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RECEIVED
JAN 11 1974
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

ASSEMBLY, No. 672

STATE OF NEW JERSEY

PRE-FILED FOR INTRODUCTION IN THE 1984 SESSION

By Assemblywoman OGDEN, Assemblymen MARSELLA, McENROE,
BENNETT, FRANKS, WEIDEL, KAVANAUGH, MUZIANI,
Assemblywoman COOPER, Assemblymen KERN, SCHWARTZ,
MARKERT, ALBOHN and MILLER

AN ACT concerning the regulation of freshwater wetlands, amend-
ing P. L. 1968, c. 285, and amending and supplementing P. L. 1975,
c. 291.

1 BE IT ENACTED *by the Senate and General Assembly of the State*
2 *of New Jersey:*

1 1. Section 2 of P. L. 1975, c. 291 (C. 40:55D-2) is amended to
2 read as follows:

3 2. Purpose of the act. It is the intent and purpose of this act:

4 a. To encourage municipal action to guide the appropriate use
5 or development of all lands in this State, in a manner which will
6 promote the public health, safety, morals, and general welfare;

7 b. To secure safety from fire, flood, panic and other natural and
8 man-made disasters;

9 c. To provide adequate light, air and open space;

10 d. To ensure that the development of individual municipalities
11 does not conflict with the development and general welfare of
12 neighboring municipalities, the county and the State as a whole;

13 e. To promote the establishment of appropriate population densi-
14 ties and concentrations that will contribute to the well-being of
15 persons, neighborhoods, communities and regions and preservation
16 of the environment;

17 f. To encourage the appropriate and efficient expenditure of
18 public funds by the coordination of public development with land
19 use policies;

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill
is not enacted and is intended to be omitted in the law.
Matter printed in italics thus is new matter.

20 g. To provide sufficient space in appropriate locations for a
 21 variety of agricultural, residential, recreational, commercial and
 22 industrial uses and open space, both public and private, according
 23 to their respective environmental requirements in order to meet
 24 the needs of all New Jersey citizens;

25 h. To encourage the location and design of transportation routes
 26 which will promote the free flow of traffic while discouraging loca-
 27 tion of such facilities and routes which result in congestion or
 28 blight;

29 i. To promote a desirable visual environment through creative
 30 development techniques and good civic design and arrangements;

31 j. To promote the conservation of open space and valuable na-
 32 tural resources and to prevent urban sprawl and degradation of
 33 the environment through improper use of land;

34 k. To encourage planned unit developments which incorporate
 35 the best features of design and relate the type, design and layout
 36 of residential, commercial, industrial and recreational development
 37 to the particular site;

38 l. To encourage senior citizen community housing construction;

39 m. To encourage coordination of the various public and private
 40 procedures and activities shaping land development with a view
 41 of lessening the cost of such development and to the more efficient
 42 use of land; [and]

43 n. To promote the conservation of energy through the use of
 44 planning practices designed to reduce energy consumption and to
 45 provide for maximum utilization of renewable energy sources; and

46 o. *To protect and maintain the water purification function of*
 47 *freshwater wetlands in order to preserve and enhance the quality*
 48 *of the ground and surface waters of the State.*

1 2. Section 4 of P. L. 1968, c. 285 (C. 40:27-6.2) is amended to
 2 read as follows:

3 4. The board of freeholders of any county having a county
 4 planning board shall provide *for the review and approval of appli-*
 5-6 *cations for a freshwater wetlands permit pursuant to the provi-*
 7 *sions of P. L. 198 , c. (C.) (now pending before the*
 8 *Legislature as Senate Bill No. 602 of 1984 or Assembly Bill No. 672*
 9 *of 1984) and for the review of all subdivisions of land within the*
 10 *county by said county planning board and for the approval of those*
 11 *subdivisions affecting county road or drainage facilities as set forth*
 12 *and limited hereinafter in this section. [Such review] Review of*
 13 *subdivisions of land or approval of subdivisions affecting county*
 14 *roads or drainage facilities shall be in accordance with procedures*
 15 *and engineering and planning standards adopted by resolution of*

16 the board of chosen freeholders. These standards shall be limited
17 to:

18 a. The requirement of adequate drainage facilities and easements
19 when, as determined by the county engineer in accordance with
20 county-wide standards, the proposed subdivision will cause storm
21 water to drain either directly or indirectly to a county road, or
22 through any drainageway, structure, pipe, culvert, or facility for
23 which the county is responsible for the construction, maintenance,
24 or proper functioning;

25 b. The requirement of dedicating rights-of-way for any roads
26 or drainageways shown on a duly adopted county master plan or
27 official county map;

28 c. Where a proposed subdivision abuts a county road, or where
29 additional rights-of-way and physical improvements are required
30 by the county planning board, such improvements shall be subject
31 to recommendations of the county engineer relating to the safety
32 and convenience of the traveling public and may include additional
33 pavement widths, marginal access streets, reverse frontage and
34 other county highway and traffic design features necessitated by
35 an increase in traffic volumes, potential safety hazards or impedi-
36 ments to traffic flows caused by the subdivision;

37 d. The requirement of performance guarantees and procedures
38 for the release of same, maintenance bonds for not more than two
39 years duration from date of acceptance of improvements and agree-
40 ments specifying minimum standards of construction for required
41 improvements. The amount of any performance guarantee or
42 maintenance bond shall be set by the planning board upon the
43 advice of the county engineer and shall not exceed the full cost
44 of the facility and installation costs or the developer's proportion-
45 ate share thereof, computed on the basis of his acreage related
46 to the acreage of the total drainage basin involved plus 10% for
47 contingencies. In lieu of providing any required drainage ease-
48 ment a cash contribution may be deposited with the county to
49 cover the cost or the proportionate share thereof for securing
50 said easement. In lieu of installing any such required facilities
51 exterior to the proposed plat a cash contribution may be deposited
52 with the county to cover the cost of proportionate share thereof
53 for the future installation of such facilities. Any and all moneys
54 received by the county to insure performance under the provisions
55 of this act shall be paid to the county treasurer who shall provide
56 a suitable depository therefor. Such funds shall be used only for
57 county drainage projects or improvement for which they are
58 deposited unless such projects are not initiated for a period of

59 10 years, at which time said funds shall be transferred to the
60 general fund of the county, provided that no assessment of benefits
61 for such facilities as a local improvement shall thereafter be levied
62 against the owners of the lands upon which the developer's prior
63 contribution had been based. Any moneys or guarantees received
64 by the county under this paragraph shall not duplicate bonds or
65 other guarantees required by municipalities for municipal
66 purposes.

67 e. Provision may be made for waiving or adjusting requirements
68 under the subdivision resolution to alleviate hardships which would
69 result from strict compliance with the subdivision standards. Where
70 provision is made for waiving or adjusting requirements criteria
71 shall be included in the standards adopted by the board of chosen
72 freeholders to guide actions of the county planning board.

73 Notice of the public hearing on a proposed resolution of the
74 board of chosen freeholders establishing procedures and engineer-
75 ing standards to govern land subdivision within the county, and
76 a copy of such resolution, shall be given by delivery or by certified
77 mail to the municipal clerk and secretary of the planning board
78 of each municipality in the county at least 10 days prior to such
79 hearing.

1 3. Section 3.1 of P. L. 1975, c. 291 (C. 40:55D-4) is amended to
2 read as follows:

3 3.1. "Days" means calendar days.

4 "Developer" means the legal or beneficial owner or owners of
5 a lot or of any land proposed to be included in a proposed develop-
6 ment including the holder of an option or contract to purchase,
7 or other person having an enforceable proprietary interest in such
8 land.

9 "Development" means the division of a parcel of land into two
10 or more parcels, the construction, reconstruction, conversion, struc-
11 tural alterations, relocation or enlargement of any building or
12 other structure, or of any mining, excavation or landfill, and any
13 use or change in the use of any building or other structure, or land
14 or extension of use of land, for which permission may be required
15 pursuant to this act.

16 "Development regulation" means a zoning ordinance, subdivi-
17 sion ordinance, site plan ordinance, official map ordinance or other
18 municipal regulation of the use and development of land, or amend-
19 ment thereto adopted and filed pursuant to this act.

20 "Division" means the Division of State and Regional Planning
21 in the Department of Community Affairs.

22 "Drainage" means the removal of surface water or groundwater

23 from land by drains, grading or other means and includes control
 24 of runoff during and after construction or development to minimize
 25 erosion and sedimentation, to assure the adequacy of existing and
 26 proposed culverts and bridges, to induce water recharge into the
 27 ground where practical, to lessen nonpoint pollution, to maintain
 28 the integrity of stream channels for their biological functions as
 29 well as for drainage, and the means necessary for water supply
 30 preservation or prevention or alleviation of flooding.

31 "Environmental commission" means a municipal advisory
 32 body created pursuant to P. L. 1968, c. 245 (C. 40:56A-1 et seq.).

33 "Erosion" means the detachment and movement of soil or rock
 34 fragments by water, wind, ice and gravity.

35 "Final approval" means the official action of the planning board
 36 taken on a preliminary approved major subdivision or site plan
 37 after all conditions, engineering plans and other requirements have
 38 been completed or fulfilled and the required improvements have
 39 been installed or guarantees properly posted for their completion,
 40 or approval conditioned upon the posting of such guarantees.

41 "Freshwater wetlands" means any area, natural or man-induced,
 42 that is inundated or saturated by fresh surface water or ground-
 43 water frequently enough and for long enough duration to at least
 44 periodically support hydrophytic vegetation or other aquatic life
 45 typically adapted to such conditions, or any area of hydric soils,
 46 including, but not limited to, the following:

47 a. Forested wetlands characterized by the following vegeta-
 48 tive types: *Acer rubrum* (red maple), *Acer saccharinum*
 49 (silver maple), *Liquidambar styraciflua* (sweet gum), *Nyssa*
 50 *sylvatica* (black gum) and *Quercus palustris* (pin oak);

51 b. Shrub wetlands characterized by the following vegetative
 52 types: *Alnus* spp. (alder), *Cephalanthus occidentalis* (button-
 53 bush), *Chamaedaphne calyculata* (leather-leaf), *Clethra alni-*
 54 *folia* (sweet pepper bush), *Lindera benzoin* (spice bush), and
 55 *salix* spp. (willow);

56 c. Emergent wetlands characterized by the following vegeta-
 57 tive types: *Bidens* spp. (beggar-ticks), *Carex* spp. (sedge),
 58 *Decodon verticillatus* (water willow), *Juncus* spp. (rush),
 59 *Phalaris arundinacea* (reed canary grass), *Pontederia cordata*
 60 (pickerel-weed), *Scirpus* spp. (bulrush) and *Typha* spp. (cat-
 61 tail);

62 d. Aquatic bed wetlands characterized by the following
 63 vegetative types: *Elodea canadensis* (waterweed), *Lemna* spp.
 64 (duckweed), *Nuphar luteum* (yellow pond lily), *Nymphaea*
 65 *odorata* (white water lily), and *Potamogeton* spp. (pondweed).

66 *These lands are generally mapped and identified as wetlands on the*
 67 *National Wetlands Inventory maps prepared by the United States*
 68 *Fish and Wildlife Service for the State. For the purposes of this*
 69 *amendatory and supplementary act, "freshwater wetlands" shall*
 70 *not include those lands located within the pinelands area as defined*
 71 *in section 10 of P. L. 1979, c. 111 (C. 13:18A-11), those lands under*
 72 *the jurisdiction of the Hackensack Meadowlands Development*
 73 *Commission pursuant to P. L. 1968, c. 404 (C. 13:17-1 et seq.), or*
 74 *those areas regulated as coastal wetlands pursuant to P. L. 1970,*
 75 *c. 272 (C. 13:9A-1 et seq.).*

76 *"Freshwater wetlands permit" means a permit to engage in a*
 77 *regulated activity issued pursuant to the provisions of this amend-*
 78 *atory and supplementary act.*

79 *"Governing body" means the chief legislative body of the mu-*
 80 *nicipality. In municipalities having a board of public works, "gov-*
 81 *erning body" means such board.*

82 *"Historic site" means any building, structure, area or property*
 83 *that is significant in the history, architecture, archeology or culture*
 84 *of this State, its communities or the National and has been so desig-*
 85 *nated pursuant to this act.*

86 *"Hydric soil" means soil that is wet for a length of time sufficient*
 87 *to periodically produce anaerobic conditions, thereby influencing*
 88 *the growth of plants.*

89 *"Hydrophyte" means any plant growing in water or on a sub-*
 90 *strate that is periodically deficient in oxygen as a result of excessive*
 91 *water content.*

92 *"Interested party" means (a) in a criminal or quasicriminal*
 93 *proceeding, any citizen of the State of New Jersey; and (b) in the*
 94 *case of a civil proceeding in any court or in an administrative pro-*
 95 *ceeding before a municipal agency, any person, whether residing*
 96 *within or without the municipality, whose right to use, acquire, or*
 97 *enjoy property is or may be affected by any action taken under*
 98 *this act, or whose rights to use, acquire, or enjoy property under*
 99 *this act, or under any other law of this State or of the United*
 100 *States have been denied, violated or infringed by an action or a*
 101 *failure to act under this act.*

102 *"Land" includes improvements and fixtures on, above or below*
 103 *the surface.*

104 *"Lot" means a designated parcel, tract or area of land estab-*
 105 *lished by a plat or otherwise as permitted by law and to be used,*
 106 *developed or built upon as a unit.*

1 *4. Section 3.3 of P. L. 1975, c. 291 (C. 40:55D-6) is amended*
 2 *to read as follows:*

3. 3.3. "Party immediately concerned" means for purposes of
4 notice any applicant for development, the owners of the subject
5 property and all owners of property and government agencies
6 entitled to notice under section 7.1.

7 "Performance guarantee" means any security, which may be
8 accepted by a municipality, including cash; provided that a mu-
9 nicipality shall not require more than 10% of the total perform-
10 ance guarantee in cash.

11 "Planned commercial development" means an area of a mini-
12 mum contiguous size as specified by ordinance to be developed
13 according to a plan as a single entity containing one or more
14 structures with appurtenant common areas to accommodate com-
15 mercial or office uses or both and any residential and other uses
16 incidental to the predominant use as may be permitted by ordi-
17 nance.

18 "Planned development" means planned unit development,
19 planned unit residential development, residential cluster, planned
20 commercial development or planned industrial development.

21 "Planned industrial development" means an area of a minimum
22 contiguous size as specified by ordinance to be developed accord-
23 ing to a plan as a single entity containing one or more structures
24 with appurtenant common areas to accommodate industrial uses
25 and any other uses incidental to the predominant use as may be
26 permitted by ordinance.

27 "Planned unit development" means an area with a specified
28 minimum contiguous acreage of 10 acres or more to be developed
29 as a single entity according to a plan, containing one or more
30 residential clusters or planned unit residential developments and
31 one or more public, quasi-public, commercial or industrial areas in
32 such ranges of ratios of nonresidential uses to residential uses as
33 shall be specified in the zoning ordinance.

34 "Planned unit residential development" means an area with a
35 specified minimum contiguous acreage of five acres or more to be
36 developed as a single entity according to a plan containing one or
37 more residential clusters, which may include appropriate commer-
38 cial, or public or quasi-public uses all primarily for the benefit of
39 the residential development.

40 "Planning board" means the municipal planning board estab-
41 lished pursuant to section 14 of this act.

42 "Plat" means a map or maps of a subdivision or site plan.

43 "Preliminary approval" means the conferral of certain rights
44 pursuant to sections 34, 36 and 37 of this act prior to final approval
45 after specific elements of a development plan have been agreed
46 upon by the planning board and the applicant.

47 "Preliminary floor plans and elevations" means architectural
48 drawings prepared during early and introductory stages of the
49 design of a project illustrating in a schematic form, its scope,
50 scale and relationship to its site and immediate environs.

50A "Public areas" means (1) public parks, playgrounds, trails,
51 paths and other recreational areas; (2) other public open spaces;
52 (3) scenic and historic sites; and (4) sites for schools and other
53 public buildings and structures.

54 "Public development proposal" means a master plan, capital
55 improvement program or other proposal for land development
56 adopted by the appropriate public body, or any amendment thereto.

57 "Public Drainage Way" means the land reserved or dedicated
58 for the installation of storm water sewers or drainage ditches, or
59 required along a natural stream or watercourse for preserving the
60 biological as well as drainage function of the channel and providing
61 for the flow of water to safeguard the public against flood damage,
62 sedimentation and erosion and to assure the adequacy of existing
63 and proposed culverts and bridges, to induce water recharge into
64 the ground where practical, and to lessen nonpoint pollution.

65 "Public open space" means an open space area conveyed or
66 otherwise dedicated to a municipality, municipal agency, board of
67 education, State or county agency, or other public body for recrea-
68 tional or conservational uses.

69 "Quorum" means the majority of the full authorized member-
70 ship of a municipal agency.

71 "Regulated activity" means the alteration of freshwater wet-
72 lands in any of the following ways:

73 a. The removal, excavation or dredging of soil, sand, gravel, or
74 aggregate material of any kind;

75 b. The drainage or disturbance of the water level or water table;

76 c. The dumping, discharging or filling with any materials;

77 d. The driving of pilings, or the erection of buildings or struc-
78 tures of any kind;

79 e. The placing of obstructions whether or not they interfere with
80 the flow of water;

81 f. The destruction of plant life, including the cutting of trees,
82 which could result in harm to freshwater wetlands.

83 "Residential cluster" means an area to be developed as a single
84 entity according to a plan containing residential housing units
85 which have a common or public open space area as an appurte-
86 nance.

87 "Residential density" means the number of dwelling units per

88 gross acre of residential land area including streets, easements
89 and open space portions of a development.

90 "Resubdivision" means (1) the further division or relocation
91 of lot lines of any lot or lots within a subdivision previously made
92 and approved or recorded according to law or (2) the alteration
93 of any streets or the establishment of any new streets within any
94 subdivision previously made and approved or recorded according
95 to law, but does not include conveyances so as to combine existing
96 lots by deed or other instrument.

1 5. (New section) a. A person proposing to engage in a regulated
2 activity shall, as a condition of receiving a freshwater wetlands
3 permit therefor, submit an application to the municipal planning
4 board containing:

5 (1) A written description of the proposed regulated activity,
6 the total area to be modified, and the total area of the freshwater
7 wetlands to be affected;

8 (2) A notice to each adjacent municipality which may be affected
9 by the regulated activity; and

10 (3) A statement detailing any potential adverse environmental
11 effects of the regulated activity and what measures may be neces-
12 sary to mitigate those effects.

13 b. The planning board of the municipality shall, with the advice
14 of the municipal environmental commission, as appropriate, issue
15 the freshwater wetlands permit only if it finds that the regulated
16 activity:

17 (1) Requires access to water or freshwater wetlands or is water
18 dependent as a central element of its basic function;

19 (2) Has no prudent or feasible alternative site which does not
20 involve freshwater wetlands;

21 (3) Maintains the natural movement of water in the freshwater
22 wetlands so as to preserve the natural composition and temperature
23 of ground and surface water discharging from the freshwater
24 wetlands;

25 (4) Will result in minimum feasible alteration or impairment
26 of the natural contour, the natural vegetation, the fish and wildlife
27 resources or the natural aquatic circulation of the freshwater
28 wetlands.

1 6. (New section) a. On or before the next revision of the munici-
2 pal master plan pursuant to the provisions of P. L. 1975, c. 291
3 (C. 40:55D-1 et seq.), or within one year of the effective date of
4 this amendatory and supplementary act, whichever is earlier, the
5 governing body of each municipality shall, using as base data the
6 National Wetlands Inventory maps or other information prepared

7 by the United States Fish and Wildlife Service and any information
 8 available from the Soil Conservation Service, with the advice of
 9 its environmental commission after public hearing, identify and
 10 map the freshwater wetlands within its jurisdiction and incorporate
 11 this identification in the land use plan element of the master plan
 12 and the zoning ordinance.

13 b. If no environmental commission has been appointed, the mu-
 14 nicipal planning board shall identify and map, after public hearing,
 15 the freshwater wetlands within its jurisdiction and incorporate
 16 this identification in the land use plan element of the master plan
 17 and the zoning ordinance.

18 c. The governing body of a municipality, with the advice of its
 19 environmental commission, may identify and map an area to serve
 20 as a buffer to the freshwater wetlands. The governing body may
 21 regulate, by ordinance, development activities in buffer areas which
 22 may induce significant adverse impacts on the freshwater wetlands.

1 7. (New section) a. A person proposing to engage in a regulated
 2 activity the total area of which extends beyond the boundaries of
 3 a single municipality shall apply to the county planning board for
 4 a freshwater wetlands permit on the forms and in the manner pre-
 5 scribed by the county planning board for a fee not to exceed the
 6 cost of processing the application. The application shall include:

7 (1) A written description of the proposed regulated activity, the
 8 total area to be modified, and the total area of the freshwater wet-
 9 lands to be affected;

10 (2) A notice to each adjacent municipality which may be affected
 11 by the regulated activity;

12 (3) A statement detailing any potential adverse environmental
 13 effects of the regulated activity and what measures may be
 14 necessary to mitigate those effects; and

15 (4) Any other information deemed appropriate by the county
 16 planning board.

17 b. The county planning board shall issue a freshwater wetlands
 18 permit only upon a finding that the activity satisfies the criteria
 19 enumerated in subsection b. of section 5 of this amendatory and
 20 supplementary act.

21 c. Nothing in this section shall be construed to exempt or relieve
 22 a person from the requirements of submitting an application for
 23 development pursuant to the provisions of the "Municipal Land
 24 Use Law," P. L. 1975, c. 291 (C. 40:55D-1 et seq.).

1 8. (New section) a. A person proposing to engage in a regulated
 2 activity the total area of which extends beyond the boundaries of
 3 a single county shall apply to the Department of Environmental

4 Protection for a freshwater wetlands permit for a fee not to exceed
5 the cost of processing the application on forms and in the manner
6 prescribed by the Commissioner of the Department of Environ-
7 mental Protection pursuant to the "Administrative Procedure Act,"
8 P. L. 1968, c. 410 (C. 52:14B-1 et seq.). An agency of State govern-
9 ment proposing to engage in a regulated activity shall also apply to
10 the department for a freshwater wetlands permit on forms and in a
11 manner prescribed by the commissioner but shall not be required
12 to pay a fee therefor. The application shall include:

13 (1) A written description of the proposed regulated activity, the
14 total area to be modified, and the total area of the freshwater wet-
15 lands to be affected;

16 (2) A notice to each adjacent municipality and county which may
17 be affected by the regulated activity;

18 (3) A statement detailing any potential adverse environmental
19 effects of the regulated activity and what measures may be
20 necessary to mitigate those effects; and

21 (4) Any other information deemed appropriate by the com-
22 missioner.

23 b. The commissioner shall issue a freshwater wetlands permit
24 after soliciting the views of the governing bodies of adjacent
25 municipalities and counties which may be affected by the regulated
26 activity and only if he finds that the activity satisfies the criteria
27 enumerated in subsection b. of section 5 of this amendatory and
28 supplementary act.

29 c. A person proposing to engage in a regulated activity in flood-
30 ways of streams delineated pursuant to P. L. 1962, c. 19 (C.
31 58:16A-50 et seq.), or within nondelineated streams at locations
32 having a drainage area of over 50 acres, shall apply for and may
33 receive approval of a freshwater wetlands permit in accordance
34 with the provisions of this section.

35 d. Nothing in this section shall be construed to exempt or relieve
36 a person from the requirements of submitting an application for
37 development pursuant to the provisions of the "Municipal Land
38 Use Law," P. L. 1975, c. 291 (C. 40:55D-1 et seq.).

1 9. (New section) Within five working days of the issuance of a
2 freshwater wetlands permit pursuant to the provisions of sections
3 5 or 7 of this amendatory and supplementary act, the municipal
4 planning board or the county planning board, as the case may be,
5 shall notify the Department of Environmental Protection, in writ-
6 ing, that the freshwater wetlands permit has been issued. This
7 notification shall contain a description of the regulated activity,
8 the total area to be modified and the total area of the freshwater

9 wetlands to be affected. The planning board also shall notify the
10 person to whom the freshwater wetlands has been issued of the
11 period of time during which the department may take action pur-
12 suant to section 10 of this amendatory and supplementary act.

1 10. (New section) The Department of Environmental Protection
2 may, upon petition by any person, commence a review of an ap-
3 proval of a freshwater wetlands permit within 30 days after the
4 approval. Upon determining to exercise this authority, the depart-
5 ment shall transmit, by certified mail, written notice thereof to the
6 applicant informing the applicant that the freshwater wetlands
7 permit shall not be deemed approved and instructing the applicant
8 to take no action authorized by the freshwater wetlands permit
9 until further notice. The department shall, after public hearing,
10 approve, or deny the freshwater wetlands permit within 90 days
11 of transmitting the written notice. This approval or denial shall
12 be binding upon the applicant, shall supersede any municipal or
13 county approval of the freshwater wetlands permit application and
14 shall be subject only to judicial review as provided by law.

1 11. (New section) Any person may obtain judicial review of a
2 decision made pursuant to section 10 of this act or of any approval,
3 or rejection of a freshwater wetlands permit by filing a petition
4 in the Appellate Division of the Superior Court of New Jersey
5 within 45 days after the approval or rejection. The court shall
6 have the power to grant such relief as it deems just and proper,
7 and to make and enter an order enforcing, modifying and enforcing
8 as so modified, remanding for further specific evidence or findings,
9 or setting aside, in whole or in part, an action of the department.
10 The findings of fact on which the decision is based shall be con-
11 clusive if supported by substantial evidence on the record con-
12 sidered as a whole.

1 12. (New section) a. Except as provided in subsection b. of this
2 section, the following activities are exempt from the provisions
3 of this amendatory and supplementary act:

4 (1) Agricultural management practices recommended pursuant
5 to P. L. 1983, c. 31 (C. 4:1C-1 et al.);

6 (2) Emergency activities carried out to protect the public health
7 and safety;

8 (3) Maintenance or repair of roads or structures or public utilities
9 existing prior to the effective date of this amendatory and supple-
10 mentary act; and

11 (4) Maintenance or repair of irrigation or drainage ditches exist-
12 ing prior to the effective date of this amendatory and supple-
13 mentary act.

14 b. The exemption provided for in subparagraphs (1), (3) and
 15 (4) of subsection a. of this section shall not apply to any activity
 16 which has as its purpose or effect the permanent alteration of any
 17 area of freshwater wetlands.

1 13. (New section) If a person violates this amendatory and sup-
 2 plementary act, the Department of Environmental Protection or
 3 the county planning board, as the case may be, may institute a
 4 civil action in the name of the State, or the county, as the case may
 5 be, in a court of competent jurisdiction, for injunctive relief to
 6 enforce this amendatory and supplementary act and to prohibit
 7 and prevent that violation, and the court may proceed in the action
 8 in a summary manner. A person who violates this amendatory and
 9 supplementary act is subject to a penalty of not less than \$250.00
 10 nor more than \$3,000.00 for each offense, to be collected in a civil
 11 action by a summary proceeding under "the penalty enforcement
 12 law" (N. J. S. 2A:58-1 et seq.), or in any case before a court of
 13 competent jurisdiction wherein injunctive relief had been requested.
 14 The Superior Court and county district court have jurisdiction to
 15 enforce "the penalty enforcement law." If the violation is of a
 16 continuing nature, each day during which it continues constitutes
 17 an additional, separate and distinct offense.

1 14. This act shall take effect immediately.

STATEMENT

The purpose of this bill is to provide for the systematic review of development activities in and around freshwater wetlands to better protect the citizens of the State from chemical contamination of water supplies, flood and storm damage, and depletion of natural resources which serve both recreation and commercial purposes. To prevent duplicative procedures with respect to freshwater wetlands already regulated, the bill exempts lands located in the pine-land area as defined in section 10 of the "Pinelands Protection Act," P. L. 1979, c. 111 (C. 13:18A-11), those lands under the jurisdiction of the Hackensack Meadowlands Development Commission pursuant to P. L. 1968, c. 404 (C. 13:17-1 et seq.), or those areas regulated as coastal wetlands pursuant to P. L. 1970, c. 272 (C. 13:9A-1 et seq.) from the requirements of the bill by not including these areas in the definition of "freshwater wetlands."

The bill requires that a proposal to dredge, fill, develop or in any other way alter freshwater wetlands, be accompanied by an application for a freshwater wetlands permit to engage in the activity. The planning board of the municipality, with the advice of its environ-

mental commission, is authorized to issue a freshwater wetlands permit only if the activity:

- (1) Requires access to water or freshwater wetlands or is water dependent as a central element of the basic function of the activity;
- (2) Has no prudent or feasible alternative site which does not involve freshwater wetlands;
- (3) Maintains the natural movement of water in the freshwater wetlands so as to preserve the natural composition and temperature of ground and surface water discharging from the freshwater wetlands;
- (4) Will result in minimum feasible alteration or impairment of the natural contour, the natural vegetation, the fish and wildlife resources or the natural aquatic circulation of the freshwater wetlands.

An underlying assumption of this bill is that municipalities and developers are fully capable of identifying freshwater wetlands using the definition provided in the bill, and that a municipality will identify and map the freshwater wetlands in the land use plan element of its master plan and in its municipal zoning ordinances.

This bill also provides for review by the county planning board of any proposed freshwater wetlands project which crosses municipal boundaries and for the review by the Commissioner of the Department of Environmental Protection of any proposed freshwater wetlands project which crosses county boundaries.

The bill provides "call-up" review powers to the commissioner for any freshwater wetlands permit approval and specifically grants the right to citizens to obtain judicial review of any decision to review, approve, or reject a freshwater wetlands permit by the department.

Finally, the bill exempts activities from the permit requirement which do not cause the permanent alteration of any area of freshwater wetlands. Included among these activities are agricultural management practices recommended pursuant to the "Agriculture Retention and Development Act," P. L. 1983, c. 32 (C. 4:1C-11 et al.), and maintenance and repair of irrigation and drainage ditches existing prior to the effective date of the bill. The bill contains a penalty provision.

ASSEMBLY, No. 2348

STATE OF NEW JERSEY

INTRODUCED JUNE 28, 1984

By Assemblymen RILEY, MARSELLA, GORMAN, DOYLE, FORTUNATO, ZANGARI, Assemblywoman KALIK, Assemblymen WATSON, NAPLES, FOY, HERMAN, PANKOK, Assemblywoman FORD, Assemblymen ROCCO, SHUSTED, BOCCHINI, FLYNN, Assemblywoman WALKER, Assemblyman KLINE, Assemblywoman COOPER, Assemblymen MUZLANI, CHINNICI, MEYER and HAINES

AN ACT providing for the management of freshwater wetlands and supplementing chapter 27 of Title 40 of the Revised Statutes.

1 BE IT ENACTED by the Senate and General Assembly of the State
2 of New Jersey:

1 1. This act shall be known and may be cited as the "Freshwater
2 Wetlands Act."

1 2. The Legislature finds and declares: that New Jersey is the
2 most densely populated State in the nation; that it is located within
3 the most important commercial corridor in the nation which links
4 the eastern megaports and business centers; that the natural beauty
5 of the State attracts residents and tourists to its coastal areas, pine-
6 lands and upland regions; and that, to such a complex State as New
7 Jersey, an extraordinary effort must be made to find a balance
8 between human use and conservation of our natural resources.

9 The Legislature finds that freshwater wetlands are an important
10 natural resource for the following reasons:

11 a. The preservation of physical values through: (1) flood pro-
12 tection by retarding the discharge of stormwater runoff from
13 storms, (2) storm protection by dampening wave energy, (3)
14 groundwater recharge discharge, (4) stream flow maintenance, and
15 (5) trapping sediments;

16 h. The preservation of chemical values by: (1) maintaining
 17 stream quality by filtering pollutants and absorbing nutrients, (2)
 18 maintaining ground water quality by filtering pollutants and
 19 removing nutrients that percolate into surface aquifers, and (3)
 20 counterbalancing the impact of salt water and movement of brackish
 21 water into our freshwaters;

22 c. The preservation of biological values through: (1) habitat
 23 preservation for native flora and fauna, (2) food production for
 24 man, mammals and other species, and (3) timber production;

25 d. The preservation of social values by: (1) preserving open
 26 space, (2) providing outdoor recreation for hiking, nature study,
 27 birdwatching, hunting and fishing, and (3) enhancing general
 28 aesthetics; and

29 e. The preservation of economic values by: (1) timber produc-
 30 tion; (2) providing a quality environment which supports hunting,
 31 fishing, recreation and tourism generated incomes, (3) maintaining
 32 the habitat of fish which produces food, (4) maintaining the
 33 habitat of wildlife, including waterfowl, which produces food, fur
 34 and feather resources, and (5) providing jobs to the industries
 35 associated with fish, game and wildlife management, conservation
 36 organizations, and education/research institutions.

37 The Legislature further finds that freshwater wetlands require a
 38 degree of protection consistent with their values in a society having
 39 competing interests for land use; that in order to protect the public
 40 interest, a balance must be achieved between the conservation of
 41 wetlands and the use of lands for other human uses.

42 The Legislature therefore declares that it is necessary to provide
 43 a method for defining freshwater wetlands and a regulatory pro-
 44 cedure designed to balance the competing needs for wetlands
 45 preservation, waterfront access, residential and commercial needs
 46 and the public and private goals for the utilization of these lands.
 47 The method and regulatory procedure should be designed to main-
 48 tain the overall integrity and continuity of stream corridors and
 49 to protect the wetlands so that they may continue to function in a
 50 manner to preserve their physical, chemical, biological, social and
 51 economic values. All wetlands are not of comparable value, how-
 52 ever, and some wetlands can be utilized for other purposes without
 53 unduly harming our basic environmental goals.

I 3. As used in this act:

2 a. "Biotic community" means any assemblage of populations
 3 living in a prescribed area or physical habitat. It is an organized
 4 unit, to the extent that it has characteristics additional to its in-
 5 dividual and population components, and functions as a unit

6 through coupled metabolic transformations. A biotic community
7 not only has a definite functional unity with characteristic trophic
8 structures and patterns of energy flow, but it also has compositional
9 unity in that there is a certain probability that certain species will
10 occur together. However, species are to a large extent replaceable
11 in time and space, and therefore functionally similar communities
12 may have different species compositions.

13 b. "Board" means the county planning board or other county
14 agency exercising its power within a charter county.

15 c. "Hydric soils" means hydric soils as listed by the United
16 States Department of Agriculture, Soil Conservation Service, which
17 are saturated under normal climatic regimes during the growing
18 season.

19 d. "Hydrophytic vegetation" means plant life adapted to growth
20 and reproduction under saturated root zone conditions.

21 e. "Lacustrine environment" means wetlands and deepwater
22 habitats with all of the following characteristics: (1) situated in a
23 topographic depression or a dammed river channel; (2) lacking
24 trees, shrubs, persistent emergents, emergent mosses or lichens
25 with greater than 30% areal coverage; and (3) total area exceeds
26 20 acres.

27 f. "Palustrine environment" means all nontidal wetlands domi-
28 nated by trees, shrubs, persistent emergents, emergent mosses or
29 lichens, and also wetlands lacking such vegetation but with all of
30 the following characteristics: (1) total area less than 20 acres; (2)
31 active wave-formed or bedrock shoreline features lacking; and (3)
32 water depth in the deepest part of the basin less than 2 meters at
33 low water.

34 g. "Riverine environment" means those wetlands and deep-
35 water habitats contained within a channel and not dominated by
36 trees, shrubs, persistent emergents, emergent mosses or lichens.

37 h. "Regulated activity" means a proposed subdivision, site plan
38 or planned development as defined in the "Municipal Land Use
39 Law," P. L. 1975, c. 291 (C. 40:55D-1 et seq.), and any dredging or
40 filling. Regulated activity does not include: the repair or rebuilding
41 of any lawful preexisting building or structure; the use of agri-
42 cultural management practices recommended pursuant to P. L.
43 1983, c. 32 (C. 4:1C-11 et al.); or the construction of any trans-
44 portation or public utility system, provided that such transporta-
45 tion or utility system does not promote additional development in
46 regulated wetlands.

47 i. "Upland vegetation" means plant life requiring a portion of
48 root zone aerated during the growing season.

1 4. a. For the purpose of this act, "freshwater wetlands" or "wet-
 2 lands" means those lands associated with the riverine, lacustrine,
 3 and palustrine environments and shall include those lands with
 4 predominantly hydric soils and supporting predominantly hydro-
 5 phytic vegetation that is naturally occurring and growing
 6 vigorously, but shall not include lands supporting upland vegetation.
 7 The identification of these vegetative species shall be carried out
 8 utilizing the following characteristic wetlands species list.
 9 Variances within certain vegetative families shall be further
 10 defined with reference to the master list.

11 When the preceding definition of freshwater wetlands does not
 12 provide a clear delineation of wetlands, hydrologic regime may be
 13 determined. Under this approach, lands where the water table is
 14 at or within 0.3 meters of the surface at some time during the
 15 growing season shall be considered wetlands.

16 Since characteristic wetlands species, hydrophytes, may change
 17 depending upon the location of the wetlands and its physical,
 18 chemical and biological composition, such species are listed, by
 19 biotic community, based on their geographic location. The charac-
 20 teristic hydrophytes listed below are intended as a general guide,
 21 and reference to the master list for further analysis of certain
 22 vegetative species shall be necessary.

23 For purposes of this section, "master list" shall mean the "Master
 24 List of New Jersey Vegetation Species With Their Affinity For
 25 Wetlands," which shall be adopted pursuant to rules and regula-
 26 tions by each board to further define variances and inconsistencies
 27 between vegetative species.

CHARACTERISTIC WETLANDS SPECIES (BY BIOTIC COMMUNITY)

RIVERINE ENVIRONMENT—

| | | |
|----|-------------------------------|----------------------------------|
| 28 | 1. River/Stream | |
| 29 | Water-thyme | Anacharis canadensis |
| 30 | | (slow quiet water) |
| 31 | Nuttall's Waterweed | A. nuttalli=Elodea nuttalli |
| 32 | | (slow quiet water) |
| 33 | | (shallow water) |
| 34 | | (fresh to brackish) |
| 35 | Water Marigold | Bidens beckii=Megalodonta beckii |
| 36 | | (slow quiet water) |
| 37 | Fanwort | Cabomba caroliniana |
| 38 | | (slow quiet water) |

| | | |
|----|-----------------------|---------------------------------|
| 39 | Water Starwort | <i>Callitriche stagnalis</i> |
| 40 | | (slow quiet water) |
| 41 | Vernal Water Starwort | <i>C. verna</i> |
| 42 | | (slow quiet water) |
| 43 | Mountain or Round- | |
| 44 | leaved Water Cress | <i>Cardamine rotundifolia</i> |
| 45 | | (slow springs and brooks) |
| 46 | Robbins Spikerush | <i>Eleocharis robbinsii</i> |
| 47 | | (slow quiet water) |
| 48 | | (shallow water) |
| 49 | Angled Spikerush | <i>E. quadrangulata</i> |
| 50 | | (shallow water) |
| 51 | Eaton's Quillwort | <i>Isoetes eatoni</i> (fresh) |
| 52 | Duckweeds | <i>Lemna</i> spp. |
| 53 | | (slow quiet water) |
| 54 | Pepperwort | <i>Marsilea quadrifolia</i> |
| 55 | | (slow quiet water) |
| 56 | Water Milfoils | <i>Myriophyllum</i> spp. |
| 57 | | (slow quiet water) |
| 58 | Water Nymph | <i>Najas flexilis</i> |
| 59 | | (shallow water) |
| 60 | | (fresh to brackish) |
| 61 | True Watercress | <i>Nasturtium officinale</i> |
| 62 | | (springs and brooks) |
| 63 | Lotus Lily | <i>Nelumbo lutea</i> |
| 64 | | (slow quiet water) |
| 65 | Spadderdock | <i>Nuphar</i> spp. |
| 66 | | (slow quiet water) |
| 67 | | (shallow water) |
| 68 | Fragrant Waterlily | <i>Nymphaea odorata</i> |
| 69 | | (slow quiet water) |
| 70 | Tuberous White | |
| 71 | Waterlily | <i>N. tuberosa</i> |
| 72 | | (slow quiet water) |
| 73 | Floating Heart | <i>Nymphoides cordata</i> |
| 74 | | (slow quiet water) |
| 75 | Pondweeds | <i>Potamogeton</i> spp. |
| 76 | | (slow quiet water) |
| 77 | Riverweed or | |
| 78 | Threadfoot | <i>Podostemum ceratophyllum</i> |
| 79 | | (slow quiet water) |

| | | |
|-----|----------------------|---|
| 80 | White Water Crowfoot | <i>Ranunculus</i> spp. |
| 81 | | (slow quiet water) |
| 82 | | (fresh to brackish) |
| 83 | Tassel Pondweed | <i>Ruppia maritima</i> |
| 84 | | (fresh, brackish, saline) |
| 85 | Arrowheads | <i>Sagittaria</i> spp. |
| 86 | | (shallow water) |
| 87 | Bur-reeds | <i>Sparganium</i> spp. |
| 88 | | (shallow water) |
| 89 | Greater Duckweed | <i>Spirodela polyrhiza</i> |
| 90 | | (slow quiet water) |
| 91 | Glaucous Cattail | <i>Typha glauca</i> |
| 92 | | (shallow water) |
| 93 | | (fresh to brackish) |
| 94 | Bladderworts | <i>Utricularia</i> spp. |
| 95 | | (slow quiet water) |
| 96 | Water Celery | <i>Vallisneria americana</i> |
| 97 | | (slow quiet water) |
| 98 | Pointed Duckweed | <i>Wolffia papulifera</i> |
| 99 | | (slow quiet water) |
| 100 | Horned Pondweed | <i>Zannichellia palustris</i> |
| 101 | | (shallow water) |
| 102 | | (fresh to brackish) |
| 103 | Water Stargrass | <i>Zosterella dubia</i> = <i>Heteranthera</i> |
| 104 | | <i>dubia</i> |
| 105 | | (slow quiet water) |
| 106 | | (shallow water) |

LAUCUSTRINE ENVIRONMENT—

| | | |
|-----|-------------------------|--|
| 107 | 1. Lake/Pond/Reservoir— | |
| 108 | Water-thyme | <i>Anacharis canadensis</i> |
| 109 | Nuttall's Waterweed | <i>A. nuttalli</i> = <i>Elodea nuttalli</i> |
| 110 | | (shallow water) |
| 111 | | (fresh to brackish) |
| 112 | Water Marigold | <i>Bidens beckii</i> = <i>Megalodonta beckii</i> |
| 113 | Water Shield | <i>Brasenia schreberi</i> |
| 114 | Fanwort | <i>Cabomba caroliniana</i> |
| 115 | Larger Water Starwort | <i>Callitriche heterophylla</i> (fresh) |
| 116 | Water Starwort | <i>C. Stagnalis</i> |
| 117 | Hornwort | <i>Ceratophyllum echinatum</i> |
| 118 | | (fresh to brackish) |
| 119 | Robbins Spikerush | <i>Eleocharis robbinsii</i> |
| 120 | | (shallow water) |

- 121 Angled Spikerush *E. quadrangulata*
 122 (shallow water)
 123 Seven-angled Pipewort *Eriocaulon septangulare*
 124 (shallow water)
 125 Eaton's Quillwort *Isoetes eatoni* (fresh)
 126 Water Primrose *Jussinea repens*
 127 Duckweeds *Lemna* spp.
 128 Dortmann's or Water
 129 Lobelia *Lobelia dortmanna*
 130 (along water edges)
 131 Pepperwort *Marsilea quadrifolia*
 132 Water Milfoils *Myriophyllum* spp.
 133 (shallow water)
 134 (fresh to brackish)
 135 Najas or Water Nymph *Najas* spp.
 136 (shallow water)
 137 (fresh to brackish)
 138 Lotus Lily *Nelumbo* spp.
 139 (also found along estuaries)
 140 Yellow Pond Lily or
 141 Spadderdock *Nuphar* spp.
 141A (shallow water)
 142 Fragrant Waterlily *Nymphaea odorata*
 143 Tuberous White
 144 Waterlily *N. tuberosa*
 145 Floating Heart *Nymphoides* spp.
 146 Pondweeds *Potamogeton* spp.
 147 (fresh to brackish)
 148 Cut-leaved Mermaid
 149 Weed *Proserpinaca pectinata*
 150 (shallow water)
 151 White Water Crowfoot *Ranunculus* spp.
 152 (fresh to brackish)
 153 Arrowheads *Sagittaria* spp.
 154 (shallow water)
 155 Water or Swaying
 156 Bulrush *Scirpus subterminalis*
 157 Nuttall's or Slender
 158 Bur-reed *Sparganium americanum*
 158A (shallow water)
 159 Small Bur-reed *S. minimum*
 160 (shallow water)

| | | |
|-----|------------------|---|
| 161 | Greater Duckweed | <i>Spirodela polyrhiza</i> |
| 162 | Glaucous Cattail | <i>Typha glauca</i> |
| 163 | | (shallow water) |
| 164 | | (fresh to brackish) |
| 165 | Bladderworts | <i>Utricularia</i> spp. |
| 166 | Water Celery | <i>Vallisneria americana</i> |
| 167 | Pointed Duckweed | <i>Wolffia papulifera</i> |
| 168 | Water Stargrass | <i>Zosterella dubia</i> — <i>Heteranthera</i> |
| 169 | | <i>dubia</i> |
| 170 | | (shallow water) |

PALUSTRINE ENVIRONMENT—

| | | |
|-----|---|----------------------------------|
| 171 | 1. Shrub/Swamp/Floodplain | |
| 172 | (a) Buttonbush—Alder—Willow (Northern N. J.—Ridge and | |
| 173 | Valley, Highlands) | |
| 174 | Buttonbush | <i>Cephalanthus occidentalis</i> |
| 175 | Alder | <i>Alnus</i> spp. |
| 176 | Willow | <i>Salix</i> spp. |
| 177 | Swamp Azalea | <i>Rhododendron viscosum</i> |
| 178 | Viburnum | <i>Viburnum</i> spp. |
| 179 | Highbush Blueberry | <i>Vaccinium corymbosum</i> |
| 180 | Common Spicebush | <i>Lindera benzoin</i> |
| 181 | Witch-hazel | <i>Hamamelis virginiana</i> |
| 182 | Cinnamon Fern | <i>Osmunda cinnamomea</i> |
| 183 | Sensitize Fern | <i>Onoclea sensibilis</i> |
| 184 | Marsh Marigold | <i>Caltha palustris</i> |
| 185 | Touch-me-not | <i>Impatiens</i> spp. |
| 186 | Orchids | <i>Habenaria</i> spp. |
| 187 | Cardinal Flower | <i>Lobelia cardinalis</i> |
| 188 | May Apple | <i>Podophyllum peltatum</i> |
| 189 | Jack-in-the-pulpit | <i>Arisaema triphyllum</i> |
| 190 | Spring Beauties | <i>Claytonia virginica</i> |
| 191 | Skunk Cabbage | <i>Symplocarpus foetidus</i> |
| 192 | Sphagnum | <i>Sphagnum</i> sp. |
| 193 | Sedges | <i>Carex</i> spp. |
| 194 | (b) Leatherleaf—Highbush Blueberry (Southern N. J.— | |
| 195 | Inner and Outer Coastal Plains) | |
| 196 | Leatherleaf | <i>Chamaedaphne calyculata</i> |
| 197 | Highbush Blueberry | <i>Vaccinium corymbosum</i> |
| 198 | Sweet Pepperbush | <i>Clethra alnifolia</i> |
| 199 | Fetterbush | <i>Lyonia lucida</i> |
| 200 | Swamp Azalea | <i>Rhododendron viscosum</i> |
| 201 | Rushes | <i>Juncus</i> spp. |

- 202 Sedges *Carex* spp.
- 203 Chain Fern *Woodwardia* spp.
- 204 Cinnamon Fern *Osmunda cinnamomea*
- 205 Sphagnum *Sphagnum* sp.
- 206 2. Swamp Forest/Floodplain
- 207 (a) Red Maple—Yellow Birch (Northern N. J.—Ridge and
- 208 Valley, Highlands)
- 209 Red Maple *Acer rubrum*
- 210 Yellow Birch *Betula alleghaniensis*
- 211 Black Ash *Fraxinus nigra*
- 212 White Ash *F. americana*
- 213 American Basswood *Tilia americana*
- 214 Tulip Tree *Liriodendron tulipifera*
- 215 Sourgum *Nyssa sylvatica*
- 216 Buttonbush *Cephalanthus occidentalis*
- 217 Common Alder *Alnus serrulata*
- 218 Willow *Salix* spp.
- 219 Swamp Azalea *Rhododendron viscosum*
- 220 Viburnum *Viburnum* spp.
- 221 Highbush Blueberry *Vaccinium corymbosum*
- 222 Common Spicebush *Lindera benzoin*
- 223 Cinnamon Fern *Osmunda cinnamomea*
- 224 Sensitive Fern *Onoclea sensibilis*
- 225 Marsh Marigold *Caltha palustris*
- 226 Touch-me-not *Impatiens* spp.
- 227 Orchids *Habenaria* spp.
- 228 Cardinal Flower *Lobelia cardinalis*
- 229 May Apple *Podophyllum peltatum*
- 230 Jack-in-the-pulpit *Arisaema triphyllum*
- 231 Spring Beauties *Claytonia virginica*
- 232 Skunk Cabbage *Symplocarpus foetidus*
- 233 Sphagnum *Sphagnum* sp.
- 234 Sedges *Carex* spp.
- 235 (b) Red Maple (Central N. J.—Piedmont)
- 236 Red Maple *Acer rubrum*
- 237 Silver Maple *A. saccharinum*
- 238 American Elm *Ulmus americana*
- 239 Slippery Elm *U. rubra*
- 240 Pin Oak *Quercus palustris*
- 241 Swamp White Oak *Q. bicolor*
- 242 Sourgum *Nyssa sylvatica*
- 243 Black Ash *Fraxinus nigra*

- 244 White Ash *F. americana*
 245 Shadbush *Amelanchier* sp.
 246 Common Spicebush *Lindera benzoin*
 247 Cinnamon Fern *Osmunda cinnamomea*
 248 Sensitive Fern *Onoclea sensibilis*
 249 Marsh Marigold *Caltha palustris*
 250 Touch-me-not *Impatiens* spp.
 251 Orchids *Habenaria* spp.
 252 Cardinal Flower *Lobelia cardinalis*
 253 May Apple *Podophyllum peltatum*
 254 Jack-in-the-pulpit *Arisaema triphyllum*
 255 Spring Beauties *Claytonia virginica*
 256 Skunk Cabbage *Synplocarpus foetidus*
 257 Sphagnum *Sphagnum* sp.
 258 Sedges *Carex* spp.
 259 (c) Even-aged Sweetgum (Southern N. J.—Inner Coastal
 260 Plain)
 261 Sweetgum *Liquidambar styraciflua*
 262 Red Maple *Acer rubrum*
 263 Willow Oak *Quercus phellos*
 264 Pin Oak *Q. palustris*
 265 Swamp White Oak *Q. bicolor*
 266 Tulip Tree *Liriodendron tulipifera*
 267 White Ash *Fraxinus americana*
 268 Black Ash *F. nigra*
 269 American Elm *Ulmus americana*
 270 Arrowwood *Viburnum dentatum*
 271 Common Spicebush *Lindera benzoin*
 272 Highbush Blueberry *Vaccinium corymbosum*
 273 Sweet Pepperbush *Clethra alnifolia*
 274 Swamp Azalea *Rhododendron viscosum*
 275 Cinnamon Fern *Osmunda cinnamomea*
 276 Chain Fern *Woodwardia* spp.
 277 Rushes *Juncus* sp.
 278 Sedges *Carex* spp.
 279 Sphagnum *Sphagnum* sp.
 280 (d) Red Maple—Sourgum—Sweetbay (Southern N. J.—
 281 Other Coastal Plain)
 282 Red Maple *Acer rubrum*
 283 Sourgum *Nyssa sylvatica*
 284 Sweetbay *Magnolia virginiana*
 285 Gray Birch *Betula populifolia*

| | | |
|------|--|--------------------------------|
| 286 | Atlantic White | |
| 286A | Cedar | <i>Chamaecyparis thyoides</i> |
| 287 | Sweetgum | <i>Liquidambar styraciflua</i> |
| 288 | Tulip Tree | <i>Liriodendron tulipifera</i> |
| 289 | White Ash | <i>Fraxinus americana</i> |
| 290 | Black Ash | <i>F. nigra</i> |
| 291 | Sweet Pepperbush | <i>Clethra alnifolia</i> |
| 292 | Highbush Blueberry | <i>Vaccinium corymbosum</i> |
| 293 | Swamp Azalea | <i>Rhododendron viscosum</i> |
| 294 | Fetterbush | <i>Lyonia lucida</i> |
| 295 | Leatherleaf | <i>Chamaedaphne calyculata</i> |
| 296 | Cinnamon Fern | <i>Osmunda cinnamomea</i> |
| 297 | Chain Fern | <i>Woodwardia</i> spp. |
| 298 | Rushes | <i>Juncus</i> spp. |
| 299 | Sedges | <i>Carex</i> spp. |
| 300 | Sphagnum | <i>Sphagnum</i> sp. |
| 301 | (e) Pitch Pine Lowland (Southern N. J.—Pine Barrens) | |
| 302 | Pitch Pine | <i>Pinus rigida</i> |
| 303 | Red Maple | <i>Acer rubrum</i> |
| 304 | Sourgum | <i>Nyssa sylvatica</i> |
| 305 | Gray Birch | <i>Betula populifolia</i> |
| 306 | Leatherleaf | <i>Chamaedaphne calyculata</i> |
| 307 | Dangleberry | <i>Gaylussacia frondosa</i> |
| 308 | Milkworts | <i>Polygala</i> spp. |
| 309 | Swamp Pink | <i>Helonias bullata</i> |
| 310 | Starflower | <i>Trientalis borealis</i> |
| 311 | Rushes | <i>Juncus</i> spp. |
| 312 | Sedges | <i>Carex</i> spp. |
| 313 | Yellow-eyed Grass | <i>Xyris</i> sp. |
| 314 | Tawny Cotton Grass | <i>Eriophorum virginicum</i> |
| 315 | Sphagnum | <i>Sphagnum</i> sp. |
| 316 | (f) Atlantic White Cedar Swamp | |
| 317 | Atlantic White | |
| 318 | Cedar | <i>Chamaecyparis thyoides</i> |
| 319 | Red Maple | <i>Acer rubrum</i> |
| 320 | Sweet Bay | <i>Magnolia virginiana</i> |
| 321 | Sourgum | <i>Nyssa sylvatica</i> |
| 322 | Swamp Azalea | <i>Rhododendron viscosum</i> |
| 323 | Highbush Blueberry | <i>Vaccinium corymbosum</i> |
| 324 | Marsh Fern | <i>Thelypteris palustris</i> |
| 325 | Chain Fern | <i>Woodwardia</i> spp. |
| 326 | Curly-grass Fern | <i>Schizaea pusilla</i> |

- 327 Swamp Pink *Helonias bullata*
 328 Thread-leaved
 329 Sundew *Drosera filiformis*
 330 Round-leaved
 331 Sundew *D. rotundifolia*
 332 Intermediate
 333 Sundew *D. intermedia*
 334 Pitcher Plant *Sarracenia purpurea*
 335 Sedges *Carex* spp.
 336 Sphagnum *Sphagnum* sp.
 337 3. Fresh March
 338 (a) Common Reed
 339 Common Reed *Phragmites communis*
 340 Buttonbush *Cephalanthus occidentalis*
 341 Rosemallow *Hibiscus* spp.
 342 Swamp Milkweed ... *Asclepias incarnata*
 343 Spotted Touch-me-
 344 not *Impatiens capensis*
 345 Climbing Hempweed *Mikania scandens*
 346 Sensitive Fern *Onoclea sensibilis*
 347 Arrowarum *Peltandra virginica*
 348 Clearweed *Pilea pumila*
 349 Halberdleaf
 350 Tearthumb *Polygonum arifolium*
 351 Arrowleaf
 352 Tearthumb *P. sagittatum*
 353 Dotted Smartweed ... *Persicaria punctatum*
 354 Narrowleaf Cattail *Typha angustifolia*
 355 (b) Cattail
 356 Narrowleaf Cattail ... *Typha angustifolia*
 357 Southern Cattail ... *T. domingensis*
 358 Common Cattail ... *T. latifolia*
 359 Marshelder *Iva frutescens*
 360 Swamp Rose *Rosa palustris*
 361 Rosemallow *Hibiscus* spp.
 362 Seashore Mallow ... *Kosteletzkya virginica*
 363 Waterhemp *Amaranthus cannabinus*
 364 Water Plantain ... *Alisma subcordatum*
 365 Swamp Milkweed ... *Asclepias incarnata*
 366 Smooth
 367 Burmarigold *Bidens laevis*
 368 Waterhemlock *Cicuta maculata*

| | | |
|-----|---|---------------------------------|
| 369 | Hedge Bindweed | <i>Convolvulus sepium</i> |
| 370 | Marsh Fern | <i>Thelypteris palustris</i> |
| 371 | Joe-pye Weed | <i>Eupatorium dubium</i> |
| 372 | Spotted Touch-me- | |
| 373 | not | <i>Impatiens capensis</i> |
| 374 | Climbing Hempweed | <i>Mikania scandens</i> |
| 375 | Spatterdock | <i>Nuphar advena</i> |
| 376 | Sensitive Fern | <i>Onoclea sensibilis</i> |
| 377 | Arrowarum | <i>Peltandra virginica</i> |
| 378 | Clearweed | <i>Pilea pumila</i> |
| 379 | Dotted Smartweed | <i>Persicaria punctatum</i> |
| 380 | Halberdleaf | |
| 381 | Tearthumb | <i>Polygonum arifolium</i> |
| 382 | Arrowleaf | |
| 383 | Tearthumb | <i>P. sagittatum</i> |
| 384 | Pickerelweed | <i>Pontederia cordata</i> |
| 385 | Duckpotato | |
| 386 | (Arrowhead) | <i>Sagittaria</i> spp. |
| 387 | Burreeds | <i>Sparganium</i> spp. |
| 388 | Sweetflag | <i>Acorus calamus</i> |
| 389 | Sedges | <i>Carex</i> spp. |
| 390 | Rushes | <i>Juncus</i> spp. |
| 391 | Softstem Bulrush | <i>Scirpus validus</i> |
| 392 | Wildrice | <i>Zizania aquatica</i> |
| 393 | (c) Wildrice (Southern N. J.—Inner and Outer Costal | |
| 394 | Plains) | |
| 395 | Wildrice | <i>Zizania aquatica</i> |
| 396 | Waterhemp | <i>Amaranthus cannabinus</i> |
| 397 | Water Plantain | <i>Alisma subcordatum</i> |
| 398 | Smooth | |
| 399 | Burmarigold | <i>Bidens laevis</i> |
| 400 | Spotted Touch-me- | |
| 401 | not | <i>Impatiens capensis</i> |
| 402 | Spatterdock | <i>Nuphar advena</i> |
| 403 | Arrowarum | <i>Peltandra virginica</i> |
| 404 | Dotted Smartweed | <i>Persicaria punctatum</i> |
| 405 | Arrowleaf | |
| 406 | Tearthumb | <i>Polygonum sagittatum</i> |
| 407 | Pickerelweed | <i>Pontederia cordata</i> |
| 408 | Duckpotato | |
| 409 | (Arrowhead) | <i>Sagittaria</i> spp. |
| 410 | Branching Burreed | <i>Sparganium angustifolium</i> |

- 411 Softstem Bulrush . . . *Scirpus validus*
- 412 4. Bog
- 413 (a) Bogs (Northern N. J.—Ridge and Valley, Highlands)
- 414 Red Maple *Acer rubrum*
- 415 Sourgum *Nyssa sylvatica*
- 416 Black Spruce *Picea mariana*
- 417 Tamarack *Larix laricina*
- 418 Eastern Hemlock . . . *Tsuga canadensis*
- 419 Yellow Birch *Betula alleghaniensis*
- 420 Atlantic White
- 421 Cedar *Chamaecyparis thyoides*
- 422 Black Alder *Alnus glutinosa*
- 423 Leatherleaf *Chamaedaphne calyculata*
- 424 Swamp Azalea *Rhododendron viscosum*
- 425 Rosebay
- 426 Rhododendron . . . *R. maximum*
- 427 Staggerbush *Lyonia mariana*
- 428 Fetterbush *L. lucida*
- 429 Inkberry *Ilex glabra*
- 430 Sweet Pepperbush . . *Clethra alnifolia*
- 431 Large Cranberry . . . *Vaccinium macrocarpum*
- 432 Small Cranberry . . . *V. oxycoccus*
- 433 Highbush Blueberry *V. corymbosum*
- 434 Bog Rosemary *Andromeda glaucophylla*
- 435 Labrador Tea *Ledum groenlandicum*
- 436 Swamp Loosestrife *Decodon verticillatus*
- 437 Sedges *Carex* spp.
- 438 Marsh Fern *Thelypteris palustris*
- 439 Cinnamon Fern *Osmunda cinnamomea*
- 440 Chain Fern *Woodwardia* spp.
- 441 Pitcher Plant *Sarracenia purpurea*
- 442 Sundews *Drosera* spp.
- 443 Sphagnum *Sphagnum* sp.
- 444 (b) Bogs (Southern N. J.—Pinelands, Inner and Outer
- 445 Coastal Plains)
- 446 Atlantic White
- 447 Cedar *Chamaecyparis thyoides*
- 448 Red Maple *Acer rubrum*
- 449 Sourgum *Nyssa sylvatica*
- 450 Sweetbay *Magnolia virginiana*
- 451 Leatherleaf *Chamaedaphne calyculata*
- 452 Swamp Azalea *Rhododendron viscosum*

| | | |
|------|--------------------------|--|
| 453 | Sweet Pepperbush | <i>Clethra alnifolia</i> |
| 454 | Wax Myrtles | <i>Myrica</i> spp. |
| 455 | Large Cranberry | <i>Vaccinium macrocarpum</i> |
| 456 | Small Cranberry | <i>V. oxycoccus</i> |
| 457 | Highbush Blueberry | <i>V. corymbosum</i> |
| 458 | Swamp Loosestrife | <i>Decodon verticillatus</i> |
| 459 | Sedges | <i>Carex</i> spp. |
| 460 | Marsh Fern | <i>Thelypteris palustris</i> |
| 461 | Cinnamon Fern | <i>Osmunda cinnamomea</i> |
| 462 | Chain Fern | <i>Woodwardia</i> spp. |
| 463 | Curly Grass Fern | <i>Schizaea pusilla</i> |
| 464 | Sundews | <i>Drosera</i> spp. |
| 465 | Pitcher Plant | <i>Sarracenia purpurea</i> |
| 466 | Bog Asphodel | <i>Narthecium americanum</i> |
| 467 | Yellow-eyed Grasses | <i>Xyris</i> spp. |
| 468 | Carolina Club Moss | <i>Lycopodium carolinianum</i> |
| 469 | Golden Crest | <i>Lophiola americana</i> |
| 470 | Pipeworts | <i>Eriocaulon</i> spp. |
| 471 | Milkworts | <i>Polygala</i> spp. |
| 472 | Pogonias | <i>Pogonia</i> spp. |
| 473 | Lobelias | <i>Lobelia</i> spp. |
| 474 | Sphagnum | <i>Sphagnum</i> sp. |
| 475 | 5. Sandbar/Beach/Mudflat | |
| 476 | Sensitive-Joint Vetch | <i>Aeschynomene virginica</i> |
| 477 | | (fresh to brackish) |
| 478 | Teal or Smooth | |
| 479 | Creeping Lovegrass | <i>Eragrostis hypnoides</i> |
| 479A | | (also found on river banks and |
| 480 | | pond bottoms) |
| 481 | Muenscher's Najas or | |
| 482 | Water Nymph | <i>Najas muenscheri</i> |
| 483 | | (fresh, also found on river edges) |
| 484 | Sedges | <i>Carex</i> spp., <i>Scirpus</i> spp. |
| 485 | Arrowarum | <i>Peltandra virginica</i> |
| 486 | Pickerelweed | <i>Pontederia cordata</i> |
| 487 | Arrowheads | <i>Sagittaria</i> spp. |
| 488 | Yellow-eyed Grasses | <i>Xyris</i> spp. |
| 489 | Pipeworts | <i>Eriocaulon</i> spp. |
| 490 | Spikerushes | <i>Eleocharis</i> spp. |

b. Freshwater wetlands shall not include: areas drained prior to the effective date of this act; wetlands artificially created due to manmade or natural obstructions; or wetlands which were created by the action of any person other than the owner of record of that wetlands on or after the effective date of this act during the period of that ownership and without the record owner's knowledge or consent. Freshwater wetlands shall also not include: (a) lands within the uppermost 20 acres of an intermittent stream corridor; or (b) wetlands within an isolated depression or discontinuous area of less than 10 acres; unless it can be demonstrated that the wetlands in both subsections a. and b. above are unique and irreplaceable to the people of the State of New Jersey.

c. Wetlands shall not include any lands regulated pursuant to the "Hackensack Meadowlands Reclamation and Development Act," P. L. 1968, c. 404 (C. 13:17-1 et seq.), "The Wetlands Act of 1970," P. L. 1970, c. 272 (C. 13:9A-1 et seq.), the "Pinelands Protection Act," P. L. 1979, c. 111 (C. 13:18A-1 et seq.), or the United States Army Corps of Engineers' permit jurisdiction, authorized pursuant to the provisions of the "Clean Water Act," Pub. L. 95-217 (33 U. S. C. § 1344 et al.).

d. All wetlands shall be protected by an area of land referred to as the "buffer zone." Wetlands buffers shall be variable and functional depending upon the potential for adverse environmental impacts associated with landuse, natural conditions, and depending upon the environmental sensitivity of the wetlands.

The buffer zone shall be treated in a similar manner as wetlands, meaning that no activities shall be permitted in the buffer zones unless it complies with this act. The following distances shall be utilized, whichever is more restrictive:

| Landuse | Buffer Zone Width (from activity) | |
|------------------------------------|--------------------------------------|-----------------|
| | Wetlands | Unique Wetlands |
| Residential dwelling with on-site | | |
| septic disposal system | 100' | 200' |
| Residential dwelling with off-site | | |
| disposal of septic waste | 50' | 100' |
| Commercial and office development | 100' | 200' |
| Industrial, light | 100' | 200' |
| Industrial, heavy | 250' | 500' |
| Roadway, local* | 50' | 100' |
| Roadway, county or state* | 100' | 200' |

* Except where roadways are exempt from regulation as provided herein.

| | Natural Slope Considerations | Buffer Zone Width |
|-----|------------------------------|-------------------|
| 531 | 0 - 4% | 50' |
| 532 | 4.5 - 6% | 75' |
| 533 | 6.5 - 8% | 100' |
| 534 | greater than 8% | 150' |

535 e. Unique wetlands shall be determined based upon special
 536 features, or an assemblage of special features, that cause the wet-
 537 lands to be unique in comparison with surrounding wetlands, and
 538 irreplaceable to the people of the State of New Jersey. Such
 539 features include geologic, soils, hydrologic, flora or fauna con-
 540 siderations, sufficient enough to warrant the wetlands area to be
 541 designated as a National Natural Landmark in accordance with the
 542 Natural Landmarks Program administered by the United States
 543 Department of the Interior, National Park Service.

1 5. a. An applicant for a wetlands permit shall utilize the county
 2 soil surveys and field investigations with on-site soil profiles to
 3 determine hydric soils. The applicant shall utilize field investiga-
 4 tions to identify those areas which support hydrophytic vegetation
 5 and exclude upland vegetation. When a determination of hydro-
 6 logic regime is necessary, the applicant shall utilize five foot piezo-
 7 meter readings, from November to May, corrected for unusual
 8 precipitation events.

9 b. If a wetlands area receives Natural Landmark status, it shall
 10 be "unique" and preserved as provided herein. If the wetlands are
 11 not a Natural Landmark, and a documented claim is prepared by
 12 the board or submitted to the board for consideration, the land
 13 containing the subject wetlands area, and appropriate buffer zone,
 14 shall be offered for sale to the State of New Jersey and land-trust
 15 environmental conservation organizations for acquisition at fair
 16 market value. Failure by these entities to exercise this right of
 17 first purchase, within six months of the offering date, negates the
 18 claim of uniqueness. The applicant may then apply for a fresh-
 19 water wetlands permit as provided in this act.

1 6. No person may undertake any regulated activity on any
 2 property containing freshwater wetlands without obtaining a fresh-
 3 water wetlands permit from the county planning board as provided
 4 in this act.

1 7. An applicant for a freshwater wetlands permit shall submit
 2 to the board: (1) three sets of project plans with the wetlands
 3 delineated on the site as provided herein; (2) a soils map, utilizing
 4 the applicable Soil Conservation Service County Soil Survey
 5 delineating the extent of wetlands on-site; (3) a written explana-

tion as to how the subject wetlands were delineated; and (4) if the delineated wetlands are to be disturbed or utilized, a written and illustrative justification as to why this disturbance should be authorized and a description of the proposed mitigation procedures to be utilized. A copy of this application shall be submitted to the municipality wherein the regulated wetlands are located.

8. a. The board shall review the application and delineation of wetlands within 15 working days of its receipt and declare the application and the delineation of wetlands complete or not complete. If the application is complete, and there are no regulated activities proposed in the delineated wetlands, the board shall issue a freshwater wetlands permit within the same 15 working days.

b. If the application is declared incomplete, the board may require the applicant to submit a revised application utilizing the definition and criteria to delineate wetlands authorized herein. Only one such request shall be made by the board.

9. Once an application is deemed complete, the board may: approve, approve with conditions, or deny, giving its reasons for denial in writing, within 30 days of receiving a completed application. The board and the applicant may extend, by mutual agreement in writing, this period for an additional 30 days. Any application, not acted upon within the time period contained in this section, shall be deemed approved.

10. In deciding to approve or deny an application for a permit, the board shall utilize the procedures and legislative findings and declarations included in this act to reach a decision which takes into account the public's right to regulate land use and the private landowner's right to utilize his land. The board shall solicit and give due consideration to the advice of the environmental commission and planning board of the municipality wherein the regulated wetlands are located.

The board may approve a permit, if denial of the permit would create exceptional and undue hardship upon the applicant, or if there is an unreasonably disproportionate relationship between protection of these resources and the added cost of avoiding such damage.

11. The board may authorize the use of a portion of the wetlands provided that one of the following conditions are met:

a. Appropriate environmental or engineering mitigation techniques are employed to alleviate any potential adverse environmental impact on the wetlands relative to water quality, water storage, groundwater recharge, erosion and sedimentation, and habitat protection. These techniques may include, but are not

8 limited to, the following: (1) installing a system of water deten-
 9 tion and filtration of surface runoff so as to avoid adverse impacts
 10 on wetlands water quality; (2) utilizing riprap, filter fabric, grease
 11 traps, etc. to minimize soil erosion, sedimentation and water quality
 12 impacts on wetlands; (3) creating vegetative or earthen buffers
 13 between development and the wetlands to protect wetlands habitats;
 14 or (4) enhancing undisturbed wetlands by increasing its produc-
 15 tivity and specie diversity.

16 b. Comparable environmental replacement value is provided by
 17 one of the following methods:

18 (1) New wetlands are created elsewhere on-site, or off-site,
 19 within the same drainage basin, in order to replace any wetlands
 20 converted to non-wetlands, on a one for one basis; or

21 (2) Compensation is provided as described below.

1 12. Compensation for utilization of freshwater wetlands for a
 2 regulated activity shall be paid by the applicant to an environ-
 3 mental organization or to a government for wetlands acquisition,
 4 the enhancement of wetlands values or wetlands educational pro-
 5 grams. Compensation may be made in cash payments or in dona-
 6 tions of ownership rights to comparable wetlands. Compensation
 7 shall be the cost necessary to restore upland acreage to wetlands
 8 in an amount equal to the wetlands acreage to be disturbed accord-
 9 ing to the permit.

10 Any land transferred pursuant to this section shall be deed
 11 restricted to an environmental use, and shall provide for transfer
 12 to a public agency for an environmental use if such organization
 13 or government chooses to transfer the land or if it ceases to exist.
 14 This provision will allow an immediate tax exemption for non profit
 15 loss of land value.

1 13. An applicant or other aggrieved party to a decision of the
 2 board shall have 45 days from the date of the decision to file an
 3 appeal in the Law Division of the Superior Court of New Jersey.

1 14. The board shall adopt a fee schedule and collect fees for costs
 2 incurred in administering this act. The fees shall be no more than
 3 \$100.00 per permit plus up to \$25.00 for the first 1,000 linear feet of
 4 wetlands boundary-line evaluated, and \$25.00 for each 2,500 linear
 5 feet thereafter, plus \$100.00 per 10,000 square feet of wetlands
 6 proposed for disturbance.

1 15. a. To provide guidance to land owners, the board shall de-
 2 lineate all freshwater wetlands within the county, at a scale of one
 3 inch equals 600 feet. Such delineations shall be in accordance with
 4 the definitions as set forth in sections 5 and 6 of this act, and shall
 5 utilize field investigations to spot-check such delineations.

6 b. Within two years of the effective date of this act, the board
7 shall, with the advice of the governing bodies of the municipalities
8 within the county boundaries and after public hearing thereon,
9 identify and adopt a map of the freshwater wetlands within its
10 jurisdiction. This map shall be incorporated in the county master
11 plan adopted pursuant to R. S. 40:27-2.

12 c. When adopted by the county governing body, the map pre-
13 pared pursuant to this section, shall be binding upon the county
14 governing body, county agencies, municipal governing bodies, and
15 upon applicants seeking a freshwater wetlands permit as provided
16 for herein. As any time, however, an applicant shall be permitted
17 the opportunity to demonstrate, in accordance with sections 5 and 6
18 of this act, that the wetlands delineated according to the adopted
19 map are not accurately represented thereon. In cases where wet-
20 lands are accurately depicted by an applicant, in conflict with the
21 adopted map, the board shall process the application for a fresh-
22 water wetlands permit in accordance with this act, and recommend
23 to the governing body that the adopted map be amended to reflect
24 the new wetlands delineation.

25 d. Until the map is adopted pursuant to this section, the board
26 shall review applications for a freshwater wetlands permit in
27 accordance with the definition and procedures contained in sections
28 5 and 6 of this act. The applicant will be required to delineate the
29 extent of freshwater wetlands in accordance with these definitions
30 and procedures for the first two years following the effective date
31 of this act.

1 16. To the extent necessary to remove any inconsistencies, the
2 provisions of this act shall supersede any inconsistent provisions
3 of the following acts: "Flood Hazard Area Control Act," P. L. 1962,
4 c. 19 (C. 58:16A-50 et seq.), the "Coastal Area Facility Review
5 Act," P. L. 1973, c. 185 (C. 13:19-1 et seq.), the "Water Pollution
6 Control Act," P. L. 1977, c. 74 (C. 58:10A-1 et seq.) and the "Water
7 Quality Planning Act," P. L. 1977, c. 75 (C. 58:11A-1 et seq.).

1 17. A person who violates this act is subject to a penalty of not
2 less than \$25.00 nor more than \$1,000.00, to be collected in a civil
3 action by a summary proceeding under "the penalty enforcement
4 law" (N. J. S. 2A:58-1 et seq.), or in any case before a court of
5 competent jurisdiction wherein injunctive relief had been requested.
6 If the violation is of a continuing nature, each day during which it
7 continues constitutes an additional, separate and distinct offense.

1 18. Every county planning board shall report to the Legislature
2 any recommendations concerning the experiences and operations

3 of the act, including recommendations for appropriate statutory
4 changes by January 1, 1988.

1 19. All procedures and regulations necessary to administer this
2 act are contained herein.

1 20. There is appropriated from the General Fund to the Depart-
2 ment of Treasury, \$525,000.00 for distribution to the county
3 planning boards to defray the cost of delineation of freshwater
4 wetlands pursuant to section 16 of this act. The \$525,000.00 shall be
5 distributed equally to every county having freshwater wetlands as
6 defined in this act. The Department of Treasury shall, after con-
7 sultation with the county planning boards, estimate the remaining
8 acreage of wetlands to be delineated and the cost of the delineation
9 to complete the freshwater wetlands mapping as described in this
10 act, and report to the Governor and the Legislature within 180 days
11 of the effective date of this act.

1 21. This act shall take effect immediately.

STATEMENT

This act provides for a uniform and balanced freshwater wetlands permit program for the State of New Jersey. The primary objective of this act is to maintain the overall integrity and continuity of stream corridors, and protect freshwater wetlands so that they may continue to perform the important physical, chemical, biological, social and economic functions associated with said areas. All freshwater wetlands are not of comparable value, however, and some wetlands can be utilized for other purposes without unduly harming our basic environmental goals. In this regard, the act takes into account the fact that wetlands, by nature, represent a constantly changing environment.

The act sets forth a definition of freshwater wetlands that will regulate lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or where the land is covered by water. A variable wetlands buffer is required, which takes into account differing natural and landuse related impacts on wetlands. County planning boards will have the power to review and issue freshwater wetlands permits, according to the bill's definition, standards and procedures, for all freshwater wetlands in New Jersey, except for lands regulated pursuant to the "Hackensack Meadowlands Reclamation and Development Act," P. L. 1968, c. 404 (C. 13:17-1 et seq.), "The Wetlands Act of 1970," P. L. 1970, c. 272 (C. 13:9A-1 et seq.), and the "Pinelands Protection Act," P. L. 1979, c. 111 (C. 13:18A-1 et seq.).

The act provides for an appropriation of \$525,000.00 to the county planning boards to begin the process of mapping freshwater wetlands. It is anticipated that an appropriation of a similar amount will be made in the annual budget bill for the year following the first anniversary of this bill, to complete the mapping process. Until such time as the maps are adopted, the board will review applications for a freshwater wetlands permit in accordance with the definition and procedures contained herein.

Furthermore, so as to avoid a duplication of regulatory authority, the bill exempts from regulation the United States Army Corps of Engineers' permit jurisdiction under section 404 of the "Clean Water Act," Pub. L. 95-217 (33 U. S. C. § 1344 et al.). Together, this bill and the "Clean Water Act" achieve the goal of preserving the long-term integrity of freshwater wetlands for the State of New Jersey.

ASSEMBLYMAN ROBERT P. HOLLENBECK (Chairman): Ladies and gentlemen, I just want to let you know there is no public address system today. I believe the microphones you see are the transcript recording microphones. So, will those who are testifying please raise your voices slightly so that the people in the back of the room can hear you?

This is the Assembly Agriculture and Environment Committee. I would like to introduce myself. I am Assemblyman Robert Hollenbeck. My Vice Chairman is Assemblyman Stephen Adubato, who is on my left. On my far left is Assemblyman Thomas Pankok and Assemblyman William Haines. Our Committee Aide is Mark Smith. I also saw, from staff, Karen Jezierny.

This public hearing concerns the regulation of freshwater wetlands. As you know, what regulation there is of wetlands is carried out under the authority of Section 404 of the Clean Water Act by the U.S. Army Corps of Engineers. This Committee will be considering two bills, Assembly Bill No. 672 and Assembly Bill No 2348, both of which would regulate freshwater wetlands in different ways.

One bill appears to incorporate the belief that the "404" regulatory process is sufficient to protect most wetlands. Presumably, activities in wetlands which would not be subject to "404" regulation would be picked up under this bill.

The other bill presumes that the "404" process is not adequate and would, consequently, regulate all activities in freshwater wetlands.

There is no doubt that the freshwater wetlands in this State are a valuable natural resource that must be protected from unthinking and unregulated development. It is the object and the extent of that protection that is in question.

If this Committee is to adequately address the issue, it will need to develop an understanding not only of what the proposed legislation seeks to accomplish, but of the current regulatory scene.

That is why we have invited the participation of the Federal agencies, the U.S. Environmental Protection Agency, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service, which are the responsible agencies for that regulatory scene.

I have also requested that our own Department of Environmental Protection provide this Committee with the benefit of its experience.

We will also hear from those members of the public familiar with the resource, the proposed legislation, and the present regulatory process.

I would like to thank all those who have been able to find the time to help this Committee in its deliberations and for participating in this public forum.

We have a list of invited speakers, so this is not truly a public hearing, where the public itself can generally participate. All our witnesses are invited speakers, people who we feel have expertise in this particular area, and who can be very informative to the members of the Committee.

Our first speaker will be Assemblywoman Maureen Ogden, the sponsor of one of the pieces of legislation. Assemblywoman, would you come up to this chair, please?

ASSEMBLYWOMAN MAUREEN OGDEN: Mr. Chairman, members of the Committee, I thank you and the Committee for the opportunity to speak again in connection with A-672. Thank you for holding this special hearing today.

We have prepared, Senator Lynch and myself— Senator Lynch is the sponsor of S-602 in the Senate, which is identical to A-672. Senator Lynch planned to be here to speak, and we have written joint testimony. Unfortunately, he has a virus that is going around. He is sick in bed, and he couldn't come. But, he did want everyone to know that he is in complete accord with what we are presenting today in the testimony.

We begin this testimony upon the premise that the responsibility for the protection of these wetlands lies not with the environmentalists, not with the builders, and not with any other special interest group. Rather, the responsibility rests solely with the Legislature. It is our purpose to speak frankly regarding our bill and, while acknowledging there are differing points of view, to urge your favorable consideration of our legislation as the best response to the responsibility we have as legislators.

In New Jersey we have approximately 600,000 acres of freshwater wetlands. About two-thirds of these wetlands are already protected from indiscriminate development by other legislation, including the Pinelands Protection Act, the Hackensack Meadowlands Reclamation and Development Act, by delineated floodways, and by public or private conservation lands. The bill of our sponsorship addresses the remaining 200,000 acres, or approximately 4% of our State's land mass. Nearly half of these 200,000 acres exists in only three of our counties: Morris, Burlington, and Sussex. But, portions of the 200,000 acres exist in most of our counties. We believe our bill competently fills the void in the statutory law regarding wetlands preservation and development.

This bill has evolved over a period of 18 months, and includes the input of a wide range of experts from the environmental field, as well as the input resulting from talks and negotiations with the builders and others. Before its introduction last year, we worked closely with our own Department of Environmental Protection, and countless meetings, discussions, negotiations, and deliberative thought followed.

Soon after the bill was introduced, the builders expressed their concern, and during the past spring we held three sessions with representatives of the builders' group. These discussions resulted in four major changes in our legislation -- testimony, we believe, to our desire to offer responsible legislation that accommodates, to the degree possible, the legitimate concerns of the people most affected when the bill becomes law.

The four major changes were as follows:

1. We amended the bill to change the level of administration of its provisions from local to county planning boards. We agreed with the-builders that the change would provide for greater uniformity, the availability of greater expertise, and more uniform predictability. At the same time, we provided positive input from local planning boards and other authorities.

2. We included a provision to appropriate \$525,000 for mapping, or \$25,000 for each county, to offset the cost of pulling

together Soil Conservation Service and Fish and Wildlife Commission maps, along with local available topographic definitions to assure the most competent delineation of our wetlands. Funds required for the administration of a wetlands application should be available from fees collected from applicants.

3. We drafted specific language to provide set distances as required buffers for development in wetland areas.

4. We incorporated less stringent criteria regarding requirements for roads and utilities and other linear developments.

After making these changes, the remaining unresolved issue with the builders' group was in the area of definition. We expected to receive a proposed definition from the builders, but only received what was acknowledged to be a partial submittal before the so-called builders' bill was filed.

Frankly, after A-2348 was published, we sent copies to experts across this State, and beyond, and these experts unanimously criticized the builders' definition. You will hear testimony today from one or more of those experts.

It is important to note that we acknowledge the concern surrounding our legislation. We do not want to mandate needless, frustrating, and time-consuming red tape. We are aware, of course, of the provisions of the U.S. Army Corps of Engineers' Section 404 and the approval requirements necessary to accommodate these Federal regulations. We are preparing, and hope the Committee will adopt, an amendment to our legislation that would direct the counties to coordinate the application and review process with the Army Corps, to reduce cost and delays for the applicants. Such a joint review could be New Jersey's first step toward the eventual assumption of the 404 program.

After several years of working together, the State of Michigan has recently received responsibility from the Army Corps for the administration of the program. Other states are considering assumption, and EPA is providing planning grants to encourage states with wetlands laws of their own to work with the Army Corps.

The administration of a wetlands program by a Federal agency, such as the Army Corps, has often resulted in time-consuming and frustrating delays. To this end, we believe our bill, with the amendment we proposed, will, in fact, serve the best interests of the builders and others by reducing the time required for the review process.

It is important for us to point out a few basic differences between A-672 and A-2348 that go to the very heart of these deliberations. The differences we will define now, in our opinion, will convince you that our legislation, rather than the builders' bill, will competently and effectively protect our wetlands. The other piece of legislation, we believe, would promote a piecemeal development of wetlands by applying short-term, economic criteria.

1. We believe the A-2348 definition would leave most freshwater wetlands unregulated.

2. We believe A-672 covers the whole range of activities which might be harmful to wetlands; whereas, A-2348 is silent regarding many activities.

3. We believe our bill requires that objective, resource-based conditions be made before a permit can be issued. By contrast, A-2348 requires that only one or two economic conditions be met.

4. Our bill permits an appeal to the State agency with the greatest technical expertise in freshwater wetlands before elevation to judicial review. By contrast, A-2348 provides only for judicial review of a permit decision.

5. Our bill provides a greater minimum and maximum buffer width than does A-2348, except in the case of heavy industrial use. By contrast, A-2348 provides a system of determining buffer zone width which is less restrictive.

6. Our bill seeks to avoid costly and non-uniform mapping, but directs counties to use maps and other information already available from Federal agencies recognized as experts in wetlands delineation. This would be extremely costly, potentially non-uniform from county-to-county, and difficult to complete in a reasonable amount of time.

At the outset of this testimony, we said our bill has resulted from an myriad of interested organizations, experts, and interested citizens. At this and other hearings, you will no doubt hear supportive and critical testimony from others. We welcome this additional input. We urge you to fully consider it. We have approached the development of this legislation with open minds. However, we also urge that all of us keep in mind the primary purpose of this legislation is the protection of our wetlands.

Wetlands need to be an integral part of New Jersey's urbanized landscape to keep the balance nature intended. Without such a balance, municipalities, and areas like the Passaic River Basin, could experience disastrous flooding. New Jersey residents will drink more expensive and less pure water. New Jersey business and industry will have a less abundant supply of water. New Jersey fishermen will have restrictions on their catch. New Jersey hunters will have to travel to other states when duck habitats are destroyed. New Jersey researchers will see one of their most productive laboratories destroyed, and school children will lose a fascinating educational experience.

In short, everyone in New Jersey will suffer irreparable losses if we in the Legislature fail to act now to preserve our fast-disappearing freshwater wetlands. Future generations will suffer the greatest losses if we do not bequeath to them this invaluable resource -- New Jersey's freshwater wetlands.

Mr. Chairman, members of the Committee, I thank you very much for the opportunity to present this statement. I would welcome any questions.

ASSEMBLYMAN HOLLENBECK: Thank you very much for your testimony. We know you have put an awful lot of time in on this particular subject. We appreciate your coming forth with a bill so that we can deal with the question.

I have no questions at the moment. Does any member of the Committee have any questions of the sponsor of the legislation?

ASSEMBLYMAN HAINES: I have a question. I am not clear on this. You refer to your bill, A-2348, and a builders' bill. Do we

have three bills before us today, because I don't see a builders' bill before us?

ASSEMBLYWOMAN OGDEN: That is A-2348.

ASSEMBLYMAN HAINES: Maureen, I am not a builder, and I am a cosponsor of A-2348.

ASSEMBLYMAN HOLLENBECK: We will straighten that out, all right?

ASSEMBLYWOMAN OGDEN: It was my understanding, Assemblyman Haines, that this was the bill they had drafted.

ASSEMBLYMAN HOLLENBECK: We will make the assumption that the bill submitted by Assemblyman Riley -- A-2348 -- is a bill that he might have received input on from other agencies, or from other interested groups, and that he has now worked within that, gone over that bill, put in his own philosophy, and then filed the bill.

ASSEMBLYMAN HAINES: I just think that for clarification we ought to refer to two numbers, or refer to the Ogden-Riley bills, or something like that, rather than three different situations.

ASSEMBLYMAN HOLLENBECK: Thank you very much, Assemblywoman.

Senator Lynch requested to speak but he is ill this morning. He has sponsored an identical bill to A-672.

We have Assemblyman Riley, the sponsor of A-2348, with us today, and he would like to give testimony on that bill.

ASSEMBLYMAN DENNIS L. RILEY: Thank you, Mr. Chairman and members of the Committee. I am Assemblyman Dennis "builder" Riley, I guess, for this testimony. I don't believe I have changed my name. I think my name is still Dennis Riley, Mr. Chairman, and I believe I represent in the Legislature, and I have been a spokesman for, interests in South Jersey. The interest in this bill in South Jersey is pretty high. We have been fairly well-regulated in South Jersey; between the Pinelands, CAFRA, and the things already mentioned by Assemblywoman Ogden, we feel we have been fairly well-restricted, and we feel, therefore, we should have input in this matter, to make sure that any further regulation is justified in some type of easily-identified manner, which we do not believe the other bill would provide.

I am pleased to have this opportunity to speak to you, Mr. Chairman and members of the Committee, regarding Assembly Bill 2348, which I and 25 others have sponsored, in order to put in place what we believe to be a reasonable and technically-justified permit program to protect freshwater wetlands in the State of New Jersey.

It is our belief that the wetlands should be regulated, and we commend Assemblywoman Ogden for her initiative in this area. However, I would like to take a few minutes to discuss what we feel are the critical points of my bill, and of the other bill. We believe there are points which should be seriously considered by this Committee before action is taken on either A-2348 or A-672, or a combination of the two.

The issue concerns what areas of the State we are proposing to regulate under a freshwater wetlands program. A-2348 exempts from its jurisdiction areas already regulated by the United States Army Corps of Engineers. Assembly Committee Substitute 672, which is obviously also the subject of this hearing, provides no such exemption. The Corps' statutory authority, pursuant to Section 404 of the Clean Water Act, under which the Dredge and Fill Permit Program is administered throughout New Jersey -- and I believe throughout the United States -- regulates developmental activities affecting navigable waterways and adjacent wetland areas. In fact -- as I believe you will hear from the Corps today -- the regulatory program is currently undergoing changes that would make more stringent their wetlands requirements, and even expand their jurisdiction. I believe much of this will be based upon a recent court settlement, where a consent order is being drafted.

As such, I strongly believe that legislation considered by this Committee must recognize the existence of the Corps' wetlands program, because not to recognize it would be to operate in a void. By doing this, we can avoid confusion and expensive duplication procedures. Furthermore, if delegation of a portion of the Corps' regulatory program is going to be legislated, I would encourage that it be done consistent with the provisions of A-2348, not A-672.

A second, but very related, regulatory issue would be the proliferation of State permit programs, administered by the New Jersey Department of Environmental Protection, that sporadically and inconsistently regulate freshwater wetland areas. Under both the DEP's Stream Encroachment and Sewer Extension permit programs, wetlands are presently regulated. However, the DEP has neither specific statutory or regulatory wetlands definitions, nor permit requirements, within which applicants must comply. I find this type of hit-and-miss regulation unacceptable, and I believe that the Legislature should correct the confusion. A-2348 recognizes the inequity in the administration of these programs by setting forth a consistency provision requiring DEP's regulation of wetlands to be consistent with this statute. Helter-skelter, undefined regulation must cease as a policy from the Legislature.

The third major issue with which I am concerned -- and I believe many members of the Legislature are concerned with this also -- is the way in which wetlands are to be defined. The lack of clear and predictable procedures in this area have contributed to the detriment of other wetlands regulatory programs, and a multitude of expensive appeals. The definition set forth in A-2348 is sound, and one which will minimize conflicts and indecision in the field. This sense of predictability is what is desperately needed for a regulatory program designated to protect freshwater wetlands. A great deal of effort and research went into the development of both the definition and the species list in my bill. Therefore, I urge you to support my bill's definition since it would regulate those areas that are truly important to the overall protection of the wetlands resource, and not be a broad-brushed confiscatory definition that would further engulf our State, and my area in particular.

For instance, A-672 includes a definition that encompasses areas with either wet soils or vegetation, but not both, as does A-2348. An evil sought to be remedied in the legislative findings of A-672 was absorption in the wetlands for the purpose of flood control. However, the all-encompassing definition in A-672 is based upon a premise that wetlands act as a sponge to absorb flood waters. In

actuality, the studies available show that not to be the case. All of us, from our personal experience -- if we live near wetland areas -- know these are not absorbent or porous; hence, the reason they are called "wetlands." Can you imagine taking a perc test in a wetland? Will not the result be a foregone conclusion?

A further example of the broad-brush of A-672 would be in the area of the buffer zone. My bill clearly and concisely defines the areas so covered. We provide a predictable set of distances that protect, and yet can be expanded where the environment so requires with the most restrictive always applying. This is to be determined by the County Planning Board.

I call your attention also to the buffer zone definition of A-672 -- located on page two of the bill. You cannot even remotely obtain a predictable result when you use a subjective criteria. How can you go an unknown amount of feet -- 100 to 300 -- using no guidelines at all for the 200 feet in-between, from a line -- namely, the freshwater wetland -- which in itself is undefined and vague? To do so would be impossible and would invite court challenge. How would you like to make an investment decision, based upon the double negative criteria in A-672?

Finally, I believe it is important to set forth specific statutory guidance that will assure the administration of a uniform permit program. I refer to specific standards, permit processing times, fees, and other procedural matters that are not only critical to the applicant, but also to the county agency which would administer the program under either bill.

I believe these are the major issues which my bill addresses. I also believe A-2348's 25 cosponsors are likewise concerned with these issues, and they encourage an amicable resolution of the problems highlighted by the differences in the two bills before this Committee.

I would note that the sponsorship of A-2348 increases daily; that of A-672 decreases. I believe it is noteworthy that the cosponsors from South Jersey, on a bipartisan basis, have seen the need pursued by Assemblywoman Ogden, but now view A-2348 as a more

reasonable approach and appropriate mechanism to accomplish the goal of clean water sought by us all.

I sincerely hope that the Committee has found my comments to be useful, and I invite any questions you may have.

ASSEMBLYMAN HOLLENBECK: Thank you. Just to clarify a point Assemblyman Haines brought up, this legislation you have sponsored is your legislation, and it is not projected as anything else but your legislation?

ASSEMBLYMAN RILEY: It is my legislation.

ASSEMBLYMAN HOLLENBECK: So, we will know it as Assemblyman Riley's legislation, all right?

ASSEMBLYMAN RILEY: I do not believe there is anyone in the legislature by the name of "Builder."

ASSEMBLYMAN HOLLENBECK: No, I don't believe we have an "Assemblyman Builder" here. I have no further questions for you, Assemblyman. Do any of the members of the Committee have any questions?

ASSEMBLYMAN HAINES: I have a question on this. You have listed in our species-- I am a horticulturist by trade and also by education. I am a graduate norticulturist. The thing that bothers me about this is, you list tulip tree, highbush blueberry, red maple, silver maple, american elm, pin oak, white oak, and all of these -- species -- and I could go on and on -- are found in some of our highest ground. I understand that they are in wetlands too, but I wonder whether there is any point in listing them? It just seems to me that what we ought to have listed in the list of species are the things that are found only in wetlands, such as skunk cabbage and maybe cattails -- the type of thing that is only found in wetlands. How is this covered?

ASSEMBLYMAN RILEY: I don't disagree, Assemblyman. The basic reason there was, those things can, as I understand it, be found in wetlands; therefore, that was the reason for their inclusion. A less-encompassing list of species would not bother me in the slightest, Mr. Haines.

ASSEMBLYMAN HAINES: It seems to me if we could define this perfectly -- and I suppose it is probably difficult to do this -- what

we ought to do is to find species that can only be found in wetlands, and then find species that can only be found in non-wetland areas.

As an example, an apple tree or a peach tree, or most of your— Even a cherry tree will not grow in an area that is flooded for any length of time, even for a two-month period. If asparagus is more than a year old, that would indicate that it is not in a wetlands area. Could we narrow this down a little better by finding species that are only found in wetlands, and find other species that cannot grow in wetlands?

ASSEMBLYMAN RILEY: I would have no problem with that. These were items that could be found in wetlands, but are not necessarily restricted to wetlands. I am not a horticulturist, as you are, Bill. I will leave that to you and to the expertise of the Committee.

ASSEMBLYMAN HAINES: Thank you.

ASSEMBLYMAN RILEY: Thank you.

ASSEMBLYMAN HOLLENBECK: Next we have Lieutenant Colonel Ralph Locurcio, District Engineer, U. S. Army Corps of Engineers. Colonel?

LIEUTENANT COLONEL RALPH LOCURCIO: Good morning, Mr. Chairman, members of the Assembly. I am happy to be here today to describe a regulatory program which is administered by the U.S. Army Corps of Engineers. I didn't mean to inundate you with paper, but you did request a comprehensive coverage of our program, and I will attempt to do that today through my testimony, assisted by members of my staff who are in the regulatory branch of my organization.

I have a rather lengthy statement, but I think it will satisfy your desire to cover the program in toto; its history; and how we got into the business of regulatory functions.

I will not comment on where we are going in the future, because as of last Friday, we understand that the changes to our regulations are presently on hold, and we are not in a position, at this point, to comment on where we might be going. There are some differences.

I will answer questions upon conclusion, and I will also call your attention to the graphics we will use throughout the presentation.

The U.S. Army Corps of Engineers originated in 1775, and is one of the world's largest and most unique engineering organizations. Today, its missions include civil works and flood-control projects, mobilization for national readiness, special assignments, such as Superfund construction, dam inspection supervision, and regulatory functions.

The Corps today is a highly decentralized organization. It is structured into 14 Division Offices and 39 District Offices. I might add that that organization is depicted in the blue book which is in your packet.

The Assistant Secretary of the Army, acting through the Office of the Chief of Engineers in Washington, has the principal responsibility for establishing policy and overseeing the Corps of Engineers.

Our regional headquarters, the North Atlantic Division, is composed of four District Offices: Norfolk, Baltimore, New York, and Philadelphia. I should add at this point that New York and Philadelphia are the two offices which have responsibility for the State of New Jersey, and this is depicted on the map.

The red line shows the division between the responsibilities of the New York District Corps of Engineers and the Philadelphia District, which I represent. I will be speaking today for both districts.

The Philadelphia District is defined by the Delaware River and Bay drainage basin and the contiguous reach of the Atlantic Coast, from Manasquan to Cape May, and from Cape Henlopen to the southern border of Delaware. As I mentioned, there are two Districts that have responsibility in New Jersey.

The New York District essentially has the northern portion of New Jersey, the major industrial area from Manasquan, north. As requested, my presentation will address the regulatory mission of the Corps from its inception.

The Corps' program began in 1899, with the enactment of the River and Harbor Act. This Act gave the Corps of Engineers authority and responsibility to regulate -- and I quote from the Act -- "...work

and structures in the waterways used as highways for the transportation of interstate or foreign commerce, including those waters subject to the ebb and flow of the tide shoreward to the mean high water line."

I would ask you to refer to the chart on my left. We will change the cover sheet on this chart to show you how our regulatory responsibilities have increased with successive changes in legislation. Presently, I am talking about the area shaded in blue. These waters are referred to as navigable waters. Until 1968, the Corps administered its regulatory program only to protect navigation and the navigable capacity of the nation's waters, and did not provide for the protection of the environment or the wetlands.

In December, 1968, in response to a growing national concern for environmental values, the Department of the Army revised its policy for evaluating permit applications. This revision in policy added a type of review, called a "public interest review." For the first time in the history of the Corps' permit program, the Corps began to consider a broader range of factors, including environmental, in its permit application process review. This public interest review process remains today, and I will discuss it in more detail in my presentation.

In 1972, Congress enacted the Federal Water Pollution Control Amendments -- now commonly referred to as the Clean Water Act -- with the announced purpose of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters.

Section 404 of this Act established a permit program to be administered by the Corps of Engineers. This program regulates the discharge of dredged or fill material into the waters of the United States.

In order for the Corps to implement this new law, revised Federal permit regulations were published in 1974. These regulations limited the Section 404 permit program to the same waters -- shaded in blue -- which were currently being regulated by the Department of the Army under the River and Harbor Act of 1899. Essentially, it held the 404 jurisdiction to those waters defined as navigable waters of the United States, as previously defined.

It was also at this time that the Corps of Engineers added to its regulation the Wetland Policy, to protect wetlands within its jurisdiction from "unnecessary alteration or destruction." Now, these wetland areas were, again, within the navigable waters -- the blue shaded area shown. So, we did not, at this point, extend our jurisdiction outside the realm of navigable waters.

However, shortly after publication of these revised regulations, the National Resource Defense Council, and the National Wildlife Federation challenged, in Federal Court, the limitation of the Corps' Section 404 jurisdiction to only navigable waters. These organizations expressed concern over the need to regulate the entire aquatic system, including the wetlands, rather than only those areas distinguished by the presence of the mean high, or ordinary high water mark. Another look at the chart will clarify this point.

Concern was also expressed over the need to regulate many tributary systems that feed into navigable waters, and for the many other waters, including lakes, isolated wetlands, etc. In March of 1975, in response to a suit in the U.S. Federal District Court, a U.S. Federal District Court ordered the revocation and rescission of the Corps' 1974 regulation, which limited Section 404 jurisdiction to only navigable waters.

In response to the District Court decision, the Corps of Engineers published revised Section 404 regulations, on July 25, 1975. These regulations provided a "phase in" schedule for expanding the Corps' Section 404 permit program to include essentially all waters of the United States, including adjacent and isolated wetlands.

Again, please refer to the charts, and we are now discussing those areas that are shaded in blue and green. As you see, this is a major difference from the original regulation.

- All tidal waters, shoreward to the high tide line, are now included, including adjacent wetlands. All non-tidal waters, to the ordinary water line, including adjacent wetlands are included. And, all other non-tidal waters and wetlands that are not part of a surface tributary system are included. In total, these waters are referred to as "waters of the United States."

The Corps' permit regulations were further refined and clarified in July, 1977, and again in 1982. The July, 1982, regulation is our most current publication and is the regulation being followed today in carrying out the Corps' regulatory responsibilities.

I might add that I have included that regulation as part of your packet.

In summary, the Corps' permit program is not a new one. When it began in 1899, its purpose was principally to avoid the obstruction of navigable waters. Now, in response to changing environmental, social, and economic conditions and laws, the scope of the program has been broadened. Today, the Corps' regulatory program concerns not only the integrity of our Nation's navigation channels, but also the quality of all waters and wetlands of the United States.

Again, if you refer to our chart, you will see that in the mean high waterline, we regulate virtually all activities, based upon our responsibilities under Section 10 of the River and Harbor Act of 1899, and under Section 404 of the Clean Water Act.

Beyond the mean high waterline, we regulate only the discharge of dredged or fill material into the waters of the United States under the Section 404 permit program.

As you requested, I will discuss, in more detail, our permit program for the regulation of activities in freshwater wetlands areas, which are subject to the two bills before the Assembly. Since the majority of the fresh water wetlands is located above the head of tide in non-navigable waters, I will focus my presentation on Section 404 of the Clean Water Act. It is under the authority of Section 404 that the Corps regulates the majority of freshwater wetlands within the State of New Jersey.

Based on available information, there are approximately 860,000 acres of wetlands within the State, which are shown on this chart. Of the total acreage, approximately 590,000 acres are subject exclusively to 404 authority. These latter, purely 404 wetlands, are shown in green on the State map to my left.

As stated earlier, under Section 404 of the Clean Water Act, the Corps of Engineers regulates only the discharge of dredged or fill

material into the waters of the United States and adjacent wetlands. The 404 legislation does not provide the Corps with authority to regulate the construction of structures or any other activities, except as they may involve the discharge of dredged or fill materials. For the purpose of this hearing, it is important to define the following terms:

The term "wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and, under normal circumstances, do support a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

The Corps presently utilizes a three-parameter approach in making wetland jurisdictional determinations. The first parameter is the presence of "hydrophytic or wetland vegetation." The Corps of Engineers, in consultation with the U.S. Fish and Wildlife Service, is presently compiling a list of wetland species throughout the nation.

The second parameter considers the nature of soil development in wetlands. If a soil develops under saturated conditions, it will exhibit certain morphological characteristics that distinguish it as being a hydric soil. The term "saturated" refers to the situation where all soil pores in the root zone are filled with water. The Soil Conservation Service has presently completed a list of these soil types in New Jersey.

The final parameter used in wetland determinations is hydrology. An area must either have permanent surface water, or be periodically inundated during the growing season by groundwater or surface water. In determining whether a state is a wetland, under Corps jurisdiction, all three parameters must be present.

The term "fill material" means any material used for the primary purpose of replacing an aquatic area with dry land, or of changing the bottom elevation of a water body. The term "fill material" does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under Section 402 of the Clean Water Act, administered by the U.S. Environmental Protection Agency.

The term "discharge of fill material" means the placement of fill material into waters of the United States, including wetlands. The discharge of fill material generally includes, without limitation, the following types of activities: Placement of fill that is necessary for the construction of any structure in waters of the United States; the building of any structure or impoundment requiring rock, sand, dirt, or any other material for its construction; site development fills for recreational, industrial, commercial, residential and other uses; causeways or road fills; dams and dikes; property protection and/or reclamation devices such as riprap; fill for structures such as sewage treatment facilities; and subaqueous utility lines. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products.

As indicated earlier in my presentation, the keystone of the Corps' permit application process is the public interest review. We have a chart to show you how this review is accomplished. This process is used in evaluating all Department of the Army permit applications. The decision whether a particular project is in the general public interest is based on an evaluation of the cumulative impacts of the proposed activity and its intended use in the public interest. Evaluation of this impact requires a careful weighing of all benefits which reasonably may be expected to accrue from the proposal, balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision should reflect the national concern for both protection and utilization of important resources.

All factors which may be relevant to the proposal must be considered, including the cumulative effects thereof, among which are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use navigation, and shore erosion, just to mention a few. I repeat, no permit will be granted unless its issuance is judged to be in the public interest, following this process.

I would also like to indicate that in the course of this process, we do coordinate with individuals, with special interest groups, where they indicate an interest, with local agencies, State agencies, and Federal agencies. So, the review is a very comprehensive review that is characterized and detailed by the nature of the permit application.

In evaluating whether an alteration of special conditions is necessary, the Corps gives special preference to certain types of wetlands, and these are:

Wetlands which serve significant, natural, biological functions, including food chain production, habitat and nesting, spawning, rearing, and resting sites;

Wetlands which serve as valuable storage areas for storm and flood waters; and

Wetlands which, through natural water filtration processes, serve significant and necessary water purification functions.

In evaluating whether the special wetlands' alteration is necessary, the Corps primarily considers whether the proposed activity for which a permit is being requested is dependent upon being located in a wetland resource, and whether feasible alternative sites are available. For those filling activities in wetlands that are not dependent on being located in, or close to, an aquatic environment, we assume that practicable alternatives do exist. These activities are termed, "non-water dependent" activities." So, we make a distinction as to preservation of the wetlands, depending upon whether or not the activity for which a permit is being requested must be in a wetland area or not.

Although a particular alteration of wetlands may constitute a minor change, the cumulative effect of numerous such piecemeal changes often results in a major impairment of the wetland resources. Thus, the particular wetland site for which an application is made will be evaluated with the recognition that it may be part of a complete and interrelated wetland system. In addition, State regulatory programs for the protection of wetlands will be given full consideration in the Corps' evaluation process. A copy of this permit review process is

also included in the packet which I have handed to you for future reference.

The procedure which I have just detailed applies to the issuance of individual Department of the Army permits. Please keep this term in mind.

In the Philadelphia District, processing of an individual permit application requires 45 to 60 days. However, applications that generate significant controversy or environmental impacts may extend processing time beyond 60 days and up to a year, or greater, if an Environmental Impact Statement is necessary. In the Philadelphia District, however, the 45 to 60 day process is generally the rule, and approximately 95 percent of all of our permit applications fall into this time frame.

Another form of Federal authorization is known as a General Permit. The General Permit program has been instituted in order to minimize the duplication of effort, needless paperwork, and delays in the issuance of a Department of the Army individual permit. It was developed in order to reduce the regulatory burdens on the public. It is important to understand that the General Permit program is applicable only for those regulated activities judged to have minimal adverse environmental impact. Under this program, there are two types of General Permits, nationwide and regional.

A Nationwide Permit is a form of a General Permit, which authorizes a category of activity throughout the nation, provided certain special conditions and management practices are adhered to. These permits were published in the Federal Register, dated July 22, 1982. To date, there are 27 Nationwide Permits. I must emphasize that the issuance of the Nationwide Permit is not a relinquishment of our jurisdiction or an exemption of the regulatory authority. Rather, it is a streamlined permitting procedure, established to regulate certain specific activities. Nationwide Permits enable the public to proceed with work without the time-consuming formal application process required for individual permits.

Two examples of the Nationwide Permit follow. Please refer to the wetlands' chart on my left for an explanation of these.

First, a Nationwide Permit has been issued for the discharge of dredged or fill material into non-tidal waters and wetlands that are not part of a tributary system to interstate waters or navigable waters of the United States. Essentially, these are isolated waters and wetlands.

A second is a Nationwide Permit for the discharge of fill material into non-tidal rivers and streams and their adjacent wetlands that are located at a point on the stream, above which the average annual flow is less than five cubic feet per second.

All other Nationwide Permits are for specific categories of work, such as a Nationwide Permit for the discharge of fill material for backfill or bedding for utility lines.

Secondly, there is a Nationwide Permit for fills for minor road crossings -- and there are approximately 25 others in this category. At present, there are a total of 27 Nationwide Permits. They are all contained in the regulations I mentioned, published in the Federal Register in July of 1983, Part 330.

I should reemphasize here that the Nationwide Permits are applicable provided that the person accomplishing the development follows the special conditions and the management practices which are cited in the regulations. Non-compliance with any of the Nationwide Permit special conditions would then require submission of a formal permit application, and the issuance of an individual Department of the Army Permit.

So, under this permit program, an applicant may proceed with the development, provided he follows the regulations. If we determine that he is not following the regulations, the specific conditions, or the management practices, we may then issue a cease and desist order, have him stop the activity, and file for an individual permit, which would follow the process I mentioned to you earlier.

Another type of General Permit is the Regional Permit. Similar to Nationwide Permits, Regional Permits authorize categories of regulated activities in waters of the United States which, again, have minimal individual and cumulative adverse impacts.

What differentiates the Nationwide from the Regional Permits is that the latter are issued at the discretion of individual Corps Division and District Commanders, based on an evaluation of the individual characteristics of their particular service area. So, these are similar to the Nationwide Permits. Recognizing the fact that different regions have different characteristics and economic needs, we -- my Division Commander and I -- are authorized to issue specific permits in our service area.

The permits themselves, the general permits, are issued in accordance with the formal processing procedures and with opportunity for a public hearing and for public input, as I explained earlier.

Of particular interest to me, and possibly to this Committee, is a provision in the Clean Water Act legislation and in our regulations, which allow for the Division or the District Engineer to issue a Regional Permit encompassing an entire State regulatory program. Such permits are referred to as "State Program General Permits" -- or "SPGP's." The purpose of the State Program General Permit is to avoid duplication and to reduce the time required to obtain both Federal and State permits by utilizing an established and effective State regulatory program.

Before a Division or District Engineer considers whether to issue such a permit, he must carefully review the State regulatory program for reasonable conformity with the Corps' program, and for the existence of the required manpower and expertise to effectively carry out such a program. In addition, formal processing procedures are required; a public hearing may be required, in coordination with other Federal agencies, prior to the issuance of a State Program General Permit.

The Philadelphia District has issued two State Program General Permits for work in New Jersey's coastal waters. These SPGP's cover such activities as non-commercial piers, docks, breakwaters, and bulkheads. Any person who wishes to perform work under the terms and conditions of these permits need only apply to the State agency -- the New Jersey Department of Environmental Protection -- with a copy of the application furnished to my office.

Once the State has determined that the proposed work conforms with the General Permit criteria, they are authorized to distribute a Corps of Engineers Permit, along with the State Permit. This process eliminates the need for an applicant to apply to two separate regulatory agencies for a given project.

Currently, there are no SPGP's in non-tidal freshwater wetlands within the State of New Jersey. This is due to the current lack of any established, effective, freshwater wetland regulatory program in New Jersey. Of course, any future State legislation which produces a State program, duplicating that of the Corps of Engineers' could be considered a candidate for a State Program General Permit.

Another provision of the Clean Water Act legislation which allows a state government to take an active role in regulating freshwater wetlands is Section 44 (h) of the act. In brief, 44 (h) allows the Administrator of the U.S. EPA to transfer administration of the Section 404 permit program for certain waters from the Corps of Engineers to a qualified state. The program cannot be transferred for permits in those waters which are used to transport interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide — in other words, navigable waters.

If a state's wetland program is approved by EPA, the Corps would suspend processing of all permit applications and would transfer pending applications to the state. District Engineers would assist EPA and the state in any way practicable to effect transfer, and would develop appropriate procedures to ensure orderly and expeditious transfer of these permit applications.

This concludes my presentation on the Corps missions and regulatory programs, past and present. As for what lies in the future, as I mentioned before, I can only tell you that, once again, our permit regulations are undergoing refinement and a new set of modifications to our existing regulations is expected to be published through the Code of Federal Register, sometime later this fall. Thank you.

ASSEMBLYMAN HOLLENBECK: I want to thank you very much. You went into a detailed explanation of the regulatory process of the Corps, dealing with the 404 Permits. That is something we wanted to hear, in that amount of detail.

Do the members of the Committee have any questions they would like to ask of the Colonel?

Assemblyman Pankok?

ASSEMBLYMAN PANKOK: Yes. From what I understand, the Corps is now using a new procedure to identify wetlands in the field where both wetlands visitation and hydric soils must be present. Is this true?

LT. COLONEL LOCURCIO: Our procedure is the three-factor approach, which I have mentioned to you. This is not a new procedure at this point, no.

ASSEMBLYMAN PANKOK: My point is, from what I understand, these procedures are basically the way the wetlands are outlined in A-2348.

LT. COLONEL LOCURCIO: No. Our identification of the wetlands differs from A-2348. A-2348 is based upon -- if I understand it correctly -- a list of vegetation. It is a defined list of vegetation. We do use a list of vegetation, in conjunction with other factors, and, specifically, a field visit. We do not rely solely upon a list of vegetation; that is only one of the factors we utilize.

ASSEMBLYMAN PANKOK: How do you feel about silt depositories in wetlands?

LT. COLONEL LOCURCIO: Silt, if it was deposited as part of a construction activity, would require a permit. I would have to know the exact circumstances. If it were deposited by man as part of an activity into a wetland area, that would require a permit.

ASSEMBLYMAN PANKOK: What I am referring to are deposits by the Corps of Engineers.

LT. COLONEL LOCURCIO: We require ourselves to permit our own activities -- yes, that is appropriate.

For example, in the deposition of dredged material--

ASSEMBLYMAN PANKOK: (interrupting) That is what I am referring to, dredged material.

LT. COLONEL LOCURCIO: (continuing) --we do require a permit; it is internal to the Corps of Engineers; and it is accomplished between the Branches. We don't go through the formal paperwork, but we do actually go through the permitting process.

ASSEMBLYMAN PANKOK: In your statement I think I heard you say you take into consideration the testimony from people in the area?

LT. COLONEL LOCURCIO: We do.

ASSEMBLYMAN PANKOK: The Corps of Engineers' record so far in the area I represent is very poor, as far as listening to the Boards of Freeholders, the township committees, and so forth, because we have a problem right in the Delaware River today, in the area of Kearny's Point and Penns Grove, where the Corps of Engineers allowed a lot of dredging in a portion of the land that had been very productive farmland, and now it is endangering the water supply in that area. They are going to have to go into a very expensive job of protecting that water before they can use deposits from the river for dredge material, because we don't know what kind of chemicals might be in that dredged material.

LT. COLONEL LOCURCIO: That's true. You are referring, I am sure, to the Penns Grove disposal area. Because of the possible complication with the groundwater aquifer and the possibility of leaching, in order for us to utilize that area in the future, we are presently putting in a slurry trench around the disposal area.

ASSEMBLYMAN PANKOK: I was there and looked at it the other day.

LT. COLONEL LOCURCIO: The stated purpose of that is to prevent any possible contamination of the surrounding groundwater.

ASSEMBLYMAN PANKOK: Are there any guarantees that it will prevent leaching into our water supply?

LT. COLONEL LOCURCIO: The guarantees I can give you, sir, are only to the extent of current technology. We are providing a solution which meets the standards of current technology in that particular science. We can give you no 100 percent guarantee, no.

ASSEMBLYMAN PANKOK: Can anybody tell me how much it is costing?

LT. COLONEL LOCURCIO: Yes. I don't have those figures on the tip of my tongue, but I believe this project, if I remember correctly, is about \$1 million.

I should add that we are doing the project to allow us to use this particular area to a greater extent. The alternative would be to find another area, again at greater Federal expense, somewhere else, which would require real estate acquisition, preparation of the land, etc. So, it is a question of cost-effectiveness in this particular case.

ASSEMBLYMAN PANKOK: I am glad you used that term "cost-effectiveness," because the Corps of Engineers caused this problem by allowing a local contractor to mine gravel from the area, and he went a lot deeper than he was permitted to go, because the Corps of Engineers didn't keep an eye on the project. It is now going to cost \$1 million to rectify this. I wonder how much they made from mining the gravel from this silt depository?

LT. COLONEL LOCURCIO: I am not prepared to answer that question, sir. I understand there was a problem, similar to the one you are referring to. I would add, however, that this particular project is part of a comprehensive dredge disposal area study, and disposal management study. So, it is not being done solely for that purpose, but it will allow us -- as I mentioned -- to further utilize this area to a greater effectiveness throughout the whole Delaware estuary.

ASSEMBLYMAN PANKOK: In the past, the Corps has not indicated their concern with wetlands at all, as far as their track record is concerned in my area, because they buy a productive farm and put a silt depository on it, or mine from it, and so forth, and "be damned" whether it is a wetlands area or not; they just move in and do it. They are more powerful than the President of the United States -- the Corps of Engineers -- because they don't listen to anyone. That has been their record with us. I spent 16 years on the Board of Freeholders in Salem County fighting the silt depositories in that area, because they were taking productive farmland and infringing on wetland areas constantly.

LT. COLONEL LOCURCIO: Not to oppose your statement, sir, I would just like to add, however, that through this internal process which we conduct, we also coordinate with the other Federal agencies

any of our disposal area projects, where required, to include appropriate mitigating factors. For example, we are going to create a wetland to replace a portion of a wetland that was taken up because of the geometry of the disposal area.

ASSEMBLYMAN PANKOK: In deference to you, sir, I do have to admit that there have been some improvements in your attitude towards local government and towards county government, but I still feel we have a long way to go when it comes to protecting our wetlands. I think legislation like this is probably meaningless unless the Corps starts cooperating with this type of legislation also.

LT. COLONEL LOCURCIO: I think we seek to do that, sir. We will attempt to do that as much as we can in the future. I would appreciate any comments, and will do whatever I can, to be as responsive as I can to the needs of the local communities.

ASSEMBLYMAN HOLLENBECK: Thank you, Colonel.

Steve, do you have a question for the Colonel?

ASSEMBLYMAN ADUBATO: Yes, a brief question. I am tempted, Mr. Chairman, to take advantage of this opportunity. Given the fact that this Committee instituted a Subcommittee on the Passaic Restoration Effort, which I Chair, I have the pleasure of dealing with the Army Corps of Engineers. There were several instances having to do with a fairly large project for about \$1 billion, to construct a tunnel in order to divert flood waters from the Central Passaic to the Lower Passaic River Basin. However, I am not going to take this opportunity at this time.

However, I do want to ask you something regarding a statement made by Assemblyman Riley before. On page three of his testimony, in talking about Assemblywoman Ogden's bill, he talked about the fact that there is an assumption made regarding an absorption process that goes on — having to do with wetlands — for the purpose of flood control.

In my capacity as Chairman of the Passaic River Subcommittee, I am very much concerned regarding your thoughts about whether wetlands act as a natural sponge, or absorber of flood waters, because if that is the assumption we are working on— One legislator believes that is a fairly ludicrous assumption, and another legislator, who has worked

for about 18 months on this legislation, believes it is an essential thing which must be considered. That has a lot to do with why she takes a particular point of view on this. What is the Army Corps' view on whether wetlands are an absorber of flood waters or not?

LT. COLONEL LOCURCIO: Purely from an engineering standpoint, I would think you would have to consider the fact that, first of all, the soils are never completely wet, unless they are totally inundated. So, the wetlands, to which we are referring, are in various states of inundation. Those that are not totally saturated would obviously provide available area to act as a sponge, if you will, to absorb flood waters, to a limited degree, depending on the size of the flood.

So, I would have to say that wetlands which are not totally inundated would provide a basis for the storage, if you will, of some runoff, number one. Number two, if construction is regulated so that it did not occur within those wetlands which are subject to inundation, or frequent inundation, by flood waters or storms of various sizes, that in itself would prevent damages later on.

So, from those two aspects — from the standpoint of, yes, I would think that those that are not totally inundated would provide some storage area, and if those areas were not built up, then that would reserve an area for storage that would not cause flood damage.

ASSEMBLYMAN ADUBATO: So it would help in the process?

LT. COLONEL LOCURCIO: Yes, I think it would.

ASSEMBLYMAN HAINES: Getting back to Assemblyman Pankok's question, how do you differ in determining wetlands in the two bills that have been presented to us? You use three criteria, but as I understand it, these bills also use the same criteria. They use hybrid soils, vegetation, and so forth. How do you differ the determination of wetlands in the two bills?

LT. COLONEL LOCURCIO: Our reading of the two bills is that they differ. I hope I have the numbers correct. A-2348 uses a list of specific vegetation as the trigger for a permit process; whereas, A-672 uses a map. In neither case is there an on-site inspection required, which we use. We then apply the three-factor evaluation, after an on-site inspection. We think the on-site inspection is an essential

part of this review process, because maps and terminology -- or specific types of vegetation -- are not all-encompassing. So, the area can be characterized, and we use a biologist, or a marine biologist, or someone who is technically qualified, to actually make an evaluative judgment as to whether or not jurisdiction applies. We don't just use a point on a map, or a name on a list. So, that is one specific area where I think we differ.

The other is in the application of public interest review. Our public interest review allows us to consider all significant aspects. Anything that may adversely impact the environment can be considered; whereas, in the legislation -- both pieces of legislation, as they are proposed -- such other factors could not be considered because they wouldn't be part of the legislation. In other words, subjective judgmental factors, and a broader range of factors that are more judgmental, if you will, than legislative factors, are based upon a professional judgment, rather than upon words.

ASSEMBLYMAN HAINES: From the way you describe it then, I think your procedure in determining a wetland is probably superior to either bill, because you do inspect the site. I think that sounds good.

One other question: You say that farming activities are permitted, and you describe such things as cultivating the crops, growing the crops, and so forth. I wonder how irrigation-- Can a farmer build a pond? Can a farmer run underground irrigation lines? Can a farmer drain a field? How does your jurisdiction interfere with what I would consider to be normal farming activities?

LT. COLONEL LOCURCIO: If the farm is an established, operating farm, then those activities would be exempted. I will ask my technical expert here to correct me if I am wrong, but if it is an established, operating farm, those activities would be exempted.

ASSEMBLYMAN HAINES: What about building dikes, and that type of thing?

LT. COLONEL LOCURCIO: If they were specifically for farming activity, directly related to the production of income from the farm, then they would be exempted. Is that correct, Ben?

TECHNICAL EXPERT: It would have to be an established operation.

ASSEMBLYMAN HAINES: Well, suppose I am a grain grower or a dairy farmer — suppose I am a dairy farmer, and I decide to go in and build a cranberry bog, would that be okay? You know, I am changing from one form of farming to another.

LT. COLONEL LOCURCIO: Let me defer to my expert.

TECHNICAL EXPERT: The intent of the regulation is, as I understand it, if it is related to an ongoing process, an ongoing cropping function, without change, it is not a new enterprise. If you want to go in and establish a new farm — and I think the activity you are representing is a new farming activity — that would be subject to a permit process. Whereas, if you have an ongoing activity and your activity is merely a part of that ongoing activity, then it would be exempted.

ASSEMBLYMAN HAINES: All right. Suppose I am a grain farmer and I have never irrigated before. I now want to go in and irrigate some vegetables?

LT. COLONEL LOCURCIO: In this case, I would say no, there would be no change because it would be an ongoing operation, and just a change in the way you are operating that ongoing operation.

ASSEMBLYMAN HAINES: It wouldn't be?

LT. COLONEL LOCURCIO: It would not be. It would be exempted.

ASSEMBLYMAN HAINES: I see. Thank you very much.

ASSEMBLYMAN HOLLENBECK: Just to clarify a point that was raised by Assemblyman Pankok and by Assemblyman Haines, neither bill, as presented by the sponsors at the moment, would qualify for a program that would satisfy the Corps for a State General Permit?

LT. COLONEL LOCURCIO: That's correct.

ASSEMBLYMAN HOLLENBECK: So, both bills would have to have alterations which would more closely resemble the regulations of the Corps of Engineers, in order to have the State qualify for a State General Permit?

LT. COLONEL LOCURCIO: That's correct. If I might add something at this point, we have one other reservation about both of these bills that I hadn't previously mentioned, and that is the method of enforcement and the technical staff required. I currently have 24 people from various professions who operate in this particular area, and who are dedicated only to the process of evaluating these permits.

We feel that delegating the responsibility for issuing permits down to the county level might preclude the application of enough people with the right skills to make an adequate determination of the nature of the permit.

We would ask that if the State develops a program, it be held at the State level and that an appropriate staff and surveillance authority be established to ensure that the conditions are followed, and that they are checked up on after the construction.

ASSEMBLYMAN HOLLENBECK: Thank you very much.

ASSEMBLYMAN PANKOK: May I make a comment on that particular statement?

ASSEMBLYMAN HOLLENBECK: Sure.

ASSEMBLYMAN PANKOK: When you go from local government to county government, it costs a little more to regulate, and when you go from county government to State government, it costs a lot more to regulate. So, I think it would be a very expensive process, as far as the applications, etc., are concerned, if it were to be left in the State's hands.

ASSEMBLYMAN HOLLENBECK: And, conversely, Colonel, it gets more expensive to have duplication of permit applications also.

LT. COLONEL LOCURCIO: If I might comment on that, sir: The staff necessary -- the technical staff necessary -- in this very scientific area is extensive, and to have to replicate that staff in each county, we feel, would be an excessive burden on the county government and on the State Treasury; whereas, centralizing it at the State government would allow one to have specialists in the area who could effectively cover a broader State area.

ASSEMBLYMAN HOLLENBECK: Thank you very much, Colonel.

William Muszynski, Director of the Water Management Division,
U.S. EPA.

WILLIAM J. MUSZYNSKI: Good morning, Mr. Chairman and members of the Committee. My name is William Muszynski, and I am Director of the Water Management Division of EPA, Region II. I am pleased to be here representing our Regional Administrator, Christopher J. Daggett, at this hearing on freshwater wetlands and their protection.

EPA defines "wetlands" as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support -- and that, under normal circumstances, do support -- vegetation typically adapted for life in saturated soil conditions.

Wetlands are among the nation's most valuable natural resources. Wetlands are areas of great natural productivity, hydrological utility, and environmental diversity. They provide natural flood control, improve water quality, recharge aquifers, stabilize flow of streams and rivers, and serve as habitat for fish and wildlife. Protection of wetlands has been identified as a priority issue by EPA, at both the national and regional levels.

The primary Federal regulatory program for the protection of wetlands is known as the 404 program. Section 404 (a) of the Clean Water Act authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material to waters of the United States, including wetlands. The Environmental Protection Agency and the Corps of Engineers share responsibilities under Section 404.

EPA's role under Section 404 is several-fold:

EPA develops and promulgates the 404 (b)(1) guidelines, which are the substantive environmental criteria under which permit applications are reviewed. Although the Clean Water Act (CWA) uses the term "guidelines" to refer to these criteria, the guidelines are regulatory in nature, and compliance with them is mandatory.

Applications for 404 permits are handled by the Corps of Engineers. EPA reviews these applications and gives its comments to the permitting authority, the Corps.

Under Section 404 (c) EPA can prohibit or restrict the use of any disposal site when there is an unacceptable adverse impact on

fisheries, shell fisheries, wildlife, municipal water supplies, or recreational areas. EPA can invoke section 404 (c) in advance of a planned discharge, while a permit application is being evaluated, or after a permit has been issued.

Under the Clean Water Act, EPA has the ultimate authority to determine the extent of waters of the United States to which Section 404 is applied. EPA has, for the most part, delegated this responsibility to the Corps. In New Jersey, the Corps is the determining authority.

EPA also has the responsibility for approving and overseeing State assumption of the 404 program.

Finally, EPA has the authority to act against unpermitted discharges of dredged or fill material in accordance with Section 309 of the Clean Water Act, which specifies criminal and civil penalties for violations.

As I mentioned earlier, the 404 (b)(1) guidelines are the substantive environmental criteria under which 404 permit applications are reviewed. Compliance with the guidelines is mandatory. A major factor in applying the guidelines is the consideration of alternatives. The guidelines always prohibit discharges where there is a practical, less-damaging alternative. Where the proposed activity is non-water dependent, practical alternatives are presumed to be available, unless an applicant can demonstrate otherwise.

The guidelines also prohibit discharges which would result in significant degradation of waters of the United States. Findings of significant degradation are based upon a wide range of ecological factors. The guidelines also allow the use of mitigation to compensate for adverse environmental effects. However, mitigation may not be used to avoid consideration of practicable alternatives. Finally, the guidelines require a consideration of cumulative impacts. Cumulative impacts are changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material.

It is important to recognize that section 404 only regulates discharges of dredged or fill material. It does not regulate dredging

, draining, and placement of structures on wetlands. Although these activities are regulated by the Corps of Engineers, pursuant to Section 10 of the Rivers and Harbors Act, the area of jurisdiction for Section 10 is considerably less extensive than 404. Action by the State to regulate these other activities in inland freshwater wetlands would be an important step in the protection of these important resources.

Section 404 (g) of the Clean Water Act provides for State assumption of the 404 program for certain waters of the United States. The Clean Water Act indicates that navigable waters and adjacent wetlands must remain under the Corps jurisdiction. Remaining inland waters and wetlands could become part of the State's 404 program. The Clean Water Act gives EPA the authority to approve and oversee State assumption of the 404 program. The Governor of any State desiring to administer its own permit program for the discharge of dredged and fill material may submit to the Administrator of EPA a description of the program it proposes to administer and establish under State law.

An approvable State 404 program is one that is at least equivalent to the existing Federal 404 program, in terms of jurisdiction, environmental criteria, and enforcement. Of course, nothing restricts a State from enacting a program which is more stringent than that required under 404. In EPA's opinion, a single state agency should be responsible for administration of a State 404 program. A single administrative agency allows for consistency in determinations of jurisdiction, interpretation and application of regulations, and enforcement. It has been our experience that a successful wetlands program requires a well-trained technical staff, which could be more economically assembled by a single agency. In addition, administration of a State 404 program involves continuing coordination between the State and EPA. The logistics involved in coordinating with numerous permit agencies would strain EPA's ability to fulfill its oversight responsibilities mandated by the Clean Water Act.

To be eligible for 404 assumption, a State must have authority over all waters subject to Section 404. The State definition of wetlands must be at least as encompassing as the current definition

used by EPA and the Corps. Specific geographic areas of the State may not be excluded from the program. Partial program transfers are not allowed.

A State must also have the ability to assure compliance with applicable requirements of the Clean Water Act, including the 404 (b)(1) guidelines. The States need not adopt the guidelines themselves, but can establish environmental criteria which are at least as strict.

A State 404 program must provide for public participation, such as public notices and opportunity for public hearings in the permit process.

The State must also have the ability to halt, enjoin, and/or prevent unauthorized discharges. State law should provide for civil and criminal penalties which are equivalent to those specified in Section 309 of the Clean Water Act.

The Clean Water Act provides for EPA oversight of State 404 programs. States are required to transmit copies of permanent applications to EPA. EPA then has 30 days in which to notify the State of its intent to comment. EPA may comment on an application within 90 days of its receipt. During this period, EPA coordinates with other Federal agencies, including the Fish and Wildlife Service, the National Marine Fisheries Service, and the Corps of Engineers, who are also given the opportunity to comment on the proposed permit. If EPA objects to a permit issuance, the State may not issue a permit until the objection has been resolved. EPA addresses overall State performance and may, in extreme circumstances, withdraw program approval. EPA encourages State assumption of Clean Water Act programs, including 404.

Our preliminary review of Assembly Bill 2348 and Assembly Bill 672 indicates that although both bills would extend protection to freshwater wetlands, neither bill would provide adequate authorities to enable EPA to consider approval of State assumption of the 404 program.

Both bills exclude specific geographic areas -- the Pinelands and the Hackensack Meadowlands -- from the definition of wetlands. In addition, A-2348 excludes all areas subject to 404 of the Clean Water Act, as well as man-made wetlands.

The definition of wetlands in A-2348 is not technically compatible with the EPA definition because manmade wetlands are not always recognized under the State bill.

Both bills provide for permitting authorities other than a State agency.

Neither bill provides for public notice and public participation procedures prior to a determination to issue a permit as required by Federal law.

Environmental review criteria are not as stringent as the 404 (b)(1) guidelines. A-672 requires minimization of impacts, but does not recognize that in certain circumstances, minimized impacts may still be unacceptable. A-2348 would allow issuance of a permit even when less damaging alternatives are available.

Each bill exempts certain activities -- for instance, utility lines and linear development -- which are not exempted by 404.

Enforcement remedies and penalties in each bill are inadequate. Federal requirements are for civil penalties of up to \$5,000 per day, and criminal penalties of up to \$10,000 per day. A-672 provides for a maximum civil penalty of \$3,000, and A-2348 provides for maximum civil penalties of \$1,000. Neither bill provides for criminal penalties.

Time constraints for permit review contained in each bill would not allow for coordination with EPA, as required by the Clean Water Act.

We view the expansion of wetlands protection contemplated by the State of New Jersey as a positive contribution to environmental protection.

I would like to submit copies of EPA's 404 (b)(1) guidelines, and EPA's regulations regarding State program assumption for your information. I believe they have been included in my packet to you. EPA would be pleased to provide assistance in developing a State 404 program and provide advice concerning legislation necessary to provide adequate authority for the 404 program.

I would like to thank you for this opportunity to comment on the bill.

ASSEMBLYMAN HOLLENBECK: Does any member of the Committee have any questions? (negative response) Thank you very much for the information you provided to us this morning, Mr. Muszynski.

Mr. Charles Kulp, U. S. Fish and Wildlife Service.

CHARLES KULP: Mr. Chairman, my name is Charles Kulp. I am a Fish and Wildlife Administrator for the States of Pennsylvania and New Jersey. I am here to represent the Regional Director of the Fish and Wildlife Service in Boston.

With me, I have Mr. Ralph Tiner, who is in charge of all national wetlands inventory mapping in all of the northeastern states, and he can answer any questions you may have on the mapping system.

I also have with me Mr. Cliff Day, who is a biologist, stationed in Absecon, New Jersey. He has worked with Mrs. Ogden on A-672, and he has provided some assistance to her.

I also have with me a Mr. William Neidermyer, standing up here, who is from our Boston office, in the permit area.

We have reviewed copies of Assembly Bills 672 and 2348, concerning the regulation of freshwater wetlands in the State of New Jersey.

As you may be aware, the service regularly provides technical assistance to various state agencies on environmental issues, and in this manner has provided technical assistance toward the development of proposed bill 672, and has participated in a series of workshops and meetings.

As a general background, our office in Absecon, New Jersey, has reviewed and commented on thousands of Federal permit applications, and on numerous other projects that involve New Jersey's Wetlands, particularly in tidal areas. Our Congressional mandate is to provide the Federal leadership to preserve, protect, and enhance fish and wildlife in their habitats for the continuing benefit of people. We consider our involvement with the proposed Wetland bills for the State a direct way to implement this important mandate.

In general, wetlands yield public assets that include flood control, water purification, erosion control, fish and wildlife habitat, and education and recreational values. Wetlands provide

breeding and feeding habitats for mammals such as mink, muskrats, and otters; birds, including ducks, geese, herons, egrets, owls and hawks; reptiles, including turtles and snakes; amphibians, including salamanders, frogs and toads; a host of other vertebrate and invertebrate species; and, further, freshwater wetlands' species that have been designated as being threatened or endangered by the State of New Jersey.

Overall, we believe that wetlands should be protected and properly managed as valuable public resources that comprise an important part of our environment and our nation's water resources and wildlife.

The unnecessary alteration or destruction of wetlands should be discouraged as being contrary to the overall public interest. According to our national wetlands' inventory, there are over 600,000 acres of freshwater wetlands in New Jersey.

Bill No. 672, as proposed, would regulate approximately 200,000 acres of these wetlands, since it excludes the Pinelands area, which is about 300,000 acres, and, 100,000 acres of the remaining 300,000 are in private and public conservation lands.

In comparison, Bill No. 2348 will, in our opinion, have no beneficial effect on freshwater wetland protection, and would result in the continued loss of wetlands. This bill inaccurately defines hydric soils and fails to distinguish between obligate and facultative hydrophytes and upland vegetation. The exclusions under this bill are so numerous, both in terms of exempted activities and areas not covered, as to render the bill useless.

In New Jersey, freshwater wetlands are increasingly subject to competing land use pressures that are usually motivated by economic gains. Our experience has shown that the management and ecological succession of New Jersey's inland wetlands are customarily dictated, or influenced, by zoning and land-use decisions made by planning boards, land speculators and landowners.

Rarely are wetlands, or the important public assets that are derived from wetlands, given equal consideration in local land-use planning. Nevertheless, we are optimistic and believe that the

successful implementation of adequate State legislation, including enforcement guidelines, could reverse the trend of wetlands destruction.

The Corps, under the Clean Water Act, regulates discharge of dredged or fill material in waters of the United States. In general, they have the authority to regulate these activities in all wetlands in New Jersey. The Corps uses nationwide permits and individual permits to regulate activities in these waters. This map depicts, in yellow (indicating) those wetlands under nationwide permits, and, in green (again indicating) those areas under individual permits. These areas were mapped from the U.S. Geological Survey and Corps of Engineers information, with the yellow area having an average annual discharges of less than five cubic feet per second. Except for the Pinelands Comprehensive Management Plan, there is no state or county program that regulates development in freshwater wetlands for the purpose of protecting wetlands. In fact, New Jersey is one of the only States in the northeast that has not implemented a program to protect freshwater wetland values.

Rather than an overlap, or duplication of regulatory procedures, our experience in other states has shown that Federal wetland regulations frequently complement and support state regulations for properly protecting our nations' water resources.

The proposed bill, presented as Assembly Bill No. 672, represents a major forward stride for the protection of the State's inland wetlands. In comparison, we do not feel that Assembly Bill No. 2348 provides any meaningful protection for freshwater wetlands. I would be happy to answer any questions.

ASSEMBLYMAN HOLLENBECK: Yes, I have one. With reference to your speaking of other states in the northeast that have programs for protection, are there any other states in the northeast that have State General Permits under 404?

WILLIAM NEIDERMYER: I can answer that. Rhode Island is under a pilot program to assume a State 404. In the northeast we have State General Program Permits in Maine, Connecticut, and Virginia.

ASSEMBLYMAN HOLLENBECK: What are they doing? Are they in the process of seeking this?

MR. NEIDERMYER: Rhode Island is in the process of taking over the 404 program. They first have to go through a pilot program for a year.

ASSEMBLYMAN HOLLENBECK: And, what are the other states doing?

MR. NEIDERMYER: In the other states, the Corps of Engineers has issued a State Program General Permit, where, if an applicant meets the Corps regulations through state regulation, it automatically gets the Corps permit.

ASSEMBLYMAN HOLLENBECK: Thank you. Could you compare the definition of wetlands in the two bills before us?

RALPH TINER: I can address that one. First of all, the Ogden bill is really consistent with the accepted Federal definitions of wetlands, those that have been developed by the Fish and Wildlife Service, in conjunction with other Federal and State agencies. That is the one we are using for mapping the wetlands, as part of the national wetland intergroup.

By comparison, Bill 2348 is not generally consistent with the scientifically sound definition of wetlands for a number of reasons. One, it defines hydric soils in a manner that is not comprehensive enough. It does not cover all of the types of soils that would be covered by the Soil Conservation Service's definition of hydric soils, and we question why they have taken parts from that definition.

Another major drawback with the wetland definition in 2348 is that it relies on this master species list. If you look at that list, you will see that they identify wetland species and species that are more wide-ranging, and then upland species. If you look closely at the various species that are identified as upland, some of them have been found naturally in New Jersey's wetlands.

In 2348, they say the regulations will exclude any lands that have upland vegetation from the jurisdiction of the act; therefore, if you find one plant that happens to be growing in an upland, with a designated upland affinity, you would then not regulate that area, or not call it a wetland.

Now, any competent wetland scientist knows that within large wetland areas, we do have changes in topography, and a slight rise in elevation will produce different conditions, and you can find some upland plants in there; however, they will not predominate, and the area still should be considered a wetland. There are no provisions in 2348 for identifying those small areas, or for handling those isolated occurrences of upland plants within a wetland complex.

ASSEMBLYMAN HOLLENBECK: Do you think it is okay to develop wetlands as long as there is mitigation, or compensation, provided in another area?

CHARLES KULP: Well, no. There are a couple of reasons for that. First of all, there is a question of non-water dependency, and also because I think essentially it is prohibited mostly because 404 (b)(1) guidelines provide for a practical alternative.

Now, we have, on occasion, had some litigation compensation for wetlands, but if you just start off with that and say, "We will go ahead and build and we will compensate later on," that just won't be a workable solution.

ASSEMBLYMAN HOLLENBECK: States with their own freshwater wetlands programs avoid duplication with the 404 program.

CHARLES KULP: I have been in the State of Pennsylvania for eight years. I live right in the center of the State. In 1979, the State of Pennsylvania passed a Wetlands Protection law, and it has been effective since about 1981. Besides that, in the State of Pennsylvania we have the Buffalo Corps District, we have the Pittsburgh Corps District, we have the Baltimore Corps District, and the Philadelphia District.

In my experience, in the past three years or so, in dealing with both the State Permit system and also the Corps of Engineer's system, we have not had any duplication of effort; we have not had any delays; and, we find that they complement one another.

Another thing is, the Pennsylvania DER did not, after they passed the Wetlands Bill, go out and hire 100 people. They only have about three people in Harrisburg, and the way we handle this thing is, we look at the sites before we go to a meeting. We have a meeting once

a month. We go out and look at all the sites. Also, the EPA is at the meeting. We have the Pennsylvania Fish Commission, and the Pennsylvania Game Commission, and we will discuss maybe 30 or 40 permits. There is no duplication of effort. In fact, we had several cases where, because of the State Permit system, there was no need for a Federal permit; or, by the time we got to the point of needing a Federal permit, all the problems are resolved.

Also, you already have a duplicative system in New Jersey with the coastal wetlands. You have permits required for any activity in tidal waters, and that has been— I don't know how long that has been around. But, we don't really have any duplication of effort in the New York/Philadelphia Corps in New Jersey on 404 permits concerning tidal waters.

So, I just don't really think that is a big issue. It can be worked out. Now, as far as other states' duplication of effort, I am not familiar with anything outside of New Jersey and Pennsylvania. But, that has been my experience.

ASSEMBLYMAN HOLLENBECK: Are there any further questions?

CHARLES KULP: Could I just add one thing to that?

ASSEMBLYMAN HOLLENBECK: Yes.

CHARLES KULP: I forgot to mention that besides your Coastal Areas CAFRA permit, you would also need a permit for any project that is over 25 acres in size from the Delaware River Basin Commission, for example, in the Delaware River Basin. We haven't had any problems with that one either. So, I just don't think that is a big issue.

ASSEMBLYMAN HOLLENBECK: Thank you very much, Mr. Kulp.

ASSEMBLYMAN HAINES: Mr. Chairman, I do have a question. I read something in your testimony, and I am sorry I wasn't here for part of it. You say the bill incorrectly defines hydric soils, and it fails to distinguish between obligate and facultative hydrophytes and upland vegetation. In what way does it inaccurately define hydric soils?

MR. TINER: The definition in 2348 refers strictly to saturation, and it says, "during the growing season." It doesn't say for how long during the growing season, and there is no reference to any flooding at all.

For example, the Soil Conservation Service's definition of hydric soil includes soil that is, one, either saturated at, or near, the soil surface with water that is virtually lacking free oxygen for significant periods during the growing season; or, two, is flooded frequently for long periods during the growing season. In 2348, there is no reference to the duration. One can interpret that in a number of ways. It could be for any period during the growing season, or it could be for the entire growing season; whereas, the technical definition of hydric soil specifies that it has to be for long enough periods to develop a lack of oxygen in the soil, or frequently flooded for long period.

ASSEMBLYMAN HAINES: Are you saying that the Soil Conservation's definition of hydric soils is incorrect?

MR. TINER: No, I am saying that is the correct definition.

ASSEMBLYMAN HAINES: Well, I thought that Riley's bill referred to the Soil Conservation definitions.

MR. TINER: It referred to a list of soils, but it did not use the exact definition. And, the list of soils that are referred to is not-- There is uncertainty as to what list they are referring to. We have worked with the Soil Conservation Service to develop a list of hydric soils for the State.

ASSEMBLYMAN HAINES: It is my impression, as a farmer and a horticulturist, and so forth, that if you take a soil sample, it is like a thumb print, and you can tell by the soil sample whether that soil has been under water for a period of time during the season. It may be completely dry when you take the sample, but if it has been inundated for, say, two-thirds of the growing season, you can tell by looking at the soil that it is a hydric soil.

Are you saying that Riley's bill does not include this as a hydric soil?

MR. TINER: Well, there is some confusion as to what Riley's bill would really include, because it refers to a list that is not published or available at this point, and it is questionable what list they are talking about.

Also, you mentioned good points, and they are the way we go out into the field to make a determination. We examine the soils and look for those characteristics of wetness, and you can see that. But, the Riley bill does not say anything about using hydric soils to make a determination if you have a question in your mind as to what the vegetation is telling you, whereas, the Ogden bill does that.

A-2348 relies on identifying the presence of the water table, but it does not say that it will try to observe signs of flooded soils that are evident in a soil sample.

ASSEMBLYMAN HAINES: My impression was that Riley's bill did refer to hydric soils, and that is why I am asking the question.

MR. TINER: Well, it refers to hydric soils, but it doesn't define them the same way as the Soil Conservation Service does. So, therefore, there is room for an interpretation that could preclude identifying some of the hydric soils that the Soil Conservation Service would consider as wetlands in their identification of what a wetland is.

The question is, why did they depart from the technically-sound and scientifically-accepted definition of hydric soil?

ASSEMBLYMAN HAINES: Well, I wasn't aware that they did depart from it; that is why I am asking the question.

MR. TINER: Well, they have, and that is why I have some problems with it.

ASSEMBLYMAN HAINES: I would like to see where they have departed from it, because it spells out hydric soils, the way I read it. Thank you.

ASSEMBLYMAN HOLLENBECK: Thank you very much, gentlemen.

That took care of the Federal portion dealing with the legislation. We now have Commissioner Robert Hughey from the New Jersey Department of Environmental Protection, who apparently has a busy day.

COMMISSIONER ROBERT HUGHEY: Mr. Chairman, members of the Committee, I appreciate the opportunity to appear before you today to discuss our freshwater wetlands policies and their protection. The subject is of vital concern to our Department, and it has received very serious consideration during recent years.

Our general attitude towards freshwater wetlands has been evident in our coastal resource and development policies — which the Chairman is very familiar with — and our comments on the Corps of Engineers regulations.

We view freshwater wetlands as a valuable natural resource whose loss or alteration should be sharply restricted. Continued loss or alteration of freshwater wetlands should be permitted only in extraordinary circumstances, when such loss or alteration is necessary to protect public health, safety, or welfare.

Freshwater wetlands presently receive incomplete protection — which I think became very obvious through the first part of the testimony this morning — under Federal and State laws that were principally designed for flood control and water pollution control rather than to protect wetlands. This indirect, or piecemeal approach, is unsatisfactory.

The Department strongly supports the adoption of a State Freshwater Wetlands Protection Law that defines freshwater wetlands and requires a level of protection commiserate with their natural resource value.

We also support the concept that county planning boards, or other county agencies, should have the principal responsibility, with certain defined exceptions, for administering such a law. And, I would share with the Committee that when we first started to discuss legislation, we even discussed using municipalities and the environmental boards in those municipalities, but we realized that becomes cumbersome, so we backed off to the county level for help and enforcement of the law.

I was going to talk to you about what I think freshwater wetlands values are, but you have already heard those values discussed. I think it is instructive that we have two bills here, and while we may or may not agree with all parts of those bills, they are both here because freshwater wetlands are presumed to have value. So, I am going to skip that section, and go to a very brief overview of Federal regulation.

Before discussing the desirable elements of State freshwater wetlands, I think we should have some sense of why we think Federal regulation is not currently adequate for the protection of this resource.

The principal Federal regulation program relegated to freshwater wetlands is the program administered by the United States Army Corps of Engineers, pursuant to 404, The Federal Clean Water Act. This program, in our opinion, has serious limitations for freshwater wetlands protection. These limitations arise partly from the Clean Water Act itself and partly from the administration of the program. 404 is not a comprehensive freshwater wetlands program. As specified in the Clean Water Act, 404 only regulates the discharge of dredged or fill material into waters of the United States. If an activity in freshwater wetlands does not constitute the discharge of dredged or fill material, the activity is not subject to 404. Thus, freshwater wetlands can be lost, or altered, by various activities that fall outside of the 404 program. Such activities include the excavation of wetlands that are not within bodies of surface water, the drainage of wetlands, and the removal of wetlands vegetation.

Also, for any freshwater wetlands that do not fall within the Corps of Engineers' definition of waters of the United States, no activities in such wetlands are subject to the 404 program. The definition of the waters of the United States has been the subject of prolonged controversy and uncertainty, particularly as related to the inclusion or exclusion of various kinds of freshwater wetlands.

Both of the bills before the Committee recognize the need for buffer zones around freshwater wetlands. But, the 404 program only provides for the waters of the United States; it does not regulate activities in buffer zones that are outside, or adjacent to, those waters.

Besides the limitations present in the text of the Clean Water Act, there are also limitations present in the administration of the program. As I stated in my May 25, 1984, letter to William Gianelli, Assistant Secretary of the Army for Civil Works: "The settlement agreement recently reached on 404 litigation does not

adequately address all of the environmental concerns. The Corps of Engineers' proposed regulations do not reflect the best interest of New Jersey's water quality goals and objectives."

A copy of my May 25th letter and a July 8, 1983, letter on this subject are attached to our comments on Assembly Bill 2348. Among the problems identified in these letters are problems with various nationwide permits, including nationwide permits for discharges that are located above what the Corps of Engineers has defined as headwaters; problems with the public interest review criteria; problems with the definition of waters of the United States, as related to wetlands; problems with the so-called "letter of permission" for certain 404 projects; and problems with the review period for section 401 certifications and coastal zone management consistency regulations.

In short, we oppose most of the proposed changes in the 404 regulations because they consistently diminish the weight in environmental factors, of the public interest determination and the role of public participation in the review process, while increasing the Corps' discretion to authorize projects under the General Permit Program, and to place greater burdens on the State, without giving the State the resources to carry out those burdens.

An additional problem is that the 404 Program remains, year in and year out, one of the most controversial provisions in the Clean Water Act. We never know, from year to year, what to expect by way of revisions to the Clean Water Act, revisions to applicable Federal regulations, or Federal court decisions. The 404 program does not provide a firm base on which to build State freshwater wetlands legislation. We have serious reservations about the ability of the Federal agencies, with limited staff resources, to implement the program throughout New Jersey. The delegation of the 404 program, for New Jersey, may require considerable time in order to overcome various obstacles -- and you have heard about some of those obstacles today.

For the above reasons, at this time we would not support a State Freshwater Wetlands Act which categorically excludes all freshwater wetlands that are within the jurisdiction of the Corps of Engineers. The fact that the proposed Assembly Committee Substitute

for Assembly Bill No. 672 avoids this concern, by providing for comprehensive regulation of wetlands by counties, is an important plus.

Let me go over with the Committee what we think — without referring to either of the bills — are the fundamental parts of any effective Freshwater Wetlands Protection Act.

First, we think that the lead regulatory agency for most private activity should be the County Planning Board or another county agency. For activities that cross county lines and activities by government agencies, the lead regulatory agency should be the Department of Environmental Protection. The administrative coordinator of the permit requirements for a Freshwater Wetlands Act and the existing permit requirements of the Flood Hazard Area Control Act should be the Department of Environmental Protection. The DEP should be the lead regulatory agency for activities in stream channels and delineated floodways.

Second, the list of regulated activities covered by the Act should be comprehensive and include activities that can result in a loss or alteration of freshwater wetlands, such as dredging, filling, draining, and removal of vegetation. Transportation and utility corridors should have regulatory provisions suited to their special characteristics, but should not be exempted from the Act.

Third, the wetlands exempted from the Act should include the Hackensack Meadowlands area, the Pinelands area, the Coastal Wetlands, promulgated by the Wetlands Act of 1970, and other marine wetlands. Because of the limitations in the Section 404 Program, freshwater wetlands within the jurisdiction of the Corps of Engineers should not be exempt from the Act.

Care should also be taken against including other exemptions which are so broad as to imperil the basic purpose of the Act, which should be the protection of freshwater wetlands.

Fourth, the Act should include the definition of freshwater wetlands, and such related scientific terms as hydrophytes and hydric soils. Again, you started to hear those comments today. These definitions should be directly based on definitions that have been prepared by wetlands ecologists and soil scientists, and they should be

broad enough to include all the freshwater wetlands, hydrophytes and hydric soils recognized by at least a substantial segment of the scientific community. We recommend the definitions developed by the United States Fish and Wildlife Service and the Federal Soil Conservation Service.

Fifth, the Act should provide for a wetlands buffer zone to protect freshwater wetlands from activities in adjacent uplands. This includes buffer zones around freshwater wetlands within the jurisdiction of the Corps of Engineers' Section 404 Program.

Sixth, the Act should provide for appeals to the Department of Environmental Protection to ensure adequate implementation of the Act, but we do not intend to engage in frivolous appeals to reverse county decisions unless there is an obvious error.

Seventh, the basic test for deciding whether or not to issue a freshwater wetlands permit should be whether or not the proposed activity has a prudent or feasible alternative; whether or not the proposed activity would result in minimal feasible alteration of the freshwater wetlands; and, whether or not the applicant will restore or create freshwater wetlands to mitigate any significant alteration of freshwater wetlands. Each of these tests should be passed before a permit is issued.

The Act should also include a reasonable hardship provision that would allow a waiver from strict compliance in cases of hardship, but only if such waivers would not result in a substantial detriment to the public good, nor would it substantially impair the intent and purposes of the Act.

Eighth, the administration of the Flood Hazard Area Control Act, the Coastal Area Facilities Review Act, the Water Pollution Control Act, and the Water Quality Planning Act should not be inconsistent with the State Freshwater Wetlands Protection Act, unless more stringent provisions are specifically required by Federal law or regulation to administer a Federal program, such as 404. However, a State Freshwater Wetlands Protection Act must itself provide for adequate protection of freshwater wetlands in order to ensure that such a consistency provision is acceptable.

Ninth, the Act should cite the National Wetlands Inventory Maps, prepared by the United States Fish and Wildlife Service, and the County Soil Surveys, prepared by the Federal Soil Conservation Service, as basic information sources, and allow for the refinement and correction of such information on the basis of site investigation performed for the preparation of county wetlands maps, or for individual proposed facilities.

Tenth, the Department of Environmental Protection should be authorized to adopt regulations to implement its responsibilities under the Act to establish uniform scales and standards for county freshwater wetlands and maps, and to allocate funds to counties in accordance with their mapping needs and fiscal control procedures.

Now, let me briefly talk about the two bills that are in front of the Committee.

First, I think we should all acknowledge that the most important general contribution made by Assembly Bill 672, and its proposed Assembly Committee Substitute, has been to elevate the subject of freshwater wetlands to the degree of attention that the Legislature is now showing it. Without the prolonged and diligent effort that has been invested in the drafting, revision, and discussion of this bill, we would probably not be here today.

Moreover, I think I should tell you that my Department supports most of the provisions of the proposed Assembly Committee Substitute.

Secondly, we also acknowledge important general contributions made by Assembly Bill 2348. The introduction of this bill demonstrates that there is widespread recognition of the value of freshwater wetlands; a need for a State Freshwater Wetlands Act, with a primary role for County Planning Boards; a need for the specific definition of wetland standards; a need for freshwater wetlands buffer zones; a need for freshwater wetlands maps; and a need for appropriations to support the preparation of these maps.

The substantial differences between these two bills have, I think, served to focus on the fundamental issues of public policy that should properly be discussed in front of this Committee and the

Legislature. There are also individual provisions in Assembly Bill 2348 that, with further refinements in some cases, would be useful provisions in a Freshwater Wetlands Protection Act. It is our hope that the best elements from both bills, together with our comments and the comments of others you will hear from today, will result in a strong and reasonable Freshwater Wetlands Protection Act.

This having been said, however, we must acknowledge that the proposed Committee Substitute for Assembly Bill 672 comes considerably closer to what we are looking for in freshwater wetlands legislation. This bill makes it clear that the purpose of the legislation is the protection of freshwater wetlands, and that substantial loss or alteration of freshwater wetlands should be permitted only under extraordinary circumstances.

The bill designates that the Department of Environmental Protection is the regulatory agency for certain kinds of activities. The bill's list of regulated activities is comprehensive and does not include broad exemption for transportation and public utility systems. The bill does not exempt wetlands within the Corps of Engineer's 404 jurisdiction, nor does it contain other broad exemptions that would impede the proper purpose of freshwater wetlands legislation.

The bill's definition of freshwater wetlands, hydrophytes, and hydric soils is more consistent with the United States Fish and Wildlife Service's than the Soil Conservation Service's definition, and we now think that the bill's definition of freshwater wetlands should be revised for even greater consistency.

The bill would establish buffer zones for freshwater wetlands whether or not the wetlands themselves are in the Corps of Engineers' jurisdiction.

The bill provides for appeals of county approvals to the Department of Environmental Protection, but does not require the Department to commence a review of every petition. The bill's basic tests for deciding whether or not the issue of freshwater wetlands permits are closer to our recommendations -- although some of these tests are still too stringent -- and additional provisions for mitigation would be useful.

There is need for a reasonable hardship provision that would not substantially impair the purpose of the Act. There is also a need for a provision that would require other State laws -- such the as Flood Hazard Area Control Act and the Water Quality Planning Act -- which could be administered in a manner consistent with the bill.

The bill cites the National Wetlands Inventory Maps and the County Soil Surveys, but provisions should be added to allow for the refinement and correction of the information on these maps, on the basis of site investigations. This need also applies to freshwater wetlands maps, prepared by the counties.

Finally, a provision needs to be added to authorize the Department of Environmental Protection to adopt regulations to implement responsibilities under the Act.

Turning to Assembly Bill 2348, we see a number of serious difficulties which, considered separately or in combination, would make that bill, in its present form, a step backward for environmental protection in New Jersey. More importantly, it will not provide for effective protection of freshwater wetlands.

First, the bill excludes far too many freshwater wetlands. By excluding freshwater wetlands within the Corps of Engineers' jurisdiction, the bill excludes 90 percent of the freshwater wetlands in the State. As I stated previously, we cannot rely on Section 404 for comprehensive wetlands protection. By excluding wetlands artificially created due to man-made or natural obstructions, the bill would directly exclude all the freshwater wetlands associated with man-made lakes and ponds. Because almost all wetlands were created in recent or ancient history by some man-made obstruction, the bill could, under strict interpretation, exclude almost all the freshwater wetlands in the State.

By excluding areas drained prior to the effective date of the Act, the bill would exclude any area that shows evidence of drainage or ditching, even if that area would otherwise meet the definition of freshwater wetlands.

By excluding lands within the uppermost 20 acres of intermittent stream quarters and isolated or discontinuous areas of

less than ten acres, the bill would exclude vast areas of freshwater wetlands.

We have prepared two maps, one from the north and one from the south, to show what the implications are of the exemptions that are included in Assembly Bill 2348.

John Gaston, would you go up and outline the categories of exemption, and show the Committee what they would exclude in the two examples?

MR. GASTON: We tried to have a map that was large enough so that you could see it, but wouldn't have to challenge it.

This is a U.S.G.S. map which shows areas that would be excluded for one reason or another, based on the Fish and Wildlife definition of where wetlands are, and their mapping system. While you can't see those particulars, what the map would indicate is that for one reason or another, a total of five different categories would be excluded from regulation. The comment that the Commissioner made was that some 90 percent of the areas that are indicated as freshwater wetlands would be exempt. Let me just go over them quickly.

Excluded under A-2348 would be: Wetlands with an uppermost 20 acres of an intermittent stream corridor — and there are a few of them within the map; wetlands with isolated depressions or continuous areas of less than 10 acres — and they are in red on the map; wetlands with flows greater than 5 cfs, that are regulated by the Corps of Engineers — this is the Black River, running north down through here (indicating) and all of that would be excluded from regulation under the bill because it is regulated by the Corps of Engineers; wetlands with flows of less than 5 cfs would be excluded because they are covered by general permits — and the purple areas are indicated as such; and wetlands in isolated depressions with continuous areas, also regulated by the Corps, would be excluded.

So, up in the north, most of what we were able to locate on the map falls into one of those categories of definition under A-2348, and would, therefore, not be regulated as a wetland under the State system.

Now, for comparison purposes, we did a similar analysis for South Jersey. On this map, Pitman is located here, so we are talking about areas that are west and south of Pitman, New Jersey. Again, you see the same pattern. Wetlands that have been identified in the wetlands inventory done by the Fish and Wildlife Service, for one reason or another are excluded from regulation by the exclusions that have been provided for in A-2348.

So, in effect, you have wetlands regulations, but you have no regulated areas upon which to apply the regulations. We did this to provide a good comparison. In North Jersey we have different types of wetlands. In South Jersey we have larger numbers of areas that have less than 5 cfs flow, but, still, the pattern is the same. We have the Wetlands Bill, where A-2348, in effect, doesn't regulate anything.

COMMISSIONER HUGHEY: In addition to these exclusions, the bill has excessively narrow definitions for freshwater wetlands, hydrophytes, and hydric soils. Under the bill, an area must now have both predominant hydrophyte vegetation and predominantly hydric soil to be considered a freshwater wetland. But in reality, sometimes freshwater wetlands have either one or the other. And, sometimes freshwater wetlands have hydric soil without hydric vegetation. All these freshwater wetlands should be protected under the Act.

The bill's definition of hydric soil is substantially narrower than that and it is inconsistent with the definition of hydric soil prepared by the Federal Soil Conservation Service. The bill's definition of hydrophyte is substantially narrower than, and is inconsistent with, the definition adopted by the United States Fish and Wildlife Service. Moreover, by requiring that hydrophytic vegetation be naturally occurring and growing vigorously, the bill would exclude all vegetation species that were not originally native to New Jersey; all areas where vegetation is deliberately destroyed to escape from the requirements of the bill; and all areas where vegetation has been temporarily damaged by such causes as fire, insects, and plant disease. I would not be surprised if the combined effect of these excessively narrow definitions would be to exclude 50 percent, or more, of the freshwater wetlands that we intend to cover.

I think that the bill, to its credit, recognizes the importance of buffer zones. It does not recognize that there is no buffer zone provision in Section 404 of the program, whose jurisdiction is excluded from the bill. It does not designate the Department of Environmental Protection as the lead regulatory agency, nor does it have any any regulatory activity, including activities that cross county lines.

I think the basic test to decide whether or not to issue a wetlands permit is inadequate in the bill. It does not require an applicant to demonstrate that there is no prudent or feasible alternative, nor that the proposed activity will result in minimum feasible alteration to freshwater wetlands. It includes a hardship provision, but it does not restrict hardship clauses to cases where it would not result in substantial detriment to the public good. Indeed, various provisions of the bill indicate that further substantial loss of freshwater wetlands will frequently be in the public interest.

The bill includes the protection of unused portions of freshwater wetlands as a mitigation measure, but this does not mitigate the loss or alteration of used portions. The bill refers to the creation of new freshwater wetlands as a mitigation measure, but it does not prevent these artificially-created wetlands from themselves being converted to other uses. The bill includes transfer of title of existing wetlands as mitigation measures, but this is not a true mitigation measure.

It is perhaps unnecessary to say that unless several major revisions are made to correct the major deficiencies in the bill, we do not think it should supersede the substantive wetlands protection measures already available under the general provisions of the Flood Hazard Area Control Act, the Coastal Areas Facility Review Act, the Water Pollution Control Act, and the Water Quality Planning Act.

Because the definitions of freshwater wetlands and hydric soils in this bill are not consistent with the definitions used in the United States Fish and Wildlife Service, the Federal Soil Conservation Service, the National Wetlands Inventory Maps, the County Soil Surveys, which are not referenced in this bill, these maps would not serve as a

direct basis for a freshwater wetlands map to be prepared by the counties.

Excessive and extensive site investigation would be required to identify those areas that meet this bill's restricted definition of freshwater wetland.

I think that I, as well as the members of the Committee, recognize the difficult task that is ahead of you. We are evaluating the technical administrative provisions in both of these bills and we are considering the comments that are being made today. We have been considering them now for 14 months, as we worked through drafts of various wetland strategies. I know it isn't anyone's intention not to regulate wetlands. I think the question is how we are going to regulate wetlands. We now pass on what has been our participation in the drafting process to this legislative committee. However, we are available. We are interested in a wetlands protection strategy, and we think there is a basis for that discussion in the Assembly Substitute for 672. Thank you, Mr. Chairman.

ASSEMBLYMAN HOLLENBECK: Commissioner, do you now have a regulatory authority to regulate any wetlands?

COMMISSIONER HUGHEY: Yes, we do. We regulate saltwater wetlands, as you know. We also regulate some of these wetlands, although we are reaching each time we do it, and I think John Gaston can tell you the reason why. John?

MR. GASTON: We regulate some wetlands, through the Flood Plains Management Act, within the corridor. We regulate some wetlands, through the Water Pollution Control Act and the Federal grant program, which we administer for the United States Environmental Protection Agency. Those efforts are piecemeal efforts and they are resource-intensive, but they represent the best we can do under the circumstances.

ASSEMBLYMAN HAINES: I have the same question. I have read the definition of hydric soils in both bills and I can find no substantial difference. If you can point out the difference-- They both refer to the United States Soil Conservation Service and they use their definition. Now, why are we saying they are different, or can you find some differences? I read it and I see no difference at all.

MR. GASTON: I think the way to answer that question is, we ought to have the Committee staff and our staff sit down and do a little analysis and provide you with a response on that question.

ASSEMBLYMAN HAINES: I just wonder if, because you drafted Maureen Ogden's bill, the other bill is wrong, and because some other folks drafted another bill that Maureen Ogden's bill is wrong. I would like to see us get together and put these things together and try to come up with some sense, and not just criticize the other bill if it has the same definition as the bill we are for.

COMMISSIONER HUGHEY: I think quite aside from definition or pride of authorship-- First of all, we didn't draft the bill; we helped to draft the bill with a working committee of a number of interested people. It is Maureen Ogden's bill, and the Committee Substitute is the Committee Substitute bill.

Quite aside from the question of definitions, which we think are too narrow -- and we would be happy to supply a technical review from your staff and our staff that they both agree with -- I think there are fundamental differences in the bills. I am not saying that is good or bad; I have said repeatedly that I think it is instructive and that while there are certain polls on this subject, there is no question that we need the regulation. So, I think that is a very positive step, regardless of whose input is involved in either one of the bills.

There is a lot of room for discussion. What I did tell you, and I know this wasn't a surprise to you, is that I think Maureen's bill -- the Committee review of Maureen's bill -- is far closer to what I would like to see in strategy.

ASSEMBLYMAN HAINES: What I am trying to do on this thing is to find out where the differences are -- where the real differences are. I understand hydric soils. Heck, I work with them all the time. I would like to know, if we have the same definition in both bills, why we are criticizing one. Let's find out where we are the same and where we are different and try to resolve this thing, because I don't think we are that far apart on these two bills. I don't think we should be critical of a bill if we have the same definition in the bill we

favor. That's where I am coming from on this thing. I would like to see the differences spelled out.

I think when you talk about vegetation, I know an awful lot about vegetation and I just don't see the difference in the two bills. I would like to see this thing spelled out on a working basis instead of saying, "Well, the other guy has the wrong bill."

COMMISSIONER HUGHEY: No. I don't think anybody is saying that anyone has the wrong bill. We like one better than the other, but we are not saying that anybody has the wrong bill. We will be happy to do that. As a matter of fact, we have provided to you today, Bill— We will provide you with an even more detailed work-up of a technical review of both bills. I think what is required now is a very simple step, which is to match up the two technical reviews and compare the bills piece by piece, and we will be happy to do that.

ASSEMBLYMAN HOLLENBECK: Just for the edification of the Assemblymen, I think more information, of course, is the purpose for this hearing. We want to develop the thoughts with reference to various portions of these bills. I would assume that the bill, or the substitute bill we will probably put together, will have something in it that nobody will like. That is usually when we have it right, when we have a bill that neither the proponents nor the opponents like. It is then probably right for the citizens of the State.

That is our job, to define that particular area and come up with a bill that nobody likes. That is what we are going to be working on. Let us not kid ourselves, a bill in its purest form is never going to go through, either way. So, we will have to try to work out the language and the problems with the definitions in order to try and work out these differences. We have to make some decisions, and our major decision was, one, that we need a wetlands bill; two, that we want to tie it in with the 404 program; and, three, what our definitions are and how we want to accomplish the goals that we think will fill the needs of the State and the people.

So, those are problems and we are going to have expert advise. That is what we have the experts here for. We have reached a natural point in the testimony at this hearing where we are now going

into the testimony from the varying interest groups. So, I think this is an ideal time for us to take our lunch break. It is now 12:45. I would like to start the hearing again at 2:00. Thank you.

COMMISSIONER HUGHEY: Thank you, Mr. Chairman.

(Lunch Break)

AFTER LUNCH

ASSEMBLYMAN HOLLENBECK: Will everyone please take their seats? Is David Jackson here?

MEMBER OF AUDIENCE: He has not returned as yet.

ASSEMBLYMAN HOLLENBECK: We did say 2:00 didn't we? He didn't believe us.

Is Beryl Collins present? (affirmative reply)

Good afternoon, Ms. Collins.

BERYL ROBISHAUD COLLINS: Good afternoon. Chairman Hollenbeck and Committee members: My name is Beryl Robichaud Collins; I am an Associate Research Professor at Rutgers University, and I have studied and published extensively on the vegetation of New Jersey. I welcome the opportunity to comment on the two bills before you, and hope that out of this process will come needed protection for our State's freshwater wetlands.

In recent years the many values of wetlands to the general public have received growing recognition. Here in New Jersey the need to protect these values through regulation has been acknowledged by both conservation and development interests. Therefore, rather than focusing on the benefits of protecting wetlands, I will direct my comments to three areas of major differences between ACS-672 and A-2348, which affect the relative level of protection that each would provide for freshwater wetlands.

The most fundamental issue to be addressed in any regulatory program is that of establishing a definition of the resource to be protected. It is my opinion that the definition of wetlands offered in A-2348 does not have a sound scientific rationale as its basis, and the

definition does not offer a practical working guide for the delineation of wetland areas in New Jersey. The definition which states that the wetlands shall include, "those lands...supporting predominantly hydrophytic vegetation...but shall not include lands supporting upland vegetation" runs contrary to accepted ecological theory and to field evidence on what actually occurs on wetlands in this State.

As detailed in A-2348, there are characteristic wetland plant communities in New Jersey that are identified by the presence of particular plants known as wetland species or hydrophytes. In its classification and description of these wetland communities, A-2348 has drawn heavily on a book that I coauthored, entitled The Vegetation of New Jersey — Rutgers University Press. But, in so doing, it fails to give recognition to a very important fact pointed out in this book, and that is, occasional representatives of upland species are also found on the wetlands. If the definition contained in A2348 is combined with the so-called Master Plant List, to which reference is made in A-2348, it would be impossible to delineate with any supportable rationale a New Jersey wetland. In fact, many of our well-known and accepted wetlands would not be so designated under this definition.

Several examples illustrate what I have said. Among the most common trees that we have growing in New Jersey are the white oak, scarlet oak, black oak, and the black cherry. All four of these species are classed as upland trees on the Master List of Species referenced in A-2348, but we find occasional representatives of these trees on our freshwater wetlands.

As documented in published reports, John Bernard, who did wide-ranging studies in South Jersey — the lowlands of South Jersey — found white oak and black cherry present on wetlands there. Lord and Boerner have reported finding on the Rancocas wetlands white oak, black oak, and scarlet oak; all three are classed on the A-2348 list as upland species. William Niering, the ecologist responsible for much of our information about High Point State Park, found in our famous High Point bogs and swamps some white pine, another tree which was classed as an upland tree in the A-2348 reference list.

These few examples -- and there are hundreds more that could be cited -- illustrate what occurs on many of the New Jersey wetlands, as well as those in other states. While these lands are characterized by a predominance of wetland vegetation, they may also have present some plants that grow on the uplands. To exclude sites, or parts thereof, simply on the basis of these representatives, as prescribed by A-2348, runs contrary to the accepted understanding of wetlands.

On the other hand, the definition of freshwater wetlands given in A672 has a sound basis and offers a practical working guide for the delineation of wetland areas. This definition, based on "a predominance of hydrophytic vegetation," is in keeping with accepted I would like to see this thing spelled out on a working ecological concepts and the field characteristics of known wetland sites in New Jersey as we know them. The definition also provides a practical working guide by recognizing that if the presence of hydrophytic vegetation cannot be determined in the field, the hydric soil criterion will be used as the guide.

As a final comment on the wetlands definition, I strongly suggest to the Committee that the New Jersey wetlands legislation endorse, by reference only, a scientifically-sound classified list of wetland plant species. At present, the only list that appears to meet this qualification is the currently-available preliminary wetlands species list prepared by the U.S. Fish and Wildlife Service, with the assistance of many outside acknowledged experts.

At this point I wanted to vary from my prepared statement to define the difference in hydric soils. One of your Committee members did raise the question as to whether there truly was, or was not, any difference between the two bills, and I wanted to define what, in essence, was the difference.

Hydric soils, under the builders' bill, states that the soils are saturated under normal climatic conditions during the growing season, and there is no way to interpret that, other than to believe that this means they must be saturated throughout the whole growing season.

ACS-72 does not say that. It is, in fact, different. It says that hydric soils are those that are saturated heavily on the surface for significant periods during the growing season -- and this is quite different -- or a hydric soil is one which can be flooded for long periods during the growing season. The other bill, A-2348, says nothing about flooding during the growing season. Therefore, there is a significant difference in the definition of both the hydrophytic vegetation and hydric soils, and A-2348 does not withstand scientific scrutiny. It has no sound basis for either one of the two definitions.

A second factor that will determine the effectiveness of wetland resource protection is the delineation of the activities that will come under regulation. The list of regulated activities contained in ACS-672 appears to be comprehensive. In contrast, A-2348 omits from regulation a number of activities which, if left unregulated, would greatly diminish wetland values; these include pile driving and any actions that alter drainage, disturb water levels, or water tables, or cause destruction to plants.

Of particular concern also is the A-2348 exemption from regulation for "construction of any transportation or public utility system, provided that such transportation or utility system does not promote additional development in regulated wetlands." In the past, highway and utility construction has been a major cause of the destruction or adverse modification of wetlands throughout the State. Although it may be impractical to enact an outright ban on such construction in wetlands, complete exemption from regulation is not a good solution. Rather, it appears more appropriate to carefully regulate such construction, as is proposed in ACS-672.

The third major factor that will determine the level of resource protection is the set of criteria used to determine what types of activities are appropriate in the wetlands and under what conditions. County agencies need explicit criteria to render fair and legally defensible wetland permitting decisions. ACS-672 establishes such criteria, including a requirement that the proposed activity, by its nature, depends upon access to water or wetlands, except in the case of highways or public utilities, which would be permitted if there

is no prudent or feasible alternative alignment of less impact on wetlands. In my opinion, this requirement is of paramount importance to the success of any wetlands protection program.

A-2348 is silent as to what activities may or may not be permitted in freshwater wetlands. Furthermore, it provides no criteria as to how a permitted activity shall be implemented to minimize negative impacts on wetlands resources. These two omissions are significant flaws in A-2348 which would result in unpredictable agency decision-making and inadequate resource protection. If it is the desire of the Legislature to prevent unnecessary losses of the State's remaining freshwater wetlands, then it must adopt a policy similar to that already adopted for coastal wetlands; that is, activities which do not require a wetland location should be sited in other most suitable areas.

I am not commenting on some of the other aspects of the two bills, but, instead, have confined my statement to analyzing the three greatly diminish wetland values; these include pile driving and any definition of freshwater wetlands, differences in the exemptions from the regulations, and differences in the criteria used for siting of wetland activities. Clearly, in all three of these areas, ACS-672 is superior. Its adoption will represent a major step forward in protecting the many values that freshwater wetlands have for the people of New Jersey. Thank you, Mr. Chairman.

ASSEMBLYMAN HOLLENBECK: Thank you, Professor. Are there any questions? You have one, Assemblyman?

ASSEMBLYMAN HAINES: Yes. One of the things that concerns me is when you say the definition says that if you have a utility line going through a wetland and if there is another alternative, the other alternative should be used. I am a farmer, and the other alternative, in 90 percent of the cases, is going to be farmland. To me, putting a high tension line, other electrical lines, and many utilities through wetlands, if they are properly installed and do not permanently disturb the wetlands area, is a fine place to put them; much better than over agricultural land.

I think we have to look at alternatives on these things, and not just say we will not disturb wetlands at all. Why do you feel that you should not put, say, a high tension line through a wetlands area, if it is properly done?

PROFESSOR COLLINS: Well, I think it is very difficult to do it properly, in order to avoid adverse effects to wetlands. Therefore, if there is an alternative, I think it should be explored and used, if it is a feasible alternative.

ASSEMBLYMAN HAINES: One of the things I know happened was, I have a friend who lost his son. He was guiding an airplane, which was doing aerial spraying, with a 40 foot irrigation pipe. Unfortunately, a spark jumped from the high tension line to the irrigation pipe and killed his son. To me, it is far better to put those high tension lines in an area that will not be used for farming activities, or other things. This will, in effect, once the high tension lines are put into place, ensure that that wetlands will stay and will not be developed, forever.

I just don't understand the attitude that it is better to put it on farmland than to put it in wetlands, because to me it is a detriment to farmlands, and it does interfere with farming operations.

I do think -- and I am very sincere about this -- we have a limited amount of high quality farmland in this world. If we are going to go ahead and say that anything that is not put in other areas will go in farmland areas, then I think we are making a bad choice. To me, it is far better to put it in properly, in a wetlands area, than it is, in effect, to destroy some of the value of farmlands. Thank you.

ASSEMBLYMAN HOLLENBECK: I don't know what the question was.

ASSEMBLYMAN HAINES: Well, I am asking her why -- I am basically asking her way the alignment should be deferred from the wetlands area, Mr. Chairman, to a farmland area. I mean, that is the natural alternative. It is either wetlands or--

ASSEMBLYMAN HOLLENBECK: (interrupting) I don't think she advocated that particular position. I think what she is saying is there shouldn't be an exemption on it. That is what she was referring to. In other words, it has to go through a permit process, like anything else, and it shouldn't be exempt from any permitting process.

ASSEMBLYMAN HAINES: If you read the bill, most of the qualification for utility lines in wetlands, I agree with one hundred percent. They should be returned to normal. They should disturb the wetlands to a minimum extent. All these things should be done. But, when you say the alignment should be removed from the wetlands, if possible, and put into other areas, 90 percent of the time, at least in South Jersey, those areas mean farmland.

PROFESSOR COLLINS: I think ACS-672 states, "where there is no prudent or feasible alternative alignment of less than--"

ASSEMBLYMAN HAINES: (interrupting) You see, farmland is a feasible alternative. I just prefer the wetlands to farmland because--

PROFESSOR COLLINS: (interrupting) I couldn't agree with you more. We have to preserve our New Jersey farmland.

ASSEMBLYMAN HAINES: You say you are for that?

PROFESSOR COLLINS: Yes, I am strongly for that.

ASSEMBLYMAN HAINES: We are agreed on that point anyway.

ASSEMBLYMAN PANKOK: Mr. Chairman?

ASSEMBLYMAN HOLLENBECK: Assemblyman Pankok?

ASSEMBLYMAN PANKOK: I think it takes just about the opposite effect in Salem County because there is a very rare bird that is nesting in one of the high line towers, starting from Artificial Island to Hancock's Bridge. That very rare bird is protected because he is in the high line tower. He probably wouldn't be in the area if it wasn't for the availability of this tower to nest in. And, I have never seen more deer in Salem County and in the area of the atomic generating station than I have in the last couple of years. The towers and the road went right across a wetland area, and I see no ill effect to that wetland area from that access road or those high towers.

ASSEMBLYMAN HOLLENBECK: Do you want to ask a question, Assemblyman Adubato?

ASSEMBLYMAN ADUBATO: I really don't want to ask a question, nor belabor the point. Bill, you represent a point of view that is very well taken on this Committee. If I am not mistaken, you are the only farmer in the Legislature. You are very effective in representing the farmer's point of view. However, I don't think, as the Chairman

stated, that is what is being advocated here today — the idea of moving the construction of utility lines and other transportation projects from wetlands to farmlands. The point is, just as farmlands are a resource in our State that we are trying to protect, the reason why we are here today, primarily, is because we are trying to protect wetlands also.

So, the point is, that is our basic responsibility at this hearing. I think all the comments have been germane, appropriate, and to the point, in terms of protecting wetlands, which is — as I said — what we are here for.

ASSEMBLYMAN HAINES: My point is that if we have an alternative, I would rather see it on wetlands. I won't go on with this any further, but there is one other area in which you can put these high tension lines, and that is through wooded areas.

When you are putting them through true wetlands, you don't have to cut down any trees because the vegetation is generally pretty low. When you put it through nice woodlands, you do have to cut down trees. So, here again, I would prefer that we go into swampy areas and put the high tension lines there, if we have a perfect situation where we can do that. Of course, nothing is perfect. One always has variations on it.

One of the things that was brought to my attention, however, was that you defined hydric soils while I was not here. I wonder if you could do that again for me, because I am having a little trouble with it. Maybe you could do that after the meeting. My problem is, I have read the two bills, and I can't find any difference between them.

ASSEMBLYMAN HOLLENBECK: All right. That will be taken care of. We are having the transcript made, and you can read that testimony. Also, Professor, did you read from a prepared statement?

PROFESSOR COLLINS: I did not have the definition in my prepared statement.

ASSEMBLYMAN HOLLENBECK: We will have it in the transcript.

PROFESSOR COLLINS: I added this, Assemblyman Haines.

ASSEMBLYMAN HOLLENBECK: We will have it in the transcript anyhow. Thank you very much.

David Jackson, you got here, I see, from lunch. The Legislator's lunches take less time than the Builders' Association lunches.

DAVID B. JACKSON: Unfortunately, this is a working builder who had to make a phone call.

Good afternoon, Mr. Chairman and members of the Committee. My name is David Jackson. I am the current President of the New Jersey Builders' Association, a 2100 member trade organization of firms involved in the construction industry in New Jersey.

We are vitally concerned with the regulation of freshwater wetlands in New Jersey, and specifically the legislation before your Committee for consideration. As such, we are here today to lend our full support to Assemblyman Riley's bill, A-2348, and to oppose A-672. We appreciate this opportunity to testify, and would like to briefly highlight some of the differences between the two bills in an effort to explain our position.

There are three primary issues with which we are most concerned. These are:

1. The way in which freshwater wetlands are to be defined.
2. The duplication of regulatory responsibility with the U.S. Army Corps of Engineers. And,
3. Consistency with other State permit programs administered by the New Jersey Department of Environmental Protection.

A most important component of all freshwater wetlands legislation is the way in which these areas are to be defined. Above all, our builders feel that procedures should be designed to minimize subjective interpretation and narrow-down the location where the "line is drawn" to delineate the extent of wetlands. We feel that the definition in A-2348 would accomplish these goals by regulating truly "wet" lands, and thus lend predictability to the process of delineating such areas. This would not only help the applicant and ultimately the home buyer, but also the county agency, in reviewing permits and during the mapping process.

An important feature of A-2348's definition is that it requires the predominance of both hydrophytic -- wetlands -- vegetation

and hydric -- wet -- soils. Along with this definition, A-23489 lists "characteristic wetland species" and makes reference to a "master list" that has been developed to provide specific guidance for delineating wetlands in the field. A-672 does not provide such guidance, and, in fact, expands the areas to be defined by not requiring both wet soils and wetlands vegetation, and by regulating wetlands that are man-made.

A-2348, in turn, rightfully exempts wetlands that are artificially created due to man-made or natural obstructions. Unlike 672, A-2348 sets forth acreage thresholds, below which wetlands would not be regulated. We support these thresholds, particularly for isolated wetland areas that usually bear little or no connection or significance to other wetlands systems. Furthermore, A-2348 exempts transportation and public utilities, provided that they do not promote additional wetlands development. We support this logical provision, and seriously doubt whether A-672's exception for "linear development" would allow utility construction due to the number of very subjective conditions that must be met.

As part of the definition of wetlands, a "buffer zone" has been included in both bills. The NJBA prefers A-2348's wetlands buffer requirements, due to the specific distances set forth by the legislation. On the other hand, A-672 adds to an already expansive definition a range of not less than 100 feet and not more than 300 feet. A reliable set of distances, as used in A-2348, is a much preferred method.

We heard, earlier today, the Army Corps of Engineers administers a permit program in New Jersey that regulates dredge and fill activities in wetlands. The United States Fish and Wildlife Service and the United States Department of Environmental Protection Agency are consulted on each of these permit applications. Furthermore, the Corps will soon be adopting amended regulations that most assuredly will make their wetlands requirements more strict. We feel that it would be irresponsible for the Legislature to support a bill that totally disregards such a program, as does A-672. Instead, the NJBA strongly encourages the provision in A-2348 that exempts the Corps' jurisdiction from that statute, thereby recognizing the Corps'

regulatory program as a valid, functioning wetlands protection authority.

There is also a desperate need for other DEP permit programs to be consistent with any bill to be sanctioned by the Legislature. There are several examples of DEP permit programs under which freshwater wetlands are now being regulated. As Commissioner Hughey admitted earlier today, under the Stream Encroachment Permit Program, for instance, wetlands are regulated as a "project of special concern," yet, there exists no definition, no guidelines, and no environmental standards with which to comply. The issue is not so much the fact that the wetlands are being regulated, but the haphazard and ill-defined way in which it is occurring. DEP's programs are acknowledged in A-2348 as ones which must become consistent with the statute. We cannot afford to endorse freshwater wetlands regulations that would conflict with the administration of other State permit programs. The Legislature should seize this opportunity to make "uniform" the wetlands permit requirements of various DEP programs, thus creating one specific set of criteria. A-2348 creates this uniformity.

Another critical component of any regulatory program is the set of procedures that are required of the applicant during the processing of the permit. On this subject, we support the uniform set of procedures offered by A-2348 regarding:

1. Permit processing times and requirements;
2. Permit fees, which, of course, should provide sufficient revenue to support the administration program;
3. A separate procedure for identifying "unique" wetlands areas;
4. A hardship consideration;
5. Allowances for limited use of wetlands subject to appropriate mitigation or compensation methods; and
6. An appeals process directly to the Superior Court.

In contrast, A-672 provides no such requirements for the processing of the permit, and it offers no fee structure. These procedures are important ones to our builders, who are constantly struggling to obtain permits in a timely fashion. A-672 provides for

practically no use of wetland areas, with the exception of development that "requires access to the water" as part of its function, and while meeting several other very subjective and stringent criteria.

Projects that have been approved by the Army Corps of Engineers and by DEP allow for mitigation plans and limited use of wetlands in accordance with sound environmental controls. Why does A-672 fail to recognize such methods? We don't know. Furthermore, A-672 does not allow the county to consider the economic benefits of a development proposal as compared to the public benefit associated with the protection of the resource, as does A-2348's hardship provision.

In addition to the appeals provision which is similar to A-2348, A-672 also has a call-up process, whereby DEP may negate any county decision and call up the permit for additional review upon petition by any person. We feel this is simply overkill, and a procedure that is likely to be abused. Still another unnecessary provision of A-672 is the requirement for a formal public hearing before the county on every application. This is not only an unreasonable task to require of every applicant, but would result in added expense and time delays.

Another issue concerns the mapping of freshwater wetland areas. While both bills provide for the mapping of wetlands, A-672 limits the mapping period to one year, and costs to \$525,000. While the NJBNA supports the completion of wetlands mapping as soon as possible, we do not believe that one year is a reasonable amount of time. Furthermore, the cost for such mapping, as is recognized by A-2348, is likely to be greater than \$525,000.

One final matter that I would like to bring to the attention of the Committee is the applicability of the statute once enacted. We strongly suggest that if wetlands legislation is released, it should contain a "grandfather" provision, allowing those approved preliminary municipal approvals to proceed in good faith, as they were designed, subject to the protection of Public Health, Safety, and Welfare.

At this time, if the Committee will allow, I would like to ask David Fisher, the New Jersey Builders' Association Staff Director of Environmental Affairs and Planning, to make a few additional remarks.

DAVID B. FISHER: I would just like to address a couple of issues that were raised this morning by several members who testified, namely the Army Corps of Engineers and the U.S. Fish and Wildlife Service.

Just to preface the statement made regarding the delegation of the Army Corps' Regulatory Program, I would like to say that the current situation in New Jersey, in terms of wetlands regulations, is haphazard, as we indicated in our testimony. It has really become a problem, especially in the last two years. The Army Corps of Engineers does regulate dredge and fill activities in wetlands. That jurisdiction is significant, as they showed you on the map. They do regulate the placement of fill, which is required for the placement of any structure in a wetland area. That is what is considered wetlands according to the Corps' definition, and by consulting the U.S. Fish and Wildlife Service.

In addition, DEP regulates wetlands under a variety of programs. This has really become a problem for many of our members, in that it is done sporadically under several different programs. They regulate wetlands under what is called "consistency determinations," which are to render developers plans consistent with area-wide 208 Plans that were developed back in the late seventies for the 12 regions in the State and also 201 Facility Plans that were developed for sewerage authorities and MUA's. For instance, if a portion of wetlands shows up on a builder's project -- determined by overlaying the fish and wildlife maps on his site -- and if the builder needs sewerage extended to that particular project site, DEP will render a decision, inconsistent with the 201 Facilities Plan if that sewerage authority's plan indentified wetlands as environmentally sensitive. Many plans do, but about half of them don't. So, we have cases throughout the State where we have wetlands regulated under the Sewer Extension Program administered by DEP and in many cases we don't. So, consultants, as well as builders, don't know when to anticipate wetlands regulations and when not to.

Also, as mentioned this morning, under the flood hazard area regulations, DEP administers the Stream Encroachment Program, and these include all of our major stream corridors throughout the entire State

of New Jersey, under which wetlands are regulated currently by DEP. This became a formalized process in May of this year. Builders continue now to encounter wetland regulations under that program. So, we not only have the Army Corps but the Department of Environmental Protection regulating the wetlands resource.

In addition to this, when wetlands appear on a builder's project site, say for that sewerage extension permit, and it is likely the Department is going to render an inconsistent determination for that project, they will tell a consultant for the builder to get the Fish and Wildlife Service out to the site to map the wetlands before they even come to DEP. Now, it may be fine to consult the Fish and Wildlife Service on the delineation of wetlands areas, but they have no direct regulatory authority over any of the permit programs I just mentioned. Yet, they are another agency that is involved in wetlands regulation.

So, that is why I think -- as stressed in our testimony -- there is a critical need to provide some degree of consistency to the regulation of wetlands. I do not agree with the Commissioner of DEP when he states that the exemptions and the programs should continue as they are. I believe that if the Legislature sanctions a freshwater wetlands statute, the way in which DEP regulates wetlands should be consistent with that statute, whatever it is; and the builders will have to live by it. It is better to be consistent and tough than it is to be somewhere in-between and have no specific guidelines to follow.

The other area we just wanted to touch on is the delegation of the Army Corps' program. This morning the representative from the Army Corps mentioned the State Program General Permit, under which the Army Corps can delegate its regulatory responsibilities to a state or local unit of government.

I have a copy with me of the Army Corps of Engineers regulatory guidance letter. Its subject is called: General Permits for Reducing Duplication; State Program General Permits. I remember that the representative from the Corps remarked that neither A-672 nor A-2348, as presently structured, would be appropriate for delegation. That may be so, and that is their opinion; however, under number six in this letter it states that, "state or local regulatory efforts are not,

nor need they be, identical to the Corps' program for delegation." The purpose of the State Program General Permit is to provide flexibility, and I think whatever the Legislature comes up with, they should consider delegation of the Army Corps' responsibilities to whatever agency is left with the task of regulating wetlands.

It is funny that the Corps and Fish and Wildlife Service seem to think that the State of New Jersey would be where wetlands are best regulated, and DEP believes the counties are the best agency to regulate wetlands. I think this Committee has its work cut out for it in terms of deciding whether or not the counties should regulate. That delegation may never occur because the way the legislation is structured, both EPA and the Army Corps representative remarked that if the statute provides exemptions for areas in the State, such as the Pinelands, Coastal Wetlands, and the Hackensack Meadowlands, that delegation could not occur.

I would just like to close by saying that I think we should do everything in our power to see that some structure is brought to the regulation of freshwater wetlands, that it be done uniformly, and that it be done by one agency, to the best of their ability, because the way it is done presently is just unacceptable. It causes more problems and delays, and it is not a reasonable solution. So, I would encourage you to take our testimony into consideration. Thank you.

ASSEMBLYMAN HOLLENBECK: Just so we can clear the air -- and I think you have in some of your testimony -- with reference to the Builders' Association's position, they are in favor of some type of wetland legislation, dealing with the wetlands of the State of New Jersey.

MR. FISHER: Yes.

ASSEMBLYMAN HOLLENBECK: You are, right now, in favor of the permitting process through the 404 Program. You think that would be the normal way it should be done for the State of New Jersey?

MR. FISHER: Unless delegation could occur.

ASSEMBLYMAN HOLLENBECK: Oh, you prefer it that way only because you don't like the duplication of a possible State one plus that one. So, that is why you are saying you would advocate the

State, under the State General Permit, taking that over and meeting the requirements of the Federal government to take it over, so that we wouldn't have duplication.

You would then also agree with areas of definition regarding what a wetland is, based upon the Federal government and the Fish and Wildlife Service. Do you agree with that also?

MR. FISHER: No.

ASSEMBLYMAN HOLLENBECK: Well you can't have it— You know, you said you will take it one way, if it is there, because you don't want duplication, but if we bring it back to the State's good, you don't want its definition of what a wetland is. It has to be consistent. Either you accept the definition they are using, or you don't accept it. You can't have it both ways.

MR. FISHER: I don't think the definition has to be precisely consistent with the Federal government's use of their definition for freshwater wetlands. That is why in this document it says that regulatory efforts are not, nor need they be, identical to the Corps' program for delegation.

ASSEMBLYMAN HOLLENBECK: Well, that means a pure adoption of their regulations as the law and regulations in this State — the absolute adoption of them. The commas don't have to be exactly the same, but I think when you get down to the definition, you would have to have it the same, wouldn't you? I would think so.

MR. JACKSON: Assemblyman, to back up just a little bit, the best thing to build the maximum amount of houses, or other structures in the State, would be to have no freshwater regulations. But, we recognize the problem, and as such we are willing to concede, "Yes, it probably does need some regulation." We don't believe the Federal definition is perfect. We believe it is rather imperfect. And, when one goes to buy a piece of land for development— And, that is what I do: I buy a piece of land, I subdivide it, and then I build it. We do the whole ball of wax. I do not have tremendous resources behind me and chances are one is spending money he does not have. One goes to the bank to borrow this money, and so forth. One needs some way to figure out what it is he is buying. That is a critical component here,

and when you have these inconsistencies in here it makes it very much more of a risk; it lends to more bankruptcies; it lends to, on the other hand, people probably making too much money when it goes right. The consumer ends up paying for all of these things.

We would suggest that it is better to have one agency regulating — the Army Corps — rather than two, even if the Army Corps' definition is not everything we would like it to be.

ASSEMBLYMAN HOLLENBECK: I would think that your major position would be — and I think I expressed the feeling that it should be a true concern — that when you have legislation and definition, then you have predictability — "We know we are never going to get a permit in here, so why waste our time; we just can't do it" — and reliability, rather than a nebulous, "We might," and start to invest in something where you might only have a small chance. I can see concerns in those areas and I concur with you, there should be true reliability and predictability insofar as whether you can develop or whether you cannot. It is when you start getting into problems with definition that we come up with every individual case ending up as something that is going to be litigated.

Now, whether the county is going to be the defender of their position or the State, there is going to be a plaintiff, and the plaintiff might be a developer or a builder, and all of a sudden the only people benefiting by this are the attorneys. We are gathering nothing out of it, and in the meantime we are trying to develop a law in order to come up with a definition one can rely upon. I would rather come up with one beforehand so we can have this predictability and reliability, and so that you won't go into extensive litigation, over a definition every time you try to develop. I think you would be far better off.

I think we are going on the same track, but we are in a position of problems with the definition. And, obviously, there is a difference in definition from the one bill to the other; we know that. If it were just a question of it not making any difference, and they were the same, then we could adopt one of them, and we would adopt the standard one.

MR. FISHER: Just as a final note, maybe there is some room for flexibility, and by that I mean, the way in which the definition in A-672 is applied in the field -- and I have seen it done -- it can extend, substantially, areas that I think most people in this room would consider to be freshwater wetlands. When you have a situation where you can have a predominance of just wetlands vegetation, as indicated in the bill -- namely, some of the examples for forest vegetation types -- and only that, as indicating a wetlands area, you get into areas that many wetlands experts would consider uplands, or transitional, at best. I don't believe that lends itself to a predictable decision-making environment; where using that criteria plus a buffer of 100 to 300 -- or somewhere in-between -- will provide people with some assurances in terms of what they are dealing with on their property.

That is the problem we have, in that it is not specific and there is a great deal of subjective interpretation in terms of how far that line is--

ASSEMBLYMAN HOLLENBECK: (interrupting) There is an accepted definition throughout the country dealing with what wetlands are. Isn't there an accepted definition in other states regarding what constitutes wetlands? Isn't there that kind of definition?

MR. FISHER: There are different definitions. Florida's wetlands law is different from Massachusetts, and that is different from Connecticut.

ASSEMBLYMAN HOLLENBECK: What about the definition purposes? Do you think the definitions are that far apart when it comes down to the definition of what a wetland is?

MR. FISHER: Some are fairly different than others. Florida's is different than Massachusetts.

ASSEMBLYMAN HOLLENBECK: But, really, when you get down to it, do you think there is that much difference? I don't think so. Concerning the definition of what a wetland is in Maine, as against what a wetland is in Vermont, I don't think you are going to find too much of a definitional change.

You can see our problem. We are trying to develop a general goal, which you concur and agree with, and some control over wetlands in the State. We are trying to do this through a method of having the least amount of regulatory impact insofar as duplication of services is concerned, which you concur with. We want to have that reliability and that predictability, which you also desire, and accomplish all these things with the same goals we are looking for. That is our job, and why we thank you for coming to testify. It has been good. It is a rare hearing when we get people with your expertise in your particular area, and others, to testify before us, because this is an area in which we are looking for a lot of general knowledge.

ASSEMBLYMAN HOLLENBECK: Bill, do you have any questions?

ASSEMBLYMAN HAINES: Yes, one question.

ASSEMBLYMAN HOLLENBECK: Surely.

ASSEMBLYMAN HAINES: Mr. Jackson, in my own legislative district, there are three towns that are outstanding towns -- I mean outstanding towns from the standpoint of being a nice place to live. There are four towns, really: Moorestown, Medford, Mount Laurel, and Evesham. In Medford, the town has Medford Lake in it, which is kind of a centerpiece in the whole town. That is designed around some old cranberry bogs, with dams. They have swimming and all kinds of recreation there. It is a very delightful place to live in.

The centerpiece of Moorstown is Strawbridge Lakes, which have attracted to the town some of the finest hi tech industry in the Northeast.

In Mount Laurel, Jerard Hognanian is building a community around artificial lakes that he has built in town. It is one of the nicest places in town.

And, in Evesham they have Kings Grant, which is built around lakes.

Now, all of these were built in wetlands. What I would like to know from you is, under the current Army Corps regulations, or under each of these bills, could you continue to build lakefront communities?

MR. JACKSON: That's a tough one. In fact, I was asking Mr. Fisher that question at lunchtime for my own self interest on a piece of land I am evaluating.

The discretionary buffer, the 100 to 300 feet under 672, could be used as a no-growth tool, and flat out prevent them. Maybe Mr. Fisher would want to continue with that question.

MR. FISHER: Housing, as a general rule, is not a water-dependant use, and the only access to a freshwater wetland under A-672 — or the buffer area, for that matter — would have to be a water dependent use, number one, and comply with the rest of the criteria, two of which Commissioner Hughey cited, namely that it has no prudent or feasible alternative site and will result in minimum feasible alteration or impairment of the natural contour, the natural vegetation, the fish and wildlife resources, or the natural aquatic circulation of the freshwater wetlands. I don't see how either one of those, as well as the water dependancy element, can be satisfied with housing near water areas, whether the water area is there to begin housing near water areas, whether the water area is there to begin with, or whether you intend to create or expand an existing water area.

So, in answer to your question, under A-672, no, I don't believe those types of communities could be built the way they are designed and proposed today. I am familiar with two of them.

Under the Army Corps process, it is questionable. It depends on where those wetlands are, relative to their jurisdiction under 404. I believe to some degree, and probably very much so as proposed, those areas could be developed under A-2348.

ASSEMBLYMAN HAINES: I have read that the closer man is to water, the happier he is. I enjoy getting in a canoe and canoeing around some of these lakes we have, visiting some friends who happen to live in a lakeside community. Maybe we are going in the wrong direction on this thing. I don't know. I just wonder, because basically these towns I am talking about are lovely towns. I just really don't see how we destroyed anything — or how the folks who did this 20, 30, 40, or 50 years ago destroyed anything when they built these lakeside communities. Certainly, the areas were dredged or dammed, or something was done there.

I think we really have to be concerned about whether we are destroying something that could be good. I know I tried to design some

freshwater wetlands legislation in Mount Laurel because we had a particularly unique piece of freshwater wetland. But, I wonder if we should have some exceptions built into this bill so that one could design a lakefront community.

I wonder, in Hognanian's situation, where he took farmland and made dams, and so forth -- it is an upland situation -- if that possibly could be continued. I would like to see some more research done into this to see whether we can actually build lakeside communities. Thank you.

ASSEMBLYMAN HOLLENBECK: I think the question is, this was pre-Army Corps, and Corps' stipulation. It becomes a moot question now because it is there and there is no way we are going to affect that.

I would like to thank you, gentlemen. I hope we will be in contact more with your Association as we proceed with the process of trying to deal with the bill. Thank you.

MR. JACKSON: Thank you.

MR. FISHER: Thank you.

ASSEMBLYMAN HOLLENBECK: Mr. Joseph Lomax, Joseph Lomax and Associates.

JOSEPH LOMAX: Good afternoon, Mr. Chairman and members of the Committee. I would like to thank you for providing me with this opportunity to appear before you this afternoon.

I would like to share with you some of my insights, but before I do, I would like to preface this by saying, number one, I bring a rather different kind of a view with me. Many people bring with them a particular special interest consideration when they testify. My background is such that although I am a scientist and a conservationist, I work on a regular level, daily basis, with both development and government agencies in the environmental field. I am a principal consultant of Lomax and Associates, an environmental consulting firm that has worked in the field for approximately ten years now. We have had over 200 clients within the State of New Jersey. Most of the issues that we dealt with have dealt with wetlands.

We have dealt with the New Jersey Department of Environmental Protection; wetlands regulatory programs; the Corps of Engineers regulatory programs; and the Pinelands regulatory program, all since their inception.

In addition, I bring a background of being a distinguished lecturer at Stockton State College, teaching a course in wetlands ecology, being up-to-date on much of the literature that is produced in the field. So, I am not only bring an academic background with me, but also a field experience background.

Also, I am the ecologist for the State Pesticide Control Council, Trustee and past-President of the Wetlands Institute, Supervisor of the Cape Atlantic Soil Conservation District, Vice President of the New Jersey Association of Conservation Districts, and a member of the Society of Wetlands Scientists. There are other State organizations that I have been involved in; however, I have retired from them at the present time.

I would like to make it clear, however, that I am not representing any of those organizations or agencies; I am speaking from my own background and expertise.

I would like to commend you for dealing with this issue of the two pieces of legislation that are before you, A-2348 and A-672. I am sure we have all recognized the value of wetlands; they range from physical and biological to chemical in nature; they have distinct economic values; they have social values; and, these have been very well documented from our most recent literature search of more than 1,000 articles.

From a historical point of view, we became aware of a piece of legislation in the last session. We were concerned about that piece of legislation. We found that the definitions were not technically correct. The bill itself did not create what we consider a positive approach and a 1980's type approach to environmental legislation.

We reviewed it, and after discussing the serious problems with the sponsor, some changes, based on our recommendations, were made in that legislation, such as the county being actively involved in the administration of a wetlands program and buffer zones being established, as well as the use of maps.

As part of those meetings, we recommended a Comprehensive Waterways Management Act to deal with the management of waterways and the associated wetlands throughout the State of New Jersey. However, that was rejected.

As an alternative, we drew together a group, a team, representing environmental interests and development interests, and we were able to find an Assistant Attorney General - an ex-Assistant Attorney General - in the public domain, who gave us a hand in trying to understand what the conflicts and problems were that currently exist in this State with the legislation, and in the implementation of this legislation. What we attempted to do then was to look at a new piece of legislation that would deal with some of these issues.

In the 1960's and the 1970's, the Legislature was very strongly stimulated by the environmental community of the era. This approach was largely to restrict growth and development. In the 1980's, we have seen a change in environmental regulations. There has been a more conservation oriented approach. There has been a greater subscription to the wise use of our natural resources -- not the prevention of the use of those resources, but the wise use of them.

There is a continuing effort and intent to protect the unique and irreplaceable natural resources. However, in the 1980's I think we are taking a far more balanced approach, dealing with environmental concerns on the one hand, and human requirements on the other. Therefore, the legislation today not only has to protect natural resources, but give very clear guidance that there is an acknowledgement of the human being's place in the overall environment.

One of our first objectives was to deal with the problems proposed by the original legislation in the last session, which had a very over-simplified approach to the definition for wetlands. Gentlemen, I have to tell you that in 1978, I joined a congress of men -- 400 scientists and students -- sponsored by the Environmental Law Institute -- to try to come up with a definition for wetlands. During that congress, there was one thing that was agreed upon, and that was that no one could agree upon a definition for wetlands.

We believe, from field experience and our academic experience, that a definition for wetlands is difficult. In 2348, we worked very hard at trying to take a definition for wetlands beyond the over-simplification that exists today, to a more scientific approach. There are wetlands biotic communities that exist throughout the State of New Jersey. They have a continuity to them. They have a hydrologic regime. They have associated wetlands vegetation. And, they also have hydric soils.

From a practical point of view and from working in the field, we had to then translate that into a very specific definition that the State Legislature could give to an agency to work with. One of the problems with agency personnel, and sometimes scientists, is they don't do sufficient work, and they have to delineate wetlands in the field and understand the difficulties they are in.

Having delineated this and by having more than 75 linear miles of wetlands certified by agencies, we feel we have become very proficient at this.

The definition in 2348, number one, deals with hydric soils. I was most concerned to hear that the Fish and Wildlife Service didn't even realize that their classification of wetlands and freshwater habitats deals with exactly the same definition and exactly the same list of hydric soils that our definition does. There is absolutely no difference.

On page one of that document, if you look at the bottom, they reference hydric soils as defined by Soil Conservation Service, and they also reference the list -- the list that has been developed on the SCS -- of the Soil Conservation service definition. That is one and the same with ours. That is in 2348.

Secondly, hydrophytes: It is very interesting to see that the Fish and Wildlife Service has prepared a list over the last three years of hydric species, or hydrophytes. We have prepared a list, and those lists are quite similar, except in one regard, and that is where 2348 and 672 vary quite a bit. We have recognized that there is a physiological basis why upland plants do not grow very frequently in wetlands areas; it is because they need an oxygenated root zone, and

throughout most of the season -- or throughout most of the year -- there is sufficient water in the root zone to eliminate upland plants from a wetlands environment.

However, on the other hand, hydrophytes, or the wetlands plants are adaptable. These are the plants that have the capability of surviving in an upland environment and a wetlands environment -- many of them.

So, in our list -- the one we have generated -- we have used not local authorities but national authorities -- people who have assembled large lists of plants, and identified where they exist. We have used their field experience to generate a master list of the vegetation of New Jersey and its affinity to wetlands. This list references Earnest Field, Norman Facet, Franault, Gleason, Hitchcock, Murray Hutch, from New Jersey, at Rutgers, McGee, John Small, Whitmer Stone, Stausburg and Core -- all authorities on the distribution of plants. In their books they not only give the geographical distribution but the habitat distribution, and this is an assemblage of not one person's opinion, but a score of people's opinions. I might add that this list is quite similar to the Fish and Wildlife Service's list, in many cases.

This list says there are three different types of plants, an upland plant, and plants that will require an oxygenated root zone for strong and vigorous growth. They recognize wetlands plants that survive primarily under wetlands conditions and hydric soil conditions. They also recognize adaptable plants, plants that are not good indicators.

Now, we have a pitch pine lowland forest in the southern part of the State that has pitch pine as the dominant species. You can find that plant growing with water at the surface, or you can find that plant growing with 60 feet as the seasonal high water table.

The red maple is another plant that is used in 672, as are several other species that are not true hydrophytes. They survive under natural conditions and under hydric soil conditions, but they also survive elsewhere, as indicated by the fact that some of these are actually used for ornamental plantings.

We believe that the definition in 2348 is far more scientific because it says that wetlands must support hydrophytes — the plants — and they also must be hydric soils, as defined by the soil conservation service, both. Also, if there is a challenge as to whether they are wetlands or not, we provide a solution, and that is that you can test the hydrology by putting in small wells or piezometers to measure the water table at the seasonal high conditions. So, we solved that problem for the regulatory agency.

In 2348, we also believe that we have formatted this legislation in a manner that provides guidance. It is believed that you must have on-site inspection. You must have scientific work that is done on a site-by-site basis, as with the Corps. However, for guidance, we have utilized that literature that can hold up under scientific scrutiny, and that says there are different wetlands types throughout the State of New Jersey, because we have a very unique State in that we have everything from inner coastal planes and outer coastal plains, to Piedmont, Hylands, and Valley Ridge provinces, with all very different characteristics, and the wetlands that are there are quite different in each one of those areas.

But, we formatted the legislation following the Fish and Wildlife Services' format of riverine, lacustrine, and palustrine wetlands so that at some time in the future it may be possible to marry this legislation with the Corps' jurisdiction and provide the opportunity or possibility for this State to pick up the Corps authority. There is not that much difference between the Corps definition, as they are implementing it now, and the definition that is here. It is not that significant a difference.

The second thing we decided to do was to look for an opportunity to protect those wetlands. We brought the concept of a buffer zone forth. We have seen the misuse of buffer zones with regulatory agencies in southern New Jersey within the last five years. Buffer zones should be predictable. They should be associated with the nature of the wetlands. the importance of those wetlands is, are they really special or unique wetlands; what is the nature of the buffer zone; is it a highly-erodible surface that can erode rapidly into those

wetlands; and, what is the potential hazard associated with the land use?

A-2348 ranges, dealing with all of those issues in a clear and crisp format that ranges from 50 feet to 500 feet. Actually, 2348 recognizes that there is a need for greater protection of some wetlands than 672 does.

It also acknowledges that there are unique wetlands, and there is an opportunity to understand what unique wetlands are, in terms of the National Landmark Program, promulgated by the U.S. Department of the Interior.

The next important issue that had to be dealt with was a clear, definitive instruction to the regulatory agency to avert the agency from going well beyond the intent of the enabling legislation. We have seen within the past decade that not only has the Legislature passed laws and given State agencies, or other agencies, the opportunity to promulgate regulations, but beyond that have come policies and interpretations have come about that are far beyond the intent of State legislation.

This legislation attempts to create an opportunity to minimize conflicts between landowners and regulatory agencies, and to provide an opportunity to resolve conflicts in order to save time, expense, and manpower in government and in the private sector.

The next issue was overlapping jurisdiction. This has concerned us for many years. The duplication is very expensive and terribly confusing. There is a lack of continuity between many different kinds of legislation and their standards. On a day-to-day basis, we try to deal with the State wetlands -- the State regulated wetlands under the Wetlands Act of 1970 -- and the Corps of Engineers. And, because there is no uniformity between definition and standards, there is always very frequently a conflict between those agencies.

So, this legislation is intended to eliminate inner-agency conflicts which translate down to the land user and delays him in attempting to deal with whatever his business is.

This piece of legislation, 2348, also deals with hardships. We see that the newer legislation being produced throughout the country

is starting to recognize hardships. A-672 does not recognize individual hardships. The hardships are dealt with in 2348 through the procedure on processing; through a timely and very specific streamlined process, as it were; and through certain kinds of exemptions in areas where we believe the wetlands will not be significantly adversely affected — the State's wetlands — on a local basis. Yes, there could be a loss of wetlands, but the total resource will be protected even though those exemptions are in place.

Also, the appeal process is streamlined compared to what it is today, with a decision, an administrative law process, back to the agency, and then, if not agreed upon, into the Appellate Division. The effort here was to streamline this process and to try to get at some case law that is needed, as well as the hardship criteria itself.

We believe that 2348 provides for good planning and a more cost-effective design. We believe that it is self-monitoring in that if there is a need to utilize areas of wetlands for a development, for a good, bona fide reason, the applicant utilizing those wetlands has two remedies. One is mitigation, which is a national philosophy now that is being generated. It has been the topic of a national symposium, but it is not completely resolved and in place at this time. Mitigation is one, valid approach.

The second valid approach is the allocation of a comparable value of that wetlands' replacement to a conservation organization or a State agency to purchase wetlands, or to develop programs and management to protect natural resources. We believe this is a direct feedback system to take those lands out of the public domain — or take them out of the private domain and put them into the public domain.

I would just like to touch on a couple of issues, very quickly, at the end. One is that I don't understand why, but there seems to be some confusion between some of the federal agencies as to what hydric soils are and what their definition is, and how it relates to the Soil Conservation Service. Gentleman, there is no difference. They are one and the same in 2348 and in the Corps of Engineers Program.

In addition, the master list does not have to be in conflict. The Fish and Wildlife Service list identifies uplands species, identifies wetlands species, and identifies facultative species. They are quite similar, and many of the species fall right into line with their list. There is just a little bit of a difference in terminology.

The concern over the individual uplands plants occurring in a wetlands seems to be most peculiar. It seems to me to be trying to pick at some problem, trying to create an issue out of a non-issue. If you have one white oak on a hummock in a wetlands areas, if you were to identify that as a wetlands area -- where that hummock is -- you would have a 50 foot buffer around that, bare minimum, and, therefore, that would be excluded from development anyway because the surrounding area would be wetlands. So, it seems to me that this is an absolute non-issue that has been generated with very little scientific consideration, or very little study of the sophistication of the definition.

I agree that the Soil Conservation Service's soil maps of the counties can be very useful, as can official Wildlife Service National Wetlands Inventory maps; however, in using them in a definition it is terribly misleading because, on a scale of one inch equals two thousand feet with the National Wetlands Inventory maps, a pencil line and a little jitters from a cup of coffee that morning could make a 200 foot difference in where the wetlands line truly is. So, they are good planning tools, but they are not tools by which to delineate wetlands in the field. That is why we recommended in the beginning the concept of delineating wetlands much like our State wetlands have been delineated.

There is another issue that has concerned me, and that was one which was raised as a central theme in 672 and by the Corps of Engineers, and that is that wetlands create a tremendous barrier to floodlands. Unfortunately, this has been terribly over-simplified, once again. When are these hydric soils full? When are these hydric soils flooded? It is throughout the winter, or throughout the spring, when the leaves are not on the trees pulling water from this ground and

expressing it into the air. During the winter and the spring is when these soils are flooded — they are saturated. There is water standing on these soils in most of the wetlands areas. It is the easiest time to tell that you are in wetlands.

When do we have most of our floods? In the winter and also in the spring when these water courses, no matter what you do to them, do not have the capability to store anymore water. In the summertime, the upland has much greater capacity for taking rain water, having it soak into the soils and, therefore, recharging the groundwaters below. Also, these wetlands do, at that time, have the ability to take some of these waters and store them as well.

So, I think we have had an over-simplification, probably because of a lack of understanding of the principles we are dealing with in terms of the flood water protection aspect. Wetlands are important in food protection, but nowhere near the extent that was suggested.

The next issue is the importance of the county level approach. The Federal agencies are against this and we agree with Commissioner Hughey, in that the county level is an appropriate place to administer this program. First of all, the County Planning Boards have the ability to issue permits dealing with drainage within their counties. They have county engineers who, in most cases, have the counties mapped out as to the drainage patterns.

Secondly, they have technical support from the Planning Boards, technical support from the Soil Conservation districts, and technical support from the Soil Conservation Service that has a Soil Conservation Service employee located in almost every county, or who deals with a two or three-county area. That is supported on the State level by people who have dealt with soil erosion, sediment control, and floodwater protection.

Finally, that county provides a network—

ASSEMBLYMAN HOLLENBECK: (interrupting) Will you summarize, please?

MR. LOMAX: Yes, I am. (continuing) —the county has the ability to network the environmental concerns. This is protection on

the most local level, and that is, there are Environmental Commissions on the municipal and county level, as well as conservation groups that have access to the county process.

I would like to commend the Committee for taking this action to protect the State's freshwater wetlands. We believe that A-2348 is a state-of-the-art piece of legislation that protects the natural resource while preserving some basic rights, preserving the tax structure of communities, as well as being a more balanced approach toward environmental protection and providing a statewide consistency. Thank you.

ASSEMBLYMAN HOLLENBECK: Thank you, Mr. Lomax. Are there any questions? (negative response) Thank you, Mr. Lomax.

David Moore, New Jersey Conservation Foundation. We have about six more people after Mr. Moore that we are scheduled to hear, so we would like you not to ramble off too far if you can avoid it. The quality of the testimony goes down directly in proportion to its length.

DAVID MOORE: Mr. Chairman, thank you very much for this opportunity, and I couldn't agree with you more. I will summarize my statement, since we have provided you and the Committee with a good deal of information prior to this hearing.

With me is Tom Wells, who is Assistant Director at the Conservation Foundation. He is here to help with any questions you may have of us.

The Conservation Foundation is a nonprofit organization representing approximately 3,000 members throughout the State who are interested in conservation and natural resource work.

Over a decade ago, the State took action on behalf of the coastal wetlands, and we felt it was time. As you heard today, virtually everyone who has appeared before you thinks it is time to do something about freshwater wetlands.

In my written Statement, I refer to Assembly Bill 2348, as drafted by the New Jersey builders' Association. I know this has been an issue and I want to apologize to both Mr. Haines and Mr. Riley for that reference in the statement; however, I think it is easy to tell where it comes from because you have heard by now from both parties.

In a letter that was written to Senator Lynch by the Builders' Association, they referred to the text of that bill, and I will quote: "We enclose a copy of "our" freshwater wetlands legislation. So, it was naturally easy to take on that name, and we apologize for doing so.

That version of the bill is to be commended, however, for its statement of purposes. We think it is a fine statement, and we certainly agree that it ought to be included in any version this Committee releases.

On the issue of flooding, which has just been mentioned by Mr. Lomax and others, we certainly agree that even though Assembly Bill 2348 lists that as a prime reason for preserving wetlands, we understand that is only partially effective. However, one point I should make is that most of New Jersey's major storms -- if you look back over the record -- have occurred in the summer and the fall, as a result of summer storms and hurricanes. That is when wetlands have both the absorption capacity necessary to help the flooding, and also the ability to slow down the flow. In fact, they have that ability in the winter as well. It is that slow-to-flow concept that I think is the most important about wetlands functions.

We certainly know all about the value of wetlands in the Passaic Basin. As I have alluded to in my testimony, the loss of wetlands there over the last century has probably been something in excess of 65 percent, and it certainly shows in terms of the kinds of proposals that are now before us, where we are required -- if we follow the DEP version of the Plan -- to spend something in the order of \$1 billion to remedy that situation.

There has been a great deal of discussion about this bill with relation to the duplication of the dredge and fill permit program, administered by the Corps of Engineers under Section 404. We found that 404 has been inadequate to protect New Jersey's wetlands. One problem involves the narrow scope of the program -- it governs only dredging and filling.

In addition, we reviewed a number of decisions by 404 and, as others have already alluded to, it is a little bit spotty in terms of

how it has handled wetlands situations. In fact, even today the question of jurisdiction remains unresolved on some major cases.

You have also heard about the differences in definitions with respect to vegetation and hydric soils. My feeling is, since Mr. Lomax, who testified just prior to me, and the Builders' Association seem to think that there is no difference, I would certainly strongly recommend that the Committee adopt the version in Mrs. Ogden's bill. There can be no argument with that, if the agreement is that they are the same.

I also want to make mention of the transportation and public utility system questions that have been raised by the Committee, particularly Mr. Haines. In fact, I don't think anyone has thought about saying that we should substitute farmlands for wetlands, or woods for wetlands, in any situation in which there is a contest. That is one of the reasons for going through a permit process, so those kinds of things can be evaluated with respect to the public purpose, and those evaluations are made properly, in opposition to the way they are now.

In short, ACS-672 recognizes that objective resource-based conditions should be met before a permit can be issued. This is based on the fact that freshwater wetlands are a public resource of finite dimensions, which should not be manipulated or destroyed to provide for land uses that can be accommodated in less environmentally-sensitive locations.

We urge you to support ACS-672, and to reject A-2348.

One other point I would like to make is, both Mr. Lomax and the representatives of the Builders' Association seem to recommend that water dependency should be a consideration, or a factor, in deciding the uses which are placed on buffer areas. We would certainly welcome that kind of a change. That is not the way things are in the Ogden bill at the moment. Thank you very much for your attention.

ASSEMBLYMAN HOLLENBECK: Thank you very much, Mr. Moore. I know you have submitted testimony and charts to us from your Foundation for our reading prior to this hearing.

Does anyone have any questions?

ASSEMBLYMAN HAINES: Yes. You talk about flooding. This, of course, is a problem in the upper part of the State, but it is not a particularly serious problem in areas that are served by tidal waters. As you know, tides wash in and wash out, and we have streams with a tremendous volume. So, when we do have a lot of rain those streams can handle the large amount of rain they get without very much of a problem.

We have seen houses built directly on the Rancocas Creek, as an example -- ten feet from the Creek with the house a foot or two above the high water level. Yes, these areas are flooded, but basically most areas in South Jersey are not affected by floods because they are washed by tidal waters.

It seems to me we have a different situation in areas that are tidal than you do in North Jersey. Hurricane David came through and many, many other hurricanes came through, and they did more damage in North Jersey and in Pennsylvania. Some of the areas in Pennsylvania were particularly hard-hit by many of these hurricanes. Yet, in South Jersey there was very little damage, even though the hurricane hit there first. There was damage, of course, to crops, but there was no damage to the streams or through flooding.

It seems to me the regulations should-- I am suggesting this to you. Do you think that the regulations could be different for areas served by tidal waters than they are for non-tidal areas, such as those north of Trenton?

MR. MOORE: First of all, most of the areas contemplated by either version of the legislation are not tidal. Most of the tidal marshes are saline and they are not covered by this legislation.

ASSEMBLYMAN HAINES: That is not true. Burlington County has a lot of tidal streams and they are not saline.

MR. MOORE: I understand that. I am just saying that in the majority of the cases this is true.

The second thing I think one must remember is, even though flooding is mentioned as a principal purpose for these acts, it is by no means the central purpose.

The third thing I think is important is that if the southern part of the State were to be treated in the same fashion as the northern part, in which 65 percent, or more, of the wetlands have been destroyed, built on, or in some other way incapacitated, there would be flooding problems. I don't know if we want to take the chance on finding out whether or not that is a worthwhile experiment.

ASSEMBLYMAN HAINES: What I am saying is not that we propose no wetland act for South Jersey, but where areas are served by tidal water, the wetland act should be slightly different. I am asking you whether this might be a consideration you might have?

MR. MOORE: The answer would be yes, if the only value we were concerned about was flooding. It is not that.

ASSEMBLYMAN HAINES: Well, it seems to be a thread that follows through on a great deal of this. You are talking about water absorption; you are talking about capacity to handle additional water, and that type of thing. It seems to be a big reason for wetlands legislation up to this point.

MR. MOORE: There are -- correct me if I am wrong -- about 19, or so, points that are included as part of the justification. Flooding is certainly one of them, but in my way of thinking it is only one.

ASSEMBLYMAN PANKOK: You haven't answered Mr. Haines' question yet. He asked a specific question, and you haven't answered that yet.

MR. MOORE: I thought I did, Mr. Pankok.

ASSEMBLYMAN PANKOK: I don't think you did.

MR. MOORE: If flooding were the only consideration--

ASSEMBLYMAN PANKOK: Flooding is a common thread that runs through every statement that has been made here today.

MR. MOORE: True. I understand. All I am saying is, the other values we are concerned with here would give no difference the northern and the southern parts of the State.

ASSEMBLYMAN PANKOK: There is an area in Salem County, it is called Manikin Meadow. It is already protected, and it is the buffer -- for lack of a better term -- against flooding as far as Salem County

is concerned. We have never experienced any kind of flooding. The only flooding that ever takes place in southern New Jersey are dips and highways that are created by the New Jersey Department of Transportation.

MR. MOORE: I understand that, Mr. Pankok. My suggestion is that we don't know what would happen if the wetlands in the southern part of the State were treated in the same fashion as in the Passaic Basin.

ASSEMBLYMAN PANKOK: I am all for protecting the Passaic Basin. I will vote for any piece of legislation to protect it. If you would write it for just that and leave southern New Jersey alone, we would be very happy.

MR. MOORE: I should point out that you probably should be in the business of trying to protect against future disasters by offering that kind of protection now, before it is too late.

In the Passaic Basin, in many respects, it is already too late.

ASSEMBLYMAN PANKOK: Well, if I have said it once, I have said it one hundred times, in northern New Jersey you have pretty much messed up your environment for well over 310 years. In southern New Jersey we have protected ours and it is still a pretty good place to live. You can walk out my door and see deer grazing in the field, or pheasants flying around, or muskrats building their muskrat homes, and so forth. So, we have a pretty decent environment down there. I think we have done an excellent job, and we would appreciate it if the people from North Jersey would stop trying to tell us how to treat our environment, because we are very good at it, and have been for over 308 or 309 years.

ASSEMBLYMAN HOLLENBECK: I would suggest that you look at the changing growth patterns within the State, and the population movements, to realize what would happen to some areas of South Jersey if they took the density of population of a Hudson County and put it in areas of South Jersey.

ASSEMBLYMAN PANKOK: That won't happen.

ASSEMBLYMAN HOLLENBECK: I think you are going to find that all things show the growth areas of the State are in the southern areas of the State. If you have a lesson to be learned because of that growth, you had better take advantage of it now, before the disaster occurs.

ASSEMBLYMAN PANKOK: Salem County has a Freeholder and a Freeholder Director. We initiated a master plan that is a very strict master plan for Salem County. It takes growth into consideration, plus flooding and the environment. I should bring it up some time, I guess, and let some of the other counties initiate programs like that.

ASSEMBLYMAN HOLLENBECK: Thank you very much, Mr. Moore.

MR. MOORE: Thank you, Mr. Chairman.

ASSEMBLYMAN PANKOK: Mr. Chairman, I would just like to say that Will Rogers once said, "It is a wonderful thing that we don't have as much government as we pay for." Those of us who happen to live in South Jersey feel that North Jersey has protected us more than we really want.

ASSEMBLYMAN HOLLENBECK: Thank you.

Mr. James Lanard, New Jersey Environmental Lobby.

JAMES LANARD: Good afternoon.

ASEMBLYMAN HOLLENBECK: My intent is to stay here until about 4:30, and for those who have not had the opportunity to speak, I will set another hearing for them to come back. I do have some people here. I think I will probably miss about the last three on my list. So, if we can, we will try to fit them all in, but our intent is to quit at about 4:30.

MR. LANDARD: Mr. Chairman, members of the Committee, my name is Jim Lanard. I am the Legislative Agent for the New Jersey Environmental Lobby, which represents various environmental organizations and individuals in our State.

ACS-672 is a compromise that was worked out after many criticisms were made by different interests, including the developers. There was an effort by the sponsor, whom we worked closely with -- I really should say the New Jersey Conservation Foundation and other environmental groups worked closely with the sponsor -- to develop a

position that would seem to be adequate to the developers' concerns and not give away the store.

The only way, it seemed -- after a lot of work -- that the developers would be satisfied was to gut the bill entirely, but none of us were willing to do that.

The Riley Bill, which is A-2348, would strive to maintain the status quo. It would so that, as you have heard, by making a definition of wetlands such that almost all areas would be excluded from coverage; and, second, it would delete completely 404 regulation-covered areas -- as Dave Moore mentioned. Therefore, we would have virtually nothing left in this bill that would make it worthwhile to fight for.

Let me just address the concessions very briefly. I will list just a few. The first one, which is the major one, is that in the original bill -- 672 -- there was no exception for linear development. That is, linear development could not proceed in an area that was a wetland, unless there were certain attempt, I guess, at getting it deleted out of there.

In ACS-672, the sponsor and the environmentalists worked together to find a compromise, based upon the developers' criticisms. The developers criticized the fact that if there couldn't be a linear development, construction right-of-way infrastructure would just come to a standstill throughout New Jersey. So, ACS-672 does allow linear development. It would allow linear development for roads and public rights-of-way under certain limited circumstances -- very similar to something that has already been done before. We are not reinventing the wheel; we are following a lot of the CAFRA guidelines.

The builders, however, and the supporters of the Riley Bill, A-2348, said there should be no regulation at all for linear development, and linear development should be allowed to come in anywhere at all. That simply would not be regulating wetlands; that would just be promoting development.

We are not happy with the ACS-672 amendment -- the compromise that allows for the linear development in certain areas -- but we felt it was the best we could do. We felt it was a fair compromise from the developer's perspective and, thus, we went ahead to support it.

Other concessions concerned permitting. Originally, in 672, permitting was to be done at the municipal level. The developers complained. They said they would have to work with 500 or so municipalities; this would become very cumbersome; and, there wouldn't be uniformity. They also argued there would be less pressure, where we argued there would be less pressure and less parochial interest if we moved from the municipality to the county level. The consensus was that we should address that concession, and we moved to the county level for issuing permits concerning wetlands development. That was done specifically at the request of the builders.

Second, there now will be county level mapping instead of the municipal level mapping. There is an appropriation in the bill to guarantee that the mapping gets done. But, the 672 compromise allows for the mapping to be done in accordance with Fish and Wildlife Service maps, so that we don't have to reinvent the wheel and we don't have to determine new map-making procedures. Whereas, in the Riley bill, there would have to be entirely new map-making. It would be very expensive. It would be time consuming, and it would probably delay implementation of any type of wetlands regulation for a very long time.

Concerning limiting the size of the buffer zone, originally, in 672, buffers were to be set at the municipal level, but the municipal government would determine what that buffer would be and they would be given the discretion, under certain circumstances.

In the ACS version, there is a mandatory buffer, but it is limited to within 100 to 300 feet, so we are not going to allow municipalities, as in the past, of maybe setting very, very large buffers, or very, very small buffers. We have come to a compromise, which limits the buffers to from 100 to 300 feet, depending on the sensitivity and the type of wetlands being regulated.

In A-2348, which is Mr. Riley's bill, there is some more specific delineation which might be good and it might be included in 672, but it does fall short of where we would like to end up, because it does provide for a 50 foot minimum. We think the minimum, in any case, should be 100 feet.

You have also heard the issue of the definition of freshwater wetlands and hydric soils. We modified that in 672 -- in the Committee Substitute -- by making the wetlands delineation more precise. This was made in direct comments -- I guess, Mr. Hollenbeck, before your Committee -- when you heard the developers saying they didn't know exactly what the definitions meant. We now see the new definition making it easier to determine and to use. It would allow the developers to anticipate exactly where regulation might occur so they can make decisions on purchasing before they get involved in the process and then find out later they bought land that was worthless.

I have just a couple of other things. I would recommend a couple of changes in the ACS-672 version. One would be to designate special wetlands areas which have a wider buffer than is provided for in the Committee substitute. Members of the Committee, I am not an expert in this area, but somebody suggested that the Great Swamp Watershed would probably need greater than a 300 foot buffer in some parts of the Watershed and, therefore, there would be a need to have a special provision in the law that would allow the designation of special wetlands areas.

Second, there is the question of who is to review county projects that normally would be reviewed by the county? Should we move the responsibility for countywide projects to the State level? I don't know the answer to that, but right now it seems to be an issue that has not been resolved.

I am also not familiar with Executive Order 53, but one of my members called me up on Friday and asked that there be an analysis of Executive Order 53 to determine whether 53 and 672 are consistent with each other, and whether there is any type of competition or conflict that should be resolved.

Finally, there should be a section in the law that reads: "No person shall engage in regulated activity without a permit." Right now, it is implied throughout the bill that one would have to get a permit in order to proceed, but there is no affirmative statement that says people shall be prohibited from proceeding unless they obtain a permit.

And, something that was suggested, and that is similar to what is in Section 404, is that if there is a violation and development has occurred without permits being issued, or in violation of the permits, DEP should be permitted to issue a restoration order that would require the property subject to the illegal activity to be restored to its original condition, its condition before the illegal activity began. Thank you very much.

ASSEMBLYMAN HOLLENBECK: Are there any questions? (no questions) Thank you, Mr. Lanard.

MR. LANARD: Thank you.

ASSEMBLYMAN HOLLENBECK: Robert Starosciak, New Jersey Alliance for Action.

ROBERT STAROSCIAK: Thank you, Mr. Chairman. I will be very brief. My name is Robert Starosciak, and I represent the New Jersey Alliance for Action. The Alliance is a broad coalition of over 350 business, industry, labor, governmental and professional groups working together to promote economic development in the State of New Jersey.

The Alliance is vitally concerned with freshwater wetlands regulations that impacts the citizens of this State. The two primary concerns of our Association regarding this issue are duplication of the permit process, and the forthcoming Corps of Engineers' final permit regulations on this very subject.

Since the Army Corps has not issued final regulations regarding wetland regulations, we suggest that any definitive action on this matter be postponed. We believe that New Jersey can benefit if we wait to have a clear understanding of the new regulations.

Also, our concern is to avoid legislative and regulatory duplication. Any duplication would impede the process and would not be an acceptable method of procedure.

A uniformity of wetlands regulation is critical. The U.S. Army Corps of Engineers has done an adequate job in regulating wetlands, and it should be recognized as the agency with permit jurisdiction. This would resolve any problem concerning regulatory duplication.

The Alliance recognizes the need for wetlands regulation. We believe, however, that before any final decision is made, these and any other provisions should be carefully considered and weighted.

What is needed, obviously, is a clear, comprehensive, and balanced program which will benefit the State of New Jersey. Thank you.

ASSEMBLYMAN HOLLENBECK: That is as brief as I could have asked for.

MR. STAROSCIAK: Thank you very much.

ASSEMBLYMAN HOLLENBECK: Thank you.

Mr. Russell Bodwell, Henderson and Bodwell, Consulting Engineers.

RUSSELL BODWELL: Mr. Chairman and gentlemen of the Committee, as you debate this complex issue, I can't help but thinking that, a couple of thousand years ago, Jesus Christ was crucified because he went around preaching that man was made for the Sabbath instead of the Sabbath being made for man. Basically, to a great extent, some of the same issues probably are behind our environmental movements, because we forget that we have a historical background that goes back 5,000 years, with man manipulating wetlands.

The Egyptians did it over 5,000 years ago; Hammurabi did it 4,000 years ago; there was a certain king, about 3,000 years ago, who built a 50 mile canal, 36 feet wide, just to create a wetlands for his wife so that she could have the flora and fauna that she was used to as she grew up. We know that the Romans were probably the greatest destroyers of wetlands. The whole European continent, which many of us come from — many of our ancestries are in Europe — was man-made because of the manipulation done by the Romans. The Catholic Church, for thousands of years, was the second greatest manipulator of wetlands. They had a special order that just created agricultural lands for the nobles.

Even in this country, I attended a fair in Maine where they showed the under-drain systems that were used to drain agricultural lands. This was really done to drain lands to make productive crops, particularly apples and some of the other crops. These were 150

year-old systems, consisting of egg shaped clay pipe. We had bricks that were tongue-and-groove egg shaped bricks, and they were put into the ground. We had wooden drainage systems. And, that is really a background that I hope we don't forget.

I am here today primarily to talk about some of the weaknesses I see in the bills, but also to present what I hope will be a viewpoint.

I primarily represent the developers in this State, with probably a dozen projects of from 200 acres to over 1,000 acres in various counties. They are greatly concerned about wetlands legislation, particularly when one of your members raised the question as to how one manipulates wetlands to create the high-quality environments that man foresees he wants to live around.

Today, people pay a high premium to live near lakes and waterways. These are some of the things we have to look at when we talk about wetlands. That is why my emphasis will be on mitigation balancing, and I hope those elements will be included when you finish up with your work.

I will now read the few statements I have regarding the two proposed freshwater wetlands acts now being considered by your Committee.

Assembly Bill 2348 has attempted to balance both the environmental and competing interests. In general, based on our review, we have the following generalized comments:

While Bill 2348 obviously has considerable merit over the earlier bill, due to its attempt to be more explicit, to be fairer to private property owners and local municipalities, and to establish criteria and standards more easily accepted by landowners, there are several generalized statements that need to be recognized.

1. Wetlands, while having many attributes in large tracts of 50 acres or more, do not accomplish many of the things that are alluded to at site specific locations, and certainly not in small areas of 15 to 20 acres, including but not limited to the following:

A. The ability for flood protection would be greatly enhanced if a system of maintained ditches were run

through most, and ditch controls provided to permit reducing of the general flooded condition existing in the spring of each year. Lands that are saturated do not reduce flood peaks, and flood levels can actually be increased due to little or no detention ability for runoff flowing through wetland areas. This condition is frequently observed due to the failure of man to maintain highway drainage systems, trees falling and blocking natural streams, and artificially raising stream levels.

B. Many wetlands have impervious surface soils so that they are not functioning to assist groundwater recharge. Again, by providing ditches through the wetland areas, these impervious surface layers are penetrated and if the water table is at some depth below the surface and the wetland is a perched wetland -- discontinuous with the true groundwater table -- this will permit recharge, as it permits horizontal flow generally ten times more permeable than vertical flow. Many mosquito commissions have been performing this function for years.

C. The ability to provide storm protection by dampening wave energy is extremely limited for inland wetlands.

More specific comments on Bill 2348 are:

1. On page 2, lines 19 and 20: This upland wetlands bill should be recognized as being applicable to wetlands generally above elevation 10 in the State of New Jersey. So, this could be deleted.

2. Page 2, lines 22 to 24: The biological values for small areas of under 15 or 20 acres basically are non-existent.

3. Page 2, lines 29 through 36: No timber production will occur, and other economic values do not exist for small areas.

If it is a small area, as an island within a man-made occupied parameter, it becomes more a site for collection of human debris, and is not provided a degree of protection and maintenance. The communities do not want to accept this responsibility, and you have

the same problem with forcing a municipality to accept maintenance of open space. We know that in this country today, some parklands are costing \$20,000 to \$25,000 per acre to maintain, and communities just don't want this added municipal cost on their hands, much less deletion from the tax roles if they have high economic value.

4. Pages 16 and 17, lines 5-11 through 5-34. Delete — and I will explain that below.

More specifically, within the Bills, we find the Ogden Bill, which relies upon the Soil Conservation Services' and Fish and Wildlife Services' maps for defining wetlands, to be using base data which knowledgeable environmentalists, engineers, and surveyors have found to be substantially in error, and site specific surveys have to be made rather than adopting maps based upon faulty information. Use of base maps with erroneous data is unfair to both the regulatory agencies and the land owner, as this only increases friction, lawsuits, and other complications that any fair legislation should avoid. Both bills fail to make provisions for any specific evaluations of wetlands when, in fact, many of the uplands in New Jersey are infested with exotic plant life -- purple loose strife, as an example -- which have no value for animal populations and their destruction and removal is being encouraged in states like New York and Wisconsin.

Many State and Federal people recognize that a need exists for rating wetlands, and several are being developed. Another major area of concern regarding the wetland legislation is the excess buffers proposed in Assembly Bill 2348. We feel our experiences in Florida and other states, where encouragement is given to designs permitting surface waters to be diverted away from direct discharge into wetlands by providing detention and filtering, a higher water quality goes into the wetland than occurs with flows through a buffered area into a wetland. This buffer criteria is a carryover from septic tank experience not adaptable to most developing areas of New Jersey.

The recent publication by the Environmental Law Institute Publication, entitled Our National Wetland Heritage, a protection guidebook funded by Fish and Wildlife, highlights stilt construction over wetlands and flood plains. This type of construction should be

encouraged for those areas of the State when high land values can justify the cost of elevated construction.

I might add that in Vancouver, British Columbia, we have air rights and buildings over wetlands, which are extremely attractive and which maintain most of the wetland value. That is possibly one of the things that should be considered when you look at mitigation and balancing.

Both bills fail to establish tradeoffs recognizing that balancing is possible. I am attaching a list of potential bonuses that should be considered to encourage a developer to achieve greater environmental sensitivity and result in benefits for all.

In summary, it is our feeling that the 672 bill was hastily drafted, it is too vague, and it has poor scientific justification. Bill 2348 is a significant improvement. We feel, in fairness to the property owners and the State of New Jersey, that considerable work is required to establish a workable document that, when implemented at the county and DEP levels, reflects balancing of all interests.

I might add that I heard some discussion today regarding the Corps of Engineers delegating to the State. I would hope that in the long term that is possible. We have heard discussions about hardship waivers. One of the problems I think the builders and developers recognize is that it is going to be very difficult, for example when you look at economic justification, to go to a municipality with a high-rise office building that will generate tax revenues of maybe \$75 thousand to the municipality, and an income flow to \$150 thousand an acre in that community, and say there shouldn't be some balancing of the economic interests. Because if you just take that \$225 thousand and capitalize it eight times, you are talking about one \$1,800,000.

Now we recognize wetlands have value, but if you put it on an economic scale, it is a tough thing in a community where you are talking about creating those types of values.

We are also concerned about a bill that vests, and by vesting we mean not only the rights of the landowners, but also the rights of the municipality which, in many cases, has spent considerable dollars for infrastructure, and has passed zoning to permit that infrastructure to take place.

So, in summary, I guess my objective today is to try to recognize that there are balancing, mitigation, and other programs that we feel should be permitted and which will, hopefully, be written into your legislation. Thank you very much.

ASSEMBLYMAN HOLLENBECK: Thank you, Mr Bodwell. I guess, to summarize, we realize we still have a lot of work on our hands. Thank you.

Ellie Gruber.

ELLIE GRUBER: Thank you, Mr. Hollenbeck. My name is Ellie Gruber, and I am Cochairman of the Natural Resources Committee for the League of Women Voters of New Jersey, an organization of over 6,000 concerned and informed members.

Central to our principle is the informed and active participation of citizens in government. I am not a scientist. You have heard testimony from scientists here. We are testifying from a public protection point of view.

The League of Women Voters believes in the wise management of natural resources. We are very happy to see both these pieces of legislation today because although we agree flooding is a natural phenomenon, wetlands do act as retention areas for these waters. But, just as important, they also serve to filter pollution from farms and streets, and discharges from waste water treatment plants. It must be decided under what circumstances the State should step in and say these areas cannot be developed, because by filling them in you will alter the retention and water quality characteristics of the land — whether it be on the next corner, the next block, the next town, or the next county. So, your task is to decide on the best piece of legislation to regulate freshwater wetlands.

Both the Ogden and Riley bills fall short, in our opinion, in the area of who reviews and approves freshwater wetland permits. We would prefer a state agency to hear the application. We don't believe that either local, town, or county agencies are appropriate. The prospective of ratables dims the eyesight of even the most environmentally-aware locality, be it town or county, and we realize that too often these boards are overburdened with applications.

We don't mean to imply that the state agencies are not themselves overburdened, but the most important goal is, the decision to permit should be as objective as possible.

In addition, we have to consider who bears the burden of proof during the application process. The Riley bill does not provide for citizen appeal at a pre-judicial review level. Where the Ogden bill allows a citizen the privilege of reviewing the application with a state agency from the beginning, the Riley bill only gives the citizen the right to object in Superior Court if it can be proven that this citizen has been "aggrieved" by the decision. This is a costly process. In fact, a citizen may live two miles away and not know he is aggrieved until six inches of rain have fallen on the completed project and then it is too late.

We also object to sections 11 and 12 of the Riley bill, where it states that mitigation and monetary compensation would be preconditions for approval of a building or a filling permit. The Ogden Bill lists mitigation only if several other conditions are met. Wetlands cannot be completely mitigated. No matter how many drainage ditches, yards of filter fabric, or new earthen buffers are created, we do not believe that man can successfully recreate a wetland area. These areas have been constantly changing and adding new vegetation as nature provides for wet and dry periods. None of us is competent enough to duplicate nature.

Similarly, more flooding of flood retention areas inland also translates into economic gains for the landholder, builder, and community, but at what price? The recent floods in the Passaic Basin caused over \$50 million in damage and countless stories of misery. Many months later, some of these devastated homeowners still have no permanent home, all because some mitigation was provided; assurances were given; drainage ditches were dug; and man-made retention basins were built. We see what nature does to man's plans for mitigation.

We also disagree with section 2 of the Riley bill, where it states that not all wetlands are of comparable value and can be utilized for other purposes without harming the environment. While we recognize that some of the literature supports the theory of different

values, why should it follow that even the least valuable wetland area become a target for development? Who can really measure the value of the least valuable wetland? What measure is used? Does the value include water quality improvements by natural processes? Does it include aquatic productivity? Does it include the value of the least valuable wildlife habitat, or does it value recreation value benefits and aesthetics?

Further down, with regard to enforcement, we believe without proper channels of appeal and enforcement, we have no law. The Riley bill provides for between \$25 and \$1,000 fine. The Ogden bill lists between a \$250 and \$3,000 fine. We believe both of these fine structures are too small, but we certainly would favor the larger of the two in the bill.

We do not see, in either bill, a provision for on-site review of an approved permit as construction progresses. Some funding must be provided for this review, whether it is by the environmental offices of the town or a state agency. Some other party must supervise the permitted use while it is under construction, and we suggest funding be provided for this in a permit structure.

In summary, we hope this Committee takes into consideration all the testimony that has been given today. We urge you to pass a thorough, effective, and workable wetlands bill as soon as possible. Thank you very much.

ASSEMBLYMAN HOLLENBECK: Are there any questions? (negative response)

Angela Pulvino, President, New Jersey Association of Counties. (no response)>

John Trafford, New Jersey State League of Municipalities. (no response)

- Ladies and gentlemen, that completes my speakers list for today. Thank you very much. We will now conclude this hearing.

(HEARING CONCLUDED)

APPENDIX



**US Army Corps
of Engineers**
Philadelphia District

Regulatory Mission

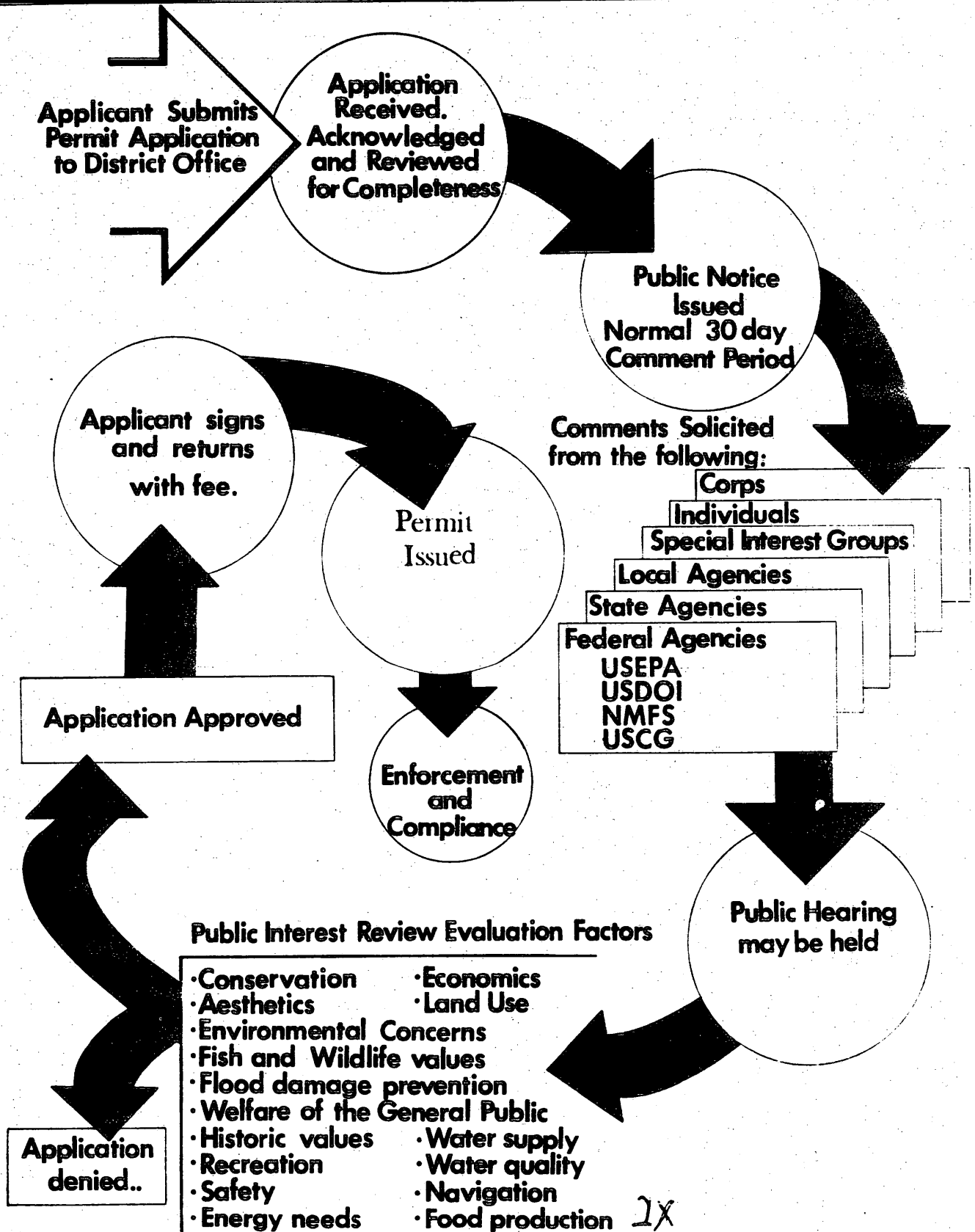
***Presentation to the State of New Jersey,
Assembly Agriculture and Environment Committee,
Monday, September 24, 1984.***

Prepared by:

***U.S. Army Corps of Engineers
Philadelphia District
Custom House
2nd and Chestnut Streets
Philadelphia, Pa. 19106***

REGULATORY FUNCTIONS:

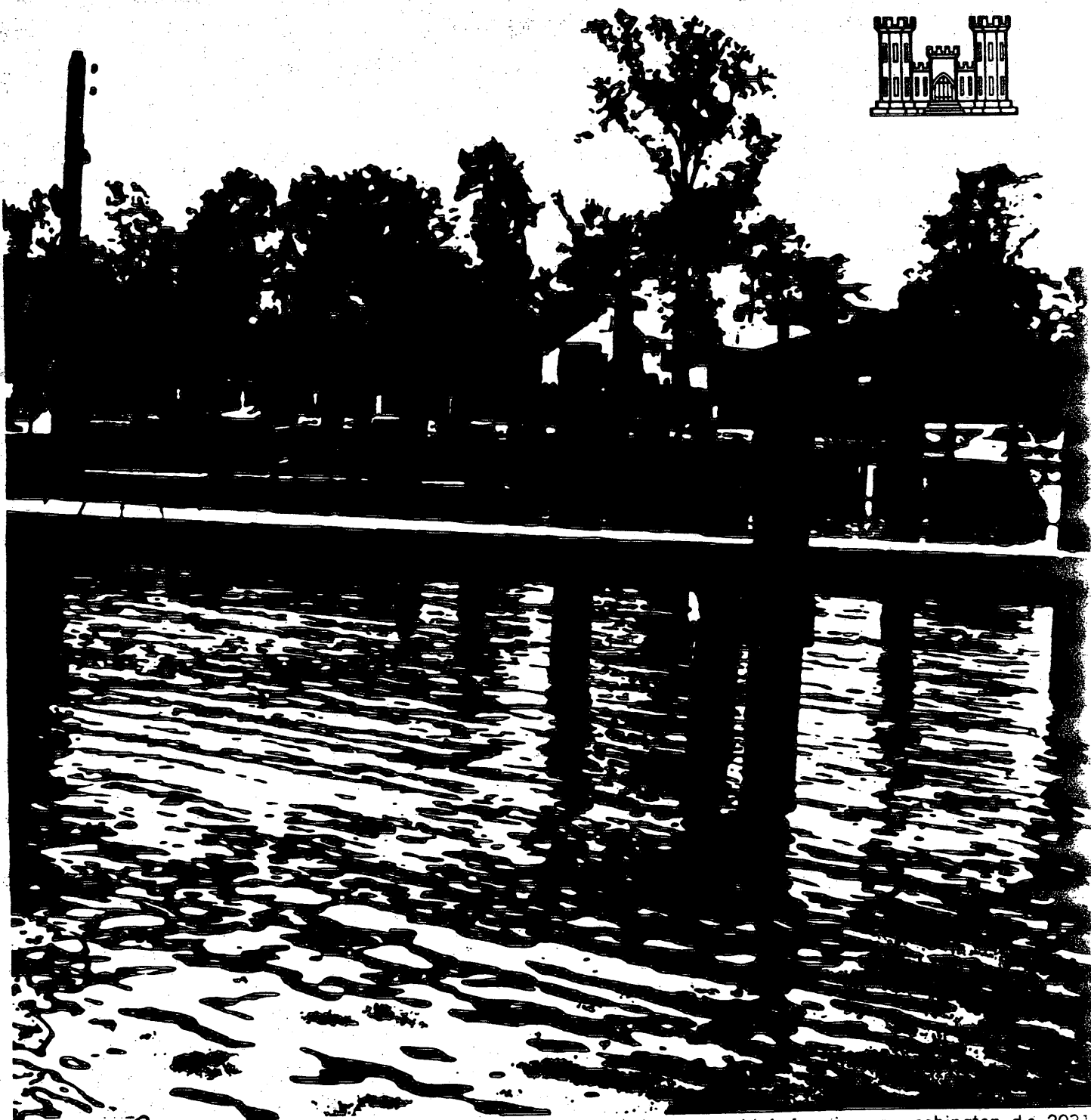
typical corps permit review process



u.s. army corps of engineers

permit program

a guide for applicants



foreword

This pamphlet is designed to assist you in applying for a Corps of Engineers permit. The pamphlet is not intended to be a complete description of all aspects of the permit program, but will provide basic, general information of a non-technical nature. Full explanation of the program may be found in the regulations, 33 Code of Federal Regulations, Parts 320 through 329. These regulations are available for review at the Corps of Engineer District offices listed inside the back cover of this pamphlet. They are also available at public libraries and government book stores. Answers to technical questions and detailed information about special aspects of the program that pertain to your geographical area and your proposed activity may also be obtained from Corps of Engineers District offices.

FOR THE CHIEF OF ENGINEERS:

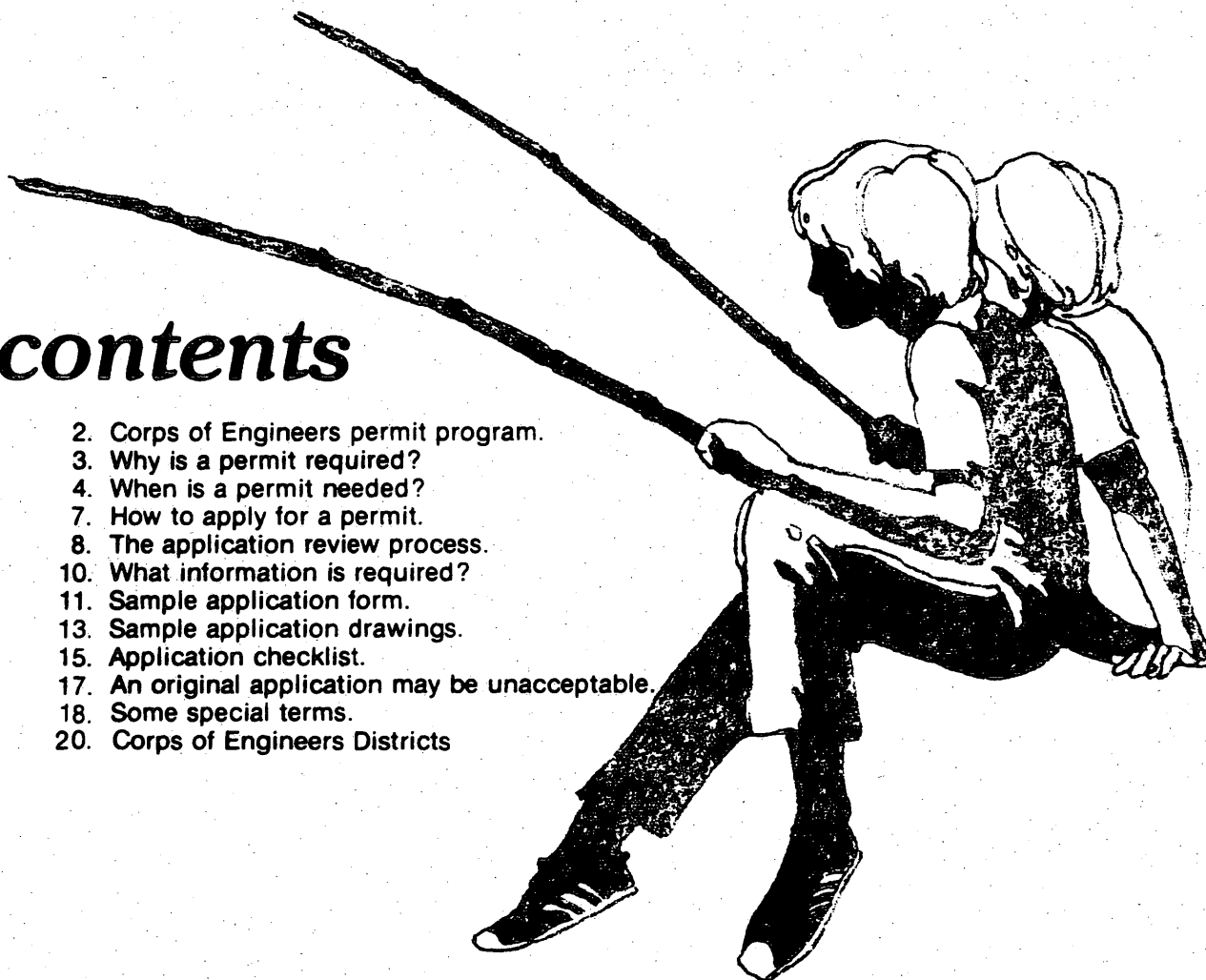


CHARLES I. MCGINNIS
Major General, USA
Director of Civil Works

This Pamphlet supersedes EP 1145-2-1, 1 Oct 74

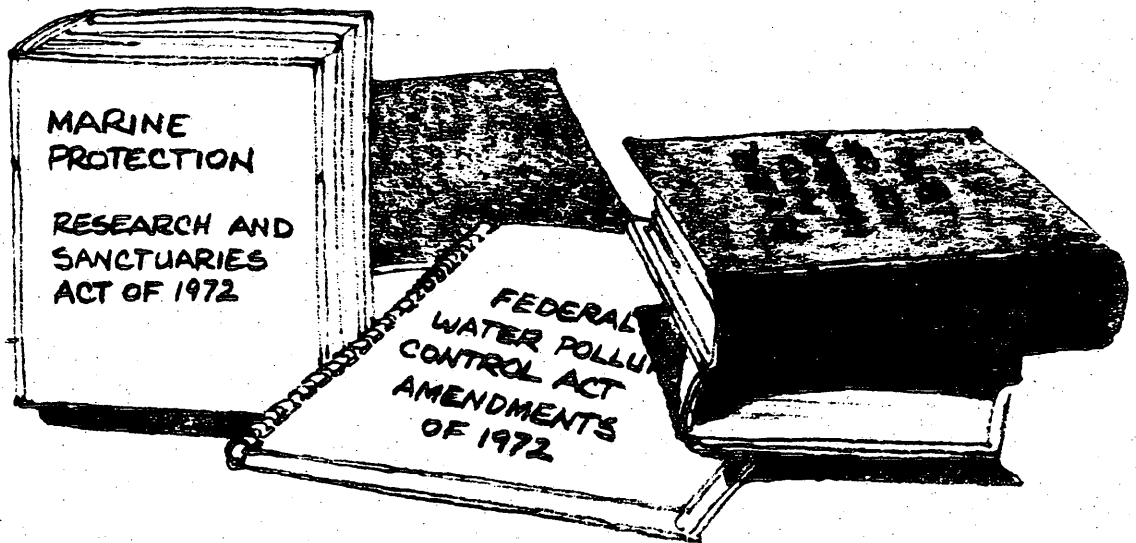
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18. Some special terms.
20. Corps of Engineers Districts



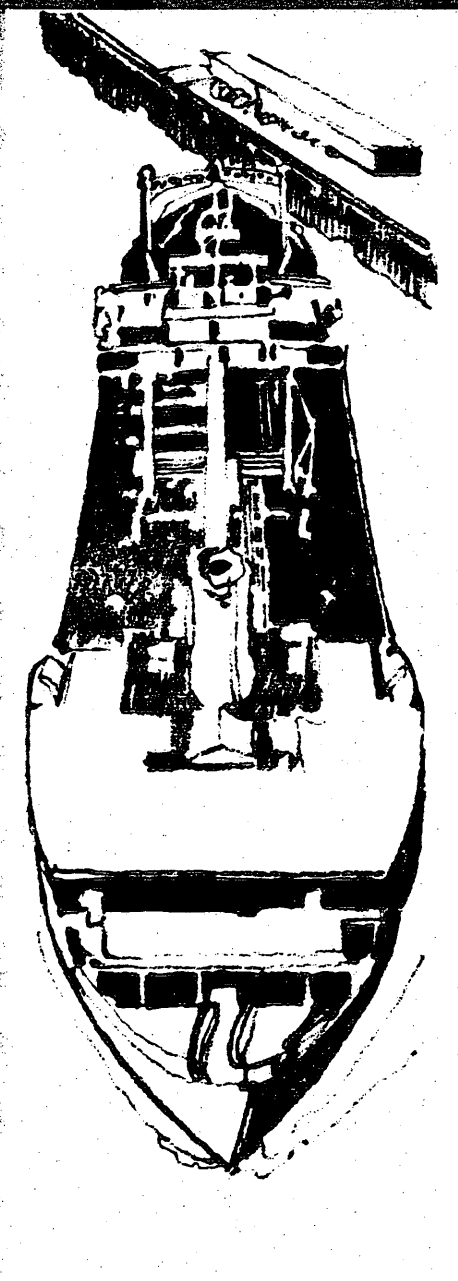
corps of engineers **permit program**

The Corps permit program is not new. When it began in 1899, its purpose was principally to avoid obstructions in navigable waters. Now, in response to changing environmental, social and economic conditions, the scope of the program has been broadened. Today the Corps regulatory program concerns not only the integrity of navigation channels but also the quality of the waters of the United States including the territorial seas.



why

is a permit required?



To protect the quality of our nation's water resources

To maintain water quality by protecting marshes, swamps, and similar environmentally valuable wetland resources

To prevent alteration or obstruction of a navigable water of the United States

To control dumping of dredged material into ocean waters

when is a permit needed?

A Corps permit is required if you plan to locate a structure, excavate, or discharge dredged or fill material in waters of the United States or if you plan to transport dredged material for the purpose of dumping it into ocean waters. However, not every activity requires a separate, individual permit application. Certain activities and work have been authorized by nationwide permits and general permits.

Nationwide permits have been issued for discharges of dredged or fill material into certain smaller or minor waters of the United States. Nationwide permits have also been issued for certain types of activities in all waters of the United States. These permits and their conditions are published in Sections 322.4 and 323.4 of Title 33 of the Code of Federal Regulations. If an activity is covered by a nationwide permit and the applicable conditions will be met, there is no need to apply for an individual permit. In effect, activities authorized by the nationwide permits in the regulation are permitted in advance. No paperwork or delay is required.

General permits are issued by the District Engineer. They are similar to the nationwide permits, but are limited to smaller specified regions and may require some notification or reporting procedures. The District Engineer is authorized to determine those categories of activities in specified geographical regions that will cause only a minimal adverse environmental impact and to permit them with general permits. These will reduce delays by eliminating the need to process many individual applications.

So, before you submit an application, contact the responsible District Engineer office for current information about nationwide and general permits.

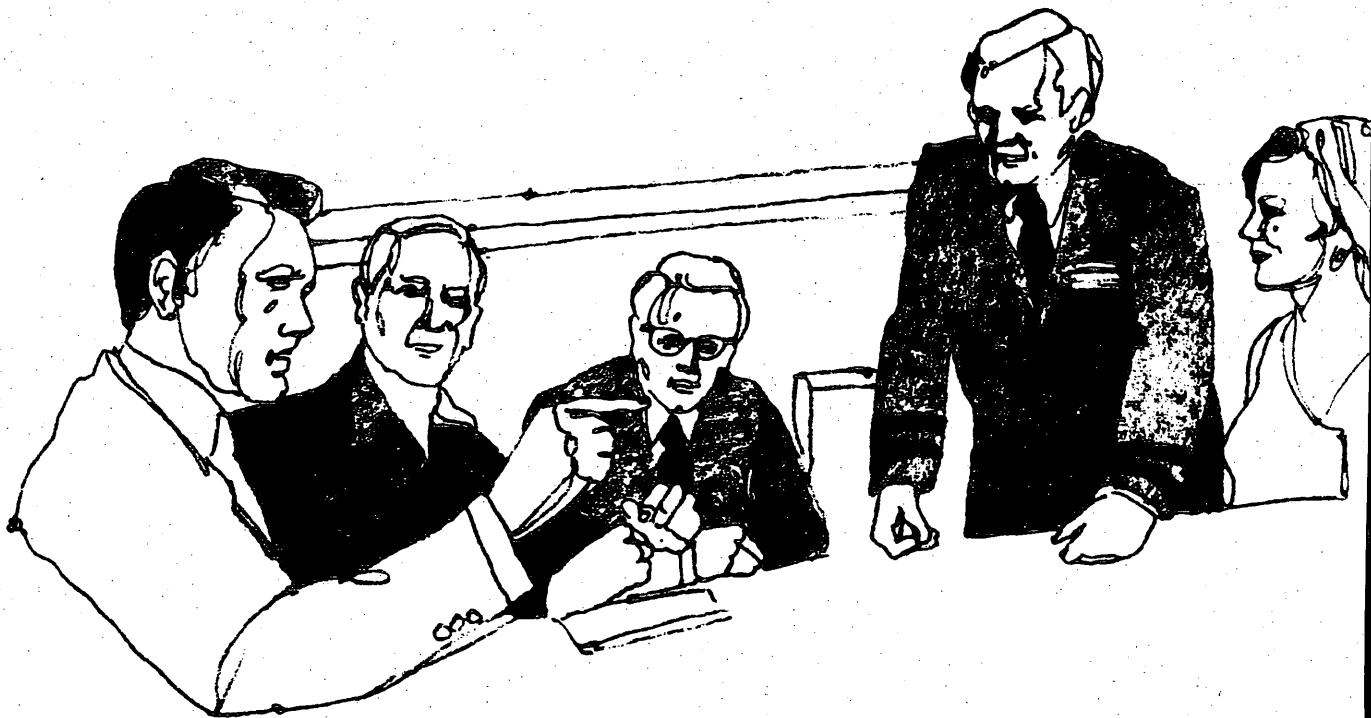


some typical activities requiring permits

Artificial canals
Artificial islands
Beach nourishment
Boat ramps
Breakwaters
Bulkheads
Dams, dikes, weirs
Discharging:
 Sand
 Gravel
 Dirt
 Clay
 Stone
Dolphins
Dredging
Filling
Groins and jetties
Intake pipes
Levees
Mooring Buoys
Ocean dumping
Outfall pipes
Pipes and cables
Piers and wharves
Riprap
Road fills
Signs
Tunnels

remember

You are encouraged to contact the District Engineer Office having jurisdiction over the specific geographic location of the structure or activity before submitting an application. The District Engineer and his staff are ready to provide information, guidance and other assistance that will help you prepare an application for a Corps permit.



10X

how to apply for a permit?

Contact the Office of the District Engineer who has jurisdiction over the area where the structure will be built or the activity will take place. Do this well in advance of the date that you would like to begin working on the project.

Request an application form (Eng Form 4345) and any special instructions you may wish that are not already furnished in this pamphlet.

Follow instructions carefully. Fill out the form completely and accurately. Then submit it together with a set of good quality, easily reproducible drawings to the District Engineer.

remember

The importance of providing complete and accurate information and clear drawings of your proposed project.

because

If your forms are incomplete or your drawings are unacceptable, they will be returned. This usually results in delaying the evaluation of your application.

the application review process



Each application is evaluated to determine the probable impact the structure or activity will have on the public interest.

If there are no objections to the structure or activity, a permit usually will be issued within 60 to 90 days after your completed application is received.

Many applicants are able to resolve minor objections by modifying their proposed project during the review process. . . . but many federal, state and local agencies, as well as community groups and individuals may become involved. If there are major objections or if an Environmental Impact Statement is required, processing time could be a year or more.

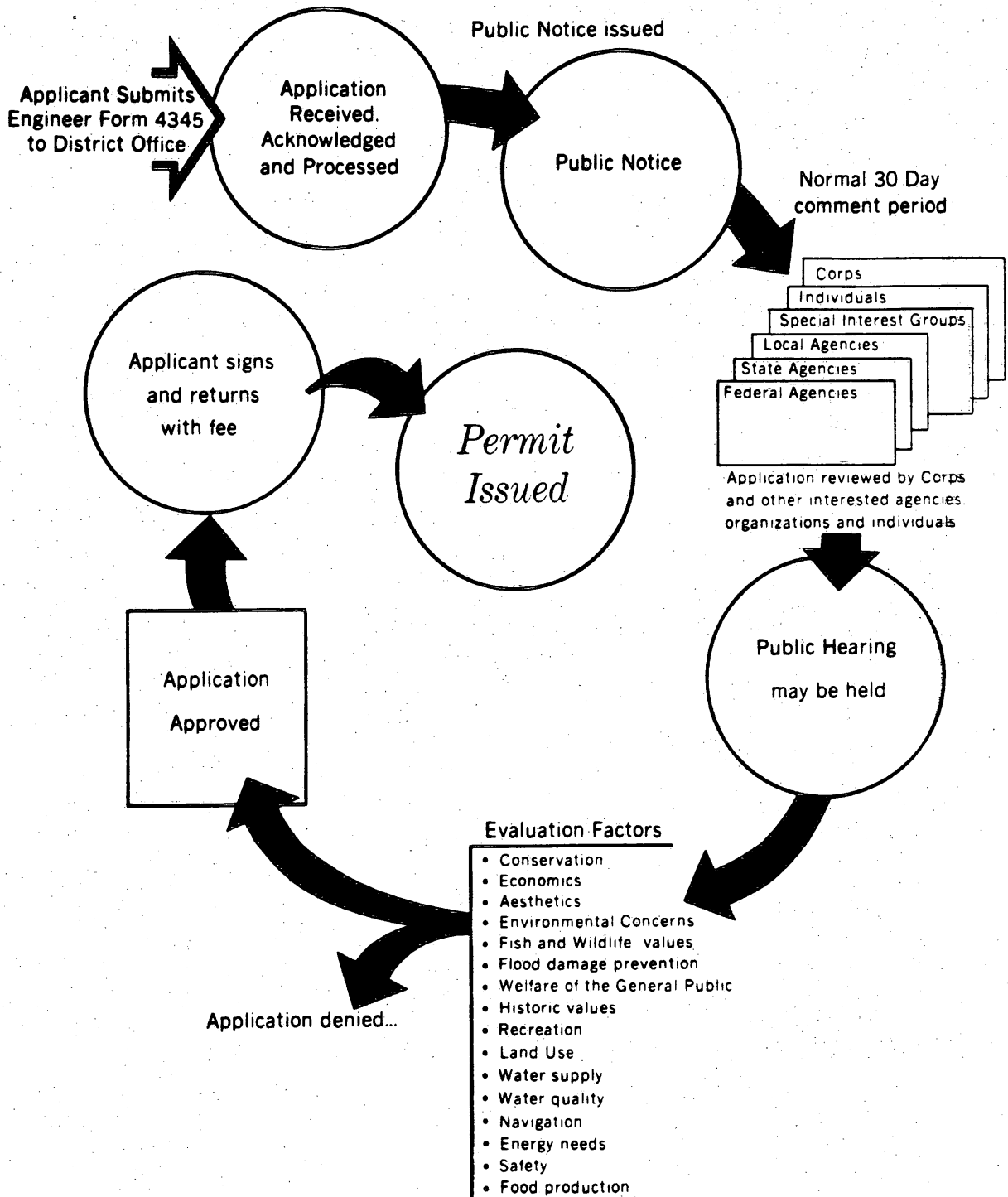


forms of authorization

- Individual Permit
- Letter of Permission
- Nationwide Permit
- General Permit

Your project may be authorized by nationwide or general permit. Contact the District for current information.

typical corps permit review process



what information is required in a permit application?

Applicants are expected to furnish the Corps of Engineers:

- A detailed description of the proposed activity, including the purpose, use, type of structures, types of vessels that will use the facility, facilities for handling wastes and the type, composition and quantity of dredged or fill material.
- Names and addresses of adjoining property owners and others, on the opposite side of streams or lakes or whose property fronts on a cove, who may have a direct interest because they could possibly be affected by your project.
- Complete information about the location, including street number, tax assessors description, political jurisdiction and name of waterway in enough detail so that the site can be easily located during a field visit.
- A list of the status of all approvals and certifications required by other federal, state, and local governmental agencies. This information is important because review time is often reduced by joint or simultaneous processing.
- Reasons that explain denial of any approvals or certifications required by other government agencies. When other approvals or authorizations are denied, application for a Corps permit may not be approved.

If ENG Form 4345 is not signed by the applicant, attach a statement designating the duly authorized agent who is acting on your behalf.

For most projects little or no additional information is required. What you provide on ENG Form 4345 and the drawings is usually all that is needed to review your application.

Yet, when wetlands, historic or archeological sites, dredging, filling, or ocean dumping are involved, you may be asked to furnish additional information or drawings that will assist in evaluating your application.

S A M P L E

APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT

For use of this form, see EP 1145-2-1

The Department of the Army permit program is authorized by Section 10 of the River and Harbor Act of 1899, Section 404 of P. L. 92-500 and Section 103 of P. L. 92-532. These laws require permits authorizing structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided in ENG Form 4345 will be used in evaluating the application for a permit. Information in the application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and checklist) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

| | | | | | | | | | | | | | |
|---|--|---------------------------------------|--|--|------------------------|----------------------------|------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 1. Application number (To be assigned by Corps) | 2. Date <div style="border: 1px solid black; padding: 2px; text-align: center;"> <u>3 March 1977</u> Day Mo. Yr. </div> | 3. For Corps use only. | | | | | | | | | | | |
| 4. Name and address of applicant. Fred R. Johnson 1641 S. Hampton Blvd. Jacksonville, Florida 32211 <small>Telephone no. during business hours</small> A/C (904) <u>725-8386</u> A/C (904) <u>745-5172</u> | 5. Name, address and title of authorized agent. <small>Telephone no. during business hours</small> A/C () _____ A/C () _____ | | | | | | | | | | | | |
| 6. Describe in detail the proposed activity, its purpose and intended use (private, public, commercial or other) including description of the type of structures, if any to be erected on fills, or pile or float-supported platforms, the type, composition and quantity of materials to be discharged or dumped and means of conveyance, and the source of discharge or fill material. If additional space is needed, use Block 14. Bulkhead and backfill with 80 cubic yards of clean sand obtained from upland areas. Construct pier for mooring private sailboat. No fuel pumps or toilet facilities to be constructed on pier. No structures to be erected on fill. | | | | | | | | | | | | | |
| 7. Names, addresses and telephone numbers of adjoining property owners, lessees, etc., whose property also adjoins the waterway. <table style="width: 100%;"> <tr> <td style="width: 50%;"> Harry L. Hampton 12467 Ridge Road Jacksonville, Florida 32297 (904) 725-7501 </td> <td style="width: 50%;"> Mary L. Clark 12571 Ridge Road Jacksonville, Florida 32227 (904) 725-6684 </td> </tr> </table> | | | Harry L. Hampton 12467 Ridge Road Jacksonville, Florida 32297 (904) 725-7501 | Mary L. Clark 12571 Ridge Road Jacksonville, Florida 32227 (904) 725-6684 | | | | | | | | | |
| Harry L. Hampton 12467 Ridge Road Jacksonville, Florida 32297 (904) 725-7501 | Mary L. Clark 12571 Ridge Road Jacksonville, Florida 32227 (904) 725-6684 | | | | | | | | | | | | |
| 8. Location where proposed activity exists or will occur. <table style="width: 100%;"> <tr> <td style="width: 50%;"> Address: <u>1641 S. Hampton Blvd.</u> Street, road or other descriptive location <u>In city of Jacksonville, Florida</u> In or near city or town <div style="display: flex; justify-content: space-between;"> <u>Duval</u> County <u>Florida</u> State <u>32211</u> Zip Code </div> </td> <td style="width: 50%;"> Tax Assessors Description: (If known) <table style="width: 100%;"> <tr> <td style="text-align: center;"><u>10</u></td> <td style="text-align: center;"><u>215</u></td> <td style="text-align: center;"><u>21-23</u></td> </tr> <tr> <td style="text-align: center;"><small>Map No.</small></td> <td style="text-align: center;"><small>Subdiv. No.</small></td> <td style="text-align: center;"><small>Lot No.</small></td> </tr> <tr> <td style="text-align: center;">_____ <small>Sec.</small></td> <td style="text-align: center;">_____ <small>Twp.</small></td> <td style="text-align: center;">_____ <small>Rge.</small></td> </tr> </table> </td> </tr> </table> | | | Address: <u>1641 S. Hampton Blvd.</u> Street, road or other descriptive location <u>In city of Jacksonville, Florida</u> In or near city or town <div style="display: flex; justify-content: space-between;"> <u>Duval</u> County <u>Florida</u> State <u>32211</u> Zip Code </div> | Tax Assessors Description: (If known) <table style="width: 100%;"> <tr> <td style="text-align: center;"><u>10</u></td> <td style="text-align: center;"><u>215</u></td> <td style="text-align: center;"><u>21-23</u></td> </tr> <tr> <td style="text-align: center;"><small>Map No.</small></td> <td style="text-align: center;"><small>Subdiv. No.</small></td> <td style="text-align: center;"><small>Lot No.</small></td> </tr> <tr> <td style="text-align: center;">_____ <small>Sec.</small></td> <td style="text-align: center;">_____ <small>Twp.</small></td> <td style="text-align: center;">_____ <small>Rge.</small></td> </tr> </table> | <u>10</u> | <u>215</u> | <u>21-23</u> | <small>Map No.</small> | <small>Subdiv. No.</small> | <small>Lot No.</small> | _____ <small>Sec.</small> | _____ <small>Twp.</small> | _____ <small>Rge.</small> |
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| <u>10</u> | <u>215</u> | <u>21-23</u> | | | | | | | | | | | |
| <small>Map No.</small> | <small>Subdiv. No.</small> | <small>Lot No.</small> | | | | | | | | | | | |
| _____ <small>Sec.</small> | _____ <small>Twp.</small> | _____ <small>Rge.</small> | | | | | | | | | | | |
| 9. Name of waterway at location of the activity. Big Ham Creek | | | | | | | | | | | | | |

SAMPLE

10. Date activity is proposed to commence. 30 days after receipt of permit
 Date activity is expected to be completed 6 months after commencing work

11. Is any portion of the activity for which authorization is sought now complete? ☐ YES ☒ NO
 If answer is "Yes" give reasons in the remark section. Month and year the activity was completed _____ . Indicate the existing work on the drawings.

12. List all approvals or certifications required by other federal, interstate, state or local agencies for any structures, construction, discharges, deposits or other activities described in this application.

| Issuing Agency | Type Approval | Identification No. | Date of Application | Date of Approval |
|----------------------|---------------|--------------------|---------------------|------------------|
| Fla DER | Permit | - | 29 Feb 77 | Pending |
| Fla DER | Certification | - | 29 Feb 77 | Pending |
| City of Jacksonville | Permit | 77108 | 15 Jan 77 | 31 Jan 77 |

13. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?
☐ Yes ☒ No (If "Yes" explain in remarks)

14. Remarks (Checklist, Appendix H for additional information required for certain activities).

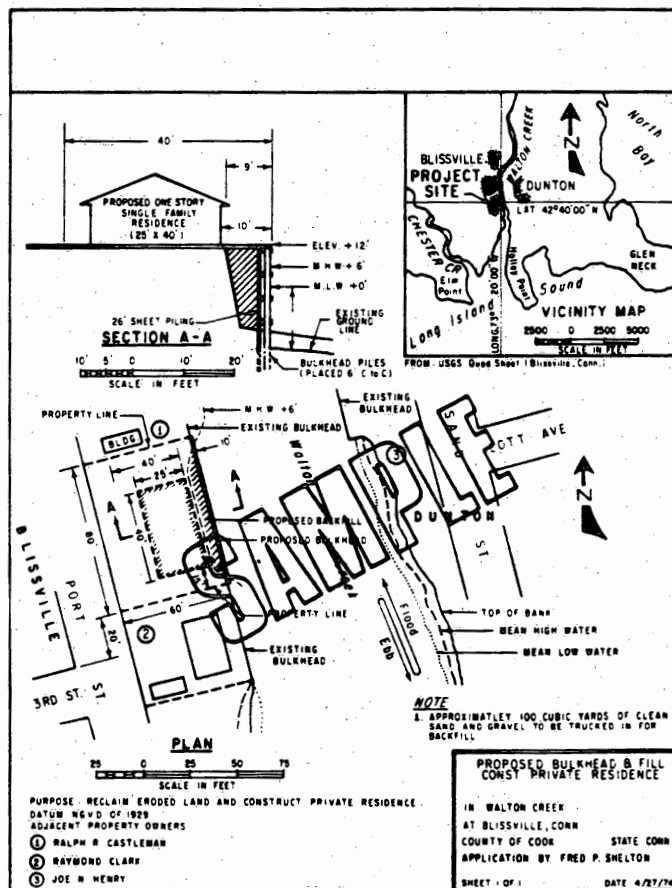
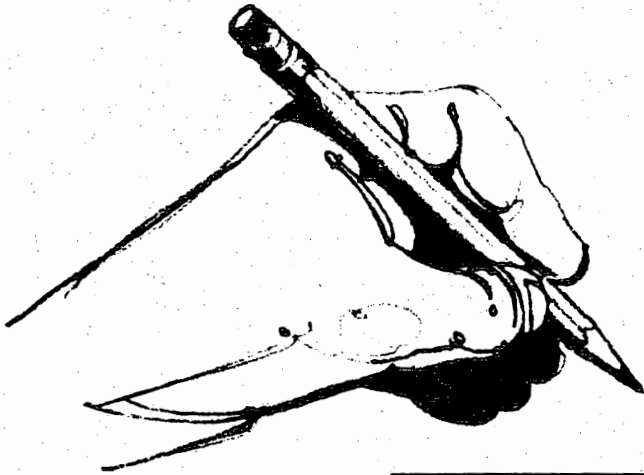
15. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

/s/ Fred R. Johnson
 Signature of Applicant or Authorized Agent

The application must be signed by the applicant; however, it may be signed by a duly authorized agent (named in Item 5) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

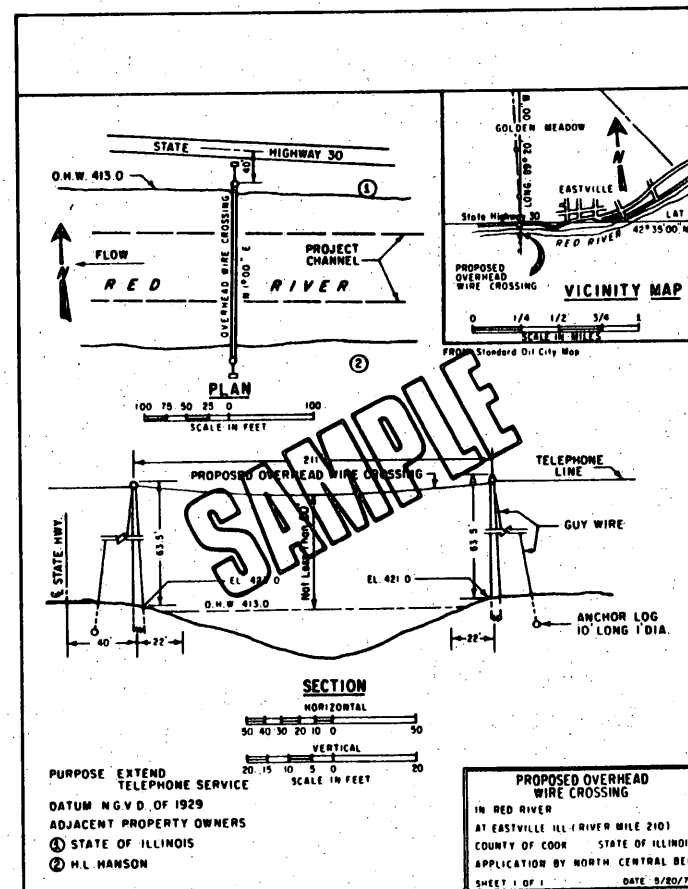
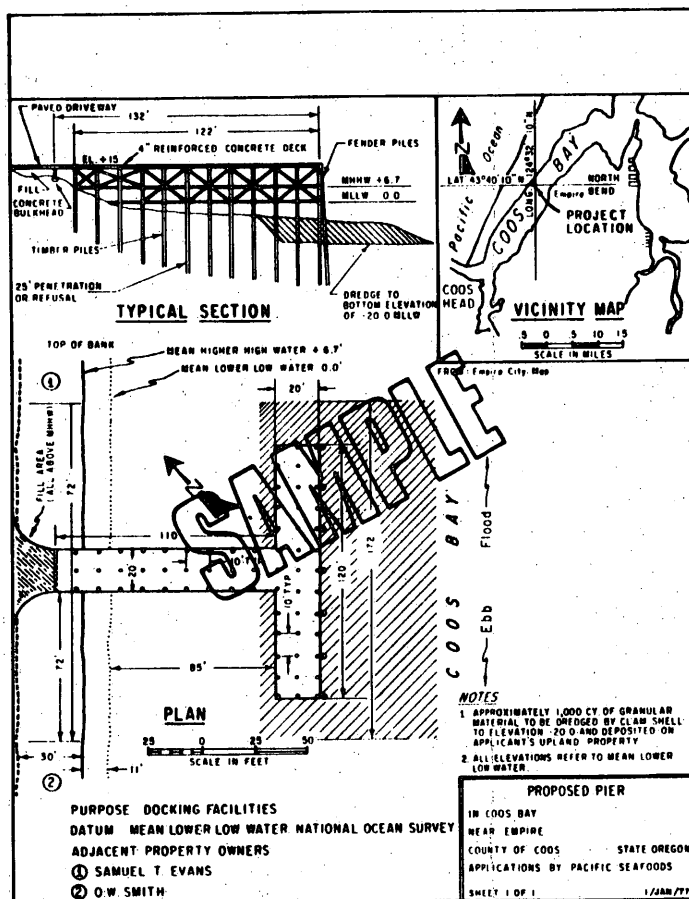
18 U. S. C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. Do not send a permit processing fee with this application. The appropriate fee will be assessed when a permit is issued.

18X



The sample application drawings shown here and on the following page are examples of the type of drawings that should be submitted with ENG Form 4345 for simple projects. For complicated structures and activities, more detailed drawings are required.

20X



application checklist

General

- ☐ Submit one original or good quality reproducible set of all drawings on 8" x 10-1/2" tracing cloth, tracing film or paper. Submit the fewest number of sheets necessary to adequately show the proposed activity. Drawings should be prepared in accordance with the general format of the samples. Block style lettering should be used.
- ☐ A 1-inch margin should be left at the top edge of each sheet for purposes of reproduction and binding. A 1/2-inch margin is required on the three other edges.
- ☐ Title block of each sheet submitted should identify the proposed activity and contain the name of the body of water; river mile, if applicable; name of county and state; name of applicant or agent; number of the sheet and total number of sheets in set; and date the drawing was prepared.
- ☐ Drawings should not reflect the approval, non-objection, or action of other agencies.
- ☐ Since drawings must be reproduced photographically, color shading cannot be used. Drawings must show work as a dot shading, hatching, or similar graphic symbols.

Vicinity Map. Identify the map or chart from which the vicinity map was taken and show the following:

- ☐ Location of the activity site including latitude and longitude and river mile, if known.
- ☐ Name of waterway.
- ☐ All applicable political (county, borough, town, city, etc.) boundary lines.
- ☐ Name of and distance to local town, community, or other identifying location.
- ☐ Names of all roads in the vicinity of the site.
- ☐ Graphic scale.
- ☐ North arrow.

Plan View. The plan view of the proposed activity should show the following:

- ☐ Existing shorelines.
- ☐ Ebb and flood in tidal waters and direction of flow in rivers.
- ☐ North arrow.
- ☐ Graphic or numerical scale.
- ☐ Mean high and low water lines if the proposed activity is located in tidal areas on the Atlantic and Gulf coasts.
- ☐ Mean higher high water and mean lower low water lines if the proposed activity is located in tidal areas on the Pacific coast.
- ☐ Ordinary high water line and ordinary low water line if the proposed activity is on a lake or ordinary high water if on a stream.

- ☐ Water depths around the project.
- ☐ Principal dimensions of the structure or work and extent of encroachment beyond the applicable high water line.
- ☐ Waterward dimension from an existing permanent fixed structure or object.
- ☐ Distances to nearby federal projects, if applicable.
- ☐ Number of cubic yards, type of material, method of handling, and location of fill or spoil disposal area if applicable. If spoil material is to be placed in approved dumping grounds, a separate map showing the location of the dumping grounds should be attached. The drawing must indicate proposed retention levees, weirs, and/or other devices for retaining hydraulically placed materials.
- ☐ Distance between proposed activity and navigation channel, where applicable.
- ☐ Federal harbor lines, if established and if known.
- ☐ Location of structures, if any, in navigable waters immediately adjacent to the proposed activity, including permit numbers, if known. Identify purpose of all structures.
- ☐ Location of any wetlands, swamps, marshes, etc. Identify.

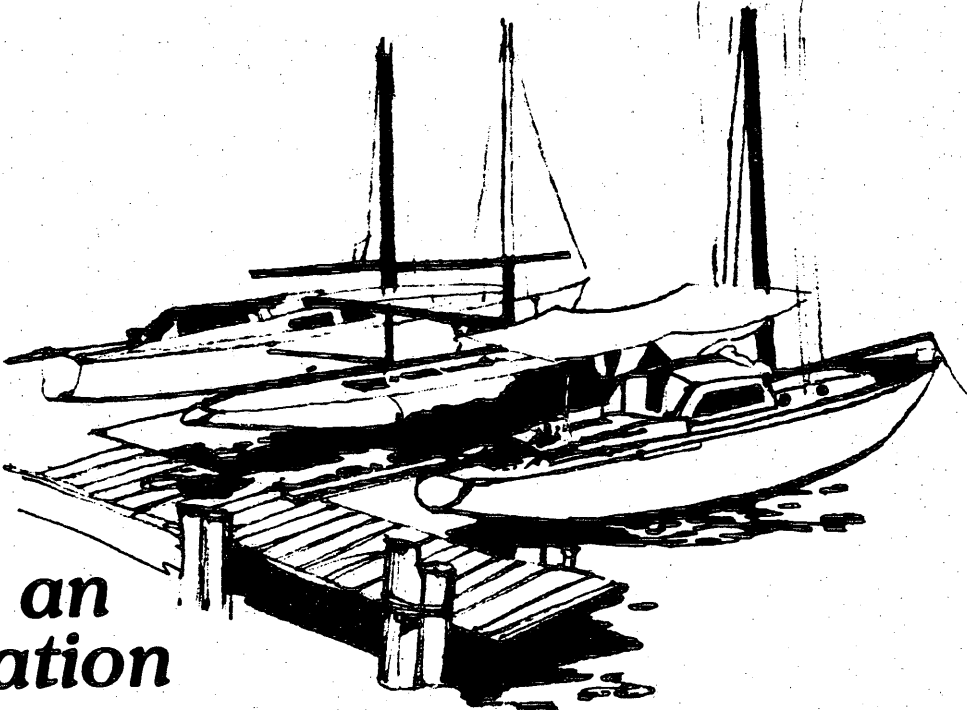
Elevation and/or Section View. The elevation and/or section view of the proposed project should show the following:

- ☐ Same water elevations as in the plan view.
- ☐ Depth at waterward face of proposed work, or if dredging is proposed, show dredging grade.
- ☐ Dimensions from applicable high water line for proposed fill, float, or pile supported platform. Identify any structures to be erected thereon.
- ☐ Graphic or numerical scale.
- ☐ Cross-section of excavation or fill, including approximate side slopes.
- ☐ Elevation of spoil areas.

Notes on Drawings

- ☐ List names of adjacent property owners whose property also adjoins the water and are not shown on plan view.
- ☐ State purpose (private use, commercial, etc.) of proposed activity.
- ☐ State datum used in plan and elevation views. Use mean low water, mean lower low water, National Ocean Survey Datum or National Geodetic Vertical Datum of 1929.

22X



when an application is disapproved

There are times during the evaluation process when the Corps finds that a project and its intended use will have an adverse impact on the public interest. If you are notified by the Corps that it is concerned about your project, you may

- Discuss with the Corps the reasons that make your application unacceptable
- Reconsider your plan and examine alternatives
- Modify the original project design to eliminate the objectionable features

. . . do not become a violator

Do not begin any work that requires a Corps permit before you have received official authorization. Case-by-case consideration is given to known violations.

Violators may be subject to:

- Civil and/or criminal court action
- Fines of \$500 to \$50,000 per day
- Imprisonment for up to 2 years
- Removal of structures and materials

some special terms

Definitions of several special terms are summarized on this page. Complete information about technical terminology may be obtained by referring to the permit regulations, 33 Code of Federal Regulations 320 through 329.

Navigable Waters of the United States

Waters of the United States that are subject to the ebb and flow of the tide, and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce.

Waters of the United States

The territorial seas.

Coastal and inland waters, lakes, rivers, and streams that are navigable waters of the United States, including adjacent wetlands.

Tributaries to navigable waters of the United States, including adjacent wetlands. Manmade nontidal drainage and irrigation ditches excavated on dry land are not considered to be tributaries.

Interstate waters and their tributaries, including adjacent wetlands.

All other waters of the United States such as isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the degradation or destruction of which could effect interstate commerce.

Wetlands

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Dredge Material

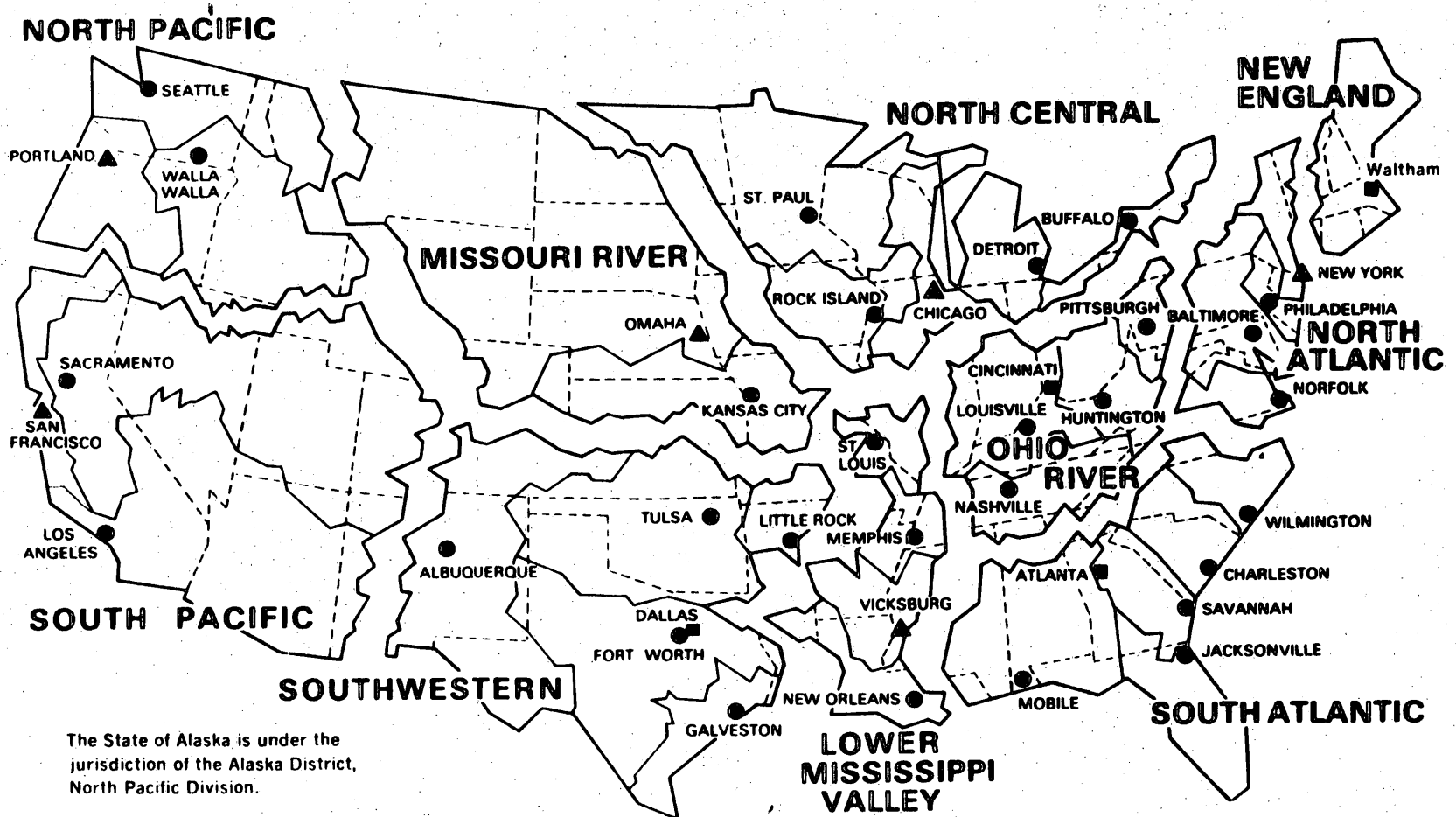
Material that is excavated or dredged from waters of the United States.

Fill Material

Any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody.



divisions and districts for civil works activities



The State of Alaska is under the jurisdiction of the Alaska District, North Pacific Division.

The State of Hawaii and islands in the Pacific are included in Honolulu District, Pacific Ocean Division with Headquarters at Honolulu, Hawaii.

The Territory of Puerto Rico and the U.S. Virgin Islands are included in Jacksonville District, South Atlantic Division.

districts

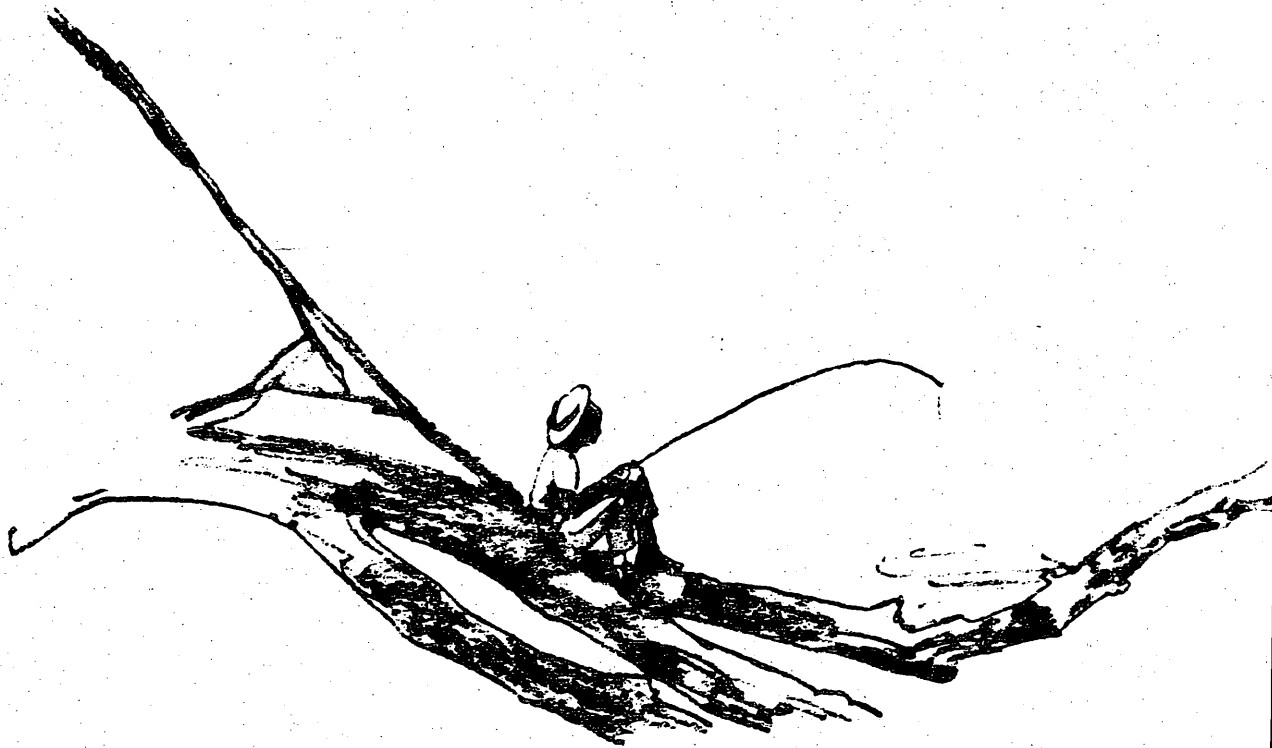
Address correspondence to:
The District Engineer, U.S. Army Engineer District

| | | Attention | Area Code & Telephone No. |
|---------------|--|-----------|---------------------------|
| Alaska | P.O. Box 7002, Anchorage, AK 99510 | NPACO—RF | 907 752-4942 |
| Albuquerque | PO Box 1580, Albuquerque, NM 87103 | SWACO—OR | 505 766-2776 |
| Baltimore | PO Box 1715, Baltimore, MD 21203 | NABOP—F | 301 962-3670 |
| Buffalo | 1776 Niagara St., Buffalo, NY 14207 | NCBCO—S | 716 876-5454 |
| Charleston | PO Box 919, Charleston, SC 29402 | SACCO—P | 803 577-4171 |
| Chicago | 219 S. Dearborn St., Chicago, IL 60604 | NCCCO—SP | 312 353-6434 |
| Detroit | PO Box 1027, Detroit, MI 48231 | NCCCO—L | 313 226-6813 |
| Ft. Worth | PO Box 17300, Ft. Worth, TX 76102 | SWFOD—P | 817 334-2814 |
| Galveston | PO Box 1229, Galveston, TX 77553 | SWGCO—OC | 713 763-1211 |
| Huntington | PO Box 2127, Huntington, WV 25721 | ORHOP—WP | 304 529-2318 |
| Honolulu | Bldg. 230, Ft. Shafter, Honolulu, HI | PODCO—O | 808 438-9258 |
| Jacksonville | PO Box 4970, Jacksonville, FL 32201 | SAJOD—RP | 904 791-2211 |
| Kansas City | 700 Fed. Bldg. 601 E. 12th St., Kansas City, MO 64106 | MRKOD—P | 816 374-3645 |
| Little Rock | PO Box 867, Little Rock, AR 72203 | SWLCO—D | 501 378-5296 |
| Los Angeles | PO Box 2711, Los Angeles, CA 90053 | SPLCO—N | 213 688-5607 |
| Louisville | PO Box 59, Louisville, KY 40201 | ORLOP—SP | 502 582-6461 |
| Memphis | 668 Fed. Ofc Bldg., Memphis, TN 38103 | LMMOD—NN | 901 521-3471 |
| Mobile | PO Box 2288, Mobile, AL 36628 | SAMOP—S | 205 690-2660 |
| Nashville | PO Box 1070, Nashville, TN 37202 | ORNOP—F | 615 251-5181 |
| New Orleans | PO Box 60267, New Orleans, LA 70160 | LMNOD—S | 504 865-1121 |
| New York | 26 Fed. Plaza, New York, NY 10007 | NANOP—E | 212 264-3996 |
| Norfolk | 803 Front St., Norfolk, VA 23510 | NAOOP—P | 804 446-3652 |
| Omaha | 6014 USPO & Courthouse, 215 N 17 St., Omaha, NE 68102 | MROOP—N | 402 221-4133 |
| Philadelphia | US Custom House, 2nd & Chestnut St., Phila., PA 19106 | NAPOP—R | 215 597-2812 |
| Pittsburgh | 1884 Fed. Bldg., 1000 Liberty Ave., Pittsburgh, PA 15222 | ORPOP—S | 412 644-6872 |
| Portland | PO Box 2946, Portland, OR 97208 | NPPND—RF | 503 221-6997 |
| Rock Island | Clock Tower Bldg., Rock Island, IL 61201 | NCROD—S | 309 788-6361 |
| Sacramento | 650 Capitol Mall, Sacramento, CA 95814 | SPKCO—O | 916 440-2327 |
| St. Louis | 210 No. 12th St. Louis, MO 63101 | LMSOD—NP | 314 268-2872 |
| St. Paul | 1135 USPO & Custom House, St. Paul, MN 55101 | NCSCO—S | 612 725-5819 |
| San Francisco | 211 Main St., San Francisco, CA 94105 | SPNCO—R | 415 556-2752 |
| Savannah | PO Box 889, Savannah, GA 31402 | SASOP—F | 912 233-8822 |
| Seattle | PO Box 3-3755 Seattle, WA 98134 | NPSOP—RF | 206 764-3495 |
| Tulsa | PO Box 61, Tulsa, OK 74102 | SWTOD—N | 918 581-7351 |
| Vicksburg | PO Box 60, Vicksburg, MS 39180 | LMKOD—F | 601 636-1311 |
| Walla Walla | Bldg. 602, City-County Airport, Walla Walla, WA 99362 | NPWOP—NF | 509 525-5500 |
| Wilmington | PO Box 1890, Wilmington, NC 28401 | SAWCO—E | 919 763-9971 |

The Division Engineer, U.S. Army Engineer Division:

New England 424 Trapelo Road, Waltham, MA 02154 NEDOD—R 617 894-2400

20X



28x

**BUILDING
TOMORROW
TODAY**

404 Guidelines
(Final)

Wednesday
December 24, 1980

Federal Register

Part IV

Environmental Protection Agency

Guidelines for Specification of Disposal
Sites for Dredged or Fill Material

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 230****(WH-FRL 1647-7)****Guidelines for Specification of Disposal Sites for Dredged or Fill Material****AGENCY:** Environmental Protection Agency.**ACTION:** Rule.

SUMMARY: The 404(b)(1) Guidelines are the substantive criteria used in evaluating discharges of dredged or fill material under section 404 of the Clean Water Act. These Guidelines revise and clarify the September 5, 1975 Interim final Guidelines regarding discharge of dredged or fill material into waters of the United States in order to:

(1) Reflect the 1977 Amendments of Section 404 of the Clean Water Act (CWA);

(2) Correct inadequacies in the interim final Guidelines by filling gaps in explanations of unacceptable adverse impacts on aquatic ecosystems and by requiring documentation of compliance with the Guidelines; and

(3) Produce a final rulemaking document.

EFFECTIVE DATE: These Guidelines will apply to all 404 permit decisions made after March 23, 1981. In the case of civil works projects of the United States Army Corps of Engineers involving the discharge of dredged or fill material for which there is no permit application or permit as such, these Guidelines will apply to all projects on which construction or dredging contracts are issued, or on which dredging is initiated for Corps operations not performed under contract, after October 1, 1981. In the case of Federal construction projects meeting the criteria in section 404(r), these Guidelines will apply to all projects for which a final environmental impact statement is filed with EPA after April 1, 1981.

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SUPPLEMENTARY INFORMATION:**Background**

The section 404 program for the evaluation of permits for the discharge of dredged or fill material was originally enacted as part of the Federal Water Pollution Control Amendments of 1972. The section authorized the Secretary of

the Army acting through the Chief of Engineers to issue permits specifying disposal sites in accordance with the section 404(b)(1) Guidelines. Section 404(b)(2) allowed the Secretary to issue permits otherwise prohibited by the Guidelines, based on consideration of the economics of anchorage and navigation. Section 404(c) authorized the Administrator of the Environmental Protection Agency to prohibit or withdraw the specification of a site, upon a determination that use of the site would have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.

Under section 404(b)(1), the Guidelines are to be based on criteria comparable to those in section 403(c) of the Act, for the territorial seas, contiguous zone, and oceans. Unlike 403(c), 404 applies to all waters of the United States. Characteristics of waters of the United States vary greatly, both from region to region and within a region. There is a wide range of size, flow, substrate, water quality, and use. In addition, the materials to be discharged, the methods of discharge, and the activities associated with the discharge also vary widely. These and other variations make it unrealistic at this time to arrive at numerical criteria or standards for toxic or hazardous substances to be applied on a nationwide basis. The susceptibility of the aquatic ecosystem to degradation by purely physical placement of dredged or fill material further complicates the problem of arriving at nationwide standards. As a result, the Guidelines concentrate on specifying the tools to be used in evaluating and testing the impact of dredged or fill material discharges on waters of the United States rather than on simply listing numerical pass-fail points.

The first section 404(b)(1) Guidelines were promulgated by the Administrator in interim final form on September 5, 1975, after consultation with the Corps of Engineers. Since promulgation of the interim final Guidelines, the Act has been substantially amended. The Clean Water Act of 1977 established a procedure for transferring certain permitting authorities to the states, exempted certain discharges from any section 404 permit requirements, and gave the Corps enforcement authority. These amendments also increased the importance of the section 404(b)(1) Guidelines, since some of the exemptions are based on alternative ways of applying the Guidelines. These changes, plus the experience of EPA and

the Corps in working with the interim final Guidelines, have prompted a revision of the Guidelines. The proposed revision attempted to reorganize the Guidelines, to make it clearer what had to be considered in evaluating a discharge and what weight should be given to such considerations. The proposed revision also tightened up the requirements for the permitting authority's documentation of the application of the Guidelines.

After extensive consultation with the Corps, the proposed revisions were put out for public comment (44 FR 54222, September 18, 1979). EPA has reviewed and, after additional consultation with the Corps, revised the proposal in light of these comments. This preamble addresses the significant comments received, explains the changes made in the regulation, and attempts to clear up some misunderstandings which were revealed by the comments. Response to Significant Comments

Regulation Versus Guideline

A number of commenters objected to the proposed Guidelines on the grounds that they were too "regulatory." These commenters argued that the term "guidelines" which appears in section 404(b)(1) requires a document with less binding effect than a regulation. EPA disagrees. The Clean Water Act does not use the word "guideline" to distinguish advisory information from regulatory requirements. Section 404(b)(2) clearly demonstrates that Congress contemplated that discharges could be "prohibited" by the Guidelines. Section 403 (which is a model for the 404(b)(1) Guidelines) also provides for "guidelines" which are clearly regulatory in nature. Consequently, we have not changed the regulation to make it simply advisory. Of course, as the regulation itself makes clear, a certain amount of flexibility is still intended. For example, while the ultimate conditions of compliance are "regulatory", the Guidelines allow some room for judgment in determining what must be done to arrive at a conclusion that those conditions have or have not been met. See, for example, § 230.6 and § 230.60, and introductory sentence in § 230.10.

Statutory Scheme and How the Guidelines Fit Into It

A number of commenters with objections appeared confused about EPA's role in the section 404 program. Some wondered why EPA was issuing Guidelines since EPA could stop an unacceptable discharge under section 404(c). Others were uncertain how the

Guidelines related to other section 404 regulations.

The Clean Water Act prohibits the discharge of dredged or fill material except in compliance with section 404. Section 404 sets up a procedure for issuing permits specifying discharge sites. Certain discharges (e.g. emergency repairs, certain farm and forest roads, and other discharges identified in sections 404(f) and (r)) are exempted from the permit requirements. The permitting authority (either the Corps of Engineers or an approved State program) approves discharges at particular sites through application of the section 404(b)(1) Guidelines, which are the substantive criteria for dredged and fill material discharges under the Clean Water Act. The Corps also conducts a Public Interest Review, which ensures that the discharge will comply with the applicable requirements of other statutes and be in the public interest. The Corps or the State, as the case may be, must provide an opportunity for a public hearing before making its decision whether to approve or deny. If the Corps concludes that the discharge does not comply with the Guidelines, it may still issue the permit under 404(b)(2) if it concludes that the economics of navigation and anchorage warrant. Section 404(b)(2) gives the Secretary a limited authority to issue permits prohibited by the Guidelines; it does not, as some commenters suggested, require the Guidelines to consider the economics of navigation and anchorage. Conversely, because of 404(b)(2), the fact that a discharge of dredged material does not comply with the Guidelines does not mean that it can never be permitted. The Act recognizes the construction of ports in section 404(b)(2), not 404(b)(1). Many readers apparently misunderstood this point.

EPA's role under section 404 is several-fold. First, EPA has the responsibility for developing the 404(b)(1) Guidelines in conjunction with the Corps. Second, EPA reviews permit applications and gives its comments (if any) to the permitting authority. The Corps may issue a permit even if EPA comments adversely, after consultation takes place. In the case of State programs, the State director may not issue a permit over EPA's unresolved objection. Third, EPA has the responsibility for approving and overseeing State 404 programs. In addition, EPA has enforcement responsibilities under section 309. Finally, under either the Federal or State program, the Administrator may also prohibit the specification of a discharge

site, or restrict its use, by following the procedures set out in section 404(c), if he determines that discharge would have an unacceptable adverse effect on fish and shellfish areas (including spawning and breeding areas), municipal water supplies, wildlife or recreation areas. He may do so in advance of a planned discharge or while a permit application is being evaluated or even, in unusual circumstances, after issuance of a permit. (See preamble to 40 CFR Part 231, 44 FR 58076, October 8, 1979.) If the Administrator uses 404(c), he may block the issuance of a permit by the Corps or a State 404 program. Where the Administrator has exercised his section 404(c) authority to prohibit, withhold, or restrict the specification of a site for disposal, his action may not be overridden under section 404(b)(2). The fact that EPA has 404(c) authority does not lessen EPA's responsibility for developing the 404(b)(1) Guidelines for use by the permitting authority. Indeed, if the Guidelines are properly applied, EPA will rarely have to use its 404(c) veto.

The Clean Water Act provides for several uses of the Guidelines in addition to the individual permit application review process described above. For example, the Corps or an approved state may issue General permits for a category of similar activities where it determines, on the basis of the 404(b)(1) Guidelines, that the activities will cause only minimal adverse environmental effects both individually and cumulatively (Section 404(e) and (g)(1)). In addition, some of the exemptions from the permit requirements involve application of the Guidelines. Section 404(r) exempts discharges associated with Federal construction projects where, among other things, there is an Environmental Impact Statement which considers the 404(b)(1) Guidelines. Section 404(f)(1)(F) exempts discharges covered by best management practices (BMP's) approved under section 208(b)(4)(B) and (c) the approval of which is based in part on consistency with the 404(b)(1) Guidelines.

Several commenters asked for a statement on the applicability of the Guidelines to enforcement procedures. Under sections 309, 404(h)(1)(G), and 404(s), EPA, approved States, and the Corps all play a role in enforcing the section 404 permit requirements. Enforcement actions are appropriate when someone is discharging dredged or fill material without a required permit, or violates the terms and conditions of a permit. The Guidelines as such are generally irrelevant to a determination

of either kind of violation, although they may represent the basis for particular permit conditions which are violated. Under the Corps' procedural regulations, the Corps may accept an application for an after-the-fact permit, in lieu of immediately commencing an enforcement action. Such after-the-fact permits may be issued only if they comply with the 404(b)(1) Guidelines as well as other requirements set out in the Corps' regulations. Criteria and procedures for exercising the various enforcement options are outside the scope of the section 404(b)(1) Guidelines.

Some commenters suggested that we either include specific permit processing procedures or that we cross-reference regulations containing them. Such procedures are described in 33 CFR Part 320-327 (Corps' procedures) and in 40 CFR Part 122-124 (minimum State procedures). When specific State 404 programs are approved, their regulations should also be consulted.

How Future Changes in the Testing Provision Relate to Promulgation of This Final Rule

The September 18, 1979, proposal contained testing provisions which were essentially the same as those in the Interim Final regulations. The Preamble to that proposal explained that it was our intention to propose changes in the testing provisions, but that a proposal was not yet ready. Consequently, while we have been revising the rest of the Guidelines, we have also been working on a proposal for reorganizing and updating the testing provisions. Now that we have finalized the rest of the Guidelines, two options are available to us. First, we could delay issuing any final revisions to our 1979 proposal until we could propose a revised testing package, consider comments on it, and finalize the testing provisions. We could then put together the Guidelines and the revised testing section in one final regulation. The 1975 Interim final Guidelines would apply in their entirety until then. Second, we could publish the final Guidelines (with the 1975 testing provisions) and simultaneously propose changes to the testing provision. It is our present belief that proposed changes to the testing provision would not affect the rest of the Guidelines, but the public would be allowed to comment on any inconsistencies it saw between the rest of the Guidelines and the testing proposal. Then, when the comments to the testing proposal had been considered, we would issue a new final regulation incorporating both the previously promulgated final Guidelines and the final revised testing provision.

We have selected the second option because this approach ensures that needed improvements to the Guidelines are made effective at the earliest possible date, it gives the public ample opportunity to comment on the revised testing section, and it maintains the 1975 testing requirements in effect during the interim which would be the case in any event.

Guideline Organization

Many readers objected to the length and complexity of the Guidelines. We have substantially reorganized the regulation to eliminate duplicative material and to provide a more logical sequence. These changes should make it easier for applicants to understand the criteria and for State and Corps permit evaluators and the Administrator to apply the criteria. Throughout the document, we have also made numerous minor language changes to improve the clarity of the regulations, often at the suggestion of commenters.

Following general introductory material and the actual compliance requirements, the regulations are now organized to more closely follow the steps the permitting authority will take in arriving at his ultimate decision on compliance with the Guidelines.

By reorganizing the Guidelines in this fashion, we were also able to identify and eliminate duplicative material. For example, the proposed Guidelines listed ways to minimize impacts in many separate sections. Since there was substantial overlap in the specific methods suggested in those sections, we consolidated them into new Subpart H. Other individual sections have been made more concise. In addition, we have decreased the number of comments, moving them to the Preamble or making them part of the Regulation, as appropriate.

General Permits

When issued after proper consideration of the Guidelines, General permits are a useful tool in protecting the environment with a minimum of red tape and delay. We expect that their use will expand in the future.

Some commenters were confused about how General permits work. A General permit will be issued only after the permitting authority has applied the Guidelines to the class of discharges to be covered by the permit. Therefore, there is no need to repeat the process at the time a particular discharge covered by the permit takes place. Of course, under both the Corps' regulations and EPA's regulations for State programs, the permitting authority may suspend General permits or require individual

permits where environmental concerns make it appropriate. For example, cumulative impacts may turn out to be more serious than predicted. This regulation is not intended to establish the procedures for issuance of General permits. That is the responsibility of the permitting authority in accordance with the requirements of section 404.

Burden of Proof

A number of commenters objected to the presumption in the regulations in general, and in proposed § 230.1(c) in particular, that dredged or fill material should not be discharged unless it is demonstrated that the planned discharge meets the Guidelines. These commenters thought that it was unfair and inconsistent with section 404(c) of the Act.

We disagree with these objections, and have retained the presumption against discharge and the existing burden of proof. However, the section has been rewritten for clarity.

The Clean Water Act itself declares a national goal to be the elimination of the discharge of pollutants into the navigable waters (section 101(a)(1)). This goal is implemented by section 301, which states that such discharges are unlawful except in compliance with, *inter alia*, section 404. Section 404 in turn authorizes the permitting authority to allow discharges of dredged or fill material if they comply with the 404(b)(1) Guidelines. The statutory scheme makes it clear that discharges shall not take place until they have been found acceptable. Of course, this finding may be made through the General permit process and the statutory exemptions as well as through individual permits.

The commenters who argued that section 404(c) shifts the usual burden to the EPA Administrator misunderstood the relationship between section 404(c) and the permitting process. The Administrator's authority to prohibit or restrict a site under section 404(c) operates independently of the Secretary of the Army's permitting authority in 404(a). The Administrator may use 404(c) whether or not a permit application is pending. Conversely, the Secretary may deny a permit on the basis of the Guidelines, whether or not EPA initiates a 404(c) proceeding. If the Administrator uses his 404(c) "veto," then he does have the burden to justify his action, but that burden does not come into play until he begins a 404(c) proceeding (See 40 CFR Part 231).

Toxic Pollutants

Many commenters objected strenuously to the presumptions in the

Guidelines that toxic pollutants on the section 307(a)(1) list are present in the aquatic environment unless demonstrated not to be, and that such pollutants are biologically available unless demonstrated otherwise. These commenters argued that rebutting these presumptions could involve individual testing for dozens of substances every time a discharge is proposed, imposing an onerous task.

The proposed regulation attempted to avoid unnecessary testing by providing that when the § 230.22(b) "reason to believe" process indicated that toxics were not present in the discharge material, no testing was required. On the other hand, contaminants other than toxics required testing if that same "reason to believe" process indicated they might be present in the discharge material. This is in fact a distinction without a difference. In practical application, toxic and non-toxic contaminants are treated the same; if either may be there, tests are performed to get the information for the determinations; if it is believed they are not present, no testing is done. Because the additional presumption for toxics did not actually serve a purpose, and because it was a possible source of confusion, we have eliminated it, and now treat "toxics" and other contaminants alike, under the "reason to believe test" (§ 230.60). We have provided in § 230.3 a definition of "contaminants" which encompasses the 307(a)(1) toxics.

Water Dependency

One of the provisions in the proposed Guidelines which received the most objections was the so-called "water dependency test" in the proposed § 230.10(e). This provision imposed an additional requirement on fills in wetlands associated with non-water dependent activities, namely a showing that the activity was "necessary." Many environmentalists objected to what they saw as a substantial weakening of the 1975 version of the water dependency test. Industry and development-oriented groups, on the other hand, objected to the "necessary" requirement because it was too subjective, and to the provision as a whole to the extent that it seemed designed to block discharges in wetlands automatically.

We have reviewed the water dependency test, its original purpose, and its relationship to the rest of the Guidelines in light of these comments. The original purpose, which many commenters commended, was to recognize the special values of wetlands and to avoid their unnecessary destruction, particularly when

practicable alternatives were available in non-aquatic areas to achieve the basic purposes of the proposal. We still support this goal, but we have changed the water-dependency test to better achieve it.

First, we agree with the comments from both sides that the "necessary" test imposed by the 1979 proposal is not likely to be workable in practice, and may spawn more disputes than it settles. However, if the "necessary" test is simply deleted, section 230.10(e) does not provide any special recognition of or protection for wetlands, and thus defeats its purpose. Furthermore, even if the "necessary" test were retained, the provision applies only to discharges of fill material, not discharges of dredged material, a distinction which lessens the effectiveness of the provision. Thus, we have decided, in accordance with the comments, that the proposal is unsatisfactory.

We have therefore decided to focus on, round out, and strengthen the approach of the so-called "water dependency" provision of the 1975 regulation. We have rejected the suggestion that we simply go back to the 1975 language, in part because it would not mesh easily with the revised general provisions of the Guidelines. Instead, our revised "water dependency" provision creates a presumption that there are practicable alternatives to "non-water dependent" discharges proposed for special aquatic sites. "Non-water dependent" discharges are those associated with activities which do not require access or proximity to or siting within the special aquatic site to fulfill their basic purpose. An example is a fill to create a restaurant site, since restaurants do not need to be in wetlands to fulfill their basic purpose of feeding people. In the case of such activities, it is reasonable to assume there will generally be a practicable site available upland or in a less vulnerable part of the aquatic ecosystem. The mere fact that an alternative may cost somewhat more does not necessarily mean it is not practicable (see § 230.10(a)(2) and discussion below). Because the applicant may rebut the presumption through a clear showing in a given case, no unreasonable hardship should be worked. At the same time, this presumption should have the effect of forcing a hard look at the feasibility of using environmentally preferable sites. This presumption responds to the overwhelming number of commenters who urged us to retain a water dependency test to discourage avoidable discharges in wetlands.

In addition, the 1975 provision effectively created a special, irrefutable presumption that alternatives to wetlands were always less damaging to the aquatic ecosystem. Because our experience and the comments indicate that this is not always the case, and because there could be substantial impacts on other elements of the environment and only minor impacts on wetlands, we have chosen instead to impose an explicit, but rebuttable, presumption that alternatives to discharges in special aquatic sites are less damaging to the aquatic ecosystem and are environmentally preferable. Of course, the general requirement that impacts on the aquatic ecosystem not be unacceptable also applies. The legislative history of the Clean Water Act, Executive Order 11990, and a large body of scientific information support this presumption.

Apart from the fact that it may be rebutted, this second presumption reincorporates the key elements of the 1975 provision. Moreover, it strengthens it because the recognition of the special environmental role of wetlands now applies to all discharges in special aquatic sites, whether of dredged or fill material, and whether or not water dependent. At the same time, this presumption, like the first one described above, retains sufficient flexibility to reflect the circumstances of unusual cases.

Consistent with the general burden of proof under these Guidelines, where an applicant proposes to discharge in a special aquatic site it is his responsibility to persuade the permitting authority that both of these presumptions have clearly been rebutted in order to pass the alternatives portion of these Guidelines.

Therefore, we believe that the new § 230.10(a)(3), which replaces proposed 230.10(e), will give special protection to wetlands and other special aquatic sites regardless of material discharged, allay industry's concerns about the "necessary" test, recognize the possibility of impacts on air and upland systems, and acknowledge the variability among aquatic sites and discharge activities.

Alternatives

Some commenters objected at length to the scope of alternatives which the Guidelines require to be considered, and to the requirement that a permit be denied unless the least harmful such alternative were selected. Others wrote to urge us to retain these requirements. In our judgment, a number of the objections were based on a

misunderstanding of what the proposed alternatives analysis required. Therefore, we have decided to clarify the regulation, but have not changed its basic thrust.

Section 403(c) clearly requires that alternatives be considered, and provides the basic legal basis for our requirement. While the statutory provision leaves the Agency some discretion to decide how alternatives are to be considered, we believe that the policies and goals of the Act, as well as the other authorities cited in the Preamble to the proposed Guidelines, would be best served by the approach we have taken.

First, we emphasize that the only alternatives which must be considered are practicable alternatives. What is practicable depends on cost, technical, and logistic factors. We have changed the word "economic" to "cost". Our intent is to consider those alternatives which are reasonable in terms of the overall scope/cost of the proposed project. The term economic might be construed to include consideration of the applicant's financial standing, or investment, or market share, a cumbersome inquiry which is not necessarily material to the objectives of the Guidelines. We consider it implicit that, to be practicable, an alternative must be capable of achieving the basic purpose of the proposed activity. Nonetheless, we have made this explicit to allay widespread concern. Both "internal" and "external" alternatives, as described in the September 18, 1979 Preamble, must satisfy the practicable test. In order for an "external" alternative to be practicable, it must be reasonably available or obtainable. However, the mere fact of ownership or lack thereof, does not necessarily determine reasonable availability. Some readers were apparently confused by the Preamble to the Proposed Regulation, which referred to the fact the National Environmental Policy Act (NEPA) may require consideration of courses of action beyond the authority of the agency involved. We did not mean to suggest that the Guidelines were necessarily imposing such a requirement on private individuals but, rather, to suggest that what we were requiring was well within the alternatives analyses required by NEPA.

Second, once these practicable alternatives have been identified in this fashion, the permitting authority should consider whether any of them, including land disposal options, are less environmentally harmful than the proposed discharge project. Of course, where there is no significant or easily identifiable difference in impact, the

alternative need not be considered to have "less adverse" impact.

Several commenters questioned the legal basis for requiring the permitting authority to select the least damaging alternative. (The use of the term "select" may have been misleading. Strictly speaking, the permitting authority does not select anything; he denies the permit if the guidelines requirements have not been complied with.) As mentioned above, the statute leaves to EPA's discretion the exact implementation of the alternative requirement in section 403 of the Act. In large part, the approach taken by these regulations is very similar to that taken by the recent section 403(c) regulations (45 FR 65942, October 3, 1980). There is one difference: the Guidelines always prohibit discharges where there is a practicable, less damaging alternative, while the section 403(c) regulations only apply this prohibition in some cases. This difference reflects the wide range of water systems subject to 404 and the extreme sensitivity of many of them to physical destruction. These waters form a priceless mosaic. Thus, if destruction of an area of waters of the United States may reasonably be avoided, it should be avoided. Of course, where a category of 404 discharges is so minimal in its effects that it has been placed under a general permit, there is no need to perform a case-by-case alternatives analysis. This feature corresponds, in a sense, to the category of discharges under section 403 for which no alternatives analysis is required.

Third, some commenters were concerned that the alternative consideration was unduly focused on water quality, and that a better alternative from a water quality standpoint might be less desirable from, say, an air quality point of view. This concern overlooks the explicit provision that the existence of an alternative which is less damaging to the aquatic ecosystem does not disqualify a discharge if that alternative has other significant adverse environmental consequences. This last provision gives the permitting authority an opportunity to take into account evidence of damage to other ecosystems in deciding whether there is a "better" alternative.

Fourth, a number of commenters were concerned that the Guidelines ensure coordination with planning processes under the Coastal Zone Management Act, § 208 of the CWA, and other programs. We agree that where an adequate alternatives analysis has already been developed, it would be wasteful not to incorporate it into the 404 process. New § 230.10(a)(5) makes it

clear that where alternatives have been reviewed under another process, the permitting authority shall consider such analysis. However, if the prior analysis is not as complete as the alternatives analysis required under the Guidelines, he must supplement it as needed to determine whether the proposed discharge complies with the Guidelines. Section 230.10(a)(4) recognizes that the range of alternatives considered in NEPA documents will be sufficient for section 404 purposes, where the Corps is the permitting authority. (However, a greater level of detail may be needed in particular cases to be adequate for the 404(b)(1) Guidelines analysis.) This distinction between the Corps and State permitting authorities is based on the fact that it is the Corps' policy, in carrying out its own NEPA responsibilities, to supplement (or require a supplement to) a lead agency's environmental assessment or impact statement where such document does not contain sufficient information. State permitting agencies, on the other hand, are not subject to NEPA in this manner.

We have moved proposed § 230.10(a)(1) (iii), concerning "other particular volumes and concentrations of pollutants at other specific rates", from the list of alternatives in § 230.10 to Subpart H, Minimizing Adverse Effects, because it more properly belongs there.

Definitions (§ 230.3)

A number of the terms defined in § 230.3 are also defined in the Corps' regulations at 33 CFR 323.2, applicable to the Corps' regulatory program. The Corps has recently proposed some revisions to those regulations and expects to receive comments on the definitions. To ensure coordination of these two sets of regulations, we have decided to reserve the definitions of "discharge of dredged material," "discharge of fill material," "dredged material," and "fill material," which otherwise would have appeared at § 230.3 (f), (g), (j), and (l).

Although the term "waters of the United States" also appears in the Corps' regulations, we have retained a definition here, in view of the importance of this key jurisdictional term and the numerous comments received. The definition and the comments are explained below.

Until new definitions are published, directly or by reference to the Corps' revised regulations, users of these Guidelines should refer to the definitions in 33 CFR 323.2 (except in the case of state 404 programs, to which the definitions in 40 CFR § 122.3 apply.)

Waters of the United States: A number of commenters objected to the

definition of "waters of the United States" because it was allegedly outside the scope of the Clean Water Act or of the Constitution or because it was not identical to the Corps' definition. We have retained the proposed definition with a few minor changes for clarity for several reasons. First, a number of courts have held that this basic definition of waters of the United States reasonably implements section 502(7) of the Clean Water Act, and that it is constitutional (e.g., *United States v. Byrd*, 609 F.2d 1204, 7th Cir. 1978; *Leslie Salt Company v. Froehke*, 578 F.2d 742, 9th Cir. 1978). Second, we agree that it is preferable to have a uniform definition for waters of the United States, and for all regulations and programs under the CWA. We have decided to use the wording in the recent Consolidated Permit Regulations, 45 Fed. Reg. 33290, May 19, 1980, as the standard.*

Some commenters suggested that the reference in the definition to waters from which fish are taken to be sold in interstate commerce be expanded to include areas where such fish spawn. While we have not made this change because we wish to maintain consistency with the wording of the Consolidated Permit regulations, we do not intend to suggest that a spawning area may not have significance for commerce. The portion of the definition at issue lists major examples, not *all* the ways which commerce may be involved.

Some reviewers questioned the statement in proposed § 230.72(c) (now § 230.11(h)) that activities on fast land created by a discharge of dredged or fill material are considered to be in waters of the United States for purposes of these Guidelines. The proposed language was misleading and we have changed it to more accurately reflect our intent. When a portion of the Waters of the United States has been legally converted to fast land by a discharge of dredged or fill material, it does not remain waters of the United States subject to section 301(a). The discharge may be legal because it was authorized by a permit or because it was made before there was a permit requirement. In the case of an illegal discharge, the fast land may remain subject to the jurisdiction of the Act until the government determines not to seek restoration. However, in authorizing a

* The Consolidated Permit Regulations exclude certain waste treatment systems from waters of the United States. The exact terms of this exclusion are undergoing technical revisions and are expected to change shortly. For this reason, these Guidelines as published do not contain the exclusion as originally worded in the Consolidated Permit Regulations. When published, the corrected exclusion will apply to the Guidelines as well as the Consolidated Permit Regulations.

discharge which will create fast lands, the permitting authority should consider, in addition to the direct effects of the fill itself, the effects on the aquatic environment of any reasonably foreseeable activities to be conducted on that fast land.

Section 230.54 (proposed 230.41) deals with impacts on parks, national and historical monuments, national sea shores, wilderness areas, research sites, and similar preserves. Some readers were concerned that we intended the Guidelines to apply to activities in such preserves whether or not the activities took place in waters of the United States. We intended, and we think the context makes it clear, that the Guidelines apply only to the specification of discharge sites in the waters of the United States, as defined in § 230.3. We have included this section because the fact that a water of the United States may be located in one of these preserves is significant in evaluating the impacts of a discharge into that water.

Wetlands: Many wetlands are waters of the United States under the Clean Water Act. Wetlands are also the subject of Federal Executive Order No. 11990, and various Federal and State laws and regulations. A number of these other programs and laws have developed slightly different wetlands definitions, in part to accommodate or emphasize specialized needs. Some of these definitions include, not only wetlands as these Guidelines define them, but also mud flats and vegetated and unvegetated shallows. Under the Guidelines some of these other areas are grouped with wetlands as "Special Aquatic Sites" (Subpart E) and as such their values are given special recognition. (See discussion of Water Dependency above.) We agree with the comment that the National Inventory of Wetlands prepared by the U.S. Fish and Wildlife Service, while not necessarily exactly coinciding with the scope of waters of the United States under the Clean Water Act or wetlands under these regulations, may help avoid construction in wetlands, and be a useful long-term planning tool.

Various commenters objected to the definition of wetlands in the Guidelines as too broad or too vague. This proposed definition has been upheld by the courts as reasonable and consistent with the Clean Water Act, and is being retained in the final regulation. However, we do agree that vegetative guides and other background material may be helpful in applying the definition in the field. EPA and the Corps are pledged to work on joint research to aid

in jurisdictional determinations. As we develop such materials, we will make them available to the public.

Other commenters suggested that we expand the list of examples in the second sentence of the wetland definition. While their suggested additions could legally be added, we have not done so. The list is one of examples only, and does not serve as a limitation on the basic definition. We are reluctant to start expanding the list, since there are many kinds of wetlands which could be included, and the list could become very unwieldy.

In addition, we wish to avoid the confusion which could result from listing as examples, not only areas which generally fit the wetland definitions, but also areas which may or not meet the definition depending on the particular circumstances of a given site. In sum, if an area meets the definition, it is a wetland for purposes of the Clean Water Act, whether or not it falls into one of the listed examples. Of course, more often than not, it will be one of the listed examples.

A few commenters cited alleged inconsistencies between the definition of wetlands in § 230.3 and § 230.42. While we see no inconsistency, we have shortened the latter section as part of our effort to eliminate unnecessary comments.

Unvegetated Shallows: One of the special aquatic areas listed in the proposal was "unvegetated shallows" (§ 230.44). Since special aquatic areas are subject to the presumptions in § 230.10(a)(3), it is important that they be clearly defined so that the permitting authority may readily know when to apply the presumptions. We were unable to develop, at this time, a definition for unvegetated shallows which was both easy to apply and not too inclusive or exclusive. Therefore, we have decided the wiser course is to delete unvegetated shallows from the special aquatic area classification. Of course, as waters of the United States, they are still subject to the rest of the Guidelines.

"Fill Material": We are temporarily reserving § 230.3(1). Both the proposed Guidelines and the proposed Consolidated Permit Regulations defined fill material as material discharged for the primary purpose of replacing an aquatic area with dryland or of changing the bottom elevation of a water body, reserving to the NPDES program discharges with the same effect which are primarily for the purpose of disposing of waste. Both proposals solicited comments on this distinction, referred to as the primary purpose test. On May 19, 1980, acting under a court-

imposed deadline, EPA issued final Consolidated Permit Regulations while the 404(b)(1) Guidelines rulemaking was still pending. These Consolidated Permit Regulations contained a new definition of fill material which eliminated the primary purpose test and included as fill material all pollutants which have the effect of fill, that is, which replace part of the waters of the United States with dryland or which change the bottom elevation of a water body for any purpose. This new definition is similar to the one used before 1977.

During the section 404(b)(1) rulemaking, the Corps has raised certain questions about the implementation of such a definition. Because of the importance of making the Final Guidelines available without further delay, and because of our desire to cooperate with the Corps in resolving their concerns about fill material, we have decided to temporarily reserve § 230.3(1) pending further discussion. This action does not affect the effectiveness of the Consolidated Permit Regulations. Consequently, there is a discrepancy between those regulations and the Corps' regulations, which still contain the old definition.

Therefore, to avoid any uncertainty from this situation, EPA wishes to make clear its enforcement policy for unpermitted discharges of solid waste. EPA has authority under section 309 of the CWA to issue administrative orders against violations of section 301. Unpermitted discharges of solid waste into waters of the United States violate section 301.

Under the present circumstances, EPA plans to issue solid waste administrative orders with two basic elements. First, the orders will require the violator to apply to the Corps of Engineers for a section 404 permit within a specified period of time. (The Corps has agreed to accept these applications and to hold them until it resolves its position on the definition of fill material.)

Second, the order will constrain further discharges by the violator. In extreme cases, an order may require that discharges cease immediately. However, because we recognize that there will be a lapse of time before decisions are made on this kind of permit application, these orders may expressly allow unpermitted discharges to continue subject to specific conditions set forth by EPA in the order. These conditions will be designed to avoid further environmental damage.

Of course, these orders will not influence the ultimate issuance or non-issuance of a permit or determine the conditions that may be specified in such a permit. Nor will such orders limit the

Administrator's authority under section 309(b) or the right of a citizen to bring suit against a violator under section 505 of the CWA.

Permitting Authority: We have used the new term "permitting authority," instead of "District Engineer," throughout these regulations, in recognition of the fact that under the 1977 amendments approved States may also issue permits.

Coastal Zone Management Plans

Several commenters were concerned about the relationship between section 404 and approved Coastal Zone Management (CZM) plans. Some expressed concern that the Guidelines might authorize a discharge prohibited by a CZM plan; others objected to the fact that the Guidelines might prohibit a discharge which was consistent with a CZM plan.

Under section 307(b) of the CZM Act, no Federal permits may be issued until the applicant furnishes a certification that the discharge is consistent with an approved CZM plan, if there is one, and the State concurs in the certification or waives review. Section 325.2(b)(2) of the Corps' regulation, which applies to all Federal 404 permits, implements this requirement for section 404. Because the Corps' regulations adequately address the CZM consistency requirement, we have not duplicated § 325.2(b)(2) in the Guidelines. Where a State issues State 404 permits, it may of course require consistency with its CZM plan under State law.

The second concern, that the 404 Guidelines might be stricter than a CZM plan, points out a possible problem with CZM plans, not with the Guidelines. Under 307(f) of CZMA, all CZM plans must provide for compliance with applicable requirements of the Clean Water Act. The Guidelines are one such requirement. Of course, to the extent that a CZM plan is general and area-wide, it may be impossible to include in its development the same project-specific consideration of impacts and alternatives required under the Guidelines. Nonetheless, it cannot authorize or mandate a discharge of dredged or fill material which fails to comply with the requirements of these Guidelines. Often CZM plans contain a requirement that all activities conducted under it meet the permit requirements of the Clean Water Act. In such a case, there could of course be no conflict between the CZM plan and the requirements of the Guidelines.

We agree with commenters who urge that delay and duplication of effort be avoided by consolidating alternatives studies required under different statutes,

including the Coastal Zone Management Act. However, since some planning processes do not deal with specific projects, their consideration of alternatives may not be sufficient for the Guidelines. Where another alternative analysis is less complete than that contemplated under section 404, it may not be used to weaken the requirements of the Guidelines.

Advanced Identification of Dredged or Fill Material Disposal Sites

A large number of commenters objected to the way proposed § 230.70, new Subpart I, had been changed from the 1975 regulations. A few objected to the section itself. Most of the comments also revealed a misunderstanding about the significance of identifying an area. First, the fact that an area has been identified as unsuitable for a potential discharge site does not mean that someone cannot apply for and obtain a permit to discharge there as long as the Guidelines and other applicable requirements are satisfied.* Conversely, the fact that an area has been identified as a potential site does not mean that a permit is unnecessary or that one will automatically be forthcoming. The intent of this section was to aid applicants by giving advance notice that they would have a relatively easy or difficult time qualifying for a permit to use particular areas. Such advance notice should facilitate applicant planning and shorten permit processing time.

Most of the objectors focused on EPA's "abandonment" of its "authority" to identify sites. While that "authority" is perhaps less "authoritative" than the commenters suggested (see above), we agree that there is no reason to decrease EPA's role in the process. Therefore, we have changed new § 230.80(a) to read:

"Consistent with these Guidelines, EPA and the permitting authority on their own initiative or at the request of any other party, and after consultation with any affected State that is not the permitting authority, may identify sites which will be considered as:"

We have also deleted proposed § 230.70(a)(3), because it did not seem to accomplish much. Consideration of the point at which cumulative and secondary impacts become unacceptable and warrant emergency action will generally be more appropriate in a permit-by-permit context. Once that point has been so determined, of course, the area can be identified as "unsuitable" under the new § 230.80(a)(2).

* EPA may foreclose the use of a site by exercising its authority under section 404(c). The advance identification referred to in this section is not a section 404(c) prohibition.

Executive Order 12044

A number of commenters took the position that Executive Order 12044 requires EPA to prepare a "regulatory analysis" in connection with these regulations. EPA disagrees. These regulations are not, strictly speaking, new regulations. They do not impose new standards or requirements, but rather substantially clarify and reorganize the existing interim final regulations.

Under EPA's criteria implementing Executive Order 12044, EPA will prepare a Regulatory Analysis for any regulation which imposes *additional* annual costs totalling \$100 million or which will result in a total *additional* cost of production of any major product or service which exceeds 5% of its selling price. While many commenters, particularly members of the American Association of Port Authorities (AAPA), requested a regulatory analysis and claimed that the regulations were too burdensome, none of them explained how that burden was an *additional* one attributable to this revision. A close comparison of the new regulation and the explicit and implicit requirements in the interim final Guidelines reveals that there has been very little real change in the criteria by which discharges are to be judged or in the tests that must be conducted; therefore, we stand by our original determination that a regulatory analysis is not required.

Perhaps the most significant area in which the regulations are more explicit and arguably stricter is in the consideration of alternatives. However, even the 1975 regulations required the permitting authority to consider "the availability of alternate sites and methods of disposal that are less damaging to the environment," and to avoid activities which would have significant adverse effects. We do not think that the revised Guidelines' more explicit direction to avoid adverse effects that could be prevented through selection of a clearly less damaging site or method is a change imposing a substantial new burden on the regulated public.

Because the revised regulations are more explicit than the interim final regulations in some respects, it is possible that permit reviewers will do a more thorough job evaluating proposed discharges. This may result in somewhat more carefully drawn permit conditions. However, even if, for purposes of argument, the possible cost of complying with these conditions is considered an *additional* cost, there is no reason to believe that it alone will be anywhere near \$100 million annually.

We also believe that it is appropriate to recognize the regulatory benefits from these more carefully drafted final regulations. Because they are much clearer about what should be considered and documented, we expect there will be fewer delays in reviewing permits, and that initial decisions to issue permits are less likely to be appealed to higher authority. These benefits are expected to offset any potential cost increase.

Some commenters suggested that documentation requirements would generate an additional cost of operations. The Corps' procedural regulations at 33 CFR 325.8 and 325.11 already require extensive documentation for individual permits being denied or being referred to higher authority for resolution of a conflict between agencies.

Economic Factors

A number of commenters asked EPA to include consideration of economic factors in the Guidelines. We believe that the regulation already recognizes economic factors to the extent contemplated by the statute. First, the Guidelines explicitly include the concept of "practicability" in connection with both alternatives and steps to minimize impacts. If an alleged alternative is unreasonably expensive to the applicant, the alternative is not "practicable." In addition, the Guidelines also consider economics indirectly in that they are structured to avoid the expense of unnecessary testing through the "reason-to-believe-test." Second, the statute expressly provides that the economics of anchorage and navigation may be considered, but only after application of the section 404(b)(1) Guidelines. (See section 404(b)(2).)

Borrow Sites

A number of highway departments objected because they felt the Guidelines would require them to identify specific borrow sites at the time of application, which would disrupt their normal contracting process and increase cost. These objections were based on a misunderstanding of the Guideline's requirements. Under those Guidelines, the actual borrow sites need not be identified, if the application and the permit specify that the discharge material must come from clean upland sites which are removed from sources of contamination and otherwise satisfy the reason-to-believe test. A condition that the material come from such a site would enable the permitting authority to make his determinations and find compliance with the conditions of

§ 230.10, without requiring highway departments to specify in advance the specific borrow sites to be used.

Consultation With Fish and Wildlife Agencies

One commenter wanted us to put in a statement that the Fish and Wildlife Coordination Act requires consultation with fish and wildlife agencies. We have not added new language because (1) the Fish and Wildlife Act only applies to Federal permitting agencies and not to State permitting agencies, and (2) the Corps' regulations already provide for such consultation by the only Federal 404 permitting agency. However, we agree with the commenter that Federal and State fish and wildlife agencies may often provide valuable assistance in evaluating the impacts of discharges of dredged or fill material.

The Importance of Appropriate Documentation

Specific documentation is important to ensure an understanding of the basis for each decision to allow, condition, or prohibit a discharge through application of the Guidelines. Documentation of information is required for: (1) facts and data gathered in the evaluation and testing of the extraction site, the material to be discharged, and the disposal site; (2) factual determinations regarding changes that can be expected at the disposal site if the discharge is made as proposed; and (3) findings regarding compliance with § 230.10 conditions. This documentation provides a record of actions taken that can be evaluated for adequacy and accuracy and ensures consideration of all important impacts in the evaluation of a proposed discharge of dredged or fill material.

The specific information documented under (1) and (2) above in any given case depends on the level of investigation necessary to provide for a reasonable understanding of the impact on the aquatic ecosystems. We anticipate that a number of individual and most General permit applications will be for routine, minor activities with little potential for significant adverse environmental impacts. In such cases, the permitting authority will not have to require extensive testing or analysis to make his findings of compliance. The level of documentation should reflect the significance and complexity of the proposed discharge activity.

Factual Determinations

Proposed section 230.20, "Factual Determinations" (now § 230.11) has been significantly reorganized in response to comments. First, we have

changed (c) to reflect our elimination of the artificial distinction between the section 307(a)(1) toxics and other contaminants. Second, we have eliminated proposed (f) (Biological Availability), since the necessary information will be provided by (d) and new (e). Proposed (f) was intended to reflect the presumption that toxics were present and biologically available. We have modified proposed (g), now (f), to focus on the size of the disposal site and the size and shape of the mixing zone. The specific requirement to document the site has been deleted; where such information is relevant, it will automatically be considered in making the other determinations. We have also deleted proposed (h) (Special Determinations) since it did not provide any useful information which would not already be considered in making the other factual determinations.

Finally, in response to many comments, we have moved the provisions on cumulative and secondary impact to the Factual Determination section to give them further emphasis. We agree that such impacts are an important consideration in evaluating the acceptability of a discharge site.

Water Quality Standards

One commenter was concerned that the reference § 230.10(b) to water quality standards and criteria "approved or promulgated under section 303" might encourage permit authorities to ignore other water quality requirements. Under section 303, all State water quality standards are to be submitted to EPA for approval. If the submitted standards are incomplete or insufficiently stringent, EPA may promulgate standards to replace or supplant the State standards. Disapproved standards remain in effect until replaced. Therefore, to refer to "EPA approved or promulgated standards" is to ignore those State standards which have been neither approved nor replaced. We have therefore changed the wording of this requirement as follows: "... any applicable State water quality standard." We have also dropped the reference to "criteria", to be consistent with the Agency's general position that water quality criteria are not regulatory.

Other Requirements for Discharge

Section 230.10(c) provides that discharges are not permitted if they will have "significantly" adverse effects on various aquatic resources. In this context, "significant" and "significantly" mean more than "trivial", that is, significant in a conceptual rather than a statistical sense. Not all effects which

are statistically significant in the laboratory are significantly adverse in the field.

Section 320.10(d) uses the term "minimize" to indicate that all reasonable reduction in impacts be obtained. As indicated by the "appropriate and practicable" provision, steps which would be unreasonably costly or would be infeasible or which would accomplish only inconsequential reductions in impact need not be taken.

Habitat Development and Restoration of Water Bodies

Habitat development and restoration involve changes in open water and wetlands that minimize adverse effects of proposed changes or that neutralize or reverse the effects of past changes on the ecosystem. Development may produce a new or modified ecological state by displacement of some or all of the existing environmental characteristics. Restoration has the potential to return degraded environments to their former ecological state.

Habitat development and restoration can contribute to the maintenance and enhancement of a viable aquatic ecosystem at the discharge site. From an environmental point of view, a project involving the discharge of dredged and fill material should be designed and managed to emulate a natural ecosystem. Research, demonstration projects, and full scale implementation have been done in many categories of development and restoration. The U.S. Fish and Wildlife Service has programs to develop and restore habitat. The U.S. Army Engineer Waterways Experiment Station has published guidelines for using dredged material to develop wetland habitat, for establishing marsh vegetation, and for building islands that attract colonies of nesting birds. The EPA has a Clean Lakes program which supplies funds to States and localities to enhance or restore degraded lakes. This may involve dredging nutrient-laden sediments from a lake and ensuring that nutrient inflows to the lake are controlled. Restoration and habitat development techniques can be used to minimize adverse impacts and compensate for destroyed habitat. Restoration and habitat development may also provide secondary benefits such as improved opportunities for outdoor recreation and positive use for dredged materials.

The development and restoration of viable habitats in water bodies requires planning and construction practices that integrate the new or improved habitat into the existing environment. Planning requires a model or standard, the

achievement of which is attempted by manipulating design and implementation of the activity. This model or standard should be based on characteristics of a natural ecosystem in the vicinity of a proposed activity. Such use of a natural ecosystem ensures that the developed or restored area, once established, will be nourished and maintained physically, chemically and biologically by natural processes. Some examples of natural ecosystems include, but are not limited to, the following: salt marsh, cattail marsh, turtle grass bed, small island, etc.

Habitat development and restoration, by definition, should have environmental enhancement and maintenance as their initial purpose. Human uses may benefit but they are not the primary purpose. Where such projects are not founded on the objectives of maintaining ecosystem function and integrity, some values may be favored at the expense of others. The ecosystem affected must be considered in order to achieve the desired result of development and restoration. In the final analysis, selection of the ecosystem to be emulated is of critical importance and a loss of value can occur if the wrong model or an incomplete model is selected. Of equal importance is the planning and management of habitat development and restoration on a case-by-case basis.

Specific measures to minimize impacts on the aquatic ecosystem by enhancement and restoration projects include but are not limited to:

(1) Selecting the nearest similar natural ecosystem as the model in the implementation of the activity.

Obviously degraded or significantly less productive habitats may be considered prime candidates for habitat restoration. One viable habitat, however, should not be sacrificed in an attempt to create another, i.e., a productive vegetated shallow water area should not be destroyed in an attempt to create a wetland in its place.

(2) Using development and restoration techniques that have been demonstrated to be effective in circumstances similar to those under consideration wherever possible.

(3) Where development and restoration techniques proposed for use have not yet advanced to the pilot demonstration or implementation stage, initiate their use on a small scale to allow corrective action if unanticipated adverse impacts occur.

(4) Where Federal funds are spent to clean up waters of the U.S. through dredging, scientifically defensible levels of pollutant concentration in the return discharge should be agreed upon with the funding authority in addition to any

applicable water quality standards in order to maintain the desired improved water quality.

(5) When a significant ecological change in the aquatic environment is proposed by the discharge of dredged or fill material, the permitting authority should consider the ecosystem that will be lost as well as the environmental benefits of the new system.

Dated: December 12, 1980.

Douglas M. Costle,
Administrator, Environmental Protection Agency.

Part 230 is revised to read as follows:

PART 230—SECTION 404(b)(1) GUIDELINES FOR SPECIFICATION OR DISPOSAL SITES FOR DREDGED OF FILL MATERIAL

Subpart A—General

- Sec.
- 230.1 Purpose and policy.
- 230.2 Applicability.
- 230.3 Definitions.
- 230.4 Organization.
- 230.5 General procedures to be followed.
- 230.6 Adaptability.
- 230.7 General permits.

Subpart B—Compliance With the Guidelines

- 230.10 Restrictions on discharge.
- 230.11 Factual determinations.
- 230.12 Findings of compliance or non-compliance with the restrictions on discharge.

Subpart C—Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem

- 230.20 Substrate.
- 230.21 Suspended particulates/turbidity.
- 230.22 Water.
- 230.23 Current patterns and water circulation.
- 230.24 Normal water fluctuations.
- 230.25 Salinity gradients.

Subpart D—Potential Impacts on Biological Characteristics of the Aquatic Ecosystem

- 230.30 Threatened and endangered species.
- 230.31 Fish, crustaceans, mollusks, and other aquatic organisms in the food web.
- 230.32 Other wildlife.

Subpart E—Potential Impacts on Special Aquatic Sites

- 230.40 Sanctuaries and refuges.
- 230.41 Wetlands.
- 230.42 Mud flats.
- 230.43 Vegetated shallows.
- 230.44 Coral reefs.
- 230.45 Riffle and pool complexes.

Subpart F—Potential Effects on Human Use Characteristics

- 230.50 Municipal and private water supplies.
- 230.51 Recreational and commercial fisheries.
- 230.52 Water-related recreation.
- 230.53 Aesthetics.

Sec.

230.54 Parks, national and historic monuments, national seashores, wilderness areas, research sites and similar preserves.

Subpart G—Evaluation and Testing

230.60 General evaluation of dredged or fill material.

230.61 Chemical, biological, and physical evaluation and testing.

Subpart H—Actions to Minimize Adverse Effects

230.70 Actions concerning the location of the discharge.

230.71 Actions concerning the material to be discharged.

230.72 Actions controlling the material after discharge.

230.73 Actions affecting the method of dispersion.

230.74 Actions related to technology.

230.75 Actions affecting plant and animal populations.

230.76 Actions affecting human use.

230.77 Other actions.

Subpart I—Planning To Shorten Permit Processing Time

230.80 Advanced identification of disposal areas.

Authority: This regulation is issued under authority of Sections 404(b) and 501(a) of the Clean Water Act of 1977, 33 U.S.C. § 1344(b) and § 1361(a).

Subpart A—General**§ 23.1 Purpose and policy.**

(a) The purpose of these Guidelines is to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material.

(b) Congress has expressed a number of policies in the Clean Water Act. These Guidelines are intended to be consistent with and to implement those policies.

(c) Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.

(d) From a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines. The guiding principle should be that degradation or destruction of special sites may represent an irreversible loss of valuable aquatic resources.

§ 230.2 Applicability.

(a) These Guidelines have been developed by the Administrator of the Environmental Protection Agency in conjunction with the Secretary of the Army acting through the Chief of Engineers under section 404(b)(1) of the Clean Water Act (33 U.S.C. 1344). The Guidelines are applicable to the specification of disposal sites for discharges of dredged or fill material into waters of the United States. Sites may be specified through:

(1) The regulatory program of the U.S. Army Corps of Engineers under sections 404(a) and (e) of the Act (see 33 CFR 320, 323 and 325);

(2) The civil works program of the U.S. Army Corps of Engineers (see 33 CFR 209.145 and section 150 of Pub. L. 94-587, Water Resources Development Act of 1976);

(3) Permit programs of States approved by the Administrator of the Environmental Protection Agency in accordance with sections 404(g) and (h) of the Act (see 40 CFR 122, 123 and 124);

(4) Statewide dredged or fill material regulatory programs with best management practices approved under section 208(b)(4)(B) and (C) of the Act (see 40 CFR 35.1560);

(5) Federal construction projects which meet criteria specified in section 404(r) of the Act.

(b) These Guidelines will be applied in the review of proposed discharges of dredged or fill material into navigable waters which lie inside the baseline from which the territorial sea is measured, and the discharge of fill material into the territorial sea pursuant to the procedures referred to in paragraphs (a)(1) and (a)(2) above. The discharge of dredged material into the territorial sea is governed by the Marine Protection, Research, and Sanctuaries Act of 1972, Pub. L. 92-532, and regulations and criteria issued pursuant thereto (40 CFR Part 220-228).

(c) Guidance on interpreting and implementing these Guidelines may be prepared jointly by EPA and the Corps at the national or regional level from time to time. No modifications to the basic application, meaning, or intent of these Guidelines will be made without rulemaking by the Administrator under the Administrative Procedure Act (5 U.S.C. 551 *et seq.*).

§ 230.3 Definitions.

For purposes of this Part, the following terms shall have the meanings indicated:

(a) The term "Act" means the Clean Water Act (also known as the Federal Water Pollution Control Act or FWPCA)

Pub. L. 92-500, as amended by Pub. L. 95-217, 33 U.S.C. 1251, *et seq.*

(b) The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are "adjacent wetlands."

(c) The terms "aquatic environment" and "aquatic ecosystem" mean waters of the United States, including wetlands, that serve as habitat for interrelated and interacting communities and populations of plants and animals.

(d) The term "carrier of contaminant" means dredged or fill material that contains contaminants.

(e) The term "contaminant" means a chemical or biological substance in a form that can be incorporated into, onto or be ingested by and that harms aquatic organisms, consumers of aquatic organisms, or users of the aquatic environment, and includes but is not limited to the substances on the 307(a)(1) list of toxic pollutants promulgated on January 31, 1978 (43 FR 4109).

(f) [Reserved]

(g) [Reserved]

(h) The term "discharge point" means the point within the disposal site at which the dredged or fill material is released.

(i) The term "disposal site" means that portion of the "waters of the United States" where specific disposal activities are permitted and consist of a bottom surface area and any overlying volume of water. In the case of wetlands on which surface water is not present, the disposal site consists of the wetland surface area.

(j) [Reserved]

(k) The term "extraction site" means the place from which the dredged or fill material proposed for discharge is to be removed.

(l) [Reserved]

(m) The term "mixing zone" means a limited volume of water serving as a zone of initial dilution in the immediate vicinity of a discharge point where receiving water quality may not meet quality standards or other requirements otherwise applicable to the receiving water. The mixing zone should be considered as a place where wastes and water mix and not as a place where effluents are treated.

(n) The term "permitting authority" means the District Engineer of the U.S. Army Corps of Engineers or such other individual as may be designated by the Secretary of the Army to issue or deny permits under section 404 of the Act; or the State Director of a permit program

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approved by EPA under § 404(g) and § 404(h) or his delegated representative.

(o) The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials not covered by the Atomic Energy Act, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. The legislative history of the Act reflects that "radioactive materials" as included within the definition of "pollutant" in section 502 of the Act means only radioactive materials which are not encompassed in the definition of source, byproduct, or special nuclear materials as defined by the Atomic Energy Act of 1954, as amended, and regulated under the Atomic Energy Act. Examples of radioactive materials not covered by the Atomic Energy Act and, therefore, included within the term "pollutant", are radium and accelerator produced isotopes. See *Train v. Colorado Public Interest Research Group, Inc.*, 428 U.S. 1 (1976).

(p) The term "pollution" means the man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of an aquatic ecosystem.

(q) The term "practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

(q-1) "Special aquatic sites" means those sites identified in Subpart E. They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing, positively contributing to the general overall environmental health or quality of the entire ecosystem of a region. (See 230.10(a)(3)).

(r) The term "territorial sea" means the belt of the sea measured from the baseline as determined in accordance with the Convention on the Territorial Sea and the Contiguous Zone and extending seaward a distance of three miles.

(s) The term "waters of the United States" means:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under this definition.

(5) Tributaries of waters identified in paragraphs (1)-(4) of this section;

(6) The territorial sea;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

(t) The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

§ 230.4 Organization.

The Guidelines are divided into eight subparts. Subpart A presents those provisions of general applicability, such as purpose and definitions. Subpart B establishes the four conditions which must be satisfied in order to make a finding that a proposed discharge of dredged or fill material complies with the Guidelines. Section 230.11 of Subpart B, sets forth factual determinations which are to be considered in determining whether or not a proposed discharge satisfies the Subpart B conditions of compliance. Subpart C describes the physical and chemical components of a site and provides guidance as to how proposed discharges of dredged or fill material may affect these components. Subparts D-F detail the special characteristics of particular aquatic ecosystems in terms of their values, and the possible loss of these

values due to discharges of dredged or fill material. Subpart G prescribes a number of physical, chemical, and biological evaluations and testing procedures to be used in reaching the required factual determinations. Subpart H details the means to prevent or minimize adverse effects. Subpart I concerns advanced identification of disposal areas.

§ 230.5 General procedures to be followed.

In evaluating whether a particular discharge site may be specified, the permitting authority should use these Guidelines in the following sequence:

(a) In order to obtain an overview of the principal regulatory provisions of the Guidelines, review the restrictions on discharge in § 230.10(a)-(d), the measures to minimize adverse impact of Subpart H, and the required factual determinations of § 230.11.

(b) Determine if a General permit (§ 230.7) is applicable; if so, the applicant needs merely to comply with its terms, and no further action by the permitting authority is necessary. Special conditions for evaluation of proposed General permits are contained in § 230.7. If the discharge is not covered by a General permit:

(c) Examine practicable alternatives to the proposed discharge, that is, not discharging into the waters of the U.S. or discharging into an alternative aquatic site with potentially less damaging consequences (§ 230.10(a)).

(d) Delineate the candidate disposal site consistent with the criteria and evaluations of § 230.11(f).

(e) Evaluate the various physical and chemical components which characterize the non-living environment of the candidate site, the substrate and the water including its dynamic characteristics (Subpart C).

(f) Identify and evaluate any special or critical characteristics of the candidate disposal site, and surrounding areas which might be affected by use of such site, related to their living communities or human uses (Subparts D, E, and F).

(g) Review Factual Determinations in § 230.11 to determine whether the information in the project file is sufficient to provide the documentation required by § 230.11 or to perform the pre-testing evaluation described in § 230.80, or other information is necessary.

(h) Evaluate the material to be discharged to determine the possibility of chemical contamination or physical incompatibility of the material to be discharged (§ 230.80).

(i) If there is a reasonable probability of chemical contamination, conduct the appropriate tests according to the section on Evaluation and Testing (§ 230.61).

(j) Identify appropriate and practicable changes to the project plan to minimize the environmental impact of the discharge, based upon the specialized methods of minimization of impacts in Subpart H.

(k) Make and document Factual Determinations in § 230.11.

(l) Make and document Findings of Compliance (§ 230.12) by comparing Factual Determinations with the requirements for discharge of § 230.10. This outline of the steps to follow in using the Guidelines is simplified for purposes of illustration. The actual process followed may be iterative, with the results of one step leading to a reexamination of previous steps. The permitting authority must address all of the relevant provisions of the Guidelines in reaching a Finding of Compliance in an individual case.

§ 230.6 Adaptability.

(a) The manner in which these Guidelines are used depends on the physical, biological, and chemical nature of the proposed extraction site, the material to be discharged, and the candidate disposal site, including any other important components of the ecosystem being evaluated. Documentation to demonstrate knowledge about the extraction site, materials to be extracted, and the candidate disposal site is an essential component of guideline application. These Guidelines allow evaluation and documentation for a variety of activities, ranging from those with large, complex impacts on the aquatic environment to those for which the impact is likely to be innocuous. It is unlikely that the Guidelines will apply in their entirety to any one activity, no matter how complex. It is anticipated that substantial numbers of permit applications will be for minor, routine activities that have little, if any, potential for significant degradation of the aquatic environment. It generally is not intended or expected that extensive testing, evaluation or analysis will be needed to make findings of compliance in such routine cases. Where the conditions for General permits are met, and where numerous applications for similar activities are likely, the use of General permits will eliminate repetitive evaluation and documentation for individual discharges.

(b) The Guidelines user, including the agency or agencies responsible for

implementing the Guidelines, must recognize the different levels of effort that should be associated with varying degrees of impact and require or prepare commensurate documentation. The level of documentation should reflect the significance and complexity of the discharge activity.

(c) An essential part of the evaluation process involves making determinations as to the relevance of any portion(s) of the Guidelines and conducting further evaluation only as needed. However, where portions of the Guidelines review procedure are "short form" evaluations, there still must be sufficient information (including consideration of both individual and cumulative impacts) to support the decision of whether to specify the site for disposal of dredged or fill material and to support the decision to curtail or abbreviate the evaluation process. The presumption against the discharge in § 230.1 applies to this decision-making.

(d) In the case of activities covered by General permits or 208(b)(4)(E) and (C) Best Management Practices, the analysis and documentation required by the Guidelines will be performed at the time of General permit issuance or 208(b)(4)(B) and (C) Best Management Practices promulgation and will not be repeated when activities are conducted under a General permit or 208(b)(4)(B) and (C) Best Management Practices control. These Guidelines do not require reporting or formal written communication at the time individual activities are initiated under a General permit or 208(b)(4)(B) and (C) Best Management Practices. However, a particular General permit may require appropriate reporting.

§ 230.7 General permits.

(a) *Conditions for the issuance of General permits.* A General permit for a category of activities involving the discharge of dredged or fill material complies with the Guidelines if it meets the applicable restrictions on the discharge in § 230.10 and if the permitting authority determines that:

(1) The activities in such category are similar in nature and similar in their impact upon water quality and the aquatic environment;

(2) The activities in such category will have only minimal adverse effects when performed separately; and

(3) The activities in such category will have only minimal cumulative adverse effects on water quality and the aquatic environment.

(b) *Evaluation process.* To reach the determinations required in paragraph (a) of this section, the permitting authority

shall set forth in writing an evaluation of the potential individual and cumulative impacts of the category of activities to be regulated under the General permit. While some of the information necessary for this evaluation can be obtained from potential permittees and others through the proposal of General permits for public review, the evaluation must be completed before any General permit is issued, and the results must be published with the final permit.

(1) This evaluation shall be based upon consideration of the prohibitions listed in § 230.10(b) and the factors listed in § 230.10(c), and shall include documented information supporting each factual determination in § 230.11 of the Guidelines (consideration of alternatives in § 230.10(a) are not directly applicable to General permits):

(2) The evaluation shall include a precise description of the activities to be permitted under the General permit, explaining why they are sufficiently similar in nature and in environmental impact to warrant regulation under a single General permit based on Subparts C-F of the Guidelines. Allowable differences between activities which will be regulated under the same General permit shall be specified. Activities otherwise similar in nature may differ in environmental impact due to their location in or near ecologically sensitive areas, areas with unique chemical or physical characteristics, areas containing concentrations of toxic substances, or areas regulated for specific human uses or by specific land or water management plans (e.g., areas regulated under an approved Coastal Zone Management Plan). If there are specific geographic areas within the purview of a proposed General permit (called a draft General permit under a State 404 program), which are more appropriately regulated by individual permit due to the considerations cited in this paragraph, they shall be clearly delineated in the evaluation and excluded from the permit. In addition, the permitting authority may require an individual permit for any proposed activity under a General permit where the nature or location of the activity makes an individual permit more appropriate.

(3) To predict cumulative effects, the evaluation shall include the number of individual discharge activities likely to be regulated under a General permit until its expiration, including repetitions of individual discharge activities at a single location.

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Subpart B—Compliance With the Guidelines**§ 230.10 Restrictions on discharge.**

Note.—Because other laws may apply to particular discharges and because the Corps of Engineers or State 404 agency may have additional procedural and substantive requirements, a discharge complying with the requirements of these Guidelines will not automatically receive a permit.

Although all requirements in § 230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impacts on the aquatic ecosystems posed by specific dredged or fill material discharge activities.

(a) Except as provided under § 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

(1) For the purpose of this requirement, practicable alternatives include, but are not limited to:

(i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters;

(ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters;

(2) An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

(3) Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in Subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not "water dependent"), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

(4) For actions subject to NEPA, where the Corps of Engineers is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines. On occasion, these NEPA documents may address a broader range of alternatives than required to be considered under this paragraph or may not have considered the alternatives in sufficient detail to respond to the requirements of these Guidelines. In the latter case, it may be necessary to supplement these NEPA documents with this additional information.

(5) To the extent that practicable alternatives have been identified and evaluated under a Coastal Zone Management program, a § 208 program, or other planning process, such evaluation shall be considered by the permitting authority as part of the consideration of alternatives under the Guidelines. Where such evaluation is less complete than that contemplated under this subsection, it must be supplemented accordingly.

(b) No discharge of dredged or fill material shall be permitted if it:

(1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard;

(2) Violates any applicable toxic effluent standard or prohibition under section 307 of the Act;

(3) Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended. If an exemption has been granted by the Endangered Species Committee, the terms of such exemption shall apply in lieu of this subparagraph;

(4) Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under Title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

(c) Except as provided under § 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual determinations, evaluations, and tests required by

Subparts B and C, after consideration of Subparts C-F, with special emphasis on the persistence and permanence of the effects outlined in those subparts. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:

(1) Significantly adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites.

(2) Significantly adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;

(3) Significantly adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or

(4) Significantly adverse effects of discharge of pollutants on recreational, aesthetic, and economic values.

(d) Except as provided under § 404(b)(2), no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Subpart H identifies such possible steps.

§ 230.11 Factual determinations.

The permitting authority shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment in light of Subparts C-F. Such factual determinations shall be used in § 230.12 in making findings of compliance or non-compliance with the restrictions on discharge in § 230.10. The evaluation and testing procedures described in § 230.60 and § 230.61 of Subpart C shall be used as necessary to make, and shall be described in, such determination. The determinations of effects of each proposed discharge shall include the following:

(a) *Physical substrate determinations.* Determine the nature and degree of effect that the proposed discharge will have, individually and cumulatively, on the characteristics of the substrate at the proposed disposal site. Consideration shall be given to the similarity in particle size, shape, and degree of compaction of the material

proposed for discharge and the material constituting the substrate at the disposal site, and any potential changes in substrate elevation and bottom contours, including changes outside of the disposal site which may occur as a result of erosion, slumpage, or other movement of the discharged material. The duration and physical extent of substrate changes shall also be considered. The possible loss of environmental values (§ 230.20) and actions to minimize impact (Subpart H) shall also be considered in making these determinations. Potential changes in substrate elevation and bottom contours shall be predicted on the basis of the proposed method, volume, location, and rate of discharge, as well as on the individual and combined effects of current patterns, water circulation, wind and wave action, and other physical factors that may affect the movement of the discharged material.

(b) *Water circulation, fluctuation, and salinity determinations.* Determine the nature and degree of effect that the proposed discharge will have individually and cumulatively on water, current patterns, circulation including downstream flows, and normal water fluctuation. Consideration shall be given to water chemistry, salinity, clarity, color, odor, taste, dissolved gas levels, temperature, nutrients, and eutrophication plus other appropriate characteristics. Consideration shall also be given to the potential diversion or obstruction of flow, alterations of bottom contours, or other significant changes in the hydrologic regime. Additional consideration of the possible loss of environmental values (§ 230.23-.25) and actions to minimize impacts (Subpart H), shall be used in making these determinations. Potential significant effects on the current patterns, water circulation, normal water fluctuation and salinity shall be evaluated on the basis of the proposed method, volume, location, and rate of discharge.

(c) *Suspended particulate/turbidity determinations.* Determine the nature and degree of effect that the proposed discharge will have, individually and cumulatively, in terms of potential changes in the kinds and concentrations of suspended particulate/turbidity in the vicinity of the disposal site. Consideration shall be given to the grain size of the material proposed for discharge, the shape and size of the plume of suspended particulates, the duration of the discharge and resulting plume and whether or not the potential changes will cause violations of applicable water quality standards.

Consideration should also be given to the possible loss of environmental values (§ 230.21) and to actions for minimizing impacts (Subpart H). Consideration shall include the proposed method, volume, location, and rate of discharge, as well as the individual and combined effects of current patterns, water circulation and fluctuations, wind and wave action, and other physical factors on the movement of suspended particulates.

(d) *Contaminant determinations.* Determine the degree to which the material proposed for discharge will introduce, relocate, or increase contaminants. This determination shall consider the material to be discharged, the aquatic environment at the proposed disposal site, and the availability of contaminants.

(e) *Aquatic ecosystem and organism determinations.* Determine the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms. Consideration shall be given to the effect at the proposed disposal site of potential changes in substrate characteristics and elevation, water or substrate chemistry, nutrients, currents, circulation, fluctuation, and salinity, on the recolonization and existence of indigenous aquatic organisms or communities. Possible loss of environmental values (§ 230.31), and actions to minimize impacts (Subpart H) shall be examined. Tests as described in § 230.61 (Evaluation and Testing), may be required to provide information on the effect of the discharge material on communities or populations of organisms expected to be exposed to it.

(f) *Proposed disposal site determinations.* (1) Each disposal site shall be specified through the application of these Guidelines. The mixing zone shall be confined to the smallest practicable zone within each specified disposal site that is consistent with the type of dispersion determined to be appropriate by the application of these Guidelines. In a few special cases under unique environmental conditions, where there is adequate justification to show that widespread dispersion by natural means will result in no significantly adverse environmental effects, the discharged material may be intended to be spread naturally in a very thin layer over a large area of the substrate rather than be contained within the disposal site.

(2) The permitting authority and the Regional Administrator shall consider the following factors in determining the acceptability of a proposed mixing zone:

(i) Depth of water at the disposal site;

(ii) Current velocity, direction, and variability at the disposal site;

(iii) Degree of turbulence;

(iv) Stratification attributable to causes such as obstructions, salinity or density profiles at the disposal site;

(v) Discharge vessel speed and direction, if appropriate;

(vi) Rate of discharge;

(vii) Ambient concentration of constituents of interest;

(viii) Dredged material characteristics, particularly concentrations of constituents, amount of material, type of material (sand, silt, clay, etc.) and settling velocities;

(ix) Number of discharge actions per unit of time;

(x) Other factors of the disposal site that affect the rates and patterns of mixing.

(g) *Determination of cumulative effects on the aquatic ecosystem.* (1) Cumulative impacts are the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems.

(2) Cumulative effects attributable to the discharge of dredged or fill material in waters of the United States should be predicted to the extent reasonable and practical. The permitting authority shall collect information and solicit information from other sources about the cumulative impacts on the aquatic ecosystem. This information shall be documented and considered during the decision-making process concerning the evaluation of individual permit applications, the issuance of a General permit, and monitoring and enforcement of existing permits.

(h) *Determination of secondary effects on the aquatic ecosystem.* (1) Secondary effects are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities.

(2) Some examples of secondary effects on an aquatic ecosystem are fluctuating water levels in an impoundment and downstream associated with the operation of a dam, septic tank leaching and surface runoff

from residential or commercial developments on fill, and leachate and runoff from a sanitary landfill located in waters of the U.S. Activities to be conducted on fast land created by the discharge of dredged or fill material in waters of the United States may have secondary impacts within those waters which should be considered in evaluating the impact of creating those fast lands.

§ 230.12 Findings of compliance or non-compliance with the restrictions on discharge.

(a) On the basis of these Guidelines (Subparts C through G) the proposed disposal sites for the discharge of dredged or fill material must be:

- (1) Specified as complying with the requirements of these Guidelines; or
- (2) Specified as complying with the requirements of these Guidelines with the inclusion of appropriate and practicable discharge conditions (see Subpart H) to minimize pollution or adverse effects to the affected aquatic ecosystems; or
- (3) Specified as failing to comply with the requirements of these Guidelines where:

(i) There is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem, so long as such alternative does not have other significant adverse environmental consequences; or

(ii) The proposed discharge will result in significant degradation of the aquatic ecosystem under § 230.10(b) or (c); or

(iii) The proposed discharge does not include all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem; or

(iv) There does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with these Guidelines.

(b) Findings under this section shall be set forth in writing by the permitting authority for each proposed discharge and made available to the permit applicant. These findings shall include the factual determinations required by § 230.11, and a brief explanation of any adaptation of these Guidelines to the activity under consideration. In the case of a General permit, such findings shall be prepared at the time of issuance of that permit rather than for each subsequent discharge under the authority of that permit.

Subpart C—Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem

Note.—The effects described in this subpart should be considered in making the

factual determinations and the findings of compliance or non-compliance in Subpart B.

§ 230.20 Substrate.

(a) The substrate of the aquatic ecosystem underlies open waters of the United States and constitutes the surface of wetlands. It consists of organic and inorganic solid materials and includes water and other liquids or gases that fill the spaces between solid particles.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can result in varying degrees of change in the complex physical, chemical, and biological characteristics of the substrate. Discharges which alter substrate elevation or contours can result in changes in water circulation, depth, current pattern, water fluctuation and water temperature. Discharges may adversely affect bottom-dwelling organisms at the site by smothering immobile forms or forcing mobile forms to migrate. Benthic forms present prior to a discharge are unlikely to recolonize on the discharged material if it is very dissimilar from that of the discharge site. Erosion, slumping, or lateral displacement of surrounding bottom of such deposits can adversely affect areas of the substrate outside the perimeters of the disposal site by changing or destroying habitat. The bulk and composition of the discharged material and the location, method, and timing of discharges may all influence the degree of impact on the substrate.

§ 230.21 Suspended particulates/turbidity.

(a) Suspended particulates in the aquatic ecosystem consist of fine-grained mineral particles, usually smaller than silt, and organic particles. Suspended particulates may enter water bodies as a result of land runoff, flooding, vegetative and planktonic breakdown, resuspension of bottom sediments, and man's activities including dredging and filling. Particulates may remain suspended in the water column for variable periods of time as a result of such factors as agitation of the water mass, particulate specific gravity, particle shape, and physical and chemical properties of particle surfaces.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can result in greatly elevated levels of suspended particulates in the water column for varying lengths of time. These new levels may reduce light penetration and lower the rate of photosynthesis and the primary productivity of an aquatic area if they

last long enough. Sight-dependent species may suffer reduced feeding ability leading to limited growth and lowered resistance to disease if high levels of suspended particulates persist. The biological and the chemical content of the suspended material may react with the dissolved oxygen in the water, which can result in oxygen depletion. Toxic metals and organics, pathogens, and viruses absorbed or adsorbed to fine-grained particulates in the material may become biologically available to organisms either in the water column or on the substrate. Significant increases in suspended particulate levels create turbid plumes which are highly visible and aesthetically displeasing. The extent and persistence of these adverse impacts caused by discharges depend upon the relative increase in suspended particulates above the amount occurring naturally, the duration of the higher levels, the current patterns, water level, and fluctuations present when such discharges occur, the volume, rate, and duration of the discharge, particulate deposition, and the seasonal timing of the discharge.

§ 230.22 Water.

(a) Water is the part of the aquatic ecosystem in which organic and inorganic constituents are dissolved and suspended. It constitutes part of the liquid phase and is contained by the substrate. Water forms part of a dynamic aquatic life-supporting system. Water clarity, nutrients and chemical content, physical and biological content, dissolved gas levels, pH, and temperature contribute to its life-sustaining capabilities.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can change the chemistry and the physical characteristics of the receiving water at a disposal site through the introduction of chemical constituents in suspended or dissolved form. Changes in the clarity, color, odor, and taste of water and the addition of contaminants can reduce or eliminate the suitability of water bodies for populations of aquatic organisms, and for human consumption, recreation, and aesthetics. The introduction of nutrients or organic material to the water column as a result of the discharge can lead to a high biochemical oxygen demand (BOD), which in turn can lead to reduced dissolved oxygen, thereby potentially affecting the survival of many aquatic organisms. Increases in nutrients can favor one group of organisms such as algae to the detriment of other more desirable types such as submerged aquatic vegetation, potentially causing adverse health

effects, objectionable tastes and odors, and other problems.

§ 230.23 Current patterns and water circulation.

(a) Current patterns and water circulation are the physical movements of water in the aquatic ecosystem. Currents and circulation respond to natural forces as modified by basin shape and cover, physical and chemical characteristics of water strata and masses, and energy dissipating factors.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can modify current patterns and water circulation by obstructing flow, changing the direction or velocity of water flow, changing the direction or velocity of water flow and circulation, or otherwise changing the dimensions of a water body. As a result, adverse changes can occur in: location, structure, and dynamics of aquatic communities; shoreline and substrate erosion and deposition rates; the deposition of suspended particulates; the rate and extent of mixing of dissolved and suspended components of the water body; and water stratification.

§ 230.24 Normal water fluctuations.

(a) Normal water fluctuations in a natural aquatic system consist of daily, seasonal, and annual tidal and flood fluctuations in water level. Biological and physical components of such a system are either attuned to or characterized by these periodic water fluctuations.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can alter the normal water-level fluctuation pattern of an area, resulting in prolonged periods of inundation, exaggerated extremes of high and low water, or a static, nonfluctuating water level. Such water level modifications may change salinity patterns, alter erosion or sedimentation rates, aggravate water temperature extremes, and upset the nutrient and dissolved oxygen balance of the aquatic ecosystem. In addition, these modifications can alter or destroy communities and populations of aquatic animals and vegetation, induce populations of nuisance organisms, modify habitat, reduce food supplies, restrict movement of aquatic fauna, destroy spawning areas, and change adjacent, upstream, and downstream areas.

§ 230.25 Salinity gradients.

(a) Salinity gradients form where salt water from the ocean meets and mixes with fresh water from land.

(b) Possible loss of environmental characteristics and values: Obstructions which divert or restrict flow of either fresh or salt water may change existing salinity gradients. For example, partial blocking of the entrance to an estuary or river mouth that significantly restricts the movement of the salt water into and out of that area can effectively lower the volume of salt water available for mixing within that estuary. The downstream migration of the salinity gradient can occur, displacing the maximum sedimentation zone and requiring salinity-dependent aquatic biota to adjust to the new conditions, move to new locations if possible, or perish. In the freshwater zone, discharge operations in the upstream regions can have equally adverse impacts. A significant reduction in the volume of fresh water moving into an estuary below that which is considered normal can affect the location and type of mixing thereby changing the characteristic salinity patterns. The resulting changed circulation pattern can cause the upstream migration of the salinity gradient displacing the maximum sedimentation zone. This migration may affect those organisms that are adapted to freshwater environments. It may also affect municipal water supplies.

Note.—Possible actions to minimize adverse impacts regarding site characteristics can be found in Subpart H.

Subpart D—Potential Impacts on Biological Characteristics of the Aquatic Ecosystem

Note.—The impacts described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in Subpart B.

§ 230.30 Threatened and endangered species.

(a) An endangered species is a plant or animal in danger of extinction throughout all or a significant portion of its range. A threatened species is one in danger of becoming an endangered species in the foreseeable future throughout all or a significant portion of its range. Listings of threatened and endangered species as well as critical habitats are maintained by some individual States and by the U.S. Fish and Wildlife Service of the Department of the Interior (codified annually at 50 CFR § 17.11). The Department of Commerce has authority over some threatened and endangered marine mammals, fish and reptiles.

(b) Possible loss of values: The major potential impacts on threatened or endangered species from the discharge of dredged or fill material include:

(1) Covering or otherwise directly killing species;
(2) The impairment or destruction of habitat to which these species are limited. Elements of the aquatic habitat which are particularly crucial to the continued survival of some threatened or endangered species include adequate good quality water, spawning and maturation areas, nesting areas, protective cover, adequate and reliable food supply, and resting areas for migratory species. Each of these elements can be adversely affected by changes in either the normal water conditions (for clarity, chemical content, nutrient balance, dissolved oxygen, pH, temperature, salinity, current patterns, circulation and fluctuation, or the physical removal of habitat); and

(3) Facilitating incompatible activities.
(c) Where consultation with the Secretary of the Interior occurs under Section 7 of the Endangered Species Act, the conclusions of the Secretary concerning the impact of the discharge on threatened and endangered species and their habitat shall be considered final.

§ 230.31 Fish, crustaceans, mollusks and other aquatic organisms in the food web.

(a) Aquatic organisms in the food web include, but are not limited to, fish, crustaceans, mollusks, insects, annelids, planktonic organisms, and the plants and animals on which they feed and depend upon for their needs. All forms and life stages of an organism, throughout its geographic range, are included in this category.

(b) Possible loss of values: The discharge of dredged or fill material can variously affect populations of fish, crustaceans, mollusks and other food web organisms through the release of contaminants which adversely affect adults, juveniles, larvae, or eggs, or result in the establishment or proliferation of an undesirable competitive species of plant or animal at the expense of the desired resident species. Suspended particulates settling on attached or buried eggs can smother the eggs by limiting or sealing off their exposure to oxygenated water. Discharge of dredged and fill material may result in the debilitation or death of sedentary organisms by smothering, exposure to chemical contaminants in dissolved or suspended form, exposure to high levels of suspended particulates, reduction in water clarity, or alteration of the substrate upon which they are dependent. Mollusks are particularly

sensitive to the discharge of material during periods of reproduction and growth and development due primarily to their limited mobility. They can be rendered unfit for human consumption by tainting, by production and accumulation of toxins, or by ingestion and retention of pathogenic organisms, viruses, heavy metals or persistent synthetic organic chemicals. The discharge of dredged or fill material can redirect, delay, or stop the reproductive and feeding movements of some species of fish and crustacea, thus preventing their aggregation in accustomed places such as spawning or nursery grounds and potentially leading to reduced populations. Reduction of detrital feeding species or other representatives of lower trophic levels can impair the flow of energy from primary consumers to higher trophic levels. The reduction or potential elimination of food chain organism populations decreases the overall productivity and nutrient export capability of the ecosystem.

§ 230.32 Other wildlife.

(a) Wildlife associated with aquatic ecosystems are resident and transient mammals, birds, reptiles, and amphibians.

(b) Possible loss of values: The discharge of dredged or fill material can result in the loss or change of breeding and nesting areas, escape cover, travel corridors, and preferred food sources for resident and transient wildlife species associated with the aquatic ecosystem. These adverse impacts upon wildlife habitat may result from changes in water levels, water flow and circulation, salinity, chemical content, and substrate characteristics and elevation. Increased water turbidity can adversely affect wildlife species which rely upon sight to feed, and disrupt the respiration and feeding of certain aquatic wildlife and food chain organisms. The availability of contaminants from the discharge of dredged or fill material may lead to the bioaccumulation of such contaminants in wildlife. Changes in such physical and chemical factors of the environment may favor the introduction of undesirable plant and animal species at the expense of resident species and communities. In some aquatic environments lowering plant and animal species diversity may disrupt the normal functions of the ecosystem and lead to reductions in overall biological productivity.

Note.—Possible actions to minimize adverse impacts regarding characteristics of biological components of the aquatic ecosystem can be found in Subpart H.

Subpart E—Potential Impacts on Special Aquatic Sites

Note.—The impacts described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in Subpart B. The definition of special aquatic sites is found in § 230.3(q-1).

§ 230.40 Sanctuaries and refuges.

(a) Sanctuaries and refuges consist of areas designated under State and Federal laws or local ordinances to be managed principally for the preservation and use of fish and wildlife resources.

(b) Possible loss of values: Sanctuaries and refuges may be affected by discharges of dredged or fill material which will:

(1) Disrupt the breeding, spawning, migratory movements or other critical life requirements of resident or transient fish and wildlife resources;

(2) Create unplanned, easy and incompatible human access to remote aquatic areas;

(3) Create the need for frequent maintenance activity;

(4) Result in the establishment of undesirable competitive species of plants and animals;

(5) Change the balance of water and land areas needed to provide cover, food, and other fish and wildlife habitat requirements in a way that modifies sanctuary or refuge management practices;

(6) Result in any of the other adverse impacts discussed in Subparts C and D as they relate to a particular sanctuary or refuge.

§ 230.41 Wetlands.

(a)(1) Wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(2) Where wetlands are adjacent to open water, they generally constitute the transition to upland. The margin between wetland and open water can best be established by specialists familiar with the local environment, particularly where emergent vegetation merges with submerged vegetation over a broad area in such places as the lateral margins of open water, headwaters, rainwater catch basins, and groundwater seeps. The landward margin of wetlands also can best be identified by specialists familiar with the local environment when vegetation from the two regions merges over a broad area.

(3) Wetland vegetation consists of plants that require saturated soils to survive (obligate wetland plants) as well as plants, including certain trees, that gain a competitive advantage over others because they can tolerate prolonged wet soil conditions and their competitors cannot. In addition to plant populations and communities, wetlands are delimited by hydrological and physical characteristics of the environment. These characteristics should be considered when information about them is needed to supplement information available about vegetation, or where wetland vegetation has been removed or is dormant.

(b) Possible loss of values: The discharge of dredged or fill material in wetlands is likely to damage or destroy habitat and adversely affect the biological productivity of wetlands ecosystems by smothering, by dewatering, by permanently flooding, or by altering substrate elevation or periodicity of water movement. The addition of dredged or fill material may destroy wetland vegetation or result in advancement of succession to dry land species. It may reduce or eliminate nutrient exchange by a reduction of the system's productivity, or by altering current patterns and velocities. Disruption or elimination of the wetland system can degrade water quality by obstructing circulation patterns that flush large expanses of wetland systems, by interfering with the filtration function of wetlands, or by changing the aquifer recharge capability of a wetland. Discharges can also change the wetland habitat value for fish and wildlife as discussed in Subpart D. When disruptions in flow and circulation patterns occur, apparently minor loss of wetland acreage may result in major losses through secondary impacts. Discharging fill material in wetlands as part of municipal, industrial or recreational development may modify the capacity of wetlands to retain and store floodwaters and to serve as a buffer zone shielding upland areas from wave actions, storm damage and erosion.

§ 230.42 Mud flats

(a) Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may resuspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles

smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

(b) Possible loss of values: The discharge of dredged or fill material can cause changes in water circulation patterns which may permanently flood or dewater the mud flat or disrupt periodic inundation, resulting in an increase in the rate of erosion or accretion. Such changes can deplete or eliminate mud flat biota, foraging areas, and nursery areas. Changes in inundation patterns can affect the chemical and biological exchange and decomposition process occurring on the mud flat and change the deposition of suspended material affecting the productivity of the area. Changes may reduce the mud flat's capacity to dissipate storm surge runoff.

§ 230.43 Vegetated shallows.

(a) Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass and eelgrass in estuarine or marine systems as well as a number of freshwater species in rivers and lakes.

(b) Possible loss of values: The discharge of dredged or fill material can smother vegetation and benthic organisms. It may also create unsuitable conditions for their continued vigor by: (1) changing water circulation patterns; (2) releasing nutrients that increase undesirable algal populations; (3) releasing chemicals that adversely affect plants and animals; (4) increasing turbidity levels, thereby reducing light penetration and hence photosynthesis; and (5) changing the capacity of a vegetated shallow to stabilize bottom materials and decrease channel shoaling. The discharge of dredged or fill material may reduce the value of vegetated shallows as nesting, spawning, nursery, cover, and forage areas, as well as their value in protecting shorelines from erosion and wave actions. It may also encourage the growth of nuisance vegetation.

§ 230.44 Coral reefs.

(a) Coral reefs consist of the skeletal deposit, usually of calcareous or siliceous materials, produced by the vital activities of anthozoan polyps or other invertebrate organisms present in growing portions of the reef.

(b) Possible loss of values: The discharge of dredged or fill material can adversely affect colonies of reef building organisms by burying them, by releasing contaminants such as hydrocarbons into the water column, by reducing light penetration through the water, and by

increasing the level of suspended particulates. Coral organisms are extremely sensitive to even slight reductions in light penetration or increases in suspended particulates. These adverse effects will cause a loss of productive colonies which in turn provide habitat for many species of highly specialized aquatic organisms.

§ 230.45 Riffle and pool complexes.

(a) Steep gradient sections of streams are sometimes characterized by riffle and pool complexes. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a steaming flow, a smooth surface, and a finer substrate. Riffle and pool complexes are particularly valuable habitat for fish and wildlife.

(b) Possible loss of values: Discharge of dredged or fill material can eliminate riffle and pool areas by displacement, hydrologic modification, or sedimentation. Activities which affect riffle and pool areas and especially riffle/pool ratios, may reduce the aeration and filtration capabilities at the discharge site and downstream, may reduce stream habitat diversity, and may retard repopulation of the disposal site and downstream waters through sedimentation and the creation of unsuitable habitat. The discharge of dredged or fill material which alters stream hydrology may cause scouring or sedimentation of riffles and pools. Sedimentation induced through hydrological modification or as a direct result of the deposition of unconsolidated dredged or fill material may clog riffle and pool areas, destroy habitats, and create anaerobic conditions. Eliminating pools and meanders by the discharge of dredged or fill material can reduce water holding capacity of streams and cause rapid runoff from a watershed. Rapid runoff can deliver large quantities of flood water in a short time to downstream areas resulting in the destruction of natural habitat, high property loss, and the need for further hydraulic modification.

Note.—Possible actions to minimize adverse impacts on site or material characteristics can be found in Subpart H.

Subpart F—Potential Effects on Human Use Characteristics

Note.—The effects described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in Subpart B.

§ 230.50 Municipal and private water supplies.

(a) Municipal and private water supplies consist of surface water or ground water which is directed to the intake of a municipal or private water supply system.

(b) Possible loss of values: Discharges can affect the quality of water supplies with respect to color, taste, odor, chemical content and suspended particulate concentration, in such a way as to reduce the fitness of the water for consumption. Water can be rendered unpalatable or unhealthy by the addition of suspended particulates, viruses and pathogenic organisms, and dissolved materials. The expense of removing such substances before the water is delivered for consumption can be high. Discharges may also affect the quantity of water available for municipal and private water supplies. In addition, certain commonly used water treatment chemicals have the potential for combining with some suspended or dissolved substances from dredged or fill material to form other products that can have a toxic effect on consumers.

§ 230.51 Recreational and commercial fisheries.

(a) Recreational and commercial fisheries consist of harvestable fish, crustaceans, shellfish, and other aquatic organisms used by man.

(b) Possible loss of values: The discharge of dredged or fill materials can affect the suitability of recreational and commercial fishing grounds as habitat for populations of consumable aquatic organisms. Discharges can result in the chemical contamination of recreational or commercial fisheries. They may also interfere with the reproductive success of recreational and commercially important aquatic species through disruption of migration and spawning areas. The introduction of pollutants at critical times in their life cycle may directly reduce populations of commercially important aquatic organisms or indirectly reduce them by reducing organisms upon which they depend for food. Any of these impacts can be of short duration or prolonged, depending upon the physical and chemical impacts of the discharge and the biological availability of contaminants to aquatic organisms.

§ 230.52 Water-related recreation.

(a) Water-related recreation encompasses activities undertaken for amusement and relaxation. Activities encompass two broad categories of use: consumptive, e.g., harvesting resources by hunting and fishing; and non-consumptive, e.g., canoeing and sight-seeing.

(b) Possible loss of values: One of the more important direct impacts of dredged or fill disposal is to impair or destroy the resources which support recreation activities. The disposal of dredged or fill material may adversely modify or destroy water use for recreation by changing turbidity, suspended particulates, temperature, dissolved oxygen, dissolved materials, toxic materials, pathogenic organisms, quality of habitat, and the aesthetic qualities of sight, taste, odor, and color.

§ 230.53 Aesthetics.

(a) Aesthetics associated with the aquatic ecosystem consist of the perception of beauty by one or a combination of the senses of sight, hearing, touch, and smell. Aesthetics of aquatic ecosystems apply to the quality of life enjoyed by the general public and property owners.

(b) Possible loss of values: The discharge of dredged or fill material can mar the beauty of natural aquatic ecosystems by degrading water quality, creating distracting disposal sites, inducing inappropriate development, encouraging unplanned and incompatible human access, and by destroying vital elements that contribute to the compositional harmony or unity, visual distinctiveness, or diversity of an area. The discharge of dredged or fill material can adversely affect the particular features, traits, or characteristics of an aquatic area which make it valuable to property owners. Activities which degrade water quality, disrupt natural substrate and vegetational characteristics, deny access to or visibility of the resource, or result in changes in odor, air quality, or noise levels may reduce the value of an aquatic area to private property owners.

§ 230.54 Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves.

(a) These preserves consist of areas designated under Federal and State laws or local ordinances to be managed for their aesthetic, educational, historical, recreational, or scientific value.

(b) Possible loss of values: The discharge of dredged or fill material into such areas may modify the aesthetic,

educational, historical, recreational and/or scientific qualities thereby reducing or eliminating the uses for which such sites are set aside and managed.

Note.—Possible actions to minimize adverse impacts regarding site or material characteristics can be found in Subpart H.

Subpart G—Evaluation and Testing**§ 230.60 General evaluation of dredged or fill material.**

The purpose of these evaluation procedures and the chemical and biological testing sequence outlined in § 230.61 is to provide information to reach the determinations required by § 230.11. Where the results of prior evaluations, chemical and biological tests, scientific research, and experience can provide information helpful in making a determination, these should be used. Such prior results may make new testing unnecessary. The information used shall be documented. Where the same information applies to more than one determination, it may be documented once and referenced in later determinations.

(a) If the evaluation under paragraph (b) indicates the dredged or fill material is not a carrier of contaminants, then the required determinations pertaining to the presence and effects of contaminants can be made without testing. Dredged or fill material is most likely to be free from chemical, biological, or other pollutants where it is composed primarily of sand, gravel, or other naturally occurring inert material. Dredged material so composed is generally found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels. However, when such material is discolored or contains other indications that contaminants may be present, further inquiry should be made.

(b) The extraction site shall be examined in order to assess whether it is sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants. Factors to be considered include but are not limited to:

(1) Potential routes of contaminants or contaminated sediments to the extraction site, based on hydrographic or other maps, aerial photography, or other materials that show watercourses, surface relief, proximity to tidal movement, private and public roads, location of buildings, municipal and industrial areas, and agricultural or forest lands.

(2) Pertinent results from tests previously carried out on the material at the extraction site, or carried out on similar material for other permitted projects in the vicinity. Materials shall be considered similar if the sources of contamination, the physical configuration of the sites and the sediment composition of the materials are comparable, in light of water circulation and stratification, sediment accumulation and general sediment characteristics. Tests from other sites may be relied on only if no changes have occurred at the extraction sites to render the results irrelevant.

(3) Any potential for significant introduction of persistent pesticides from land runoff or percolation;

(4) Any records of spills or disposal of petroleum products or substances designated as hazardous under section 311 of the Clean Water Act (See 40 CFR 116);

(5) Information in Federal, State and local records indicating significant introduction of pollutants from industries, municipalities, or other sources, including types and amounts of waste materials discharged along the potential routes of contaminants to the extraction site; and

(6) Any possibility of the presence of substantial natural deposits of minerals or other substances which could be released to the aquatic environment in harmful quantities by man-induced discharge activities.

(c) To reach the determinations in § 230.11 involving potential effects of the discharge on the characteristics of the disposal site, the narrative guidance in Subparts C-F shall be used along with the general evaluation procedure in § 230.60 and, if necessary, the chemical and biological testing sequence in § 230.61. Where the discharge site is adjacent to the extraction site and subject to the same sources of contaminants, and materials at the two sites are substantially similar, the fact that the material to be discharged may be a carrier of contaminants is not likely to result in degradation of the disposal site. In such circumstances, when dissolved material and suspended particulates can be controlled to prevent carrying pollutants to less contaminated areas, testing will not be required.

(d) Even if the § 230.60(b) evaluation (previous tests, the presence of polluting industries and information about their discharge or runoff into waters of the U.S., bioinventories, etc.) leads to the conclusion that there is a high probability that the material proposed for discharge is a carrier of contaminants, testing may not be necessary if constraints are available to

reduce contamination to acceptable levels within the disposal site and to prevent contaminants from being transported beyond the boundaries of the disposal site, if such constraints are acceptable to the permitting authority and the Regional Administrator, and if the potential discharger is willing and able to implement such constraints. However, even if tests are not performed, the permitting authority must still determine the probable impact of the operation on the receiving aquatic ecosystem. Any decision not to test must be explained in the determinations made under § 230.11.

§ 230.61 Chemical, biological, and physical evaluation and testing.

Note.—The Agency is today proposing revised testing guidelines. The evaluation and testing procedures in this section are based on the 1975 § 404(b)(1) interim final Guidelines and shall remain in effect until the revised testing guidelines are published as final regulations.

(a) No single test or approach can be applied in all cases to evaluate the effects of proposed discharges of dredged or fill materials. This section provides some guidance in determining which test and/or evaluation procedures are appropriate in a given case. Interim guidance to applicants concerning the applicability of specific approaches or procedures will be furnished by the permitting authority.

(b) *Chemical-biological interactive effects.* The principal concerns of discharge of dredged or fill material that contain contaminants are the potential effects on the water column and on communities of aquatic organisms.

(1) *Evaluation of chemical-biological interactive effects.* Dredged or fill material may be excluded from the evaluation procedures specified in paragraphs (b)(2) and (3) of this section if it is determined, on the basis of the evaluation in § 230.60, that the likelihood of contamination by contaminants is acceptably low, unless the permitting authority, after evaluating and considering any comments received from the Regional Administrator, determines that these procedures are necessary. The Regional Administrator may require, on a case-by-case basis, testing approaches and procedures by stating what additional information is needed through further analyses and how the results of the analyses will be of value in evaluating potential environmental effects.

If the General Evaluation indicates the presence of a sufficiently large number of chemicals to render impractical the identification of all contaminants by chemical testing, information may be

obtained from bioassays in lieu of chemical tests.

(2) *Water column effects.* (i) Sediments normally contain constituents that exist in various chemical forms and in various concentrations in several locations within the sediment. An elutriate test may be used to predict the effect on water quality due to release of contaminants from the sediment to the water column. However, in the case of fill material originating on land which may be a carrier of contaminants, a water leachate test is appropriate.

(ii) Major constituents to be analyzed in the elutriate are those deemed critical by the permitting authority, after evaluating and considering any comments received from the Regional Administrator, and considering results of the evaluation in § 230.60. Elutriate concentrations should be compared to concentrations of the same constituents in water from the disposal site. Results should be evaluated in light of the volume and rate of the intended discharge, the type of discharge, the hydrodynamic regime at the disposal site, and other information relevant to the impact on water quality. The permitting authority should consider the mixing zone in evaluating water column effects. The permitting authority may specify bioassays when such procedures will be of value.

(3) *Effects on benthos.* The permitting authority may use an appropriate benthic bioassay (including bioaccumulation tests) when such procedures will be of value in assessing ecological effects and in establishing discharge conditions.

(c) *Procedure for comparison of sites.*

(1) When an inventory of the total concentration of contaminants would be of value in comparing sediment at the dredging site with sediment at the disposal site, the permitting authority may require a sediment chemical analysis. Markedly different concentrations of contaminants between the excavation and disposal sites may aid in making an environmental assessment of the proposed disposal operation. Such differences should be interpreted in terms of the potential for harm as supported by any pertinent scientific literature.

(2) When an analysis of biological community structure will be of value to assess the potential for adverse environmental impact at the proposed disposal site, a comparison of the biological characteristics between the excavation and disposal sites may be required by the permitting authority. Biological indicator species may be useful in evaluating the existing degree of stress at both sites. Sensitive species

representing community components colonizing various substrate types within the sites should be identified as possible bioassay organisms if tests for toxicity are required. Community structure studies should be performed only when they will be of value in determining discharge conditions. This is particularly applicable to large quantities of dredged material known to contain adverse quantities of toxic materials. Community studies should include benthic organisms such as microbiota and harvestable shellfish and finfish. Abundance, diversity, and distribution should be documented and correlated with substrate type and other appropriate physical and chemical environmental characteristics.

(d) *Physical tests and evaluation.* The effect of a discharge of dredged or fill material on physical substrate characteristics at the disposal site, as well as on the water circulation, fluctuation, salinity, and suspended particulates content there, is important in making factual determinations in § 230.11. Where information on such effects is not otherwise available to make these factual determinations, the permitting authority shall require appropriate physical tests and evaluations as are justified and deemed necessary. Such tests may include sieve tests, settleability tests, compaction tests, mixing zone and suspended particulate plume determinations, and site assessments of water flow, circulation, and salinity characteristics.

Subpart H—Actions To Minimize Adverse Effects

Note.—There are many actions which can be undertaken in response to § 203.10(d) to minimize the adverse effects of discharges of dredged or fill material. Some of these, grouped by type of activity, are listed in this subpart.

§ 230.70 Actions concerning the location of the discharge.

The effects of the discharge can be minimized by the choice of the disposal site. Some of the ways to accomplish this are by:

(a) Locating and confining the discharge to minimize smothering of organisms;

(b) Designing the discharge to avoid a disruption of periodic water inundation patterns;

(c) Selecting a disposal site that has been used previously for dredged material discharge;

(d) Selecting a disposal site at which the substrate is composed of material similar to that being discharged, such as discharging sand on sand or mud on mud;

(c) Selecting the disposal site, the discharge point, and the method of discharge to minimize the extent of any plume;

(f) Designing the discharge of dredged or fill material to minimize or prevent the creation of standing bodies of water in areas of normally fluctuating water levels, and minimize or prevent the drainage of areas subject to such fluctuations.

§ 230.71 Actions concerning the material to be discharged.

The effects of a discharge can be minimized by treatment of, or limitations on the material itself, such as:

(a) Disposal of dredged material in such a manner that physiochemical conditions are maintained and the potency and availability of pollutants are reduced.

(b) Limiting the solid, liquid, and gaseous components of material to be discharged at a particular site;

(c) Adding treatment substances to the discharge material;

(d) Utilizing chemical flocculants to enhance the deposition of suspended particulates in diked disposal areas.

§ 230.72 Actions controlling the material after discharge.

The effects of the dredged or fill material after discharge may be controlled by:

(a) Selecting discharge methods and disposal sites where the potential for erosion, slumping or leaching of materials into the surrounding aquatic ecosystem will be reduced. These sites or methods include, but are not limited to:

(1) Using containment levees, sediment basins, and cover crops to reduce erosion;

(2) Using lined containment areas to reduce leaching where leaching of chemical constituents from the discharged material is expected to be a problem;

(b) Capping in-place contaminated material with clean material or selectively discharging the most contaminated material first to be capped with the remaining material;

(c) Maintaining and containing discharged material properly to prevent point and nonpoint sources of pollution;

(d) Timing the discharge to minimize impact, for instance during periods of unusual high water flows, wind, wave, and tidal actions.

§ 230.73 Actions affecting the method of dispersion.

The effects of a discharge can be minimized by the manner in which it is dispersed, such as:

(a) Where environmentally desirable, distributing the dredged material widely in a thin layer at the disposal site to maintain natural substrate contours and elevation;

(b) Orienting a dredged or fill material mound to minimize undesirable obstruction to the water current or circulation pattern, and utilizing natural bottom contours to minimize the size of the mound;

(c) Using silt screens or other appropriate methods to confine suspended particulate/turbidity to a small area where settling or removal can occur;

(d) Making use of currents and circulation patterns to mix, disperse and dilute the discharge;

(e) Minimizing water column turbidity by using a submerged diffuser system. A similar effect can be accomplished by submerging pipeline discharges or otherwise releasing materials near the bottom;

(f) Selecting sites or managing discharges to confine and minimize the release of suspended particulates to give decreased turbidity levels and to maintain light penetration for organisms;

(g) Setting limitations on the amount of material to be discharged per unit of time or volume of receiving water.

§ 230.74 Actions related to technology.

Discharge technology should be adapted to the needs of each site. In determining whether the discharge operation sufficiently minimizes adverse environmental impacts, the applicant should consider:

(a) Using appropriate equipment or machinery, including protective devices, and the use of such equipment or machinery in activities related to the discharge of dredged or fill material;

(b) Employing appropriate maintenance and operation on equipment or machinery, including adequate training, staffing, and working procedures;

(c) Using machinery and techniques that are especially designed to reduce damage to wetlands. This may include machines equipped with devices that scatter rather than mound excavated materials, machines with specially designed wheels or tracks, and the use of mats under heavy machines to reduce wetland surface compaction and rutting;

(d) Designing access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement;

(e) Employing appropriate machinery and methods of transport of the material for discharge.

§ 230.75 Actions affecting plant and animal populations.

Minimization of adverse effects on populations of plants and animals can be achieved by:

(a) Avoiding changes in water current and circulation patterns which would interfere with the movement of animals;

(b) Selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species which have a competitive edge ecologically over indigenous plants or animals;

(c) Avoiding sites having unique habitat or other value, including habitat of threatened or endangered species;

(d) Using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics. Habitat development and restoration techniques can be used to minimize adverse impacts and to compensate for destroyed habitat. Use techniques that have been demonstrated to be effective in circumstances similar to those under consideration wherever possible. Where proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiate their use on a small scale to allow corrective action if unanticipated adverse impacts occur.

(e) Timing discharge to avoid spawning or migration seasons and other biologically critical time periods;

(f) Avoiding the destruction of remnant natural sites within areas already affected by development.

§ 230.76 Actions affecting human use.

Minimization of adverse effects on human use potential may be achieved by:

(a) Selecting discharge sites and following discharge procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the aquatic site (e.g. viewscapes), particularly with respect to water quality;

(b) Selecting disposal sites which are not valuable as natural aquatic areas;

(c) Timing the discharge to avoid the seasons or periods when human recreational activity associated with the aquatic site is most important;

(d) Following discharge procedures which avoid or minimize the disturbance of aesthetic features of an aquatic site ecosystem.

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(e) Selecting sites that will not be detrimental or increase incompatible human activity, or require the need for frequent dredge or fill maintenance activity in remote fish and wildlife areas;

(f) Locating the disposal site outside of the vicinity of a public water supply intake.

§ 230.77 Other actions.

(a) In the case of fills, controlling runoff and other discharges from activities to be conducted on the fill;

(b) In the case of dams, designing water releases to accommodate the needs of fish and wildlife.

(c) In dredging projects funded by Federal agencies other than the Corps of Engineers, maintain desired water quality of the return discharge through agreement with the Federal funding authority on scientifically defensible pollutant concentration levels in addition to any applicable water quality standards.

(d) When a significant ecological change in the aquatic environment is proposed by the discharge of dredged or fill material, the permitting authority should consider the ecosystem that will be lost as well as the environmental benefits of the new system.

Subpart I—Planning To Shorten Permit Processing Time

§ 230.80 Advanced identification of disposal areas.

(a) Consistent with these Guidelines, EPA and the permitting authority, on their own initiative or at the request of any other party and after consultation with any affected State that is not the permitting authority, may identify sites which will be considered as:

(1) Possible future disposal sites, including existing disposal sites and non-sensitive areas; or

(2) Areas generally unsuitable for disposal site specification;

(b) The identification of any area as a possible future disposal site should not be deemed to constitute a permit for the discharge of dredged or fill material within such area or a specification of a disposal site. The identification of areas that generally will not be available for disposal site specification should not be deemed as prohibiting applications for permits to discharge dredged or fill material in such areas. Either type of identification constitutes information to facilitate individual or General permit application and processing.

(c) An appropriate public notice of the proposed identification of such areas shall be issued;

(d) To provide the basis for advanced identification of disposal areas, and areas unsuitable for disposal, EPA and the permitting authority shall consider the likelihood that use of the area in question for dredged or fill material disposal will comply with these Guidelines. To facilitate this analysis, EPA and the permitting authority should review available water resources management data including data available from the public, other Federal and State agencies, and information from approved Coastal Zone Management programs and River Basin Plans.

(e) The permitting authority should maintain a public record of the identified areas and a written statement of the basis for identification.

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Federal Register

**Thursday
July 22, 1982**

Part II

Department of Defense

**Corps of Engineers, Department of the
Army**

**Regulatory Programs of the Corps of
Engineers**

DEPARTMENT OF DEFENSE**Corps of Engineers, Department of the Army**

33 CFR Parts 320, 321, 322, 323, 324, 325, 326, 327, 328, 329 and 330

Interim Final Rule for Regulatory Programs of the Corps of Engineers

AGENCY: Corps of Engineers, Army Department, DOD.

ACTION: Interim final rule and request for comments.

SUMMARY: We are hereby issuing final rules which govern the regulatory programs of the Corps of Engineers. On September 19, 1980, (45 FR 62732), we published proposed rules in the Federal Register which were based on legislative changes in the Clean Water Act, Executive Orders, judicial decisions and policy changes which occurred since our previous regulations were published on July 19, 1977. The major changes of these Regulations are reduction in processing time and expansion of the nationwide permit program. Because it has been nearly two years since the proposed rules were published, we are providing an additional comment period for interested parties to update their views. We will review all comments and determine whether any changes are necessary.

EFFECTIVE DATES: July 22, 1982. Comments must be received by August 23, 1982.

ADDRESS: Office of the Chief of Engineers, DAEN-CWO-N, 20 Massachusetts Ave., N.W., Washington, D.C. 20314.

FOR FURTHER INFORMATION CONTACT:

Mr. Bernie Goode 202-272-0199

or

Mr. Morgan Rees, 202-697-6985.

SUPPLEMENTARY INFORMATION:**Classification**

We have determined these regulation revisions not to be a major rule requiring a Regulatory Impact Analysis (RIA) under Executive Order 12291. However, because of the extensive public interest in the overall program we prepared an RIA. We submitted the RIA to the Office of Management and Budget. A copy has been placed in the agency record for this rule making and is available for public inspection. Since these revisions, for the most part, provide regulatory relief, they do not require a 30-day delay in implementation under 5 U.S.C. 553(d).

Environmental Impact Statement

We have determined that this action does not constitute a major federal action significantly affecting the quality of the human environment. Appropriate environmental documentation is prepared for all permit decisions. We prepared an environmental assessment for each of the nationwide permits in Part 330. We determined that, considering the potential impacts, required conditions, discretionary authority and best management practices, none would require preparation of an environmental impact statement.

Public Comment

We received nearly 400 public comments which covered the full range of views. On balance, the comments were favorable, but there were many strong criticisms that the regulations were too slanted towards environmental protection on the one hand and too slanted towards economic development on the other. We also held two public hearings on proposed nationwide permits, transcripts of which are on file in the Office of the Chief of Engineers. We convened a task force of experienced field and headquarters regulatory and legal personnel to review all comments, and synthesized them into major issues. Significant changes are as indicated below.

Part 320—General Regulatory Policies

Section 320.1(a): This new section discussing Corps of Engineers approach to its regulatory authorities received generally favorable support and has been adopted as proposed.

Section 320.1(b): Types of activities regulated. In the proposed regulations, we changed the definition of our Section 10 authority to add the term "physical" to the historic "course, condition, location or physical capacity". This was based on the judicial opinion in *National Wildlife Federation v. Alexander*, 613 F.2d 1054 (DC CIRC Dec 7, 79). (An incorrect cite was given in the preamble to the proposed regulations.) Since several other judicial opinions conflict and the case cited above is under appeal, we have decided not to change the regulations at this time. The word "physical" has been deleted throughout these final regulations. We also changed the language referring to outer continental shelf jurisdiction to conform to language in recent amendments to the Outer Continental Shelf Lands Act.

Section 320.3(a): This revision recognizes that Federal applicants now

require state water quality certifications per revisions to Section 401 of the CWA.

Section 320.3(b): Recognition of the status of Indian tribes has been added for Coastal Zone Management Act (CZMA) consistency requirements.

Section 320.3(n): A new section has been added to recognize Corps of Engineers responsibility to review for impacts on navigation applications to EPA for point source discharge permits under Section 402 of the Clean Water Act.

Section 320.4(a): The public interest review. This is the heart of our evaluation process. It involves a weighing and balancing of all factors affecting the public interest. Many comments expressed concern that the policy statements in paragraph (b) through (o) are too broad and are subject to too wide a range of interpretation. We recognize that concern and are developing specific guidance on how each of the factors may affect the public interest balancing process based on specific citations of law, Executive policy and policies of the Corps and other Federal agencies. We have changed § 320.4(a)(2)(ii) to conform to CEQ-NEPA regulations that alternatives to proposed actions need not be investigated when there are no unresolved conflicts as to resource use. We have also made a technical change. The analysis of cumulative impacts previously required by § 320.4(a)(2)(iv) has been incorporated in § 320.4(a)(1). The potential for cumulative impacts will be considered in the evaluation of the impacts on each public interest factor rather than in a separate cumulative impact analysis which may overlook potential cumulative effects of one or more of the factors.

Several comments questioned the relationship between our public interest review and the Environmental Protection Agency Guidelines for the Specification of Disposal Sites for Dredged or Fill Material. The guidelines (40 CFR Part 230) were published in the Federal Register on December 24, 1980 pursuant to Section 404(b)(1) of the CWA. The guidelines and the public interest review go hand-in-hand. Once all aspects of the public interest have been considered, if a project does not conform to the guidelines, the permit would be denied.

Section 320.4(c): The statement on mitigation of fish and wildlife impacts has been deleted from this section as it is now incorporated in the policy for conditioning permits expressed in 33 CFR 325.4.

Section 320.4(j): Some comments were concerned that permits may be issued

without compliance with the requirements of Federal law such as water quality certification and coastal zone consistency. That is not the case. Those requirements are covered in 33 CFR Part 325. Section 320.4(j) deals with only those requirements established by local or state laws or Federal laws administered by other Federal agencies.

Section 320.4(l) and (m): Extensive comments were received on both the floodplain management and water conservation policies. However, after considering all the points of view, we have retained the policies. The floodplain policy is consistent with Executive Order 11888. With addition of language from Section 101(g) of the CWA, the water conservation policy is consistent with Federal policy. It does not infringe on the primary authority of the states to allocate water rights.

Section 320.4(n): A section has been added to recognize the national importance of energy conservation and development.

Section 320.4(o): A section has been added on navigation policy. Previously, 33 CFR Part 328 addressed Corps authority to establish harbor lines and was used as a basis for navigation policy. However, with the rescission of that part, there is a need to express navigation policy elsewhere. We also had to retain in our regulations the provision which authorizes all activities which took place shoreward of a harbor line prior to 27 May 1970, the date on which harbor lines were changed from permit authorization lines to navigational guidance lines.

Part 321—Dams and Dikes

There were no significant objections to a minor wording change to exclude weirs from Section 9 coverage and to provide an expedited decision process by processing applications concurrently with the applicant obtaining the necessary approval from either the Congress or the State Legislature.

Part 322—Structures and Work

Section 322.2(f): A provision has been added to allow general permits to be issued to avoid unnecessary duplication of the regulatory control exercised by another agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal.

Section 322.3(a)(1): The term "physical capacity" has been reverted to "navigable capacity" in the definition of Section 10 authority. See the discussion for § 320.1(b) above.

Section 322.4: Nationwide permits have been moved to Part 330.

Section 322.5(f): In the proposed rules, we specifically requested comments on our long standing policy of limiting our review of structures on the Outer Continental Shelf (OCS) under lease from the Department of Interior (DOI). About 10 years ago, we adopted a policy of limiting our review to navigation and national security because the DOI does a comprehensive review during its leasing procedures. There were extensive comments on both sides of the issue. Based on all the comments and in order to be responsive to Executive Order 12291, we have maintained our policy of limited review. The DOI concurred in this policy.

Section 322.5(g): We have changed this section to be consistent with the discussion under § 320.1(b) above.

Appendixes: The appendixes to Parts 322, 323, and 324 and Appendixes B and D-H to Part 325 have been deleted. They deal with internal Corps of Engineers operations and interagency agreements. They need not be incorporated in the Code of Federal Regulations. Also, we are sensitive to reducing the volume of these regulations. The interagency agreements have recently been revised and copies are available to the public.

Part 323—Discharges of Dredged and Fill Material

Section 323.2(a): In the proposed rules, we consolidated former categories 1, 2, and 3 of waters of the United States into one category. Some concerns were raised about this change. While we believe it would be a change only in form and not in substance, we did not make the change as proposed. This was to be consistent with EPA's definition found in 40 CFR Part 128.

Section 323.2(c): We received many comments on revisions to the definition of wetlands. In addition to a Corps field task force, we convened an interagency meeting to review potential improvements to the definition. Both groups, after extensive deliberation, did not provide any improvement on a technical basis. We have therefore, decided not to change the definition at this time.

Section 323.2(e) and (f): These sections were modified to combine the terms natural lake and impoundment into one term, lake. Many people commented that impoundments should not be given the same status in the review process as natural lakes. However, we believe that the evaluation of the public interest should be based on what the impacts actually are and not on whether the area in question is natural or man-made.

Section 323.2(h): The footnote for this section was changed to delete the

requirement for the district engineer to notify the regional administrator of EPA when the median rather than the average annual flow is used to determine the headwaters of a stream. EPA and others expressed concern that EPA should be kept informed of these determinations. However, we know of no cases in the past where EPA has objected to such determinations. In the interests of reducing paperwork, we have deleted the notification requirement. District engineers, however, should notify EPA if EPA is known to have an interest in the area in question.

Section 323.2(n): A provision has been added to allow general permits to be issued to avoid unnecessary duplication of the regulatory control of another agency as discussed for 322.2(f), above.

Section 323.4: The nationwide permits which previously appeared in this section have been moved to Part 330. A new section has been added to describe the legislative exemptions to the program under Sections 404(f) and (t) of the CWA. The wording of § 323.4(a)(1)(i) and § 323.4(a)(1)(iii)(c)(1)(iv) have been changed slightly to recognize irrigation as a normal farming practice and to change the time for removal of stream blockages, to one year from the date of discovery, respectively. EPA has concurred with these changes and will at the next convenient opportunity amend its regulations at 40 CFR Part 230 to coincide with these modifications.

Section 323.5: A new section has been added to note the authority of EPA to transfer Section 404 programs to the states and Army support of program transfer. Many comments urged a more extensive discussion of procedural steps which the Corps intends to follow in a transfer process. However, we did not include such a discussion. EPA has published at 40 CFR Part 123 extensive transfer regulations. As we have not yet had the opportunity to discuss these with any states who have an interest in program transfer, we have not developed any transfer procedures.

Section 323.6(b): This section formerly § 323.5(b), has been modified to be consistent with current agreements between the Corps and EPA which reflect EPA authority to veto disposal site specifications under Section 404(c) of the CWA.

Part 324—Ocean Disposal

Section 324.3(b)(2): This section was modified to note the requirement that Federal agencies must obtain Section 401 water quality certifications from the appropriate state or interstate agency to

dispose of dredged material within the territorial sea.

Part 325—Permit Processing

Section 325.1(b): This is a new provision for pre-application consultation based on regulations of the Council on Environmental Quality for agency procedural compliance with the National Environmental Policy Act (NEPA). Other Corps procedures and policies for compliance with CEQ's NEPA regulations in its regulatory programs are now found in Appendix B to 33 CFR Part 230; a number of changes and deletions have been made throughout Part 325 to reflect this.

Section 325.1(d): Many people commented that we required too much or too little information in support of an application. In deciding what should be required, we have tried to achieve a balance among various considerations such as clarity of plans for review by technical and non-technical people, cost of developing data and its utility in the review process, and to severely limit requests for additional information once an application is considered complete.

Section 325.1(d)(2): This new section would avoid piecemeal applications for work associated with the same project. Comments on this addition were very favorable.

Section 325.1(d)(6): This new section on dam safety drew extensive comment, some saying we did not go far enough, others saying that we have only duplicated existing state requirements. The intent of this section is that the district engineer must be reasonably assured that proper design standards are met. This may be done through evidence of approval by a duly established state review, design or review by appropriately qualified persons, or other reasonable means.

Section 325.1(e): This new section limits the additional information requested of an applicant to that which is essential for the district engineer's decision process.

Section 325.1(f) Fees: This was § 325.1(g) in the proposed rules. It was renumbered because the former Section 325.1(f), signature of application, was moved to § 325.1(d)(7) for format purposes. The fee for letters of permission (LOP) has been deleted on the basis that LOP's are minor and do not generate benefits to the permittee significant enough to warrant payment of a fee.

Section 325.2(a)(1) and (2): These sections were revised to reflect the requirement of Section 404(a) of the CWA that public notices be issued within 15 days of a completed application and a stipulation in a law

suit involving ocean dumping, respectively.

Section 325.2(a)(6): The term "Findings of Fact" has been changed to "Statement of Findings" in this section and throughout these regulations to more properly reflect the nature of the document. This section also allows the district and division engineers to divulge recommendations on applications forwarded for higher authority decision.

Section 325.2(a)(9): This section concerning distribution of copies of permits has been moved from former § 325.2(b)(5).

Section 325.2(b): The provision for issuing joint notices with water quality certifying agencies has been moved and consolidated with other joint notice and processing authorities stated in 33 CFR 320.1(a)(5), 320.4(j)(6), and § 325.2(e).

Section 325.2(b)(1) has been expanded and clarified to describe procedures where more than one state is involved in the water quality certification process.

Section 325.2(b)(1)(ii) has been reworded for clarification.

Section 325.2(b)(2) has been expanded to cover coastal zone certification procedures where Indian lands are involved.

Section 325.2(b)(5) refers to endangered species review (proposed to be in § 325.2(e). The former § 325.2(b)(5) has been moved to Section 325.2(a)(5) for format purposes.

Section 325.2(b)(6) has been deleted. The provision is a requirement of the Freedom of Information Act and need not be repeated in this regulation.

Section 325.2(d) has been revised to reduce processing time goals in accordance with comments received in response to the 1980 proposed rules. Subparagraph 4 is added to clarify that decisions will normally not be deferred pending action on other agency authorizations.

Section 325.2(e) has been added to specify alternative processing procedures available to division and district engineers. These include letters of permission, regional permits, joint procedures with other Federal, state, and local agencies and expedited review processes such as joint agency review meetings.

Section 325.2(e)(4): The authority to approve emergency processing procedures has been delegated from the Assistant Secretary of the Army to the division engineers. Many people asked for a more explicit description of emergency procedures. However, since it is impossible to determine ahead of time the nature of emergencies, division engineers are relied upon to use good judgment in establishing emergency procedures. Normally, such procedures

would include expedited coordination with state and Federal agencies with an interest in any resources involved.

Section 325.3(a)(9) deletes the requirement for a statement concerning a preliminary determination of the need for and/or availability of an environmental impact statement and adds a notice of categorical exclusion, if appropriate, in accordance with Appendix B to 33 CFR Part 230.

Section 325.3(c): The requirement which was added in the proposed rules for periodic purging of the public notice mailing list and the authority to publish notices in the local newspaper have been deleted from the final regulation. District engineers are still expected to take these actions as appropriate, but they are within the scope of normal public involvement principles and need not be expressed in the CFR.

Section 325.3(d) has been deleted from the regulation. It is an internal requirement which has been added to our internal reports system.

Section 325.4: The former section on environmental impact statements has been moved to Appendix B of 33 CFR Part 230. A new section on permit conditioning has been added. We received many comments on this section. It has been rewritten to incorporate many of those comments and to clarify the intent. The authority for bonding was moved from Part 326 of the proposed rules as it is related more to permit conditioning than to enforcement.

Section 325.5(c): This section has been revised to conform to new Section 325.2(e) on alternative processing and evaluation procedures.

Section 325.6(c) and (d): These sections have been rewritten to clarify the difference between the expiration of a permit itself and the expiration of an authorized construction period. Specification of a starting time for permitted activities is now optional. The term "revalidation" is no longer in use and has been deleted. Ocean dumping permits are limited to three years based on a stipulation agreed to in a law suit.

Section 325.7(b) and (k) have been revised to give permittees who are notified of suspension proceedings an opportunity to have an informal meeting as well as or instead of a public hearing.

Section 325.7(d) has been modified to delegate permit revocation authority from the Chief of Engineers to the authority who made the decision on the original permit.

Section 325.8(b) and (c) have been revised to conform to Memoranda of Agreement reached with other Federal agencies pursuant to Section 404(q) of

the CWA and to authorize district engineers to deny certain permits without issuing a public notice where other required authorizations have been denied or where the activity will clearly interfere with navigation.

Section 325.9 has been revoked and reserved. The former section on supervision and enforcement has been moved to Part 326, except subparagraph (e) on bonding authority which has been addressed in § 325.4.

Section 325.11 on district engineer case reports to higher authority has been deleted. It is an internal requirement of the Corps and need not be expressed in the CFR.

Appendix A. The permit form has been revised as indicated in the proposed regulations. There were no significant comments on this appendix.

1. The term "Federal Water Pollution Control Act (66 Stat. 816, PL 92-500)" has been changed to "Clean Water Act (33 U.S.C. 1344)" to reflect the new law citation.

2. The last clause of general condition "i" has been deleted and set forth as a new condition "j": "That this permit does not obviate the requirement to obtain state or local assent required by law for the activity authorized herein." This change is to eliminate any suggestion that this provision relates to property rights.

3. General conditions "j" and "k" have been combined into a new condition "k": "That this permit may be modified, suspended or revoked in whole or in part pursuant to the policies and procedures prescribed in 33 CFR 325.7." This change eliminates present inconsistencies between the two conditions and the regulation provisions. It also avoids the necessity to revise the standard permit conditions in the future as the suspension, modification, and revocation procedures change in the regulations through rulemaking procedures.

4. General condition "o" has been revised to delete the start time dates pursuant to the change to § 325.6(c).

5. New general condition "u" has been added as follows: "That if the permittee, during prosecution of the work authorized herein, encounters a previously unidentified archeological or other cultural resource within the area subject to Department of the Army jurisdiction that might be eligible for listing in the National Register of Historic Places, he shall immediately notify the district engineer." This notification will enable the district engineer to notify the appropriate authorities as required by historic preservation laws.

6. The last phrase of condition "b" under "Discharges of dredged or fill material into waters of the United States" relating to toxic pollutants has been changed from "in to other than trace quantities" to "in toxic amounts" to agree with the language of Section 101(a)(3) of the CWA.

7. Condition "d" under "Discharges of Dredged or Fill Material into Waters of the United States" pertaining to wild and scenic rivers has been deleted as its original inclusion as a permit condition was inappropriate.

Appendix B has been revoked and reserved. The 1967 Memorandum of Understanding with Department of Interior has been terminated. New agreements have been reached with five Federal agencies, under Section 404(q) of the Clean Water Act.

Appendix C, Procedures for the Protection of Cultural Resources, is being revised and was not yet complete for publication. The interim procedures adopted on April 3, 1980, 40 FR 66, pgs. 22112, et seq. still apply.

Part 326—Enforcement

Comments on this part were generally related to concerns that increased authority given to district engineers in determining the disposition of an enforcement case would result in greater risk to environmental quality. However, the changes are actually related only to program management. Most violations are minor, many of them resulting from lack of public understanding of Federal jurisdiction. This regulation has been advised to allow district engineers to recognize those cases and not require lengthy paperwork and processing procedures on all of them. The staff resources thereby made available would allow the district engineer to take more vigorous enforcement action and conduct greater coordination with interested parties on those cases which are potentially significant. The changes provide a focus on the substance of the violation and the need for enforcement action. It is expected that in significant cases, there will be full coordination with interested parties to develop appropriate protective or remedial measures. The full public interest balancing process has been deleted from this Part 326 but remains in the after-the-fact evaluation phase of 33 CFR Part 325 thereby eliminating the duplication of that evaluation required in the previous regulation.

Section 326.3(d) has been added to provide for cases which are not suitable for legal action and where the responsible party refuses to apply for after-the-fact authorization. The district engineer may now proceed on his own

initiative giving due consideration in the processing requirements and the public interest review to the extent of information furnished by the responsible party.

Section 326.5: The former section dealing with processing after-the-fact permit applications has been deleted. The processing requirements are contained in Part 325. Former § 325.9 on supervision and enforcement has been moved to this section as it more directly related to this part than to Part 325.

Part 327—Public Hearings

The public hearing regulation has been changed to make the public hearing policies consistent under all Corps of Engineers regulatory authorities. As a standard, we adopted the policies and criteria previously applicable to Section 404 only. This part also combines the hearing file with the complete administrative record of the permit action. All the information previously required for the public hearing file was also required to be in the administrative record. This duplication has been eliminated. The requirement for a verbatim hearing transcript has been retained. The mandatory requirement for district counsel to be present at all hearings as a legal adviser to the presiding officer (§ 327.6) has been changed to a discretionary decision; the district engineer may wish to informally resolve a hearing request (§ 327.4); and § 327.5 provides that the district engineer may also appoint an appropriately qualified person other than the deputy district engineer to be a hearing officer. The intent of these changes is to provide greater flexibility in responding to requests for public hearings.

Part 328—Harbor Lines

This part has been revoked and reserved. The Corps policy on harbor lines and their impact on the public interest review process is now found at 33 CFR 320.4(o). That subparagraph also retains the authorization for activities constructed shoreward of harbor lines prior to 27 May 1970.

Part 329—Definition of Navigable Waters of the United States

Based on a court decision (*Leslie Salt Co. v. Froelke*, 578 F.2d 742) (9th Cir 1978) the shoreward limit of navigable waters of the United States (frequently referred to as "Section 10 waters") in coastal areas is the mean high water line on both the Atlantic and Pacific coasts (formerly the mean higher high water was used on the Pacific coast). Therefore, Part 329 has been amended to

delete the second sentence of § 329.12(a)(2).

Part 330—Nationwide Permits

Combining the nationwide permits previously found in 33 CFR 322.4 (Section 10 nationwide permits) and 33 CFR 323.4 (Section 404 nationwide permits) received very favorable response. Extensive comment was received on some aspects of the nationwide permit program and on specific nationwide permits. We conducted public hearings in Washington, DC and in St. Paul, Minnesota to obtain additional public comment. Comments from all sources ranged from strongly supportive to strongly opposed because the program was either too broad or too restrictive. We prepared environmental assessments for all proposed nationwide permits, and Section 404(b)(1) evaluations for Section 404 actions. The Chief of Engineers then reached the decision, supported by a Statement of Findings (SOF) that each of the nationwide permits contained in Part 330 is in the public interest. The decisions were based on the policies expressed in 33 CFR Part 320 and include consideration of the Clean Water Act Sections 101(b), 101(f), 404(e), and 404(g) and Executive Order 12291 which superseded E.O. 12044.

The major areas of concern are as follows:

1. *Compliance with the specific language of Section 404(e) of the CWA.* That section provides that nationwide permits may be issued for categories of activities which are similar in nature and which have individually and cumulatively minor environmental impacts. The concern was that some of the nationwide permits, particularly the ones for discharges into certain waters (§ 330.4) exceeded the Section 404(e) authority because the activities covered were considered by the respondent to not be minor and similar in nature. However, those permits and others were in effect at the time Congress adopted Section 404(e). The legislative history clearly shows Congress' intent to endorse the program in effect at the time and to encourage its expansion. Therefore, we consider that categories of activities may be based on similarities in time (§ 330.3), location (§ 330.4) and type of work (§ 330.5).

2. *State certification under Section 401 of the CWA.* In the proposed rules, we stated that we assumed all states would want to waive certification requirements except for § 330.5(a)(16), run-off from upland disposal areas. Several states responded with concerns that the nationwide permits did not take

into account local and state needs. As a result, the regional conditioning authority discussed below was added to address any special concerns states may have. Even so, the State of Wisconsin took action to formally deny certification of certain nationwide permits. These permits have been so noted in the regulations.

3. *Coastal Zone Management.* Under the Coastal Zone Management Act, a state must determine if the proposed activity is consistent with its approved state coastal zone management plan. We noted in the proposed rules that the nationwide permits would comply with state coastal zone programs. A few states replied that they would need more detailed information to make a consistency determination. However, the nature of nationwide permits must be general to account for wide variations from region to region. We appreciate the concern expressed and have adopted the regional conditioning authority to deal with those concerns.

4. *Reporting on nationwide permits.* In the preamble to the proposed rules, we specifically sought comments on the need for a reporting procedure as a prerequisite for working under a nationwide permit. Reaction was great and sharply mixed. What appeared to be good for one region was not practicable for another. Some of the nationwide permits have automatic procedures whereby the Corps is informed of the activities, and others were consensus "no reporting" situations. The ones in between were difficult to handle in a uniform national fashion. Therefore, we have designed the regional conditioning authority to provide for reporting on a regional basis where the division engineer determines there is an appropriate need.

5. *Discretionary Authority/Regional Conditioning.* The discretionary authority in the proposed rules generated many comments. One major concern was the removal of discretionary authority from district engineers to the Chief of Engineers. Some people supported that concept. However, most believed that the Chief is too far removed from the local level and that the administrative process of seeking the Chief's approval would be inefficient and would thereby unduly influence a district engineer to avoid seeking discretionary authority. On the other hand, some commenters pointed out and experience has shown a need to improve the consistency of interpretation of Corps jurisdiction and policy. Accordingly, we have vested discretionary authority on a case-by-case basis with the division engineer who is closer to the problem and can

provide necessary consistency. However, in order to override a nationwide permit for a entire category or geographic region, approval must be obtained from the Chief of Engineers. The nationwide permits published today go into effect immediately. Should additional regional conditions be found to be appropriate, they may be added at any time and appropriately announce to concerned parties. Work done between now and the effective date of any regional conditions would not be subject to those conditions. We considered deferring publication of the nationwide permits until the division engineers had an opportunity to develop regional conditions. However, the benefits to the regulated public and to the government administrative efforts stemming from immediate implementation appear to far outweigh any risk to public resources which may result while regional conditions are being considered. Note also that previously exercised discretionary authority under nationwide permits issued on 19 July 1977 expires four months from the date of these regulations. However, it may be reinstated after appropriate procedures have been followed.

6. *Section 330.3(a):* The nationwide permit for activities occurring before phase-in dates was issued with the July 1977 regulations. Those activities remain authorized. The section is included here to retain in the regulation that these activities have been authorized.

7. *Section 330.4:* The nationwide permits for activities occurring in certain waters drew the most comments. Some urged that we broaden the categories of water, others believed that this permit exceeds the authority of Section 404(e). Areas above the headwaters and isolated waters have never been regulated on a case-by-case basis (except for lakes greater than 10 acres) and it was clearly within the scope of the CWA to retain the nationwide permits existing at the time the legislation was enacted. Fills in the areas involved, including the expansion to include lakes of greater than 10 acres, are not usually a threat to water quality of the surface tributary system. In addition, case-by-case regulation of such areas is a more appropriate role for the states based on Sections 101(b) and 101(f) of the CWA. If there are areas where adequate state regulation is not present and there is a threat to the principles of the CWA, division engineers may assert discretionary authority as appropriate. The two nationwide permits found in § 330.4(a)(1) and (2) consolidate the four nationwide permits previously found at

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33 CFR § 323.4-2(a). Conditions (b)(2) was modified to comply with the Endangered Species Act.

8. *Section 330.5*: The section describes specific nationwide permits 1 through 25. A few generated no comments but most had strong supporters and strong opponents. We attempted to incorporate all the concerns into the permit conditions, but as a result of the widely divergent views, found the task impossible. While we recognize many of the concerns raised about protection of resources, we believe that we have minimized any significant risk through the conditions and the discretionary authority, including regional conditioning. As noted above, the requirements of the regulations have been followed and it has been found that each of these nationwide permits is in the public interest.

a. *Section 330.5(a)(1)*: This is an expansion of an existing nationwide permit previously found at 33 CFR 322.4(a). Only navigation aids installed by the Coast Guard were included. This revision expands the coverage to all aids and regulatory markers regulated by the Coast Guard. This permit avoids dual Federal regulatory control.

b. *Section 330.5(a)(2)*: This is a reauthorization of the nationwide permit for structures in artificial canals previously found at 33 CFR 322.4(b).

c. *Section 330.5(a)(3)*: This is a reauthorization of the nationwide permit previously found at 33 CFR 322.4(c). The term fill material has been added. Normally, fill for repair and maintenance is exempt from regulation by Section 404(f)(1)(A). However, there are conditions in Section 404(f)(2) under which the exemption may not apply. In those cases, the nationwide permit would be operable.

d. *Section 330.5(a)(4)*: Fish and wildlife harvesting activities are added to this existing nationwide permit previously found at 33 CFR 322.4(d). Such activities are or can be adequately regulated through other Federal, State and local fishing and hunting regulatory programs or they are so minor in impact as not to require any individual review.

e. *Section 330.5(a)(5)*: This is a reauthorization of the nationwide permit for water testing devices previously found at 33 CFR 322.4(e).

f. *Section 330.5(a)(6)*: This is a reauthorization and expansion of the nationwide permit for survey activities previously found at 33 CFR 322.4(f). Seismic operations are added to avoid unnecessary delays for geophysical survey activities.

g. *Section 330.5(a)(7)* is a new nationwide permit to avoid duplicating the regulatory control exercised by EPA

under its Section 402 permitting authority. The public concern with impacts of outfall structures is generally related to what comes out of the pipe rather than to the pipe itself. Some expressed concern that EPA's scope of review is not broad enough to encompass occasionally significant environmental concerns. We believe it is. However, as an additional safeguard, discretionary authority is available should the need arise.

h. *Section 330.5(a)(8)* is a new nationwide permit to avoid duplicating regulatory control exercised on the Outer Continental Shelf by the Department of Interior, Bureau of Land Management and Geological Survey.

i. *Section 330.5(a)(9)* is a new nationwide permit to avoid duplicating controls exercised by the U.S. Coast Guard over vessel anchorage and floating areas. There were many concerns expressed about floating areas in the upper Mississippi. However, only one floating area has been designated by the Coast Guard and it is located in the lower Mississippi near New Orleans.

j. *Section 330.5(a)(10)* is a new nationwide permit to avoid unnecessary Federal control over private mooring buoys.

k. *Section 330.5(a)(11)* is a new nationwide permit to avoid unnecessary Federal control over temporary markers and buoys.

l. *Section 330.5(a)(12)* is an expansion of an existing nationwide permit for utility line crossings previously found at 33 CFR 323.4-3(a)(1). It now also includes bedding and backfill for outfall and intake structures.

m. *Section 330.5(a)(13)* is an expansion of an existing Section 404 nationwide permit for bank stabilization previously found at 33 CFR 323.4-3(a)(2). It now includes Section 10 authorization and some additional conditions.

n. *Section 330.5(a)(14)* is a reauthorization of an existing nationwide permit for minor road crossings previously found at 33 CFR 323.4-3(a)(3).

o. *Section 330.5(a)(15)* is an expansion of an existing nationwide permit previously found at 33 CFR 323.4-3(a)(4) for some bridge-associated fills in tidal waters where those fills are regulated by the U.S. Coast Guard as part of the bridge permit. The expansion to include non-tidal waters reduces dual Federal regulatory control for bridges crossing tidal and non-tidal navigable waters of the United States.

p. *Section 330.5(a)(16)* is a new nationwide permit to recognize that the return water from dredged material placed hydraulically on upland sites is administratively a 404 discharge but

need not be regulated on an individual basis as long as the water quality concerns are protected through the Section 401 certification procedure. Reducing regulatory burdens on upland disposal should encourage such disposal and avoid the confusion now existing on why hydraulic disposal on the upland needs a 404 permit while non-hydraulic disposal does not.

q. *Section 330.5(a)(17)* is a new nationwide permit to avoid duplicating the regulatory control exercised by the Department of Energy, Federal Energy Regulatory Commission (FERC) under the Federal Power Act of 1920 for small hydropower projects. Some people were concerned that FERC review might not fully reflect the principles of the Clean Water Act. We disagree. However, the safeguard of discretionary authority is still available.

r. *Sections 330.5(a)(18) and (19)* are new nationwide permits for very small dredging and filling activities. We had imposed a limit of five cubic yards in the proposed rules. However, we were persuaded by the comments that increasing the limit to 10 cubic yards is reasonable.

s. *Section 330.5(a)(20)* is a new nationwide permit to avoid regulatory delays associated with oil and hazardous substances containment and cleanup operations.

t. *Section 330.5(a)(21)* is a new nationwide permit to avoid duplicating the regulatory control exercised by the Department of the Interior under the Surface Mining Control and Reclamation Act of 1977. The provision for an advance review by the Corps would afford the Corps an opportunity to insure that the activity needing a Corps permit would have minimal impacts and thus qualify for the nationwide permit.

u. *Section 330.5(a)(22)* is a new nationwide permit for work associated with removal of wrecked vessels and navigational obstructions.

v. *Section 330.5(a)(23)* is a new nationwide permit to reduce duplication of effort and unnecessary paperwork concerning activities of other Federal agencies which would have only minimal individual or cumulative environmental impacts. Some concerns were raised that other federal agencies are not as aware of CWA principles as is the Corps of Engineers. We disagree, but have reserved discretionary authority should the need arise. The conditions specified in the proposed rules have been consolidated and the notification requirement has been moved from the district engineer to the Chief of Engineers in accordance with CEQ categorical exclusion procedures.

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w. Section 330.5(a)(24) is a new nationwide permit to avoid duplications with state-administered Section 404 permit programs. Administration of the Section 404 program in waters which are navigable waters of the United States based solely on historical commercial use may be transferred to qualified states pursuant to Section 404(g) of the CWA. However, the Corps retains Section 10 permitting authority in these waters. Thus the discharge of dredged or fill material in such waters would require both a Corps Section 10 permit and State Section 404 permit. Since both EPA and the Corps have adequate control over the state 404 programs to protect the federal interest, a nationwide permit to satisfy the Section 10 jurisdictional authority would avoid paperwork, duplications, and delays. Other activities not involving the discharge of dredged and fill material in such waters would continue to be subject to Section 10.

x. Section 330.5(a)(25) is a new nationwide permit for placement of concrete into tightly sealed forms. This would address the situation where poured concrete used as a structural member would require a Section 404 permit whereas a structural member made of steel or wood but serving the same purpose does not require a Section 404 permit. The concrete structure itself would still require a Section 10 permit if located in navigable waters of the United States. This nationwide permit was announced in the Federal Register of May 15, 1981 and was discussed at our public hearings.

y. Section 330.6: A 5-year expiration date is added pursuant to Section 404(e) of the CWA.

Note 1

The term "he" and its derivatives used in these regulations are generic and should be considered as applying to both male and female.

Note 2

One purpose of these regulations is to bring up to date all policies which affect the Corps regulatory programs. All policy guidance issued prior to January 1, 1981 is hereby terminated. Since that time we have issued guidance letters with specific expiration dates.

List of Subjects

33 CFR Part 320

Environmental protection, Intergovernmental relations, Navigation, Water pollution control, Waterways.

33 CFR Part 321

Dams, Intergovernmental relations, Navigation, Waterways.

33 CFR Part 322

Continental shelf, Electric power, Navigation, Water pollution control, Waterways.

33 CFR Part 323

Navigation, Water pollution control, Waterways.

33 CFR Part 324

Water pollution control.

33 CFR Part 325

Administrative practice and procedure, Intergovernmental relations, Environmental protection, Navigation, Water pollution control, Waterways.

33 CFR Part 326

Investigations, Intergovernmental relations, Law enforcement, Navigation, Water pollution control, Waterways.

33 CFR Part 327

Administrative practice and procedure, Navigation, Water pollution control, Waterways.

33 CFR Part 329

Waterways.

33 CFR Part 330

Navigation, Water pollution control, Waterways.

For the reasons set forth in the preamble, Chapter II of Title 33 of the Code of Federal Regulations is amended by revising Parts 320, 321, 322, 323, 324, 325, 326, 327, and 329, removing and reserving Part 328 and adding a new part 330 to read as set forth below.

Dated: July 16, 1982.

Forrest T. Gay III,

Brigadier General, USA, Acting Director of Civil Works.

PART 330—GENERAL REGULATORY POLICIES

Sec.

320.1 Purpose and scope.

320.2 Authorities to issue permits.

320.3 Related laws.

320.4 General policies for evaluating permit applications.

Authority: 33 U.S.C. 401 et seq.; 33 U.S.C. 1944; 33 U.S.C. 1413.

§ 320.1 Purpose and scope.

(a) *Regulatory approach of the Corps of engineers.* (1) The U.S. Army Corps of Engineers has been involved in regulating certain activities in the nation's waters since 1890. Until 1968, the primary thrust of the Corps' regulatory program was the protection of navigation. As a result of several new laws and judicial decisions, the program evolved from one that protects navigation only to one that considers the

full public interest by balancing the favorable impacts against the detrimental impacts. This is known as the "public interest balancing process" or the "public interest review." The program is one which reflects the national concerns for both the protection and utilization of important resources. It is a dynamic program that varies the weight given to a specific public interest factor in light of the importance of other such factors in a particular situation.

(2) The Corps is a highly decentralized organization. Most of the authority for administering the regulatory program has been given to the thirty six district engineers and eleven division engineers. If a district or division engineer makes a final decision on a permit application in accordance with the procedures and authorities contained in these regulations (33 CFR Parts 320-330), there is no administrative appeal of that decision.

(3) The Corps seeks to avoid unnecessary regulatory controls. The general permit program described in 33 CFR Parts 325 and 330 is the primary method of eliminating unnecessary Federal control over activities which do not justify individual control or which are adequately regulated by another agency.

(4) The Corps believes that applicants are not necessarily due a favorable decision but they are due a timely one. Reducing unnecessary paperwork and delays is a continuing Corps goal.

(5) The Corps believes that state and Federal regulatory programs should complement rather than duplicate one another. Use of general permits, joint processing procedures, interagency review coordination and authority transfers (where authorized by law) are encouraged to reduce duplications.

(b) *Types of activities regulated.* This regulation and the regulations that follow (33 CFR Parts 321-330) prescribe the statutory authorities, and general and special policies and procedures applicable to the review of applications for Department of the Army permits for various types of activities that occur in waters of the United States or the oceans. This part identifies the various Federal statutes that require Department of the Army permits before these activities can be lawfully undertaken; the related Federal laws applicable to the review of each activity that requires a Department of the Army permit; and the general policies that are applicable to the review of all activities that require Department of the Army permits. Parts 321-324 address the various types of activities that require Department of

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the Army permits, including special policies and procedures applicable to those activities, as follows:

(1) Dams or dikes in navigable waters of the United States (Part 321);

(2) Other structures or work including excavation, dredging, and/or disposal activities, in navigable waters of the United States (Part 322);

(3) Activities that alter or modify the course, condition, location, or capacity of a navigable water of the United States (Part 322);

(4) Construction of artificial islands, installations and other devices on the outer continental shelf (Part 322);

(5) Discharges of dredged or fill material into the waters of the United States (Part 323);

(6) Activities involving the transportation of dredged material for the purpose of disposal in ocean waters (Part 324); and

(7) Nationwide general permits for certain categories of these activities (Part 330).

(c) Forms of authorization.

Department of the Army permits for the above described activities are issued under various forms of authorization. These include individual permits that are issued following a review of an individual application for a Department of the Army permit and general permits that authorize the performance of a category or categories of activities in a specific geographical region or nationwide. The term "general permit" as used in these regulations (33 CFR Parts 320-330) refers to both those regional permits issued by district or division engineers on a regional basis and to nationwide permits issued by the Chief of Engineers through publication in the Federal Register and applicable throughout the nation. The nationwide permits are found in 33 CFR Part 330. If an activity is covered by a general permit, an application for a Department of the Army permit does not have to be made. In such cases, a person must only comply with the conditions contained in the general permit to satisfy requirements of law for a Department of the Army Permit.

(d) General instructions. The procedures for processing all individual permits and regional general permits are contained in 33 CFR Part 325. However, before reviewing those procedures, a person wanting to do work that requires a Department of the Army permit should review the general and special policies that relate to the particular activity as outlined in this Part 329 and Parts 321 through 324. The terms "navigable waters of the United States" and "waters of the United States" are used frequently throughout these regulations,

and it is important from the outset that the reader understand the difference between the two. "Navigable waters of the United States" are defined in 33 CFR Part 329. These are waters that are navigable in the traditional sense where permits are required for certain work or structures pursuant to Sections 9 and 10 of the River and Harbor Act of 1899. "Waters of the United States" are defined in 33 CFR 329.2(a). These waters include more than navigable waters of the United States and are the waters where permits are required for the discharge of dredged or fill material pursuant to Section 404 of the Clean Water Act.

§ 320.2 Authorities to issue permits.

(a) Section 9 of the River and Harbor Act approved March 3, 1899 (33 U.S.C. 401) (hereinafter referred to as Section 9) prohibits the construction of any dam or dike across any navigable water of the United States in the absence of Congressional consent and approval of the plans by the Chief of Engineers and the Secretary of the Army. Where the navigable portions of the waterbody lie wholly within the limits of a single state, the structure may be built under authority of the legislature of that State, if the location and plans or any modification thereof are approved by the Chief of Engineers and by the Secretary of the Army. The instrument of authorization is designated a permit. Section 9 also pertains to bridges and causeways by the authority of the Secretary of the Army and Chief of Engineers with respect to bridges and causeways was transferred to the Secretary of Transportation under the Department of Transportation Act of October 15, 1966 (49 U.S.C. 1155g(6)(A)). (See also 33 CFR Part 321.) A Department of the Army permit pursuant to Section 404 of the Clean Water Act is required for the discharge of dredged or fill material into waters of the United States associated with bridges and causeways. (See 33 CFR Part 323.)

(b) Section 10 of the River and Harbor Act approved March 3, 1899 (33 U.S.C. 403) (hereinafter referred to as Section 10) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. The construction of any structure in or over any navigable water of the United States, the excavation from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The

instrument of authorization is designated a permit. The authority of the Secretary of the Army to prevent obstructions to navigation in the navigable waters of the United States was extended to artificial islands, installations, and other devices located on the outer continental shelf by Section 4(e) of the Outer Continental Shelf Lands Act of 1953 as amended (43 U.S.C. 1333(e)). (See also 33 CFR Part 322.)

(c) Section 11 of the River and Harbor Act approved March 3, 1899 (33 U.S.C. 404) authorizes the Secretary of the Army to establish harbor lines channelward of which no piers, wharves, bulkheads or other works may be extended or deposits made without approval of the Secretary of the Army. Effective May 27, 1970, permits for work shoreward of those lines must be obtained in accordance with Section 10 and, if applicable Section 404 of the Clean Water Act. (See § 320.4(o) of this Part.)

(d) Section 13 of the River and Harbor Act approved March 3, 1899 (33 U.S.C. 407) provides that the Secretary of the Army, whenever the Chief of Engineers determines that anchorage and navigation will not be injured thereby, may permit the discharge of refuse into navigable waters. In the absence of a permit, such discharge of refuse is prohibited. While the prohibition of this section, known as the Refuse Act, is still in effect, the permit authority of the Secretary of the Army has been superseded by the permit authority provided the Administrator, Environmental Protection Agency (EPA), and the States under Sections 402 and 405 of the Clean Water Act, respectively (33 U.S.C. 1342 and 1345). (See 40 CFR Parts 124 and 125.)

(e) Section 14 of the River and Harbor Act approved March 3, 1899 (33 U.S.C. 408) provides that the Secretary of the Army on the recommendation of the Chief of Engineers may grant permission for the temporary occupation or use of any sea wall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the United States. This permission will be granted by an appropriate real estate instrument in accordance with existing real estate regulations.

(f) Section 404 of the Clean Water Act (33 U.S.C. 1344) (hereinafter referred to as Section 404) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice and opportunity for public hearing, for the discharge of dredged or fill material into the waters of the United States as specified disposal sites. See 33 CFR Part 323. The selection and use of disposal sites will be in accordance with

guidelines developed by the Administrator of EPA in conjunction with the Secretary of the Army and published in 40 CFR 230. If these guidelines prohibit the selection or use of a disposal site, the Chief of Engineers shall consider the economic impact on navigation of such a prohibition in reaching his decision. Furthermore, the Administrator can prohibit or restrict the use of any defined area as a disposal site whenever he determines, after notice and opportunity for public hearings and after consultation with the Secretary of the Army, that the discharge of such materials into such areas will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas (See 40 CFR Part 230).

(g) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. 1413) (hereinafter referred to as Section 103) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice and opportunity for public hearings, for the transportation of dredged material for the purpose of disposal in the ocean where it is determined that the disposal will not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. The selection of disposal sites will be in accordance with criteria developed by the Administrator of the EPA in consultation with the Secretary of the Army and published in 40 CFR Parts 220-229. However, similar to the EPA Administrator's limiting authority cited in paragraph (f) of this section, the Administrator can prevent the issuance of a permit under this authority if he finds that the disposal of the material will result in an unacceptable adverse impact on municipal water supplies, shellfish beds, wildlife, fisheries or recreational areas. (See also 33 CFR 324.)

§ 320.3 Related laws.

(a) Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the State in which the discharge originates or would originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards.

A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility.

(b) Section 307(c) of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1456(c)), requires Federal agencies conducting activities, including development projects, directly affecting a State's coastal zone, to comply, to the maximum extent practicable, with an approved State coastal zone management program. Indian tribes doing work on Federal lands will be treated as a Federal agency for the purpose of the Coastal Zone Management Act. The Act also requires any non-Federal applicant for a Federal license or permit to conduct an activity affecting land or water uses in the State's coastal zone to furnish a certification that the proposed activity will comply with the State's coastal zone management program. Generally, no permit will be issued until the State has concurred with the non-Federal applicant's certification. This provision becomes effective upon approval by the Secretary of Commerce of the State's coastal zone management program. (See also 15 CFR Part 930.)

(c) Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (16 U.S.C. 1432), authorizes the Secretary of Commerce, after consultation with other interested Federal agencies and with the approval of the President, to designate as marine sanctuaries those areas of the ocean waters or of the Great Lakes and their connecting waters or of other coastal waters which he determines necessary for the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or aesthetic values. After designating such an area, the Secretary of Commerce shall issue regulations to control any activities within the area. Activities in the sanctuary authorized under other authorities are valid only if the Secretary of Commerce certifies that the activities are consistent with the purposes of Title III of the Act and can be carried out within the regulations for the sanctuary.

(d) The National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347) declares the national policy to encourage a productive and enjoyable harmony between man and his environment. Section 102 of that Act directs that "to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act, and (2) all agencies of the

Federal Government shall . . . insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations . . .". (See Appendix B of 33 CFR Part 230.)

(e) The Fish and Wildlife Act of 1956 (16 U.S.C. 742a, *et seq.*), the Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g) and the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c) and other acts express the will of Congress to protect the quality of the aquatic environment as it affects the conservation, improvement and enjoyment of fish and wildlife resources. Reorganization Plan No. 4 of 1970 transferred certain functions, including certain fish and wildlife-water resources coordination responsibilities, from the Secretary of the Interior to the Secretary of Commerce. Under the Fish and Wildlife Coordination Act and Reorganization Plan No. 4, any Federal agency that proposes to control or modify any body of water must first consult with the United States Fish and Wildlife Service, the National Marine Fisheries Service, as appropriate, and with the head of the appropriate State agency exercising administration over the wildlife resources of the affected State.

(f) The Federal Power Act of 1920 (16 U.S.C. 791a *et seq.*), as amended, authorizes the Department of Energy (DOE) to issue licenses for the construction, operation and maintenance of dams, water conduits, reservoirs, power houses, transmission lines, and other physical structures of a hydro-power project. However, where such structures will affect the navigable capacity of any navigable waters of the United States (as defined in 16 U.S.C. 796), the plans for the dam or other physical structures affecting navigation must be approved by the Chief of Engineers and the Secretary of the Army. In such cases, the interests of navigation should normally be protected by a recommendation to the DOE for the inclusion of appropriate provisions in the DOE license rather than the issuance of separate Department of the Army permit under 33 U.S.C. 401 *et seq.* As to any other activities in navigable waters not constituting construction, operation and maintenance of physical structures licensed by the DOE under the Federal Power Act of 1920, as amended, the provisions of 33 U.S.C. 401 *et seq.* remain fully applicable. In all cases involving the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposal in

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ocean waters, Section 404 or Section 103 will be applicable.

(g) The National Historic Preservation Act of 1966 (16 U.S.C. 470) created the Advisory Council on Historic Preservation to advise the President and Congress on matters involving historic preservation. In performing its function the Council is authorized to review and comment upon activities licensed by the Federal Government which will have an effect upon properties listed in the National Register of Historic Places, or eligible for such listing. The concern of Congress for the preservation of significant historical sites is also expressed in the Preservation of Historical and Archeological Data Act of 1974 (16 U.S.C. 469 *et seq.*), which amends the Act of June 27, 1960. By this Act, whenever a Federal construction project or Federally licensed project, activity or program alters any terrain such that significant historical or archeological data is threatened, the Secretary of the Interior may take action necessary to recover and preserve the data prior to the commencement of the project.

(h) The Interstate Land Sales Full Disclosure Act (15 U.S.C. 1701 *et seq.*) prohibits any developer or agent from selling or leasing any lot in a subdivision (as defined in 15 U.S.C. 1701(3)) unless the purchaser is furnished in advance a printed property report containing information which the Secretary of Housing and Urban Development may, by rules or regulations, require for the protection of purchasers. In the event the lot in question is part of a project that requires Department of the Army authorization, the Property Report is required by Housing and Urban Development regulation to state whether or not a permit for the development has been applied for, issued, or denied by the Corps of Engineers under Section 10 or Section 404. The Property Report is also required to state whether or not any enforcement action has been taken as a consequence of non-application for or denial of such permit.

(i) The Endangered Species Act (16 U.S.C. 1531 *et seq.*) declares the intention of the Congress to conserve threatened and endangered species and the ecosystems on which those species depend. The Act requires that Federal agencies in consultation with the US Fish and Wildlife Service and the National Marine Fisheries Service use their authorities in furtherance of its purposes by carrying out programs for the conservation of endangered or threatened species, and by taking such action necessary to insure that any

action authorized, funded or carried out by the Agency is not likely to jeopardize the continued existence of such endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary of the Interior or Commerce, as appropriate, to be critical. (See also 50 CFR Parts 17 and 402.)

(j) The Deepwater Port Act of 1974 (33 U.S.C. 1501 *et seq.*) prohibits the ownership, construction, or operation of a deepwater port beyond the territorial seas without a license issued by the Secretary of Transportation. The Secretary of Transportation may issue such a license to an applicant if he determines, among other things, that the construction and operation of the deepwater port is in the national interest and consistent with national security and other national policy goals and objectives. An application for a deepwater port license constitutes an application for all Federal authorizations required for the ownership, construction, and operation of a deepwater port, including applications for Section 10, Section 404 and Section 103 permits which may also be required pursuant to the authorities listed in § 320.2 and the policies specified in § 320.4 of this Part.

(k) The Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 *et seq.*) expresses the intent of Congress that marine mammals be protected and encouraged to develop in order to maintain the health and stability of the marine ecosystem. The Act imposes a perpetual moratorium on the harassment, hunting, capturing, or killing of marine mammals and on the importation of marine mammals and marine mammal products without a permit from either the Secretary of the Interior or the Secretary of Commerce, depending upon the species of marine mammal involved. Such permits may be issued only for purposes of scientific research and for public display if the purpose is consistent with the policies of the Act. The appropriate Secretary is also empowered in certain restricted circumstances to waive the requirements of the Act.

(l) Section 7(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1278 *et seq.*) provides that no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration.

(m) The Ocean Thermal Energy Conversion Act of 1980, (42 U.S.C. Section 9101 *et seq.*) establishes a licensing regime administered by the Administrator of NOAA for the ownership, construction, location and operation of ocean thermal energy conversion (OTEC) facilities and plantships. An application for an OTEC license filed with the Administrator constitutes an application for all Federal authorizations required for ownership, construction, location and operation of an OTEC facility or plantship, except for certain activities within the jurisdiction of the Coast Guard. This includes applications for Section 10, Section 404 and other Department of Army authorizations which may be required.

(n) Section 402 of the Clean Water Act authorizes EPA to issue permits under procedures established to implement the National Pollutant Discharge Elimination System (NPDES) program. The administration of this program can be and, in many cases, has been delegated to individual states. Section 402(b)(6) states that no NPDES permit will be issued if the Chief of Engineers, acting for the Secretary of the Army and after consulting with the US Coast Guard, determines that navigation and anchorage in any navigable water will be substantially impaired as a result of a proposed activity.

§ 320.4 General policies for evaluating permit applications.

The following policies shall be applicable to the review of all applications for Department of the Army permits. Additional policies specifically applicable to certain types of activities are identified in Parts 321-324.

(a) *Public interest review.* (1) The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be

considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people. No permit will be granted unless its issuance is found to be in the public interest.

(2) The following general criteria will be considered in the evaluation of every application:

(i) The relative extent of the public and private need for the proposed structure or work;

(ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and

(iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work may have on the public and private uses to which the area is suited.

(b) *Effect on wetlands.* (1) Some wetlands are vital areas that constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest. For projects to be undertaken by Federal, state, or local agencies, additional guidance on wetlands considerations is stated in Executive Order 11990, dated 24 May 1977.

(2) Wetlands considered to perform functions important to the public interest include:

(i) Wetlands which serve significant natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic or land species;

(ii) Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges;

(iii) Wetlands the destruction or alteration of which would affect detrimentally natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics;

(iv) Wetlands which are significant in shielding other areas from wave action, erosion, or storm damage. Such wetlands are often associated with barrier beaches, islands, reefs and bars;

(v) Wetlands which serve as valuable storage areas for storm and flood waters;

(vi) Wetlands which are prime natural recharge areas. Prime recharge areas are locations where surface and ground water are directly interconnected; and

(vii) Wetlands which through natural water filtration processes serve significant and necessary water purification functions.

(3) Although a particular alteration of wetlands may constitute a minor change, the cumulative effect of numerous such piecemeal changes often results in a major impairment of the wetland resources. Thus, the particular wetland site for which an application is made will be evaluated with the recognition that it may be part of a complete and interrelated wetland area. In addition, the District Engineer may undertake reviews of particular wetland areas in consultation with the appropriate Regional Director of the Fish and Wildlife Service, the Regional Director of the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration, the Regional Administrator of the Environmental Protection Agency, the local representative of the Soil Conservation Service of the Department of Agriculture, and the head of the appropriate state agency to assess the cumulative effect of activities in such areas.

(4) No permit will be granted which involves the alteration of wetlands identified as important by paragraph (b) (2) or of this section because of provisions of paragraph (b)(3), of this section, unless the district engineer concludes, on the basis of the analysis required in paragraph (a), of this section, that the benefits of the proposed alteration outweigh the damage to the wetlands resource. In evaluating whether a particular alteration is necessary, the district engineer shall consider whether the proposed activity is dependent on being located in, or in close proximity to the aquatic environment and whether practicable alternative sites are available. The applicant must provide sufficient information on the need to locate the proposed activity in the wetland and the availability of practicable alternative sites.

(5) In addition to the policies expressed in this subpart, the Congressional policy expressed in the Estuary Protection Act, Pub. L. 90-454, and state regulatory laws or programs for classification and protection of wetlands will be given great weight.

(c) *Fish and wildlife.* In accordance with the Fish and Wildlife Coordination Act (paragraph 820.3(a) of this part) Corps of Engineers officials will consult

with the Regional Director, U.S. Fish and Wildlife Service, the Regional Director, National Marine Fisheries Service, and the head of the agency responsible for fish and wildlife for the state in which work is to be performed, with a view to the conservation of wildlife resources by prevention of their direct and indirect loss and damage due to the activity proposed in a permit application. They will give great weight to these views on fish and wildlife considerations in evaluating the application.

(d) *Water quality.* Applications for permits for activities which may adversely affect the quality of waters of the United States will be evaluated for compliance with applicable effluent limitations and, water quality standards, during the construction, and subsequent operation of the proposed activity. Certification of compliance with applicable effluent limitations and water quality standards required under provisions of Section 401 of the Clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration.

(e) *Historic, cultural, scenic, and recreational values.* Applications for permits covered by this regulation may involve areas which possess recognized historic, cultural, scenic, conservation, recreational or similar values. Full evaluation of the general public interest requires that due consideration be given to the effect which the proposed structure or activity may have on values such as those associated with wild and scenic rivers, registered historic places and natural landmarks, National Rivers, National Wilderness Areas, National Seashores, National Recreation Areas, National Lakeshores, National Parks, National Monuments, estuarine and marine sanctuaries, archeological resources, including Indian religious or cultural sites, and such other areas as may be established under Federal or state law for similar and related purposes. Recognition of those values is often reflected by state, regional, or local land use classifications, or by similar Federal controls or policies. Action on permit applications should, insofar as possible, be consistent with and avoid significant adverse effects on the values or purposes for which those classifications, controls, or policies were established.

(f) *Effect on limits of the territorial sea.* Structures or work affecting coastal waters may modify the coast line or base line from which the territorial sea

is measured for purposes of the Submerged Lands Act and international law. Generally, the coast line or base line is the line of ordinary low water on the mainland; however, there are exceptions where there are islands or lowtide elevations offshore (the Submerged Lands Act, 43 U.S.C. 1301(a) and United States v. California, 361 U.S.C. 139 (1966), 382 U.S. 448 (1966)). Applications for structures or work affecting coastal waters will therefore be reviewed specifically to determine whether the coast line or base line might be altered. If it is determined that such a change might occur, coordination with the Attorney General and the Solicitor of the Department of the Interior is required before final action is taken. The district engineer will submit a description of the proposed work and a copy of the plans to the Solicitor, Department of the Interior, Washington, D.C. 20040, and request his comments concerning the effects of the proposed work on the outer continental rights of the United States. These comments will be included in the administrative record of the application. After completion of standard processing procedures, the record will be forwarded to the Chief of Engineers. The decision on the application will be made by the Secretary of the Army after coordination with the Attorney General.

(g) *Interference with adjacent properties or water resource projects.* Authorization of work or structures by the Department of the Army does not convey a property right, nor authorize any injury to property or invasion of other rights.

(1) Because a landowner has the general right to protect his property from erosion, applications to erect protective structures will usually receive favorable consideration. However, if the protective structure may cause damage to the property of others, adversely affect public health and safety, adversely impact floodplain or wetland values, or otherwise appear not to be in the public interest, the district engineer will so advise the applicant and inform him of possible alternative methods of protecting his property. Such advice will be given in terms of general guidance only so as not to compete with private engineering firms nor require undue use of government resources.

(2) A riparian landowner's general right of access to navigable waters of the United States is subject to the similar rights of access held by nearby riparian landowners and to the general public's right of navigation on the water surface. In the case of proposals which create undue interference with access

to, or use of, navigable waters, the authorization will generally be denied.

(3) Where it is found that the work for which a permit is desired is in navigable waters of the United States (see 33 CFR Part 329) and may interfere with an authorized Federal project, the applicant should be apprised in writing of the fact and of the possibility that a Federal project which may be constructed in the vicinity of the proposed work might necessitate its removal or reconstruction. The applicant should also be informed that the United States will in no case be liable for any damage or injury to the structures or work authorized by Sections 9 or 10 of the River and Harbor Act of 1899 or by Section 404 of the Clean Water Act which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation, or for other purposes, and no claims or right to compensation will accrue from any such damage.

(4) Proposed activities which are in the area of a Federal project which exists or is under construction will be evaluated to insure that they are compatible with the purpose of the project.

(h) *Activities affecting coastal zones.* Applications for Department of the Army permits for activities affecting the coastal zones of those states having a coastal zone management program approved by the Secretary of Commerce will be evaluated with respect to compliance with that program. No permit will be issued to a non-Federal applicant until certification has been provided that the proposed activity complies with the coastal zone management program and the appropriate state agency has concurred with the certification or has waived its right to do so. However, a permit may be issued to a non-Federal applicant if the Secretary of Commerce, on his own initiative or upon appeal by the applicant, finds that the proposed activity is consistent with the objectives of the Coastal Zone Management Act of 1972 or is otherwise necessary in the interests of national security. Federal agency and Indian tribe applicants for Department of the Army permits are responsible for complying with the Coastal Zone Management Act's directives for assuring that their activities directly affecting the coastal zone are consistent, to the maximum extent practicable, with approved State coastal zone management programs.

(i) *Activities in marine sanctuaries.* Applications for Department of the Army authorization for activities in a

marine sanctuary established by the Secretary of Commerce under authority of Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, will be evaluated for impact on the marine sanctuary. No permit will be issued until the applicant provides a certification from the Secretary of Commerce that the proposed activity is consistent with the purposes of Title III of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, and can be carried out within the regulations promulgated by the Secretary of Commerce to control activities within the marine sanctuary.

(j) *Other Federal, state, or local requirements.* (1) Processing of an application for a Department of the Army permit normally will proceed concurrently with the processing of other required Federal, state, and/or local authorizations or certifications. Final action on the Department of the Army permit will normally not be delayed pending action by another Federal, state or local agency (see 33 CFR 325.2(d)(4)). However, where the required Federal, state and/or local certification and/or authorization has been denied for activities which also require a Department of Army permit before final action has been taken on the Army permit, the Army permit will be denied without prejudice to the right of the applicant to reinstate processing of the application if subsequent approval is received from the appropriate Federal, state and/or local agency. Even if official certification and/or authorization is not required by state or Federal law, but a state, regional, or local agency having jurisdiction or interest over the particular activity comments on the application, due consideration shall be given to those official views as a reflection of local factors of the public interest.

(2) Where officially adopted Federal, state, regional, local or tribal land-use classifications, determinations, or policies are applicable to the land or water areas under consideration, they shall be presumed to reflect local factors of the public interest and shall be considered in addition to the other national factors of the public interest identified in § 320.4(a) of this part.

(3) A proposed activity may result in conflicting comments from several agencies within the same state. Where a state has not designated a single responsible coordinating agency, district engineers will ask the Governor to express his views or to designate one

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state agency to represent the official state position in the particular case.

(4) In the absence of overriding national factors of the public interest that may be revealed during the evaluation of the permit application, a permit will generally be issued following receipt of a favorable state determination provided the concerns, policies, goals, and requirements as expressed in 33 CFR Part 320-324, and the applicable statutes have been followed and considered: e.g., the National Environmental Policy Act; the Fish and Wildlife Coordination Act; the Historical and Archeological Preservation Act; the National Historic Preservation Act; the Endangered Species Act; the Coastal Zone Management Act; the Marine Protection, Research and Sanctuaries Act of 1972, as amended; the Clean Water Act, the Archeological Resources Act, and the American Indian Religious Freedom Act. Similarly, a permit will generally be issued for Federal and federally-authorized activities; another Federal agency's determination to proceed is entitled to substantial consideration in the Corps' public interest review.

(5) The district engineers are encouraged to develop joint procedures with those states and other Federal agencies with ongoing permit programs for activities also regulated by the Department of the Army. In such cases, applications for Department of the Army permits may be processed jointly with the state or other Federal applications to an independent conclusion and decision by the district engineer and appropriate Federal or state agency. (See 33 CFR 325.2(e).)

(6) The district engineer shall develop operating procedures for establishing official communications with Indian Tribes within the district. The procedures shall provide for appointment of a tribal representative who will receive all pertinent public notices, and respond to such notices with the official tribal position on the proposed activity. This procedure shall apply only to those Tribes which accept this option. Any adopted operating procedures shall be distributed by public notice to inform the Tribes of the option.

(k) *Safety of impoundment structures.* To insure that all impoundment structures are designed for safety, non-Federal applicants may be required to demonstrate that the structure complies with established state dam safety criteria or has been designed by qualified persons and, in appropriate cases, that the design has been independently reviewed (and modified

as the review would indicate) by similarly qualified persons.

(l) *Floodplain management.*

(1) Floodplains possess significant natural values and carry out numerous functions important to the public interest. These include:

(i) Water resources values (natural moderation of floods, water quality maintenance, and groundwater recharge);

(ii) Living resource value (fish, wildlife, and plant resources);

(iii) Cultural resource values (open space, natural beauty, scientific study, outdoor education, and recreation); and

(iv) Cultivated resource values (agriculture, aquaculture, and forestry).

(2) Although a particular alteration to a floodplain may constitute a minor change, the cumulative impact of such changes may result in a significant degradation of floodplain values and functions and in increased potential for harm to upstream and downstream activities. In accordance with the requirements of Executive Order 11988, district engineers, as part of their public interest review, should avoid to the extent practicable long and short term significant adverse impacts associated with the occupancy and modification of floodplains as well as the direct and indirect support of floodplain development whenever there is a practicable alternative. For those activities, which in the public interest, must occur in or impact upon floodplains, the district engineer shall ensure to the maximum extent practicable that the impacts of potential flooding on human health, safety and welfare are minimized, the risks of flood losses are minimized, and, whenever practicable the natural and beneficial values served by floodplains and restored and preserved.

(3) In accordance with Executive Order 11988, the district engineer should avoid authorizing floodplain developments whenever practicable alternatives exist outside the floodplain. If there are no practicable alternatives, the district engineer may consider, as a means of mitigation, alternatives within the floodplain which will lessen any significant adverse impact to the floodplain.

(m) *Water supply and conservation.* Water is an essential resource, basic to human survival, economic growth, and the natural environment. Water conservation requires the efficient use of water resources in all actions which involve the significant use of water or that significantly affect the availability of water for alternative uses. Full consideration will be given to water

conservation as a factor in the public interest review including opportunities to reduce demand and improve efficiency in order to minimize new supply requirements. This policy is subject to Congressional policy stated in Sec. 101(g) of the Clean Water Act that the authority of states to allocate water quantities shall not be superseded, abrogated, or otherwise impaired.

(n) *Energy conservation and development.* Energy conservation and development is a major national objective. District engineers will give great weight to energy needs as a factor in the public interest review and will give high priority to permit actions involving energy projects.

(o) *Navigation.* (1) Section 11 of the River and Harbor Act of 1899 authorized establishment of harbor lines shoreward of which no individual permits were required. Because harbor lines were established on the basis of navigation impacts only, the Corps of Engineers published a regulation on May 27, 1970 (33 CFR 209.150) which declared that permits would thereafter be required for activities shoreward of the harbor lines. Review of applications would be based on a full public interest evaluation and harbor lines would serve as guidance for assessing navigation impacts. Accordingly, activities constructed shoreward of harbor lines prior to May 27, 1970 do not require specific authorization.

(2) The policy of considering harbor lines as guidance for assessing impacts on navigation continues.

(3) Navigation in all navigable waters of the United States continues to be a primary concern of the Federal government and will be given great weight in the public interest balancing process.

(4) District engineers should protect navigational and anchorage interests in connection with the NPDES program by recommending to EPA or to the state, if the program has been delegated, that a permit be denied unless appropriate conditions can be included to avoid any substantial impairment of navigation and anchorage.

PART 321—PERMITS FOR DAMS AND DIKES IN NAVIGABLE WATERS OF THE UNITED STATES

Sec.

321.1 General.

321.2 Definitions.

321.3 Special policies and procedures.

Authority: 33 U.S.C. 491.

§ 321.1 General.

This regulation prescribes, in addition to the general policies of 33 CFR Part 320

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and procedures of 33 CFR Part 325, those special policies, practices, and procedures to be followed by the Corps of Engineers in connection with the review of applications for Department of Army permits to authorize the construction of a dike or dam in a navigable water of the United States pursuant to Section 9 of the River and Harbor Act of 1899 (33 U.S.C. 401). See 33 CFR 320.2(a). Dams and dikes in navigable waters of the United States also require Department of the Army permits under Section 404 of the Clean Water Act, as amended (33 U.S.C. 1344). Applicants for Department of the Army permits under this Part should also refer to 33 CFR Part 323 to satisfy the requirements of Section 404.

§ 321.2 Definitions.

For the purpose of this regulation, the following terms are defined:

(a) The term "navigable waters of the United States" means those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. See 33 CFR Part 329 for a more complete definition of this term.

(b) The term "dike or dam" means an impoundment structure that completely spans a navigable water of the United States and that may obstruct interstate waterborne commerce. The term does not include a weir which is regulated pursuant to Section 10 of the River and Harbor Act of 1899 (see 33 CFR Part 322).

§ 321.3 Special policies and procedures.

The following additional special policies and procedures shall be applicable to the evaluation of permit applications under this regulation:

(a) The Secretary of the Army will decide whether Department of the Army authorization for a dam or dike in a navigable water of the United States will be issued, since this authority has not been delegated to the Chief of Engineers. The conditions to be imposed in any instrument of authorization will be recommended by the district engineer when forwarding the report to the Secretary of the Army, through the Chief of Engineers.

(b) Processing a Department of the Army application under Section 9 will not be completed until the approval of the United States Congress has been obtained if the navigable water of the United States is an interstate waterbody, or until the approval of the appropriate state legislature has been obtained if the navigable water of the

United States is solely within the boundaries of one state. The district engineer, upon receipt of such an application, will notify the applicant that the consent of Congress or the state legislature must be obtained before a permit can be issued.

PART 322—PERMITS FOR STRUCTURES OR WORK IN OR AFFECTING NAVIGABLE WATERS OF THE UNITED STATES

Sec.

- 322.1 General.
- 322.2 Definitions.
- 322.3 Activities requiring permits.
- 322.4 Reserved.
- 322.5 Special policies.

Authority: 33 U.S.C. 403.

§ 322.1 General.

This regulation prescribes, in addition to the general policies of 33 CFR Part 320 and procedures of 33 CFR Part 325 those special policies, practices and procedures to be followed by the Corps of Engineers in connection with the review of applications for Department of Army permits to authorize certain structures or work in or affecting navigable waters of the United States pursuant to Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403) (hereinafter referred to as Section 10). See 33 CFR 320.2(b). Certain structures or work in or affecting navigable waters of the United States are also regulated under other authorities of the Department of the Army. These include discharges of dredged or fill material into waters of the United States, including the territorial seas, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344; see 33 CFR Part 323) and the transportation of dredged material by vessel for purposes of dumping in ocean waters, including the territorial seas, pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. 1413; see 33 CFR Part 324). A Department of the Army permit will also be required under these additional authorities if they are applicable to structures or work in or affecting navigable waters of the United States. Applicants for Department of the Army permits under this part should refer to the other cited authorities and implementing regulations for these additional permit requirements to determine whether they also are applicable to their proposed activities.

§ 322.2 Definitions.

For the purpose of this regulation, the following terms are defined:

(a) The term "navigable waters of the United States" means those waters of

the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. See 33 CFR Part 329 for a more complete definition of this term.

(b) The term "structure" shall include, without limitation, any pier, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other obstacle or obstruction.

(c) The term "work" shall include, without limitation, any dredging or disposal of dredged material, excavation, filling, or other modification of a navigable water of the United States.

(d) The term "letter of permission" means a type of individual permit issued in accordance with the abbreviated procedures of 33 CFR 325.2(e).

(e) The term "individual permit" means a Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of this regulation and 33 CFR 325 and a determination that the proposed structure or work is in the public interest pursuant to 33 CFR 320.

(f) The term "general permit" means a Department of the Army authorization that is issued on a nationwide ("nationwide permits") or regional ("regional permits") basis for a category or categories of activities when:

(1) those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or

(2) the general permit would result in avoiding unnecessary duplication of the regulatory control exercised by another Federal, state, or local agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal. (See 33 CFR 325.2(e) and 33 CFR Part 330).

§ 322.3 Activities requiring permits.

(a) *General.* Department of the Army permits are required under Section 10 for structures and/or work in or affecting navigable waters of the United States except as otherwise provided in these regulations. Activities that were commenced or completed shoreward of established Federal harbor lines before May 27, 1970 (see 33 CFR 320.4(o)) also do not require Section 10 permits; however, if those activities involve the discharge of dredged or fill material into

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waters of the United States after October 18, 1972, a Section 404 permit is required (see 33 CFR Part 323).

(1) Structures or work are in the navigable waters of the United States if they are within limits defined in 33 CFR Part 329. Structures or work outside these limits are subject to the provisions of law cited in paragraph (a) of this section, if these structures or work affect the course, location, or condition of the waterbody in such a manner as to impact on the navigable capacity of the waterbody. For purposes of a Section 10 permit, a tunnel or other structure or work under or over a navigable water of the United States is considered to have an impact on the navigable capacity of the waterbody.

(2) Pursuant to Section 154 of the Water Resource Development Act of 1976 (Pub. L. 94-587), Department of the Army permits will not be required under Section 10 to construct wharves and piers in any waterbody, located entirely within one State, that is a navigable water of the United States solely on the basis of its historical use to transport interstate commerce. Section 154 applies only to the construction of a single pier or wharf and not to marinas. Furthermore, Section 154 is not applicable to any pier or wharf that would cause an unacceptable impact on navigation.

(b) *Outer continental shelf.* Department of the Army permits will also be required for the construction of artificial islands, installations, and other devices on the outer continental shelf pursuant to Section 4(e) of the Outer Continental Shelf Lands Act as amended (see 33 CFR 320.2(b)).

(c) *Activities of Federal agencies.* (1) Except as specifically provided in this subparagraph, activities of the type described in paragraphs (a) and (b), of this section, done by or on behalf of any Federal agency, other than any work or structures in or affecting navigable waters of the United States that are part of the civil works activities of the Corps of Engineers, are subject to the authorization procedures of these regulations. Agreement for construction or engineering services performed for other agencies by the Corps of Engineers does not constitute authorization under this regulation. Division and district engineers will therefore advise Federal agencies accordingly, and cooperate to the fullest extent in expediting the processing of their applications.

(2) Congress has delegated to the Secretary of the Army and the Chief of Engineers in Section 10 the duty to authorize or prohibit certain work or structures in navigable waters of the United States. The general legislation by

which Federal agencies are empowered to act generally is not considered to be sufficient authorization by Congress to satisfy the purposes of Section 10. If an agency asserts that it has Congressional authorization meeting the test of Section 10 or would otherwise be exempt from the provisions of Section 10, the legislative history and/or provisions of the Act should clearly demonstrate that Congress was approving the exact location and plans from which Congress could have considered the effect on navigable waters of the United States or that Congress intended to exempt that agency from the requirements of Section 10. Very often such legislation reserves final approval of plans or construction for the Chief of Engineers. In such cases evaluation and authorization under this regulation are limited by the intent of the statutory language involved.

(3) The policy provisions set out in 33 CFR 320.4(j) relating to state or local certifications and/or authorizations, do not apply to work or structures undertaken by Federal agencies, except where compliance with non-Federal authorization is required by Federal law or Executive policy, e.g., Section 818 and Section 401 of the Clean Water Act.

§ 322.4 (Reserved)

§ 322.5 Special policies.

The Secretary of the Army has delegated to the Chief of Engineers the authority to issue or deny Section 10 permits. The following additional special policies and procedures shall also be applicable to the evaluation of permit applications under this regulation.

(a) *General.* Department of the Army permits are required for structures or work in or affecting navigable waters of the United States. However, certain structures or work specified in 33 CFR Part 330 are permitted by that regulation. If a structure or work is not permitted by that regulation, an individual or regional Section 10 permit will be required.

(b) [Reserved]

(c) *Non-Federal dredging for navigation.* (1) The benefits which an authorized Federal navigation project are intended to produce will often require similar and related operations by non-Federal agencies (e.g., dredging access channels to docks and berthing facilities or deepening such channels to correspond to the Federal project depth). These non-Federal activities will be considered by Corps of Engineers officials in planning the construction and maintenance of Federal navigation projects and, to the maximum practical extent, will be coordinated with

interested Federal, state, regional and local agencies and the general public simultaneously with the associated Federal projects. Non-Federal activities which are not so coordinated will be individually evaluated in accordance with these regulations. In evaluating the public interest in connection with applications for permits for such coordinated operations, equal treatment will, therefore, be accorded to the fullest extent possible to both Federal and non-Federal operations. Furthermore, permits for non-Federal dredging operations will normally contain conditions requiring the permittee to comply with the same practices or requirements utilized in connection with related Federal dredging operations with respect to such matters as turbidity, water quality, containment of material, nature and location of approved spoil disposal areas (non-Federal use of Federal contained disposal areas will be in accordance with laws authorizing such areas and regulations governing their use), extent and period of dredging, and other factors relating to protection of environmental and ecological values.

(2) A permit for the dredging of a channel, slip, or other such project for navigation may also authorize the periodic maintenance dredging of the project. Authorization procedures and limitations for maintenance dredging shall be as prescribed in 33 CFR 325.6(e). The permit will require the permittee to give advance notice to the district engineer each time maintenance dredging is to be performed. Where the maintenance dredging involves the discharge of dredged material into waters of the United States or the transportation of dredged material for the purpose of dumping in the ocean waters, the procedures in 33 CFR Parts 323 and 324 respectively shall also be followed.

(d) *Structures for small boats.* (1) As a matter of policy, in the absence of overriding public interest, favorable consideration will generally be given to applications from riparian owners for permits for piers, boat docks, moorings, platforms and similar structures for small boats. Particular attention will be given to the location and general design of such structures to prevent possible obstructions to navigation with respect to both the public's use of the waterway and the neighboring proprietors' access to the waterway. Obstructions can result from both the existence of the structure, particularly in conjunction with other similar facilities in the immediate vicinity, and from its inability to withstand wave action or other forces which can be expected. District

engineers will inform applicants of the hazards involved and encourage safety in location, design and operation. Corps of Engineers officials will also encourage cooperative or group use facilities in lieu of individual proprietor use facilities.

(2) Floating structures for small recreational boats or other recreational purposes in lakes controlled by the Corps of Engineers under a resource manager are normally subject to permit authorities cited in § 322.3, above, when those waters are regarded as navigable waters of the United States. However, such structures will not be authorized under this regulation but will be regulated under applicable regulations of the Chief of Engineers published in 36 CFR 327.19 if the land surrounding those lakes is under complete Federal ownership. District engineers will delineate those portions of the navigable waters of the United States where this provision is applicable and post notices of this designation in the vicinity of the lake resource manager's office.

(e) *Aids to navigation.* The placing of fixed and floating aids to navigation in a navigable water of the United States is within the purview of Section 10 of the River and Harbor Act of 1899. Furthermore, these aids are of particular interest to the U.S. Coast Guard because of their control of marking, lighting and standardization of such navigation aids. A Section 10 nationwide permit has been issued for such aids provided they are approved by and installed in accordance with the requirements of the U.S. Coast Guard (33 CFR Part 330). Electrical service cables to such aids are not included in the nationwide permit (an individual or regional Section 10 permit will be required).

(f) *Outer continental shelf.* Artificial islands, installations, and other devices located on the outer continental shelf are subject to the standard permit procedures of this regulation. Where the islands, installations and other devices are to be constructed on lands which are under mineral lease from the Bureau of Land Management, Department of the Interior, that agency, in cooperation with other Federal agencies, fully evaluates the potential effect of the leasing program on the total environment. Accordingly, the decision whether to issue a permit on lands which are under mineral lease from the Department of the Interior will be limited to an evaluation of the impact of the proposed work on navigation and national security. The public notice will so identify the criteria.

(g) *Canals and other artificial waterways connected to navigable waters of the United States.* (1) A canal

or similar artificial waterway is subject to the regulatory authorities discussed in § 322.3, of this part, if it constitutes a navigable water of the United States, or if it is connected to navigable waters of the United States in a manner which affects their course, location, condition, or capacity or if at some point in its construction or operation it results in an effect on the course, location, condition, or capacity of navigable waters of the United States. In all cases the connection to navigable waters of the United States requires a permit. Where the canal itself constitutes a navigable water of the United States, evaluation of the permit application and further exercise of regulatory authority will be in accordance with the standard procedures of these regulations. For all other canals, the exercise of regulatory authority is restricted to those activities which affect the course, location, condition, or capacity of the navigable waters of the United States.

(2) The proponent of canal work should submit the application for a permit, including a proposed plan of the entire development, and the location and description of anticipated docks, piers and other similar structures which will be placed in the canal, to the district engineer before commencing any form of work. If construction of the canal in such a manner as to result in an effect on the course, location, condition, or capacity of the navigable waters of the United States has already taken place without a permit, the district engineer will proceed in accordance with 33 CFR Part 328. Where the construction of the canal would result in an effect on the course, location, condition, or capacity of navigable waters of the United States, an application for a Section 10 permit should be made at the earliest stage of planning. Where the district engineer becomes aware that the canal construction has already begun, he will advise the proponent in writing of the need for a permit to the extent that the construction will result in an effect on the course, location, condition, or capacity of navigable waters of the United States. He will also ask the proponent if he intends to undertake such work and will request the immediate submission of the plans and permit application if it is so intended. The district engineer will also advise the proponent that any work is done at the risk that, if a permit is required, it may not be issued, and that the existence of partially completed excavation work will not be allowed to weigh favorably in evaluation of the permit application.

(h) *Facilities at the borders of the United States.* (1) The construction,

operation, maintenance, or connection of facilities at the borders of the United States are subject to Executive control and must be authorized by the President, Secretary of State, or other delegated official.

(2) Applications for permits for the construction, operation, maintenance, or connection at the borders of the United States of facilities for the transmission of electric energy between the United States and a foreign country, or for the exportation or importation of natural gas to or from a foreign country, must be made to the Secretary of Energy. (Executive Order 10485, September 3, 1953, 16 U.S.C. 824(a)(e), 15 U.S.C. 717(b), as amended by Executive Order 12038, February 3, 1978, and 18 CFR Parts 32 and 153).

(3) Applications for the landing or operation of submarine cables must be made to the Federal Communications Commission. (Executive Order 10530, May 10, 1954, 47 U.S.C. 34 to 39, and 47 CFR 1.766).

(4) The Secretary of State is to receive applications for permits for the construction, connection, operation, or maintenance, at the borders of the United States, of pipelines, conveyor belts, and similar facilities for the exportation or importation of petroleum products, coals, minerals, or other products to or from a foreign country; facilities for the exportation or importation of water or sewage to or from a foreign country; and monorails, aerial cable cars, aerial tramways and similar facilities for the transportation of persons or things, or both, to or from a foreign country. (Executive Order 11423, August 16, 1968).

(5) A Department of the Army permit under Section 10 of the River and Harbor Act of 1899 is also required for all of the above facilities which affect the navigable waters of the United States, but in each case in which a permit has been issued as provided above, the district engineer, in evaluating the general public interest, may consider the basic existence and operation of the facility to have been primarily examined and permitted as provided by the Executive Orders. Furthermore, in those cases where the construction, maintenance, or operation at the above facilities involves the discharge of dredged or fill material in waters of the United States or the transportation of dredged material for the purpose of dumping it into ocean waters, appropriate Department of the Army authorizations under Section 404 of the Clean Water Act or under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as

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amended, are also required (see 33 CFR Parts 323, 324).

(i) *Power transmission lines.* (1) Permits under Section 10 of the River and Harbor Act of 1899 are required for power transmission lines crossing navigable waters of the United States unless those lines are part of a water power project subject to the regulatory authorities of the Department of Energy under the Federal Power Act of 1920. If an application is received for a permit for lines which are part of such a water project, the applicant will be instructed to permit the application to the Department of Energy. If the lines are not part of such a water power project, the application will be processed in accordance with the procedures of these regulations.

(2) The following minimum clearances are required for aerial electric power transmission lines crossing navigable waters of the United States. These clearances are related to the clearances over the navigable channel provided by existing fixed bridges, or the clearances which would be required by the U.S. Coast Guard for new fixed bridges, in the vicinity of the proposed power line crossing. The clearances are based on the low point of the line under conditions which produce the greatest sag, taking into consideration temperature, load, wind, length of span, and type of supports as outlined in the National Electrical Safety Code.

| Nominal system voltage, kV | Minimum additional clearance (feet) above clearance required for bridges |
|----------------------------|--|
| 15 and below | 20 |
| 38 | 22 |
| 61 | 24 |
| 230 | 26 |
| 350 | 30 |
| 500 | 35 |
| 700 | 42 |
| 750 to 765 | 45 |

(3) Clearances for communication lines, stream gaging cables, ferry cables, and other aerial crossings are usually required to be a minimum of ten feet above clearances required for bridges. Greater clearances will be required if the public interest so indicates.

(j) *Seaplane operations.* (1) Structures in navigable waters of the United States associated with seaplane operations require Department of the Army permits, but close coordination with the Federal Aviation Administration (FAA), Department of Transportation, is required on such applications.

(2) The FAA must be notified by an applicant whenever he proposes to establish or operate a seaplane base. The FAA will study the proposal and advise the applicant, district engineer, and other interested parties as to the effects of the proposal on the use of airspace. The district engineer will therefore refer any objections regarding the effect of the proposal on the use of airspace to the FAA, and give due consideration to its recommendations when evaluating the general public interest.

(3) If the seaplane base would serve air carriers licensed by the Civil Aeronautics Board, the applicant must receive an airport operating certificate from the FAA. That certificate reflects a determination and conditions relating to the installation, operation, and maintenance of adequate air navigation facilities and safety equipment. Accordingly, the district engineer may, in evaluating the general public interest, consider such matters to have been primarily evaluated by the FAA.

(4) For regulations pertaining to seaplane landings at Corps of Engineers projects, see § 327.4 of this part.

(k) *Foreign trade zones.* The Foreign Trade Zones Act (48 Stat. 999-1008, 19 U.S.C. 81a to 81u, as amended) authorizes the establishment of foreign-trade zones in or adjacent to United States ports of entry under terms of a grant and regulations prescribed by the Foreign-Trade Zones Board. Pertinent regulations are published at Title 15 of the Code of Federal Regulations, Part 400. The Secretary of the Army is a member of the Board, and construction of a zone is under the supervision of the district engineer. Laws governing the navigable waters of the United States remain applicable to foreign-trade zones, including the general requirements of these regulations. Evaluation by a district engineer of a permit application may give recognition to the consideration by the Board of the general economic effects of the zone on local and foreign commerce, general location of wharves and facilities, and other factors pertinent to construction, operation, and maintenance of the zone.

PART 323—PERMITS FOR DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES

Sec.

- 323.1 General.
- 323.2 Definitions.
- 323.3 Discharges requiring permits.
- 323.4 Discharges not requiring permits.
- 323.5 Program transfer to States.
- 323.6 Special policies and procedures.

Authority: 33 U.S.C. 1344

§ 323.1 General.

This regulation prescribes, in addition to the general policies of 33 CFR Part 320 and procedures of 33 CFR Part 325, those special policies, practices, and procedures to be followed by the Corps of Engineers in connection with the review of applications for Department of the Army permits to authorize the discharge of dredged or fill material into waters of the United States pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) (hereinafter referred to as Section 404). See 38 CFR 320.2(g). Certain discharges of dredged or fill material into waters of the United States are also regulated under other authorities of the Department of the Army. These include dams and dikes in navigable waters of the United States pursuant to Section 9 of the River and Harbor Act of 1899 (33 U.S.C. 401; see 33 CFR Part 321) and certain structures or work in or affecting navigable waters of the United States pursuant to Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403; see 33 CFR Part 322). A Department of the Army permit will also be required under these additional authorities if they are applicable to activities involving discharges of dredged or fill material into waters of the United States. Applicants for Department of the Army permits under this part should refer to the other cited authorities and implementing regulations for these additional permit requirements to determine whether they also are applicable to their proposed activities.

§ 323.2 Definitions.

For the purpose of this regulation, the following terms are defined:

(a) The term "waters of the United States" means:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect

The terminology used by the CWA is "navigable waters" which is defined in Section 802(7) of the Act as "waters of the United States including the territorial seas." For purposes of clarity, and to avoid confusion with other Corps of Engineers regulatory programs, the term "waters of the United States" is used throughout this regulation.

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interstate or foreign commerce including any such waters:

- (i) Which are or could be used by interstate or foreign travels for recreational or other purposes; or
- (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
- (iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under this definition.

(5) Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;

(6) The territorial sea;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

(b) The term "navigable waters of the United States" means those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. (See 33 CFR Part 329 for a more complete definition of this term.)

(c) The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

(d) The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."

(e) The term "lake" means a standing body of open water that occurs in a natural depression fed by one or more streams from which a stream may flow, that occurs due to the widening or natural blockage or cutoff of a river or stream, or that occurs in an isolated natural depression that is not a part of a surface river or stream. The term also includes a standing body of open water created by artificially blocking or restricting the flow of a river, stream, or tidal area. As used in this regulation, the term does not include artificial lakes or

ponds created by excavating and/or diking dry land to collect and retain water for such purposes as stock watering, irrigation, settling basins, cooling, or rice growing.

(f) The term "ordinary high water mark" means that the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.

(g) The term "high tide line" is the line used in Sec. 404 determinations and means a line or mark left upon tide flats, beaches, or along shore objects that indicates the intersection of the land with the water's surface at the maximum height reached by a rising tide. The mark may be determined by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The term includes spring high tides and other high tides that occur with periodic frequency, but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(h) The term "headwaters" means the point on a non-tidal stream above which the average annual flow is less than five cubic feet per second.² The District engineer may estimate this point from available data by using the mean annual area precipitation, area drainage basin maps, and the average runoff coefficient, or by similar means.

(i) The term "dredged material" means material that is excavated or dredged from waters of the United States.

(j) The term "discharge of dredged material" means any addition of dredged material into the waters of the United States. The term includes, without limitation, the addition of dredged material to a specified discharge site located in waters of the United States and the runoff or overflow from a contained land or water disposal area. Discharges of pollutants into waters of the United States resulting from the onshore subsequent processing

²For streams that are dry during long periods of the year, district engineers may establish the headwater point as that point on the stream where a flow of five cubic feet per second is equalled or exceeded 50 percent of the time.

of dredged material that is extracted for any commercial use (other than fill) are not included within this term and are subject to Section 402 of the Clean Water Act even though the extraction and deposit of such material may require a permit from the Corps of Engineers. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products.

(k) The term "fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of an waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under Section 402 of the Clean Water Act.

(l) The term "discharge of fill material" means the addition of fill material into waters of the United States. The term generally includes, without limitation, the following activities: Placement of fill that is necessary to the construction of any structure in a water of the United States, the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products.

(m) The term "individual permit" means a Department of the Army authorization that is issued following a case-by-case evaluation of a specific project involving the proposed discharge(s) in accordance with the procedures of this regulation and 33 CFR Part 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR Part 320.

(n) The term "general permit" means a Department of the Army authorization that is issued on a nationwide ("nationwide permits") or regional ("regional permits") basis for a category or categories of activities when:

- (1) those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or
- (2) the general permit would result in avoiding unnecessary duplication of

regulatory control exercised by another Federal, state, or local agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal. (See 33 CFR 325.2(e) and 33 CFR Part 330).

§ 323.3 Discharges requiring permits.

(a) *General.* Except as provided in § 323.4 below, Department of the Army permits will be required for the discharge of dredged or fill material into waters of the United States. Certain discharges specified in 33 CFR Part 330 are permitted by that regulation ("nationwide permits"). Other discharges may be authorized by district or division engineers on a regional basis ("regional permits"). If a discharge of dredged or fill material is not exempted by § 323.4 of this part or permitted by 33 CFR Part 330, an individual or regional Section 404 permit will be required for the discharge of dredged or fill material into waters of the United States.

(b) *Activities of Federal agencies.* Discharges of dredged or fill material into waters of the United States done by or on behalf of any Federal agency, other than the Corps of Engineers (see 33 CFR 209.145), are subject to the authorization procedures of these regulations. Agreement for construction or engineering services performed for other agencies by the Corps of Engineers does not constitute authorization under the regulations. Division and district engineers will therefore advise Federal agencies and instrumentalities accordingly and cooperate to the fullest extent in expediting the processing of their applications.

§ 323.4 Discharges not requiring permits.

(a) *General.* Except as specified in paragraphs (b) and (c) of this section, any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404:

(1)(i) Normal farming, silviculture and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, as defined in paragraph (a)(1)(iii) of this section.

(ii) To fall under this exemption, the activities specified in paragraph (a)(1)(i) of this section must be part of an established (i.e., on-going) farming, silviculture, or ranching operation. Activities on areas lying fallow as part of a conventional rotational cycle are part of an established operation. Activities which bring an area into

farming, silviculture, or ranching use are not part of an established operation. An operation ceases to be established when the area on which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operations. If an activity takes place outside the waters of the United States, or if it does not involve a discharge, it does not need a section 404 permit, whether or not it is part of an established farming, silviculture, or ranching operation.

(iii)(A) Cultivating means physical methods of soil treatment employed within established farming, ranching and silviculture lands on farm, ranch, or forest crops to aid and improve their growth, quality or yield.

(B) Harvesting means physical measures employed directly upon farm, forest, or ranch crops within established agricultural and silvicultural lands to bring about their removal from farm, forest, or ranch land, but does not include the construction of farm, forest, or ranch roads.

(C)(1) Minor Drainage means:

(i) The discharge of dredged or fill material incidental to connecting upland drainage facilities to waters of the United States, adequate to effect the removal of excess soil moisture from upland croplands. (Construction and maintenance of upland (dryland) facilities, such as ditching and tiling, incidental to the planting, cultivating, protecting, or harvesting of crops, involve no discharge of dredged or fill material into waters of the United States, and as such never require a Section 404 permit.);

(ii) The discharge of dredged or fill material for the purpose of installing ditching or other such water control facilities incidental to planting, cultivating, protecting, or harvesting of rice, cranberries or other wetland crop species, where these activities and the discharge occur in waters of the United States which are in established use for such agricultural and silvicultural wetland crop production;

(iii) the discharge of dredged or fill material for the purpose of manipulating the water levels of, or regulating the flow or distribution of water within, existing impoundments which have been constructed in accordance with applicable requirements of CWA, and which are in established use for the production of rice, cranberries, or other wetland crop species.²

² The provisions of paragraphs (a)(1)(iii)(C)(i)(ii) and (iii) of this section apply to areas that are in established use exclusively for wetland crop production as well as areas in established use for

(iv) The discharge of dredged or fill material incidental to the emergency removal of sandbars, gravel bars, or other similar blockages which are formed during flood flows or other events, where such blockages close or constrict previously existing drainageways and, if not promptly removed, would result in damage to or loss of existing crops or would impair or prevent the plowing, seeding, harvesting or cultivating crops on land in established use for crop production. Such removal does not include enlarging or extending the dimensions of, or changing the bottom elevations of, the affected drainageway as it existed prior to the formation of the blockage. Removal must be accomplished within one year of discovery of such blockages in order to be eligible for exemption.

(2) Minor drainage in waters of the U.S. is limited to drainage within areas that are part of an established farming or silviculture operation. It does not include drainage associated with the immediate or gradual conversion of a wetland to a non-wetland (e.g., wetland species to upland species not typically adapted to life in saturated soil conditions), or conversion from one wetland use to another (for example, silviculture to farming). In addition, minor drainage does not include the construction of any canal, ditch, dike or other waterway or structure which drains or otherwise significantly modifies a stream, lake, swamp, bog or any other wetland or aquatic area constituting waters of the United States. Any discharge of dredged or fill material into the waters of the United States incidental to the construction of any such structure or waterway requires a permit.

(D) Plowing means all forms of primary tillage, including moldboard, chisel, or wide-blade plowing, discing, harrowing and similar physical means utilized on farm, forest or ranch land for the breaking up, cutting, turning over, or stirring of soil to prepare it for the planting of crops. The term does not include the redistribution of soil, rock, sand, or other surficial materials in a manner which changes any of area of the waters of the United States to dry land. For example, the redistribution of surface materials by blading, grading, or other means to fill in wetland areas is not plowing. Rock crushing activities which result in the loss of natural drainage characteristics, the reduction

conventional wetland/non-wetland crop rotation (e.g., the rotations of rice and soybeans) where such rotation results in the cyclical or intermittent temporary dewatering of such areas.

of water storage and recharge capabilities, or the overburden of natural water filtration capacities do not constitute plowing. Plowing will never involve a discharge of dredged or fill material.

(E) Seeding means the sowing of seed and placement of seedlings to produce farm, ranch, or forest crops and includes the placement of soil beds for seeds or seedlings on established farm and forest lands.

(2) Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design. Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.

(3) Construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance (but not construction) of drainage ditches. Discharges associated with irrigation facilities in the waters of the U.S. are included within the exemption unless the discharges have the effect of bringing these waters into a use to which they were not previously subject and the flow or circulation may be impaired or reach reduced of such waters.

(4) Construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the U.S. The term "construction site" refers to any site involving the erection of buildings, roads, and other discrete structures and the installation of support facilities necessary for construction and utilization of such structures. The term also includes any other land areas which involve land-disturbing excavation activities, including quarrying or other mining activities, where an increase in the runoff of sediment is controlled through the use of temporary sedimentation basins.

(5) Any activity with respect to which a state has an approved program under section 208(b)(4) of CWA which meets the requirements of sections 208(b)(4)(B) and (C).

(6) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained in accordance with best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics

of waters of the United States are not impaired, that the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized. These BMPs which must be applied to satisfy this provision shall include those detailed BMPs described in the state's approved program description pursuant to the requirements of 40 CFR 123.4(h)(4), and shall also include the following baseline provisions:

(i) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the U.S. shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions;

(ii) All roads, temporary or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the U.S.;

(iii) The road fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows;

(iv) The fill shall be properly stabilized and maintained during and following construction to prevent erosion;

(v) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within waters of the United States (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself;

(vi) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the U.S. shall be kept to a minimum;

(vii) The design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body;

(viii) Borrow material shall be taken from upland sources whenever feasible;

(ix) The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species;

(x) Discharges into breeding and nesting areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exist;

(xi) The discharge shall not be located in the proximity of a public water supply intake;

(xii) The discharge shall not occur in areas of concentrated shellfish production;

(xiii) The discharge shall not occur in a component of the National Wild and Scenic River System;

(xiv) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts; and

(xv) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

(b) If any discharge of dredged or fill material resulting from the activities listed in paragraphs (a)(1)-(6) of this section contains any toxic pollutant listed under section 307 of CWA such discharge shall be subject to any applicable toxic effluent standard or prohibition, and shall require a permit.

(c) Any discharge of dredged or fill material into waters of the United States incidental to any of the activities identified in paragraphs (a)(1)-(6) of this section must have a permit if it is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject and the flow for circulation of waters of the United States may be impaired or the reach of such waters reduced. Where the proposed discharge will result in significant discernible alterations to flow or circulation, the presumption is that flow or circulation may be impaired by such alteration.⁴

(d) Federal projects which qualify under the criteria contained in Section 404(r) of CWA (Federal projects authorized by Congress where an EIS has been submitted to Congress prior to authorization or an appropriation) are exempt from Section 404 permit requirements, but may be subject to other state or Federal requirements.

§ 323.5 Program transfer to states.

Section 404(h) of the Clean Water Act allows the Administrator of the Environmental Protection Agency to transfer administration of the Section 404 permit program for discharges into certain waters of the United States to

⁴For example, a permit will be required for the conversion of a cypress swamp to some other use or the conversion of a wetland from silvicultural to agricultural use when there is a discharge of dredged or fill material into waters of the United States in conjunction with construction of dikes, drainage ditches or other works or structures used to effect such conversion. A discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States.

qualified states. (The program cannot be transferred for those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to the high tide line, including wetlands adjacent thereto). See 40 CFR Part 123 for procedural regulations for transferring Section 404 programs to states. Once a state's 404 program is approved, the Corps of Engineers will suspend processing of Section 404 applications in the applicable waters and will transfer pending applications to the state agency responsible for administering the program. District engineers will assist EPA and the states in any way practicable to effect transfer and will develop appropriate procedures to ensure orderly and expeditious transfer.

§ 324.6 Special policies and procedures.

(a) The Secretary of the Army has delegated to the Chief of Engineers the authority to issue or deny Section 404 permits. Applications for permits for the discharge of dredged or fill material into waters of the United States will be reviewed in accordance with guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act. (See 40 CFR Part 230.) If the EPA guidelines alone prohibit the designation of a proposed disposal site, the economic impact on navigation and anchorage of the failure to authorize the use of the proposed disposal site will also be considered in evaluating whether or not the proposed discharge is in the public interest.

(b) The Corps will not issue a permit where the regional administrator of EPA has notified the district engineer and applicant in writing pursuant to 40 CFR 231.3(a)(1) that he intends to issue a public notice of a proposed determination to prohibit or withdraw the specification, or to deny, restrict or withdraw the use for specification, of any defined area as a disposal site in accordance with Section 404(c) of the Clean Water Act. However the Corps will continue to complete the administrative processing of the application while the Section 404(c) procedures are underway including completion of final coordination with EPA under 33 CFR Part 325.

PART 324—PERMITS FOR OCEAN DUMPING OF DREDGED MATERIAL

Sec.

324.1 General.

324.2 Definitions.

324.3 Activities requiring permits.

324.4 Special procedures.

Authority: 33 USC 1413.

§ 324.1 General.

This regulation prescribes in addition to the general policies of 33 CFR Part 320 and procedures of 33 CFR Part 325, those special policies, practices and procedures to be followed by the Corps of Engineers in connection with the review of applications for Department of the Army permits to authorize the transportation of dredged material by vessel or other vehicle for the purpose of dumping it in ocean waters at dumping sites designated under 40 CFR Part 228 pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 USC 1413) (hereinafter referred to as Section 103). See 33 CFR 320.2(h). Activities involving the transportation of dredged material for the purpose of dumping in the ocean waters also require Department of the Army permits under Section 10 of the River and Harbor Act of 1899 (33 USC 403) for the dredging in navigable waters of the United States. Applicants for Department of the Army permits under this Part should also refer to 33 CFR Part 322 to satisfy the requirements of Section 10.

§ 324.2 Definitions.

For the purpose of this regulation, the following terms are defined:

(a) The term "ocean waters" means those waters of the open seas lying seaward of the base line from which the territorial sea is measured, as provided for in the Convention on the Territorial Sea and the Contiguous Zone (15 UST 1606; TIAS 5639).

(b) The term "dredged material" means any material excavated or dredged from navigable waters of the United States.

(c) The term "transport" or "transportation" refers to the carriage and related handling of dredged material by a vessel or other vehicle.

§ 324.3 Activities requiring permits.

(a) *General.* Department of the Army permits are required for the transportation of dredged material for the purpose of dumping it in ocean waters.

(b) *Activities of Federal agencies.* (1) The transportation of dredged material for the purpose of disposal in ocean waters done by or on behalf of any Federal agency other than the activities of the Corps of Engineers are subject to the procedures of this regulation. Agreement for construction or engineering services performed for other

agencies by the Corps of Engineers does not constitute authorization under these regulations. Division and district engineers will therefore advise Federal agencies accordingly and cooperate to the fullest extent in the expeditious processing of their applications. The activities of the Corps of Engineers that involve the transportation of dredged material for disposal in ocean waters are regulated by 33 CFR 209.145.

(2) The policy provisions set out in 33 CFR 320.4(j) relating to state or local authorizations do not apply to work or structures undertaken by Federal agencies, except where compliance with non-Federal authorization is required by Federal law or Executive policy. Federal agencies are required to comply with the substantive and procedural state, interstate, and local water quality standards and effluent limitations as are applicable by law that are adopted in accordance with or effective under the provisions of the Clean Water Act and the Marine Protection, Research and Sanctuaries Act of 1972, as amended, and related laws in the design, construction, management, operation, and maintenance of their respective facilities. (See Executive Order No. 12088, dated October 18, 1978.) They are not required, however, to obtain and provide certification of compliance with effluent limitations and water quality standards from state or interstate water pollution control agencies in connection with activities involving the transport of dredged material for dumping into ocean waters beyond the territorial sea.

§ 324.4 Special procedures.

The Secretary of the Army has delegated to the Chief of Engineers the authority to issue or deny Section 103 permits. The following additional procedures shall also be applicable under this regulation.

(a) *Public notice.* For all applications for Section 103 permits, the district engineer will issue a public notice which shall contain the information specified in 33 CFR 325.3.

(b) *Evaluation.* Applications for permits for the transportation of dredged material for the purpose of dumping it in ocean waters will be evaluated to determine whether the proposed dumping will unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems or economic potentialities. In making this evaluation, criteria established by the Administrator, EPA, pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, shall be applied including an

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evaluation of the need for the ocean dumping and including the availability of alternatives to ocean dumping. Where ocean dumping is determined to be necessary, the district engineer will, to the extent feasible, specify disposal sites using the recommendations of the Administrator pursuant to Section 102(c) of the Act. See 40 CFR Parts 220 to 229.

(c) *EPA review.* If the Regional Administrator, EPA, advises the district engineer that the proposed dumping will comply with the criteria, the district engineer shall complete his evaluation of the Section 103 application under this regulation and 33 CFR Parts 320 and 325. If, however, the Regional Administrator advises the district engineer that the proposed dumping will not comply with the criteria, the district engineer will proceed as follows.

(1) The district engineer shall determine whether there is an economically feasible alternative method or site available other than the proposed ocean disposal site. If there are other feasible alternative methods or sites available, the district engineer shall evaluate them in accordance with 33 CFR Parts 320, 322, 323, 325 and this regulation, as appropriate.

(2) If the district engineer makes a determination that there is no economically feasible alternative method or site available, and the proposed project is otherwise found to be in the public interest, he shall so advise the Regional Administrator of his intent to issue the permit setting forth his reasons for such determination.

(d) *EPA objection.* If the Regional Administrator advises, within 15 days of the notice of the intent to issue, that he will commence procedures specified by Section 103(c) of the Marine Protection, Research, and Sanctuaries Act of 1972 to prohibit designation of the disposal site, the case will be forwarded to the Chief of Engineers for further coordination with the Administrator, EPA, and decision. The report forwarding the case will contain, in addition to the analysis required by 33 CFR 325.11, an analysis of whether there are other economically feasible methods or sites available to dispose of the dredged material.

(e) *Chief of Engineers review.* The Chief of Engineers shall evaluate the permit application and make a decision to deny the permit or recommend its issuance. If the decision of the Chief of Engineers is that ocean dumping at the proposed disposal site is required because of the unavailability of economically feasible alternatives, he shall so certify and request that the Secretary of the Army seek a waiver from the Administrator, EPA, of the

criteria or of the critical site designation in accordance with 40 CFR 225.4.

PART 325—PROCESSING OF DEPARTMENT OF THE ARMY PERMITS

Sec.

- 325.1 Applications for permits.
- 325.2 Processing of application.
- 325.3 Public notice.
- 325.4 Conditioning of Permits.
- 325.5 Forms of authorization.
- 325.6 Duration of authorization.
- 325.7 Modification, suspension, or revocation of authorizations.
- 325.8 Authority to issue or deny authorizations.
- 325.9 Reserved.
- 325.10 Publicity.
- Appendix A—Permit Form
- Appendix B—Reserved

Authority: 33 U.S.C. 401 et seq.; 33 USC 1344; 33 USC 1413.

§ 325.1 Applications for permits.

(a) *General.* The processing procedures of this regulation (Part 325) apply to any Department of the Army permit. Special procedures and additional information are contained in 33 CFR Parts 320 through 324 and Part 330. This Part is arranged in the basic timing sequence used by the Corps of Engineers in processing applications for Department of the Army permits.

(b) *Pre-application consultation for major applications.* The district staff element having responsibility for administering, processing, and enforcing Federal laws and regulations relating to the Corps of Engineers regulatory program shall be available to advise potential applicants of studies or other information foreseeably required for later Federal action. The district engineer will establish local procedures and policies including appropriate publicity programs which will allow potential permit applicants to contact the district engineer or the staff element to request pre-application consultation. Upon receipt of such request, the district engineer will assure the conduct of an orderly process which may involve other staff elements and affected agencies (Federal, state, or local) and the public. This early process should be brief but thorough so that the applicant may begin to assess the viability of some of the more obvious alternatives in the permit application. The district engineer will endeavor at this stage, to provide the applicant with all helpful information necessary in pursuing the application, including factors which the Corps must consider in its permit decision making process. Whenever the district engineer becomes aware of planning for work which may require a Department of the Army permit and

which would involve the preparation of an environmental document, he shall contact the principals involved to advise them of the requirement for the permit(s) and the attendant public interest review including the development of an environmental document. Whenever a potential permit applicant indicates the intent to submit an application for work which may require the preparation of an environmental document, a single point of contact shall be designated within the district's regulatory staff to effectively coordinate the regulatory process, including the National Environmental Policy Act (NEPA) procedures and all attendant reviews, meetings, hearings, and other actions, including the scoping process if appropriate, leading to a decision by the district engineer. Effort devoted to this process should be commensurate with the likelihood of a permit application actually being submitted to the Corps. The regulatory staff coordinator shall maintain an open relationship with each applicant or his consultants so as to assure that the applicant is fully aware of the substance (both quantitative and qualitative) of the data required by the district engineer for use in preparing an environmental assessment or an environmental impact statement (EIS). The actual development of the scope of data required in cases requiring an EIS should be the product of the formal "scoping" process discussed in 33 CFR Part 230.

(c) *Application form.* Any person proposing to undertake any activity requiring Department of the Army authorization as specified in 33 CFR Parts 321–324 (except activities already authorized by general permit) must apply for a permit to the district engineer in charge of the district where the proposed activity is to be performed. Applications for permits must be prepared utilizing the prescribed application form (ENG Form 4345, OMB Approval No. OMB 49–R0420). The form may be obtained from the district engineer having jurisdiction over the waters in which the proposed activity will be located. Local variations of the application form for purposes of facilitating coordination with state and local agencies may be used.

(d) *Content of application.* (1) Generally, the application must include a complete description of the proposed activity including necessary drawings, sketches or plans sufficient for public notice (the applicant is not expected to submit detailed engineering plans and specifications); the location, purpose and intended use of the proposed activity; scheduling of the activity; the names and addresses of adjoining

property owners; the location and dimensions of adjacent structures; and a list of authorizations required by other Federal, interstate, state or local agencies for the work, including all approvals received or denials already made. See also Section 325.3 for information required to be in public notices. District and division engineers are not authorized to develop additional information forms and will limit requests for additional information to those cases where the specific information is essential to complete an evaluation of the proposal's impact on the public interest.

(2) All activities which the applicant plans to undertake which are reasonably related to the same project and for which a Department of the Army permit would be required should be included in the same permit application. District engineers should reject, as incomplete, any permit application which fails to comply with this requirement. For example, a permit application for a marina will include dredging required for access as well as any fill associated with construction of the marina.

(3) If the activity would involve dredging in navigable waters of the United States, the application must include a description of the type, composition and quantity of the material to be dredged, the method of dredging, and the site and plans for disposal of the dredged material.

(4) If the activity would include the discharge of dredged or fill material in the waters of the United States or the transportation of dredged material for the purpose of disposing of it in ocean waters, the application must include the source of the material; the purpose of the discharge, a description of the type, composition and quantity of the material; the method of transportation and disposal of the material; and the location of the disposal site. Certification under Section 401 of the Clean Water Act is required for such discharges into waters of the United States.

(5) If the activity would include the construction of a filled area or pile or float-supported platform, the project description must include the use of and specific structures to be erected on the fill or platform.

(6) If the activity would involve the construction of an impoundment structure, the applicant may be required to demonstrate that the structure complies with established state dam safety criteria or that the structure has been designed by qualified persons and, in appropriate cases, independently reviewed (and modified as the review

would indicate) by similarly qualified persons. No specific design criteria are to be prescribed nor is an independent detailed engineering review to be made by the district engineer.

(7) *Signatures on application.* The application must be signed by the person who desires to undertake the proposed activity or by a duly authorized agent if accompanied by a statement by that person designating the agent. In either case, the signature of the applicant or the agent will be understood to be an affirmation that he possesses the requisite property interest to undertake the activity proposed in the application, except where the lands are under the control of the Corps of Engineers, in which cases the district engineer will coordinate the transfer of the real estate and the permit action. An application may include the activity of more than one owner provided the character of the activity of each owner is similar and in the same general area and each owner submits a statement designating the same agent.

(e) *Additional information.* In addition to the information indicated in paragraph (d) of this section the applicant will be required to furnish only such additional information as the district engineer deems essential to assist in the evaluation of the application. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation.

(f) *Fees.* Fees are required for permits under Section 404 of the Clean Water Act, Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, and Sections 9 and 10 of the River and Harbor Act of 1899. A fee of \$100.00 will be charged when the planned or ultimate purpose of the project is commercial or industrial in nature and is in support of operations that charge for the production, distribution or sale of goods or services. A \$10.00 fee will be charged for permit applications when the proposed work is non-commercial in nature and would provide personal benefits that have no connection with a commercial enterprise. The final decision as to the basis for a fee (commercial vs. non-commercial) shall be solely the responsibility of the district engineer. No fee will be charged if the applicant withdraws the application at any time prior to issuance of the permit or if the permit is denied. Collection of the fee will be deferred until the proposed activity has been determined to be in the public interest. At that time, the district engineer will furnish the

applicant two copies of the unsigned permit for his signature. He will also notify the applicant of the required fee and will request that any check or money order be made payable to the Treasurer of the United States. The permit will then be issued upon receipt of the application fee and the two signed permit copies. Multiple fees are not to be charged if more than one law is applicable. Any modification significant enough to require publication of a public notice will also require a fee. No fee will be assessed when a permit is transferred from one property owner to another. No fees will be charged for time extensions, general permits or letters of permission. Agencies or instrumentalities of Federal, state or local governments will not be required to pay any fee in connection with permits.

§ 325.2 Processing of applications.

(a) *Standard procedures.* (1) When an application for a permit is received, the district engineer shall immediately assign it a number for identification, acknowledge receipt thereof, and advise the applicant of the number assigned to it. He shall review the application for completeness, and if the application is incomplete, request from the applicant within 15 days of receipt of the application any additional information necessary for further processing.

(2) Within 15 days of receipt of all information required in accordance with Sec. 325.1(d) of this part, the district engineer will issue a public notice as described in Sec. 325.3 of this part unless specifically exempted by other provisions of this regulation. The district engineer will issue a supplemental, revised, or corrected public notice if in his view there is a change in the application data that would affect the public's review of the proposal.

(3) The district engineer will consider all comments received in response to the public notice in his subsequent actions on the permit application. Receipt of the comments will be acknowledged and they will be made a part of the administrative record of the application. Comments received as form letters or petitions may be acknowledged as a group to the person or organization responsible for the form letter or petition. If comments relate to matters within the special expertise of another Federal agency, the district engineer may seek the advice of that agency. At the earliest practicable time, the applicant must be given the opportunity to furnish the district engineer his proposed resolution or rebuttal to all objections from other Government

agencies and other substantive adverse comments before final decision will be made on the application. The applicant may voluntarily elect to contact objectors in an attempt to resolve objections but will not be required to do so.

(4) The district engineer will follow Appendix B of 33 CFR Part 230 for environmental procedures and documentation required by the National Environmental Policy Act of 1969. A permit application will require either an environmental assessment or an environmental impact statement unless it is included within a categorical exclusion.

(5) The district engineer will also evaluate the application to determine the need for a public hearing pursuant to 33 CFR Part 327.

(6) After all above actions have been completed, the district engineer will determine in accordance with the record and applicable regulations whether or not the permit should be issued. He shall prepare a Statement of Findings (SOF) or, where an EIS has been prepared, a Record of Decision (ROD), on all permit decisions. The SOF or ROD shall include the district engineer's views on the probable effect of the proposed work on the public interest including conformity with the guidelines published for the discharge of dredged or fill material in waters of the United States (40 CFR Part 230) or with the criteria for dumping of dredged material in ocean waters (40 CFR Parts 220 to 229), if applicable, and the conclusions of the district engineer. The SOF or ROD shall be dated, signed, and included in the record prior to final action on the application. Where the district engineer has delegated authority to sign permits for and in his behalf, he may similarly delegate the signing of the SOF or ROD. If a permit is warranted, the district engineer will determine the special conditions, if any, and duration which should be incorporated into the permit. In accordance with the authorities specified in § 325.8 of this Part, the district engineer will take final action or forward the application with all pertinent comments, records, and studies, including the final EIS or environmental assessment, through channels to the official authorized to make the final decision. The report forwarding the application for decision will be in the format prescribed by the Chief of Engineers. District and division engineers will notify the applicant and interested Federal and state agencies that the application has been forwarded to higher headquarters. The district or division engineer may, at his option,

disclose his recommendation to the news media and other interested parties, with the caution that it is only a recommendation and not a final decision. Such disclosure is encouraged in permit cases which have become controversial and have been the subject of stories in the media or have generated strong public interest. In those cases where the application is forwarded for decision in the format prescribed by the Chief of Engineers, the report will serve as the SOF or ROD.

(7) If the final decision is to deny the permit, the applicant will be advised in writing of the reason(s) for denial. If the final decision is to issue the permit and a standard individual permit form will be used, the issuing official will forward two copies of the draft permit to the applicant for signature accepting the conditions of the permit. The applicant will return both signed copies to the issuing official who then will sign and date the permit and return one copy to the permittee. The permit is not valid until signed by the issuing official. Letters of permission will be issued in letter form (signed by the issuing official only). Final action on the permit application is the signature on the letter notifying the applicant of the denial of the permit or signature of the issuing official on the authorizing document.

(8) The district engineer will publish monthly a list of permits issued or denied during the previous month. The list will identify each action by public notice number, name of applicant, and brief description of activity involved. It will also note that relevant environmental documents and the SOF's or ROD's are available upon written request and, where applicable, upon the payment of administrative fees. This list will be distributed to all persons who may have an interest in any of the public notices listed.

(9) Copies of permits will be furnished to other agencies in appropriate cases as follows:

(i) If the activity involves the construction of artificial islands, installations or other devices on the outer continental shelf, to the Director, Defense Mapping Agency, Hydrographic Center, Washington, D.C. 20390 Attention, Code NS12 and to the Director, National Ocean Survey, NOAA, Department of Commerce, Rockville, Maryland 20852.

(ii) If the activity involves the construction of structures to enhance fish propagation (e.g., fishing reefs) along the coasts of the United States, to Defense Mapping Agency, Hydrographic Center and National Ocean Survey as in paragraph (a)(9)(i) of this section and to

the Director, Office of Marine Recreational Fisheries, National Marine Fisheries Service, Washington, D.C. 20235.

(iii) If the activity involves the erection of an aerial transmission line across a navigable water of the United States, to the Director, National Ocean Survey, NOAA, Department of Commerce, Rockville, Maryland 20852, reference C322.

(iv) If the activity is listed in paragraphs (a)(9)(i), (ii), or (iii) of this section or involves the transportation of dredged material for the purpose of dumping it in ocean waters, to the appropriate District Commander, U.S. Coast Guard.

(b) *Procedures for particular types of permit situations.* (1) If the district engineer determines that water quality certification for the proposed activity is necessary under the provisions of Section 401 of the Clean Water Act, he shall so notify the applicant and obtain from him or the certifying agency a copy of such certification.

(i) The public notice for such activity, which will contain a statement on certification requirements (see Sec. 325.3(a)(8)), will serve as the notification to the Administrator of the Environmental Protection Agency (EPA) pursuant to Section 401(a)(2) of the Clean Water Act. If EPA determines that the proposed discharge may affect the quality of the waters of any state other than the state in which the discharge will originate, it will so notify such other state, the district engineer, and the applicant. If such notice or a request for supplemental information is not received within 30 days of issuance of the public notice, the district engineer will assume EPA has made a negative determination with respect to Section 401(a)(2). If EPA does determine another state's waters may be affected, such state has 60 days from receipt of EPA's notice to determine if the proposed discharge will affect the quality of its waters so as to violate any water quality requirement in such state, to notify EPA and the district engineer in writing of its objection to permit issuance, and to request a public hearing. If such occurs, the district engineer will hold a public hearing in the objecting state. Except as stated below, the hearing will be conducted in accordance with 33 CFR 327. The issues to be considered at the public hearing will be limited to water quality impacts. EPA will submit its evaluation and recommendations at the hearing with respect to the state's objection to permit issuance. Based upon the recommendations of the objecting state,

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EPA, and any additional evidence presented at the hearing, the district engineer will condition the permit, if issued, in such a manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot, in the district engineer's opinion, insure such compliance, he will deny the permit.

(ii) No permit will be granted until required certification has been obtained or has been waived. Waiver may be explicit, or will be deemed to occur if the certifying agency fails or refuses to act on a request for certification within sixty days after receipt of such a request unless the district engineer determines a shorter or longer period is reasonable for the state to act. The request for certification must be made in accordance with the regulations of the certifying agency. In determining whether or not a waiver period has commenced or waiver has occurred, the district engineer will verify that the certifying agency has received a valid request for certification. If, however, special circumstances identified by the district engineer require that action on an application be taken within a more limited period of time, the district engineer shall determine a reasonable lesser period of time, advise the certifying agency of the need for action by a particular date and that, if certification is not received by that date, it will be considered that the requirement for certification has been waived. Similarly if it appears that circumstances may reasonably require a period of time longer than sixty days, the district engineer, based on information provided by the certifying agency, will determine a longer reasonable period of time, not to exceed one year, at which time a waiver will be deemed to occur.

(2) If the proposed activity is to be undertaken in a State operating under a coastal zone management program approved by the Secretary of Commerce pursuant to the Coastal Zone Management Act (see 33 CFR 320.3(b)), the district engineer shall proceed as follows:

(i) If the applicant is a Federal agency, and the application involves a Federal activity in or affecting the coastal zone, the district engineer shall forward a copy of the public notice to the agency of the state responsible for reviewing the consistency of Federal activities. The Federal agency applicant shall be responsible for complying with the Coastal Zone Management Act's directive for ensuring that Federal agency activities are undertaken in a

manner which is consistent, to the maximum extent practicable, with approved Coastal Zone Management Programs. (See 15 CFR Part 930.) If the State coastal zone agency objects to the proposed Federal activity on the basis of its inconsistency with the State's approved Coastal Zone Management Program, the district engineer shall not make a final decision on the application until the disagreeing parties have had an opportunity to utilize the procedures specified by the Coastal Zone Management Act for resolving such disagreements.

(ii) If the applicant is not a Federal agency and the application involves an activity affecting the coastal zone, the district engineer shall obtain from the applicant a certification that his proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management Program. Upon receipt of the certification, the district engineer will forward a copy of the public notice (which will include the applicant's certification statement) to the state coastal zone agency and request its concurrence or objection. If the state agency objects to the certification or issues a decision indicating that the proposed activity requires further review, the district engineer shall not issue the permit until the state concurs with the certification statement or the Secretary of Commerce determines that the proposed activity is consistent with the purposes of the Coastal Zone Management Act or is necessary in the interest of national security. If the state agency fails to concur or object to a certification statement within six months of the state agency's receipt of the certification statement, state agency concurrence with the certification statement shall be conclusively presumed. District engineers shall check with the certifying agency at the end of the allotted period of time before determining that a waiver has occurred.

(iii) If the applicant is requesting a permit for work on Indian reservation lands which are in the coastal zone, the district engineer shall treat the application in the same manner as prescribed for a Federal applicant in paragraph (b)(2)(i) of this section. However, if the applicant is requesting a permit on non-trust Indian lands and the state CZM agency has decided to assert jurisdiction over such lands, the district engineer shall treat the application in the same manner as prescribed for a non-Federal applicant in paragraph (b)(2)(ii) of this section.

(3) If the proposed activity would involve any property listed or eligible for listing in the National Register of Historic Places, the district engineer will proceed in accordance with Corps National Historical Preservation Act counterpart implementing regulations.

(4) If the proposed activity would consist of dredging of an access channel and/or berthing facility associated with an authorized Federal navigation project, the activity will be included in the planning and coordination of the construction or maintenance of the Federal project to the maximum extent feasible. Separate notice, hearing, and environmental documentation will not be required for activities so included and coordinated; and the public notice issued by the district engineer for these Federal and associated non-Federal activities will be the notice of intent to issue permits for those included non-Federal dredging activities. The decision whether to issue or deny such a permit will be consistent with the decision on the Federal project unless special considerations applicable to the proposed activity are identified. (See Sec. 322.5(C)).

(5) Applications will be reviewed for the potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act as amended. If the district engineer determines that the proposed activity would not affect listed species or their critical habitat, he will include a statement to this effect in the public notice. If he finds that proposed activity may jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat, he will initiate formal consultation procedures with the U.S. Fish and Wildlife Service or National Marine Fisheries Service by including a statement to this effect in the public notice (or will amend any previous notice as appropriate). Public notices forwarded to the U.S. Fish and Wildlife Service or National Marine Fisheries Service will serve as the request for information on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the proposed activity, pursuant to Section 7(e) of the Act. References, definitions, and consultation procedures are found in 33 CFR Part 306 and 50 CFR Part 402.

(c) [Reserved]

(d) *Timing of processing of applications.* The district engineer will be guided by the following time limits for the indicated steps in the evaluation process:

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(1) The public notice will be issued within 15 days of receipt of all information required to be submitted by the applicant in accordance with § 325.1(d) of this part.

(2) The comment period of the public notice should not extend beyond 30 days from the date of the notice. However, if circumstances warrant, the district engineer may extend the comment period up to an additional 30 days.

(3) District engineers will decide on all applications not later than 60 days after receipt of a complete application, unless (i) precluded as a matter of law or procedures required by law (see below), (ii) the case must be referred to higher authority (see Sec. 325.8 of this part), (iii) the comment period is extended, (iv) a timely rebuttal or resolution of objections is not received from the applicant, (v) the processing is suspended at the request of the applicant, or (vi) information needed by the district engineer for a decision on the application cannot reasonably be obtained within the 60-day period. Once the cause for preventing the decision from being made within the normal 60-day period has been satisfied or eliminated, the 60-day clock will start running again from where it was suspended. For example, if the comment period is extended by 30 days, the district engineer will, absent other restraints, decide on the application within 90 days of receipt of a complete application. Certain laws (e.g., the Clean Water Act, the Coastal Zone Management Act, the National Environmental Policy Act, the National Historic Preservation Act, the Preservation of Historical and Archeological Data Act, the Endangered Species Act, the Wild and Scenic Rivers Act, and the Marine Protection, Research and Sanctuaries Act) require procedures such as state or other Federal agency certifications, public hearings, environmental impact statements, consultation, special studies and testing which may prevent district engineers from being able to decide certain applications within 60 days.

(4) Once the public comment period has closed (or, at the latest, on the ninetieth day following the public notice) and the district engineer has sufficient information to make his public interest determination, he should decide the permit application even though other agencies which may have regulatory jurisdiction have not yet granted their authorizations, except where such authorizations are, by Federal law, a prerequisite to making a decision on the Army permit application. Permits

granted prior to other (non-prerequisite) authorizations by other agencies should, where appropriate, be conditioned in such manner as to give those other authorities an opportunity to undertake their review without the applicant biasing such review by making substantial resource commitments on the basis of the Army permit. In an unusual case, the district engineer may decide that due to the nature or scope of a specific proposal, it would be prudent to defer taking final action until another agency has acted on its authorization. In such cases, he may advise the other agency of his position on the Army permit while deferring his final decision.

(5) If the applicant fails to respond within 45 days to any request or inquiry of the district engineer, the district engineer may advise the applicant by certified letter that his application will be considered as having been withdrawn unless the applicant responds thereto within thirty days of the date of the letter.

(e) *Alternative procedures.* Division and district engineers are authorized to use alternative procedures as follows:

(1) *Letters of permission.* In those cases subject to Section 10 of the River and Harbor Act of 1899 in which, in the opinion of the district engineer, the proposed work would be minor, would not have significant individual or cumulative impact on environmental values, and should encounter no appreciable opposition, the district engineer may omit the publishing of a public notice and authorize the work by a letter of permission. However, he will coordinate the proposal with all concerned fish and wildlife agencies, Federal and state, as required by the Fish and Wildlife Coordination Act. The letter of permission will not be used to authorize the discharge of dredged or fill material into waters of the United States nor the transportation of dredged material for purposes of dumping it in ocean waters. The letter of permission form is specified in § 325.5 of this part.

(2) *Regional permits.* Regional permits are a type of general permit as defined in 33 CFR 322.2(f) and 33 CFR 323.2(n). They may be issued by a division or district engineer after compliance with the other procedures of this regulation. After a regional permit has been issued, individual activities falling within those categories that are authorized by such regional permits do not have to be further authorized by the procedures of this regulation. The issuing authority will determine and add appropriate conditions to protect the public interest. When the issuing authority determines on a case-by-case basis that the

concerns for the aquatic environment so indicate, he may exercise discretionary authority to override the regional permit and require an individual application and review. A regional permit may be revoked by the issuing authority if it is determined that it is no longer in the public interest provided the procedures of Sec. 325.7 of this part are followed. Following revocation, applications for future activities in areas covered by the regional permit shall be processed as applications for individual permits. No regional permit shall be issued for a period of more than five years.

(3) *Joint Procedures.* Division and district engineers are authorized and encouraged to develop joint procedures with states and other Federal agencies with ongoing permit programs for activities also regulated by the Department of the Army. Such procedures may be substituted for the procedures in paragraphs (a)(1) through (5) of this section provided that the substantive requirements of those sections are maintained. Division and district engineers are also encouraged to develop management techniques such as joint agency review meetings to expedite the decision-making process. However, in doing so, the applicant's rights to a full public interest review and independent decision by the district or division engineer must be strictly observed.

(4) *Emergency procedures.* Division engineers are authorized to approve special processing procedures in emergency situations. An "emergency" is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures. In emergency situations, the district engineer will explain the circumstances and recommend special procedures to the division engineer who will instruct the district engineer as to further processing of the application. Even in an emergency situation, reasonable efforts will be made to receive comments from interested Federal, state, and local agencies and the affected public. Also, notice of any special procedures authorized and their rationale is to be appropriately published as soon as practicable.

§ 325.3 Public notice.

(a) *General.* The public is the primary method of advising all interested parties of the proposed activity for which a

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permit is sought and of soliciting comments and information necessary to evaluate the probable impact on the public interest. The notice must, therefore, include sufficient information to give a clear understanding of the nature and magnitude of the activity to generate meaningful comment. The notice should include the following items of information:

(1) Applicable statutory authority or authorities;

(2) The name and address of the applicant;

(3) The name or title, address and telephone number of the Corps employee from whom additional information concerning the application may be obtained;

(4) The location of the proposed activity;

(5) A brief description of the proposed activity, its purpose and intended use, so as to provide sufficient information concerning the nature of the activity to generate meaningful comments, including a description of the type of structures, if any, to be erected on fills, or pile or float-supported platforms, and a description of the type, composition and quantity of materials to be discharged or disposed of in the ocean;

(6) A plan and elevation drawing showing the general and specific site location and character of all proposed activities, including the size relationship of the proposed structures to the size of the impacted waterway and depth of water in the area;

(7) If the proposed activity would occur in the territorial seas or ocean waters, a description of the activity's relationship to the baseline from which the territorial sea is measured;

(8) A list of other government authorizations obtained or requested by the applicant, including required certifications relative to water quality, coastal zone management, or marine sanctuaries;

(9) If appropriate, a statement that the activity is a categorical exclusion for purposes of the National Environmental Policy Act (see paragraph 7 of Appendix B to 33 CFR Part 230);

(10) A statement on endangered species (see Sec. 325.2(b)(5));

(11) A statement(s) on evaluation factors (see Sec. 325.3(b));

(12) Any other available information which may assist interested parties in evaluating the likely impact of the proposed activity, if any, on factors affecting the public interest;

(13) A reasonable period of time, normally thirty days but not less than fifteen days from date of mailing, within which interested parties may express

their views concerning the permit application;

(14) A statement that any person may request, in writing, within the comment period specified in the notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing;

(15) For non-Federal applications in states with an approved Coastal Zone Management Plan, a statement on compliance with the approved Plan; and

(16) In addition, for Section 103 (ocean dumping) activities:

(i) The specific location of the proposed disposal site and its physical boundaries;

(ii) A statement as to whether the proposed disposal site has been designated for use by the Administrator, EPA, pursuant to Section 102(c) of the Act;

(iii) If the proposed disposal site has not been designated by the Administrator, EPA, a description of the characteristics of the proposed disposal site and an explanation as to why no previously designated disposal site is feasible;

(iv) A brief description of known dredged material discharges at the proposed disposal site;

(v) Existence and documented effects of other authorized disposals that have been made in the disposal area (e.g., heavy metal background reading and organic carbon content);

(vi) An estimate of the length of time during which disposal would continue at the proposed site; and

(vii) Information on the characteristics and composition of the dredged material.

(b) *Evaluation factors.* A paragraph describing the various evaluation factors on which decisions are based shall be included in every public notice.

(1) Except as provided in paragraph (b)(3) of this section, the following will be included:

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposals must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality,

energy needs, safety production and, in general, the needs and welfare of the people.

(2) If the activity would involve the discharge of dredged or fill material into the waters of the United States or the transportation of dredged material for the purpose of disposing of it in ocean waters, the public notice shall also indicate that the evaluation of the impact on the activity of the public interest will include application of the guidelines promulgated by the Administrator, EPA under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230) or of the criteria established under authority of Section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (40 CFR Parts 220 to 229), as appropriate. (See also 33 CFR Parts 323 and 324).

(3) In cases involving construction of artificial islands, installations and other devices on outer continental shelf lands which are under mineral lease from the Department of the Interior, the notice will contain the following statement: "The decision as to whether a permit will be issued will be based on an evaluation of the impact of the proposed work on navigation and national security."

(c) *Distribution of public notices.* (1) Public notices will be distributed for posting in post offices or other appropriate public places in the vicinity of the site of the proposed work and will be sent to the applicant, to appropriate city and county officials, to adjoining property owners, to appropriate state agencies, to appropriate Indian Tribes or tribal representatives, to concerned Federal agencies, to local, regional and national shipping and other concerned business and conservation organizations, to appropriate River Basin Commissions, to appropriate state and areawide clearing houses as prescribed by OMB Circular A-85, to local news media and to any other interested party. Copies of public notices will be sent to all parties who have specifically requested copies of public notices, to the U.S. Senators and Representatives for the area where the work is to be performed, the field representative of the Secretary of the Interior, the Regional Director of the Fish and Wildlife Service, the Regional Director of the National Park Service, the Regional Administrator of the Environmental Protection Agency (EPA), the Regional Director of the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA), the head of the state agency responsible for fish and wildlife resources, the State Historic

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Preservation Officer, and the District Commander, U.S. Coast Guard.

(2) In addition to the general distribution of public notices cited above, notices will be sent to other addressees in appropriate cases as follows:

(i) If the activity would involve structures or dredging along the shores of the seas or Great Lakes, to the Coastal Engineering Research Center, Washington, D.C. 20018.

(ii) If the activity would involve construction of fixed structures or artificial islands on the outer continental shelf or in the territorial seas, to the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics (ASD(MRA&L))), Washington, D.C. 20310; the Director, Defense Mapping Agency (Hydrographic Center) Washington, D.C. 20390, Attention, Code NS12; and the Director, National Ocean Survey, NOAA, Department of Commerce, Rockville, Maryland 20852, and to affected military installations and activities.

(iii) If the activity involves the construction of structures to enhance fish propagation (e.g., fishing reefs) along the coasts of the United States, to the Director, Office of Marine Recreational Fisheries, National Marine Fisheries Service, Washington, D.C. 20235.

(iv) If the activity involves the construction of structures which may affect aircraft operations or for purposes associated with seaplane operations, to the Regional Director of the Federal Aviation Administration.

(v) If the activity would be in connection with a foreign-trade zone, to the Executive Secretary, Foreign-Trade Zones Board, Department of Commerce, Washington, D.C. 20230 and to the appropriate District Director of Customs as Resident Representative, Foreign-Trade Zones Board.

(3) It is presumed that all interested parties and agencies will wish to respond to public notices; therefore, a lack of response will be interpreted as meaning that there is no objection to the proposed project. A copy of the public notice with the list of the addressees to whom the notice was sent will be included in the record. If a question develops with respect to an activity for which another agency has responsibility and that other agency has not responded to the public notice, the district engineer may request its comments. Whenever a response to a public notice has been received from a member of Congress, either in behalf of a constituent or himself, the district engineer will inform the member of Congress of the final decision.

§ 325.4 Conditioning of permits.

(a) *General.* The decision of whether to issue a permit is based on the public interest review described in 33 CFR 320.4. In order to protect the public interest, projects may require modifications or conditions different from what the applicant proposes.

(b) Division and district engineers are authorized to modify or add conditions to proposals when:

(1) they are necessary to meet a legal requirement,

(2) they serve to meet a public interest objective, or

(3) they will avoid or mitigate adverse impacts on fish and wildlife resources.

(c) Division and district engineers may modify or condition proposals to meet one of the objectives of 325.4(b) of this section when:

(1) there are no local, state or other Federal programs or policies to achieve the objective of the desired condition, and

(2) an agreement, enforceable at law, between the applicant and the party(ies) concerned with the resource use is not practicable.

(d) Division and district engineers will ensure that any modifications or conditions imposed on an applicant's proposal are:

(1) directly related to the impacts of the proposal; and

(2) commensurate in scope and degree with the impacts of concern; and

(3) reasonably enforceable.

(e) *Bonds.* If the District Engineer has reason to consider that the permittee might be prevented from completing work which is necessary to protect the public interest, he may require the permittee to post a bond of sufficient amount to indemnify the government against any loss as a result of corrective action it might take.

§ 325.5 Forms of permits.

(a) *General discussion.* (1) Department of the Army permits under this regulation will be in the form of individual permits or general permits. The basic format shall be ENG Form 1721, Department of the Army Permit (Appendix A).

(2) The general conditions included in ENG Form 1721 are normally applicable to all permits; however, some conditions may not apply to certain permits and may be deleted by the issuing officer. Special conditions applicable to the specific activity will be included in the permit as necessary to protect the public interest in accordance with § 325.4 of this Part.

(b) *Individual permits.* (1) *Standard permits.* A standard permit is one which has been processed through the public

interest review procedures, including public notice and receipt of comments, described throughout this Part. The standard individual permit shall be issued using ENG Form 1721.

(2) *Letters of permission.* A letter of permission will be issued where procedures of Section 325.2(e)(1) have been followed. It will be in letter form and will identify the permittee, the authorized work and location of the work, the statutory authority, any limitations on the work, a construction time limit and a requirement for a report of completed work. A copy of the general conditions form ENG Form 1721 will be attached and will be incorporated by reference into the letter of permission.

(c) *General permits.* (1) *Regional permits.* Regional permits are a type of general permit as defined in 33 CFR 322.2(f) and 33 CFR 323.2(n). They may be issued by a division or district engineer after compliance with the other procedures of this regulation. If the public interest so requires, the issuing authority may condition the regional permit to require a case-by-case reporting and acknowledgement system. However, no separate applications or other authorization documents will be required.

(2) *Nationwide permits.* Nationwide permits are a type of general permit and represent Department of the Army authorizations that have been issued by the regulation (33 CFR Part 330) for certain specified activities nationwide. If certain conditions are met, the specified activities can take place without the need for an individual or regional permit.

(d) *Section 9 permits.* Permits for structures under Section 9 of the River and Harbor Act of 1899 will be drafted at Department of the Army level.

§ 325.6 Duration of permits.

(a) *General.* Department of the Army permits may authorize both the work and the resulting use. Permits continue in effect until they automatically expire or are modified, suspended, or revoked.

(b) *Structures.* Permits for the existence of a structure or other activity of a permanent nature are usually for an indefinite duration with no expiration date cited. However, where a temporary structure is authorized, or where restoration of a waterway is contemplated, the permit will be of limited duration with a definite expiration date.

(c) *Works.* Permits for construction work, discharge of dredged or fill material, or other activity and any construction period for a structure with

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a permit of indefinite duration under paragraph (b) of this section will specify time limits for completing the work or activity. The time limits may specify a date by which the work must be started, normally one year from the date of issuance, and will specify a date by which the work must be completed. The dates will be established by the issuing official and will provide reasonable times based on the scope and nature of the work involved. Permits issued for the transport of dredged material for the purpose of disposing of it in ocean waters will specify a completion date for the disposal not to exceed three years from the date of permit issuance.

(d) *Extensions of time.* An authorization or construction period will automatically expire if the permittee fails to request and receive an extension of time. Extensions of time may be granted by the district engineer. The permittee must request the extension and explain the basis of the request, which will be granted only if the district engineer determines that an extension would be in the public interest. Requests for extensions will be processed in accordance with the regular procedures of § 325.2 of this Part, including issuance of a public notice, except that such processing is not required where the district engineer determines that there have been no significant changes in the attendant circumstances since the authorization was issued and that the work is proceeding essentially in accordance with the approved plans and conditions.

(e) *Maintenance dredging.* If the authorized work includes periodic maintenance dredging, an expiration date for the authorization of that maintenance dredging will be included in the permit. The expiration date, which in no event is to exceed ten years from the date of issuance of the permit, will be established by the issuing official after evaluation of the proposed method of dredging and disposal of the dredged material in accordance with the requirements of 33 CFR Parts 320 to 325. In such cases, this district engineer shall require notification of the maintenance dredging prior to actual performance to insure continued compliance with the requirements of this regulation and 33 CFR Parts 320-324. If the permittee desires to continue maintenance dredging beyond the expiration date, he must request a new permit. The permittee should be advised to apply for the new permit six months prior to the time he wishes to do the maintenance work.

§ 325.7 Modification, suspension or revocation of authorizations.

(a) *General.* The district engineer may reevaluate the circumstances and conditions of any permit, including regional permits either on his own motion, at the request of the permittee, or a third party, or as the result of periodic progress inspections, and initiate action to modify, suspend, or revoke a permit as may be made necessary by considerations of the public interest. In the case of regional permits, this reevaluation may cover individual activities, categories of activities, or geographic areas. Among the factors to be considered are the extent of the permittee's compliance with the terms and conditions of the permit; whether or not circumstances relating to the authorized activity have changed since the permit was issued or extended, and the continuing adequacy of the permit conditions; any significant objections to the authorized activity which were not earlier considered; revisions to applicable statutory and/or regulatory authorities; and the extent to which modification, suspension, or other action would adversely affect plans, investments and actions the permittee has reasonably made or taken in reliance on the permit. Significant increases in scope of a permitted activity will be processed as new applications for permits in accordance with § 325.2 of this part, and not as modifications under this paragraph.

(b) *Modification.* Upon request by the permittee or, as a result of reevaluation of the circumstances and conditions of a permit, the district engineer may determine that the public interest requires a modification of the terms or conditions of the permit. In such cases, the district engineer will hold informal consultations with the permittee to ascertain whether the terms and conditions can be modified by mutual agreement. If a mutual agreement is reached on modification of the terms and conditions of the permit, the district engineer will give the permittee written notice of the modification, which will then become effective on such date as the district engineer may establish. In the event a mutual agreement cannot be reached by the district engineer and the permittee, the district engineer will proceed in accordance with paragraph (c) of this section if immediate suspension is warranted. In cases where immediate suspension is not warranted by the district engineer determines that the permit should be modified, he will notify the permittee of the proposed modification and reasons therefor, and that he may request a meeting with the

district engineer and/or a public hearing. The modification will become effective on the date set by the district engineer which shall be at least ten days after receipt of the notice by the permittee unless a hearing or meeting is requested within that period. If the permittee fails or refuses to comply with the modification, the district engineer will proceed in accordance with 33 CFR Part 326.

(c) *Suspension.* The district engineer may suspend a permit after preparing a written determination and finding that immediate suspension would be in the public interest. The district engineer will notify the permittee in writing by the most expeditious means available that the permit has been suspended with the reasons therefor, and order the permittee to stop those activities previously authorized by the suspended permit. The permittee will also be advised that following this suspension a decision will be made to either reinstate, modify, or revoke the permit, and that he may within 10 days of receipt of notice of the suspension, request a meeting with the district engineer and/or a public hearing to present information in this matter. If a hearing is requested, the procedures prescribed in 33 CFR Part 327 will be followed. After the completion of the meeting or hearing (or within a reasonable period of time after issuance of the notice to the permittee that the permit has been suspended if no hearing or meeting is requested), the district engineer will take action to reinstate, modify or revoke the permit.

(d) *Revocation.* Following completion of the suspension procedures in paragraph (c) of this section if revocation of the permit is found to be in the public interest, the authority who made the decision on the original permit may revoke it. The permittee will be advised in writing of the final decision.

(e) *Regional permits.* The district engineer may, by following the procedures of this section, revoke regional permits for individual activities, categories of activities, or geographic areas. Where groups of permittees are involved, such as for categories of activities or geographic areas, the informal discussions provided in paragraph (b) of this section may be waived and any written notification may be made through the general public notice procedures of this regulation. If a regional permit is revoked, any permittee may then apply for an individual permit which shall be processed in accordance with these regulations.

§ 325.8 Authority to issue or deny permits.

(a) *General.* Except as otherwise provided in this regulation, the Secretary of the Army, subject to such conditions as he or his authorized representative may from time to time impose, has authorized the Chief of Engineers and his authorized representatives to issue or deny permits for construction or other work in or affecting navigable waters of the United States pursuant to Section 10 of the River and Harbor Act of 1899. He also has authorized the Chief of Engineers and his authorized representatives to issue or deny permits for the discharge of dredged or fill material in waters of the United States pursuant to Section 404 of the Clean Water Act or for the transportation of dredged material for the purpose of disposing of it into ocean waters pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. The authority to issue or deny permits pursuant to Section 9 of the River and Harbor Act of March 3, 1899 has not been delegated to the Chief of Engineers or his authorized representatives.

(b) *District Engineers' authority.* District engineers are authorized to issue or deny permits in accordance with these regulations permits pursuant to Section 10 of the River and Harbor Act of 1899; Section 404 of the Clean Water Act; and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, in all cases not required to be referred to higher authority (see below). It is essential to the legality of a permit that it contain the name of the district engineer as the issuing officer. However, the permit need not be signed by the district engineer in person but may be signed for and in behalf of him by whomever he designates. In cases where permits are denied for reasons other than navigation or failure to obtain required local, State, or other Federal approvals or certifications, the Statement of Findings must conclusively justify a denial decision. District engineers are authorized to deny permits without issuing a public notice or taking other procedural steps where required local, state or other Federal permits for the proposed activity have been denied or where he determines that the activity will clearly interfere with navigation except in all cases required to be referred to higher authority (see below). District engineers are also authorized to add, modify, or delete special conditions in permits in accordance with § 325.4 of this part, except for those conditions which may have been imposed by higher authority,

and to modify, suspend and revoke permits according to the procedures of § 325.7 of this part. District engineers will refer the following applications to the division engineer for resolution:

(1) When a referral is required by a written agreement between the head of a Federal agency and the Secretary of the Army;

(2) When the recommended decision is contrary to the written position of the Governor of the State in which the work would be performed;

(3) When there is substantial doubt as to authority, law, regulations, or policies applicable to the proposed activity;

(4) When higher authority requests the application be forwarded for decision; or

(5) When the district engineer is precluded by law or procedures required by law from taking final action on the application (e.g., Section 404(c) of the Clean Water Act, Section 9 of the River and Harbor Act of 1899, or territorial sea baseline changes).

(c) *Division Engineers' authority.* Division engineers will review and evaluate all permit applications referred by district engineers. Division engineers may authorize the issuance or denial of permits pursuant to Section 10 of the River and Harbor Act of 1899; Section 404 of the Clean Water Act; and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended; and the inclusion of conditions in accordance with § 325.4 of this Part in all cases not required to be referred to the Chief of Engineers. Division Engineers will refer the following applications to the Chief of Engineers for resolution:

(1) When a referral is required by a written agreement between the head of a Federal agency and the Secretary of the Army;

(2) When there is substantial doubt as to authority, law, regulations, or policies applicable to the proposed activity;

(3) When higher authority requests the application be forwarded for decision; or

(4) When the division engineer is precluded by law or procedures required by law from taking final action on the application.

§ 325.9 (Reserved.)**§ 325.10 Publicity.**

The district engineer will establish and maintain a program to assure that potential applicants for permits are informed of the requirements of this regulation and of the steps required to obtain permits for activities in waters of the United States or ocean waters. Whenever the district engineer becomes

aware of plans being developed by either private or public entities which might require permits for implementation, he should advise the potential applicant in writing of the statutory requirements and the provisions of this regulation. Whenever the district engineer is aware of changes in Corps of Engineers regulatory jurisdiction, he will issue appropriate public notices.

Appendix A—Permit Form

Application No. _____
Name of Applicant _____
Effective Date _____
Expiration Date (If applicable) _____

DEPARTMENT OF THE ARMY**Permit**

Referring to written request dated _____ for a permit to:

() Perform work in or affecting navigable waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403);

() Discharge dredged or fill material into waters of the United States upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Clean Water Act (86 Stat. 816, Pub. L. 92-500);

() Transport dredged material for the purpose of disposal in ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; Pub. L. 92-532);

(Here insert the full name and address of the permittee.)

Is hereby authorized by the Secretary of the Army:
to _____

(Here describe the proposed structure or activity, and its intended use. In the case of an application for a fill permit, describe the structures, if any proposed to be erected on the fill. In the case of an application for the discharge of dredged or fill material into waters of the United States or the transportation for discharge in ocean waters of dredged material, describe the type and quantity of material to be discharged.)
in _____

(Here to be named the ocean, river, harbor, or waterway concerned.)

at _____
(Here to be named the nearest well-known locality—preferably a town or city and the distance in miles and tenths from some definite point in the same, stating whether above or below or giving direction by points of compass.)

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (on drawings, give file number or other definite

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identification marks). Subject to the following conditions:

1. General conditions: (a) That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in whole or in part.

(b) That all activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act of 1972 (Pub. L. 92-500; 86 Stat. 816), the Marine Protection, Research and Sanctuaries Act of 1972 (Pub. L. 92-532, 86 Stat. 1052), or pursuant to applicable State and local law.

(c) That when the activity authorized herein involves a discharge during its construction or operation, of any pollutant (including dredged or fill material), into waters of the United States, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the district engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

(d) That the discharge will not destroy a threatened or endangered species as identified under the Endangered Species Act, or endanger the critical habitat of such species.

(e) That the permittee agrees to make every reasonable effort to prosecute the construction or operation of the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife, and natural environmental values.

(f) That the permittee agrees that it will prosecute the construction or work authorized herein in a manner so as to minimize any degradation of water quality.

(g) That the permittee shall allow the District Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

(h) That the permittee shall maintain the

structure or work authorized herein in good condition and in reasonable accordance with the plans and drawings attached hereto.

(i) That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, state, or local laws or regulations.

(j) That this permit does not obviate the requirement to obtain state or local assent required by law for the activity authorized herein.

(k) That this permit may be either modified, suspended or revoked in whole or in part pursuant to the policies and procedures of 83 CFR 325.7.

(l) That in issuing this permit, the Government has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be materially false, materially incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and or the Government may, in addition, institute appropriate legal proceedings.

(m) That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

(n) That the permittee shall notify the District Engineer of the time the activity authorized herein will be commenced, as far in advance of the time of commencement as the District Engineer may specify, and of any suspension of work, if for a period of more than one week, resumption of work and its completion.

(o) That if the activity authorized herein is not completed on or before _____ day of _____, 19____, (three years from the date of issuance of this permit unless otherwise specified) this permit, if not previously revoked or specifically extended, shall automatically expire.

(p) That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by the Congress or other agencies of the Federal Government.

(q) That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition (i) hereof, he must restore the area to a condition satisfactory to the District Engineer.

(r) That if the recording of this permit is possible under applicable state or local law, the permittee shall take such action as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

(s) That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

(t) That this permit may not be transferred to a third party without prior written notice to

the District Engineer, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferee subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

(u) That if the permittee during prosecution of the work authorized herein, encounters a previously unidentified archeological or other cultural resource that might be eligible for listing in the National Register of Historic Places, he shall immediately notify the district engineer.

II. Special Conditions: Here list conditions relating specifically to the proposed structure or work authorized by this permit. The following Special Conditions will be applicable when appropriate:

Structures In or Affecting Navigable Waters of the United States

(a) That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structures or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

(b) That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

(c) That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

(d) That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

(e) Structures for Small Boats: That the permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure permitted herein and the safety of boats moored thereto from damage by wave

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wash and the permittee shall not hold the United States liable for any such damage.

Maintenance Dredging

(a) That when the work authorized herein includes periodic maintenance dredging, it may be performed under this permit for _____ years from the date of issuance of this permit (ten years unless otherwise indicated);

(b) That the permittee will advise the District Engineer in writing at least two weeks before he intends to undertake any maintenance dredging.

Discharges of Dredged or Fill Material Into Waters of the United States

(a) That the discharge will be carried out in conformity with the goals and objectives of the EPA Guidelines established pursuant to Section 404(b) of the Clean Water Act and published in 40 CFR Part 230;

(b) That the discharge will consist of suitable material free from toxic pollutants in toxic amounts.

(c) That the fill created by the discharge will be properly maintained to prevent erosion and other non-point sources of pollution; and

Disposal of Dredged Material Into Ocean Waters

(a) That the disposal will be carried out in conformity with the goals, objectives, and requirements of the EPA criteria established pursuant to Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, published in 40 CFR Parts 220-228.

(b) That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or disposal of the dredged material as authorized herein.

This permit shall become effective on the date of the District Engineer's signature.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

(Permittee) _____
(Date) _____

By authority of the Secretary of the Army:

(District Engineer) _____
(Date) _____

Transferee hereby agrees to comply with the terms and conditions of this permit.

(Transferee) _____
(Date) _____

Appendix B [Reserved]

PART 326—ENFORCEMENT, SUPERVISION AND INSPECTION

Sec.

- 326.1 Purpose.
- 326.2 Discovery of unauthorized activity.
- 326.3 Administrative action.
- 326.4 Legal action.
- 326.5 Supervision and enforcement of authorized activities.

Authority: 33 U.S.C. 401 et seq.; 33 U.S.C. 1344; 33 U.S.C. 1413.

§ 326.1 Purpose.

This regulation prescribes the policy, practice, and procedures to be followed by the Corps of Engineers in connection with activities requiring Department of

the Army permits that are performed without prior authorization; and supervision and inspection of authorized activities.

§ 326.2 Discovery of unauthorized activity.

(a) When the district engineer becomes aware of any unauthorized activity still in progress, including a violation of the terms and conditions of an authorized activity, he shall immediately issue an order prohibiting further work to all persons responsible for and/or involved in the performance of the activity and may order interim protective work. If the unauthorized activity has been completed, he will advise the responsible party of his discovery.

(b) Where the unauthorized activity involves an American Indian (including Alaskan natives, Eskimos, and Aleuts) or takes place on reservation land, district engineers will coordinate proposed cease and desist order with the Assistant Chief Counsel for Indian Affairs (DAEN-CCI).

§ 326.3 Administrative action.

(a) *Initial investigation.* Immediately upon discovery of an unauthorized activity, the district engineer shall commence an investigation to ascertain the facts surrounding the activity. In making this investigation, the district engineer should, in appropriate cases, depending upon the potential impacts of the completed work solicit the views of the Regional Administrator of the Environmental Protection Agency, the Regional Director of the U.S. Fish and Wildlife Service, and the Regional Director of the National Marine Fisheries Service, and other Federal, state, and/or local agencies. He shall also request the persons involved in the unauthorized activity to provide appropriate information on the activity to assist him in his evaluation and in determining the course of action to be taken.

(b) *Remedial work.* (1) The district engineer shall determine whether as a result of the unauthorized activity, life, property or important public resources are in serious jeopardy and would require expeditious measures for protection. Such measures may range from minor modification of the existing work to complete restoration of the area involved. Important public resources are identified in 33 CFR 320.4. If the district engineer determines that immediate remedial work is required, he shall issue an appropriate order describing the work, conditions and time limits required to provide satisfactory protection of the resource.

(2) Voluntary restoration by the responsible party on the party's own initiative shall be allowed if legal action is not otherwise necessary. However, district engineers will advise the responsible party of the option of an after-the-fact application for a permit to retain the unauthorized work. No permit will be required when complete and satisfactory restoration is accomplished.

(c) *Acceptance of an after-the-fact application.* Upon completion of appropriate remedial work, if any, the district engineer shall accept an application for an after-the-fact permit for all unauthorized activities unless:

(1) Civil action to enforce an order issued pursuant to § 326.2 or § 326.3(b) of this part is required;

(2) Criminal action is appropriate (see § 326.4a(1) of this part);

(3) State local, or other federal authorization or certification has been denied,¹ or a state or local enforcement action is pending. In the above situations, the District Engineer may accept an after-the-fact permit application provided he believes it would be in the public interest and he obtains approval of the next higher authority.

(4) In some cases, a violation of the Clean Water Act may be of such a nature that it is appropriate to seek a civil penalty as provided for in the act. These cases include knowing, flagrant, repeated or substantial impact violations.²

(d) If the responsible party fails to submit an application as noted in paragraph (c) of this section within a reasonable time period, the district engineer may proceed on his own initiative with a determination of whether the activity is in the public interest. The determination will be made in accordance with appropriate procedures described in 33 CFR Parts 320 through 325.

§ 326.4 Legal action.

(a) *Criminal or civil action.* District engineers shall be guided by the following policies in recommending appropriate legal action:

¹ This section refers to state or local authorizations required as a matter of Federal law before a Sec. 404 permit may be issued. Examples are Sec. 401 Water Quality Certification and Sec. 307 Coastal Zone Management Consistency Determinations.

² In such cases, the District Engineer may, in his discretion, recommend to the United States Attorney that a complaint be filed. An after-the-fact application should not be accepted until the enforcement action is completely resolved. This exception to the general rule of accepting after-the-fact applications should be used on a limited basis, only for those cases which merit special treatment.

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(1) *Criminal action.* Criminal action is considered appropriate when the facts surrounding an unauthorized activity reveal the necessity for punitive action and/or when deterrence of future unauthorized activities in the area is considered essential to the establishment or maintenance of a viable regulatory program.

(2) *Civil action.* Civil action is considered appropriate when the evaluation of the unauthorized activity reveals that (i) enforcement of an order issued pursuant to § 326.2 or § 326.3 (b) of this Part is required; (ii) after the procedures in § 326.3 (c) of this Part have been completed, the unauthorized activity would be in the public interest if altered or modified but attempts to secure voluntary alteration or modification have failed such that a judicial order is necessary, or (iii) after the procedures in § 326.3 (c) of this Part have been completed, a civil penalty under Section 309 of the Clean Water Act is warranted.

(b) *Preparation of case.* If the district engineer determines to recommend legal action he shall prepare a litigation report which shall contain an analysis of the data and information obtained during the investigation and a recommendation of appropriate civil and/or criminal action. In those cases where the analysis of the facts developed during the investigation and/or the after-the-fact application evaluation leads to the preliminary conclusion to recommend that removal of the unauthorized activity is in the public interest, the district engineer shall also recommend restoration of the area to its original or comparable condition.

(c) *Referral to local U.S. Attorney.* Except as provided in paragraph (d) of this section, district engineers are authorized to refer the following cases to the Department of Justice (DOJ) in accordance with procedures established by DOJ. Information copies of all letters of referral which go directly to a U.S. Attorney shall be forwarded to the Chief of Engineers, ATTN: DAEN-CCK, for transmittal to the Chief, Pollution Control Section, Land and Natural Resources Division, Department of Justice, Washington, D.C. 20530.

(1) Unauthorized structures or work in or affecting navigable waters of the United States that fall exclusively within the purview of Section 10 of the River and Harbor Act of 1899 (see 33 CFR Part 322) for which a criminal fine or penalty under Section 12 of that Act (33 U.S.C. 406) is recommended.

(2) Civil action involving small unauthorized structures, such as piers, which the district engineer determines are either (i) not in the public interest

and recommends that they be removed, or (ii) would be in the public interest if altered or modified but attempts to secure voluntary alteration or modification have failed such that the district engineer recommends that a judicial order is necessary.

(3) Violations of Section 301 of the Clean Water Act involving the unauthorized discharge of dredged or fill material into the waters of the United States where the district engineer recommends, with the concurrence of the Regional Administrator, civil and/or criminal action pursuant to Section 309 of the Clean Water Act.

(4) Cases for which a temporary restraining order and/or preliminary injunction is appropriate following noncompliance with a cease and desist order.

(d) *Referral to Office, Chief of Engineers.* District engineers shall prepare and forward a litigation report to the Office, Chief of Engineers, ATTN: DAEN-CCK, for cases not identified in paragraph (c) of this section which civil and/or criminal action is considered appropriate, including cases involving:

(1) Significant questions of law or fact;
(2) Discharges of dredged or fill material into waters of the United States that are not interstate waters or navigable waters of the United States, or part of a surface tributary system to these waters;

(3) Recommendations for substantial or complete restoration;

(4) Violations of Section 9 of the River and Harbor Act of 1899; and

(5) Violations of the Marine Protection, Research and Sanctuaries Act of 1972.

(6) All cases involving American Indians, including unauthorized activities on reservation lands.

§ 326.5 Supervision and enforcement of authorized activities.

(a) *Inspection and monitoring.* District engineers will assure that authorized activities are conducted and executed in conformance with approved plans and other conditions of the permits. Appropriate inspections should be made on timely occasions during performance of the activity and appropriate notices and instructions given permittees to insure that they do not depart from the approved plans. Reevaluation of a permit to assure compliance with its purposes and conditions will be carried out as provided in 33 CFR Part 325.7. If there are approved material departures from the authorized plans, the district engineer will require the permittee to furnish corrected plans showing the activity as actually performed.

(b) *Non-compliance.* Where the district engineer determines that there has been non-compliance with the terms or conditions of a permit, he should first contact the permittee and attempt to resolve the problem. If a mutually agreeable resolution cannot be reached, a written demand for compliance will be made. If the permittee has not agreed to comply within 5 days of receipt of the demand, the district engineer will issue an immediately effective notice of suspension in accordance with 33 CFR Part 325.7(c) and consider initiation of appropriate legal action (§ 326.4 of this Part).

(c) *Surveillance.* For purposes of inspection of permitted activities and for surveillance of the waters of the United States for enforcement of the permit authorities the district engineer will use all means at his disposal. All Corps of Engineers employees will be instructed to observe and report all unauthorized activities in waters of the United States. The assistance of members of the public and personnel of other interested Federal, state and local agencies to observe and report such activities will be encouraged. To facilitate this surveillance, the district engineer will, in appropriate cases, require a copy of ENG Form 4336 to be posted conspicuously at the site of authorized activities and will make available to all interested persons information on the scope of authorized activities and the conditions prescribed in the authorizations. Surveillance in ocean waters will be accomplished primarily by the Coast Guard pursuant to Section 107(c) of the Marine Protection, Research and Sanctuaries Act of 1972, as amended.

(d) *Inspection expenses.* The expenses incurred in connection with the inspection of permitted activity in waters of the United States normally will be paid by the Federal Government in accordance with the provisions of Section 6 of the River and Harbor Act of 3 March 1905 (33 U.S.C. 417) unless daily supervision or other unusual expenses are involved. In such unusual cases, the district engineer may require the permittee to bear the expense of inspections in accordance with the conditions of his permit; however, the permittee will not be required or permitted to pay the United States Inspector either directly or through the district engineer. The inspector will be paid on regular payrolls or service vouchers. The district engineer will collect the cost from the permittee in accordance with the following:

(1) At the end of each month the amount chargeable for the cost of

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inspection pertaining to the permit will be collected from the permittee and will be taken up on the statement of accountability and deposited in a designated depository to the credit of the Treasurer of the United States, on account of reimbursement of the appropriation from which the expenses of the inspection were paid.

(2) If the district engineer considers such a procedure necessary to insure the United States against loss through possible failure of the permittee to supply the necessary funds in accordance with paragraph (d)(1) of this section he may require the permittee to keep on deposit with the district engineer at all times an amount equal to the estimated cost of inspection and supervision for the ensuing month, such deposit preferably being in the form of a certified check, payable to the order of Treasurer of the United States. Certified checks so deposited will be carried in a special deposit account (guaranty for inspection expenses) and upon completion of the work under the permit the funds will be returned to the permittee provided he has paid the actual cost of inspection.

(3) On completion of work under a permit, and the payment of expenses by the permittee without protest, the account will be closed, and outstanding deposits returned to the permittee. If the account is protested by the permittee, it will be referred to the division engineer for approval before it is closed and before any deposits are returned to the permittee.

(e) Where the unauthorized activity is determined not to be in the public interest, the notification of the denial of the permit will prescribe any corrective actions to be taken in connection with the work already accomplished, including restoration of those areas subject to denial, and establish a reasonable period of time for the applicant to complete such actions. The district engineer, after denial of the permit, will again consider whether to recommend civil and/or criminal action in accordance with § 326.4 of this Part.

(f) If the applicant declines to accept the proposed permit conditions, or fails to take corrective action prescribed in the notification of denial, or if the district engineer recommends legal action after denying the permit, the matter will be referred to the Chief of Engineers, Attn: DAEN-CCK, with recommendations for appropriate action.

(g) Division and District Engineers are authorized and encouraged to develop joint surveillance and inspection procedures with other Federal, state, and local agencies with similar

regulatory responsibilities and with other Federal, state and local agencies having special interest or expertise in the Corps regulatory program. However, any decision to initiate legal action or to require any restoration or other remedial work under Corps of Engineers authority remains the independent responsibility of the Division or district engineer.

PART 327—PUBLIC HEARINGS

Sec.

- 327.1 Purpose.
- 327.2 Applicability.
- 327.3 Definitions.
- 327.4 General policies.
- 327.5 Presiding officer.
- 327.6 Legal adviser.
- 327.7 Representation.
- 327.8 Conduct of hearings.
- 327.9 Filing of transcript of the public hearing.
- 327.10 Powers of the presiding officer.
- 327.11 Public notice.

Authority: 33 U.S.C. 1344; 33 U.S.C. 1413

§ 327.1 Purpose.

This regulation prescribes the policy, practice and procedures to be followed by the U.S. Army Corps of Engineers in the conduct of public hearings conducted in the evaluation of a proposed Department of the Army permit action or Federal project as defined in § 327.3 of this Part below including those held pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 103 of the Marine Protection, Research and Sanctuaries Act (MPRSA), as amended (33 U.S.C. 1413).

§ 327.2 Applicability.

This regulation is applicable to all divisions and districts responsible for the conduct of public hearings.

§ 327.3 Definitions.

(a) Public hearing means a public proceeding conducted for the purpose of acquiring information or evidence which will be considered in evaluating a proposed Department of the Army permit action, or Federal project, and which affords to the public the opportunity to present their views, opinions, and information on such permit actions or Federal projects.

(b) Permit action, as used herein means the evaluation of and decision on an application for a permit pursuant to Section 9 or 10 of the River and Harbor Act of 1899, Section 404 of the Clean Water Act, or Section 103 of the MPRSA, as amended, or the modification or revocation of any Department of the Army permit (see 33 CFR 325.7).

(c) Federal project means a Corps of Engineers project (work or activity of any nature for any purpose which is to be performed by the Chief of Engineers pursuant to Congressional authorizations) involving the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of dumping it in ocean waters subject to Section 404 of the Clean Water Act, or Section 103 of the MPRSA. See 33 CFR 209.145. (This regulation supersedes all references to public meetings in 33 CFR 209.145).

§ 327.4 General policies.

(a) A public hearing will be held in connection with the consideration of a Department of the Army permit application, or a Federal project whenever a public hearing is needed for making a decision on such permit application or Federal project. In addition, a public hearing may be held when it is proposed to modify or revoke a permit. (See 33 CFR 325.7).

(b) Unless the public notice specifies that a public hearing will be held, any person may request, in writing, within the comment period specified in the public notice on a Department of the Army permit application or on a Federal project, that a public hearing be held to consider the material matters in issue in the permit application or Federal project. Upon receipt of any such request, stating with particularity the reasons for holding a public hearing, the district engineer may expeditiously attempt to resolve the issues informally. Otherwise, he shall promptly set a time and place for the public hearing and give due notice thereof, as prescribed in § 327.11 of this Part. Requests for a public hearing under this paragraph shall be granted, unless the district engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing. The district engineer will make such a determination in writing, and communicate his reasons therefor to all requesting parties.

(c) In case of doubt, a public hearing shall be held. HQDA has the discretionary power to require hearings in any case.

(d) In fixing the time and place for a hearing, the convenience and necessity of the interested public will be duly considered.

§ 327.5 Presiding officer.

(a) The district engineer, in whose district a matter arises, shall normally serve as the Presiding Officer. When the district engineer is unable to serve, he

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may designate the deputy district engineer or other qualified person as such Presiding Officer. In cases of unusual interest, the Chief of Engineers or the Division Engineer may appoint such person as he deems appropriate to serve as the Presiding Officer.

(b) The Presiding Officer shall include in the administrative record of the permit action the request or requests for the hearing and any data or material submitted in justification thereof, materials submitted in opposition to or in support of the proposed action, the hearing transcript, and such other material as may be relevant or pertinent to the subject matter of the hearing. The administrative record shall be available for public inspection with the exception of material exempt from disclosure under the Freedom of Information Act.

§ 327.6 Legal adviser.

At each public hearing, the district counsel or his designee may serve as legal advisor to the presiding officer. In appropriate circumstances, the district engineer may waive the requirement for a legal advisor to be present.

§ 327.7 Representation.

At the public hearing, any person may appear on his own behalf, or may be represented by counsel, or by other representatives.

§ 327.8 Conduct of hearings.

(a) The presiding officer shall make an opening statement outlining the purpose of the hearing and prescribing the general procedures to be followed.

(b) Hearings shall be conducted by the presiding officer in an orderly but expeditious manner. Any person shall be permitted to submit oral or written statements concerning the subject matter of the hearing, to call witnesses who may present oral or written statements, and to present recommendations as to an appropriate decision. Any person may present written statements for the hearing record prior to the time the hearing record is closed to public submissions, and may present proposed findings and recommendations. The presiding officer shall afford participants a reasonable opportunity for rebuttal.

(c) The presiding officer shall have discretion to establish reasonable limits upon the time allowed for statements of witnesses, for arguments of parties or their counsel or representatives, and upon the number of rebuttals.

(d) Cross-examination of witnesses shall not be permitted.

(e) All public hearings shall be reported verbatim. Copies of the transcripts of proceedings may be

purchased by any person from the Corps of Engineers or the reporter of such hearing. A copy will be available for public inspection at the office of the appropriate district engineer.

(f) All written statements, charts, tabulations, and similar data offered in evidence at the hearing shall, subject to exclusion by the presiding officer for reasons of redundancy, be received in evidence and shall constitute a part of the record.

(g) The presiding officer shall allow a period of not less than 10 days after the close of the public hearing for submission of written comments.

(h) In appropriate cases, the district engineer may participate in joint public hearings with other Federal or state agencies, provided the procedures of those hearings meet the requirements of this regulation. In those cases in which the other Federal or state agency allows a cross-examination in its public hearing, the district engineer may still participate in the joint public hearing but shall not require cross-examination as a part of his participation.

§ 327.9 Filing of transcript of the public hearing.

Where the presiding officer is the initial action authority, the transcript of the public hearing, together with all evidence introduced at the public hearing, shall be made a part of the administrative record of the permit action or Federal project. The initial action authority shall fully consider the matters discussed at the public hearing in arriving at his initial decision or recommendation and shall address, in his decision or recommendation, all substantial and valid issues presented at the hearing. Where a person other than the initial action authority serves as presiding officer, such person shall forward the transcript of the public hearing and all evidence received in connection therewith to the initial action authority together with a report summarizing the issues covered at the hearing. The report of the presiding officer and the transcript of the public hearing and evidence submitted thereat shall in such cases be fully considered by the initial action authority in his decision or recommendation to higher authority as to such permit action or Federal project.

§ 327.10 Authority of the presiding officer.

Presiding officers shall have the following authority:

(a) To regulate the course of the hearing including the order of all sessions and the scheduling thereof, after any initial session, and the

recessing, reconvening, and adjournment thereof; and

(b) To take any other action necessary or appropriate to the discharge of the duties vested in them, consistent with the statutory or other authority under which the Chief of Engineers functions, and with the policies and directives of the Chief of Engineers and the Secretary of the Army.

§ 327.11 Public notice.

(a) Public notice shall be given of any public hearing to be held pursuant to this regulation. Such notice should normally provide for a period of not less than 30 days following the date of public notice during which time interested parties may prepare themselves for the hearing. Notice shall also be given to all Federal agencies affected by the proposed action, and to state and local agencies and other parties having an interest in the subject matter of the hearing. Notice shall be sent to all persons requesting a hearing and shall be posted in appropriate government buildings and published in newspapers of general circulation.

(b) The notice shall contain time, place, and nature of hearing; the legal authority and jurisdiction under which the hearing is held; and location of and availability of the draft environmental impact statement or environmental assessment.

PART 328 [RESERVED]

PART 329—DEFINITION OF NAVIGATION WATERS OF THE UNITED STATES

- Sec.
- 329.1 Purpose.
- 329.2 Applicability.
- 329.3 General policies.
- 329.4 General definitions.
- 329.5 General scope of determination.
- 329.6 Interstate or foreign commerce.
- 329.7 Intrastate or interstate nature of waterway.
- 329.8 Improved or natural conditions of the waterbody.
- 329.9 Time at which commerce exists or determination is made.
- 329.10 Existence of obstructions.
- 329.11 Geographic and jurisdiction limits of rivers and lakes.
- 329.12 Geographic and jurisdictional limits of oceanic and tidal waters.
- 329.13 Geographic limits: Shifting boundaries.
- 329.14 Determination of navigability.
- 329.15 Inquiries regarding determinations.
- 329.16 Use and maintenance of lists of determinations.

Authority: 33 U.S.C. 401 et seq.

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§ 329.1 Purpose.

This regulation defines the term "navigable waters of the United States" as it is used to define authorities of the Corps of Engineers. It also prescribes the policy, practice and procedure to be used in determining the extent of the jurisdiction of the Corps of Engineers and in answering inquiries concerning "navigable waters of the United States." This definition does not apply to authorities under the Clean Water Act which definitions are described under 33 CFR Part 323.

§ 329.2 Applicability.

This regulation is applicable to all Corps of Engineers districts and divisions having civil works responsibilities.

§ 329.3 General policies.

Precise definitions of "navigable waters of the United States"; or "navigability" are ultimately dependent on judicial interpretation, and cannot be made conclusively by administrative agencies. However, the policies and criteria contained in this regulation are in close conformance with the tests used by the Federal courts and determinations made under this regulation are considered binding in regard to the activities of the Corps of Engineers.

§ 329.4 General definition.

Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.

§ 329.5 General scope of determination.

The several factors which must be examined when making a determination whether a waterbody is a navigable water of the United States are discussed in detail below. Generally, the following conditions must be satisfied:

- (a) Past, present, or potential presence of interstate or foreign commerce;
- (b) Physical capabilities for use by commerce as in paragraph (a) of this section; and
- (c) Defined geographic limits of the waterbody.

§ 329.6 Interstate or foreign commerce.

(a) *Nature of commerce: type, means, and extent of use.* The types of commercial use of a waterway are extremely varied and will depend on the

character of the region, its products, and the difficulties or dangers of navigation. It is the waterbody's capability of use by the public for purposes of transportation of commerce which is the determinative factor, and not the time, extent or manner of that use. As discussed in § 329.9 of this Part, it is sufficient to establish the potential for commercial use at any past, present, or future time. Thus, sufficient commerce may be shown by historical use of canoes, bateaux, or other frontier craft, as long as that type of boat was common or well-suited to the place and period. Similarly, the particular items of commerce may vary widely, depending again on the region and period. The goods involved might be grain, furs, or other commerce of the time. Logs are a common example; transportation of logs has been a substantial and well-recognized commercial use of many navigable waters of the United States. Note, however, that the mere presence of floating logs will not of itself make the river "navigable"; the logs must have been related to a commercial venture. Similarly, the presence of recreational craft may indicate that a waterbody is capable of bearing some forms of commerce, either presently, in the future, or at a past point in time.

(b) *Nature of commerce: interstate and intrastate.* Interstate commerce may of course be existent on an intrastate voyage which occurs only between places within the same state. It is only necessary that goods may be brought from, or eventually be destined to go to, another state. (For purposes of this regulation, the term "interstate commerce" hereinafter includes "foreign commerce" as well.)

§ 329.7 Intrastate or interstate nature of waterway.

A waterbody may be entirely within a state, yet still be capable of carrying interstate commerce. This is especially clear when it physically connects with a generally acknowledged avenue of interstate commerce, such as the ocean or one of the Great Lakes, and is yet wholly within one state. Nor is it necessary that there be a physically navigable connection across a state boundary. Where a waterbody extends through one or more states, but substantial portions, which are capable of bearing interstate commerce, are located in only one of the states, the entirety of the waterway up to the head (upper limit) of navigation is subject to Federal jurisdiction.

§ 329.8 Improved or natural conditions of the waterbody.

Determinations are not limited to the natural or original condition of the waterbody. Navigability may also be found where artificial aids have been or may be used to make the waterbody suitable for use in navigation.

(a) *Existing improvements: artificial waterbodies.* (1) An artificial channel may often constitute a navigable water of the United States, even though it has been privately developed and maintained, or passes through private property. The test is generally as developed above, that is, whether the waterbody is capable of use to transport interstate commerce. Canals which connect two navigable waters of the United States and which are used for commerce clearly fall within the test, and themselves become navigable. A canal open to navigable waters of the United States on only one end is itself navigable where it in fact supports interstate commerce. A canal or other artificial waterbody that is subject to ebb and flow of the tide is also a navigable water of the United States.

(2) The artificial waterbody may be a major portion of a river or harbor area or merely a minor backwash, slip, or turning areas. (See § 329.12(b) of this Part.)

(3) Private ownership of the lands underlying the waterbody, or of the lands through which it runs, does not preclude a finding of navigability. Ownership does become a controlling factor if a privately constructed and operated canal is not used to transport interstate commerce nor used by the public; it is then not considered to be a navigable water of the United States. However, a private waterbody, even though not itself navigable, may so affect the navigable capacity of nearby waters as to nevertheless be subject to certain regulatory authorities.

(b) *Non-existing improvements, past or potential.* A waterbody may also be considered navigable depending on the feasibility of use to transport interstate commerce after the construction of whatever "reasonable" improvements may potentially be made. The improvements need not exist, be planned, nor even authorized; it is enough that potentially they could be made. What is a "reasonable" improvement is always a matter of degree; there must be a balance between cost and need at a time when the improvement would be (or would have been) useful. Thus, if an improvement were "reasonable" at a time of past use, the water was therefore navigable in law from that time forward.

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The changes in engineering practices or the coming of new industries with varying classes of freight may affect the type of the improvement; those which may be entirely reasonable in a thickly populated, highly developed industrial region may have been entirely too costly for the same region in the days of the pioneers. The determination of reasonable improvement is often similar to the cost analyses presently made in Corps of Engineers studies.

§ 329.9 Time at which commerce exists or determination is made.

(a) *Past use.* A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this Part retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions. Nor does absence of use because of changed economic conditions affect the legal character of the waterbody. Once having attained the character of "navigable in law," the Federal authority remains in existence, and cannot be abandoned by administrative officers or court action. Nor is mere inattention or ambiguous action by Congress an abandonment of Federal control. However, express statutory declarations by Congress that described portions of a waterbody are non-navigable, or have been abandoned, are binding upon the Department of the Army. Each statute must be carefully examined, since Congress often reserves the power to amend the Act, or assigns special duties of supervision and control to the Secretary of the Army or Chief of Engineers.

(b) *Future or potential use.* Navigability may also be found in a waterbody's susceptibility for use in its ordinary condition or by reasonable improvement to transport interstate commerce. This may be either in its natural or improved condition, and may thus be existent although there has been no actual use to date. Non-use in the past therefore does not prevent recognition of the potential for future use.

§ 329.10 Existence of obstructions.

A stream may be navigable despite the existence of falls, rapids, sand bars, bridges portages, shifting currents, or similar obstructions. Thus, a waterway in its original condition might have had substantial obstructions which were overcome by frontier boats and/or portages, and nevertheless be a "channel" or commerce, even though

boats had to be removed from the water in some stretches, or logs be brought around an obstruction by means of artificial chutes. However, the question is ultimately a matter of degree, and it must be recognized that there is some point beyond which navigability could not be established.

§ 329.11 Geographic and jurisdictional limits of rivers and lakes.

(a) *Jurisdiction over entire bed.* Federal regulatory jurisdiction, and powers of improvement for navigation, extend laterally to the entire water surface and bed of a navigable waterbody, which includes all the land and waters below the ordinary high water mark.

(1) The "ordinary high water mark" on non-tidal rivers is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.

(2) Ownership of a river or lake bed or of the lands between high and low water marks will vary according to state law; however, private ownership of the underlying lands has no bearing on the existence or extent of the dominant Federal jurisdiction over a navigable waterbody.

(b) *Upper limit of navigability.* The character of a river will, at some point along its length, change from navigable to non-navigable. Very often that point will be at a major fall or rapids, or other place where there is a marked decrease in the navigable capacity of the river. The upper limit will therefore often be the same point traditionally recognized as the head of navigation, but may, under some of the tests described above, be at some point yet farther upstream.

§ 329.12 Geographic and jurisdictional limits of oceanic and tidal waters.

(a) *Ocean and coastal waters.* The navigable waters of the United States over which Corps of Engineers regulatory jurisdiction extends include all ocean and coastal waters within a zone three geographic (nautical) miles seaward from the coast line. Wider zones of three leagues (nine nautical miles) are recognized off the coast of Texas and the Gulf coast of Florida and for other special regulatory powers such as those exercised over the outer continental shelf.

(1) *Coast line defined.* Generally, where the shore directly contacts the open sea, the line on the shore reached

by the ordinary low tides comprises the coast line from which the distance of three geographic miles is measured. The line has significance for both domestic and international law (in which it is termed the "baseline"), and is subject to precise definitions. Special problems arise when offshore rocks, islands, or other bodies exist, and the line may have to be drawn to seaward of such bodies.

(2) *Shoreward limit of jurisdiction.* Regulatory jurisdiction in coastal areas extends to the line on the shore reached by the plane of the mean (average) high water. Where precise determination of the actual location of the line becomes necessary, it must be established by survey with reference to the available tidal datum, preferably averaged over a period of 18.6 years. Less precise methods, such as observation of the "apparent shoreline" which is determined by reference to physical markings, lines of vegetation, or changes in type of vegetation, may be used only where an estimate is needed of the line reached by the mean high water.

(b) *Bays and estuaries.* Regulatory jurisdiction extends to the entire surface and bed of all waterbodies subject to tidal action. Jurisdiction thus extends to the edge (as determined by paragraph (a)(2) of this section of all such waterbodies, even though portions of the waterbody may be extremely shallow, or obstructed by shoals, vegetation, or other barriers. Marshlands and similar areas are thus considered "navigable in law," but only so far as the area is subject to inundation by the mean high waters. The relevant test is therefore the presence of the mean high tidal waters, and not the general test described above, which generally applies to inland rivers and lakes.

§ 329.13 Geographic limits: Shifting boundaries.

Permanent changes of the shoreline configuration result in similar alterations of the boundaries of the navigable waters of the United States. Thus, gradual changes which are due to natural causes and are perceptible only over some period of time constitute changes in the bed of a waterbody which also change the shoreline boundaries of the navigable waters of the United States. However, an area will remain "navigable in law," even though no longer covered with water, whenever the change has occurred suddenly, or was caused by artificial forces intended to produce that change. For example, shifting sand bars within a river or estuary remain part of the navigable

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water of the United States, regardless that they may be dry at a particular point in time.

§ 329.14 Determination of navigability.

(a) *Effect on determinations.* Although conclusive determinations of navigability can be made only by Federal Courts, those made by Federal agencies are nevertheless accorded substantial weight by the courts. It is therefore necessary that when jurisdictional questions arise, District personnel carefully investigate those waters which may be subject to Federal regulatory jurisdiction under guidelines set out above, as the resulting determination may have substantial impact upon a judicial body. Official determinations by an agency made in the past can be revised or reversed as necessary to reflect changed rules or interpretations of the law.

(b) *Procedures of determination.* A determination whether a waterbody is a navigable water of the United States will be made by the Division Engineer, and will be based on a report of findings prepared at the District level in accordance with the criteria set out in this regulation. Each report of findings will be prepared by the District Engineer, accompanied by an opinion of the District Counsel, and forwarded to the Division Engineer for final determination. Each report of findings will be based substantially on applicable portions of the format in paragraph (c) of this section.

(c) *Suggested format of report of findings.* (1) Name of waterbody:

(2) Tributary to:

(3) Physical characteristics:

(i) Type: (river, bay, slough, estuary, etc.)

(ii) Length:

(iii) Approximate discharge volumes: Maximum, Minimum, Mean.

(iv) Fall per mile:

(v) Extent of tidal influence:

(vi) Range between ordinary high and ordinary low water:

(vii) Description of improvements to navigation not listed in paragraph (c)(5) of this section:

(4) Nature and location of significant obstructions to navigation in portions of the waterbody used or potentially capable of use in interstate commerce:

(5) Authorized projects:

(i) Nature, condition and location of any improvements made under projects authorized by Congress:

(ii) Description of projects authorized but not constructed:

(iii) List of known survey documents or reports describing the waterbody:

(6) Past or present interstate commerce:

(i) General types, extent, and period in time:

(ii) Documentation if necessary:

(7) Potential use for interstate commerce, if applicable:

(i) If in natural condition:

(ii) If improved:

(8) Nature of jurisdiction known to have been exercised by Federal agencies if any:

(9) State or Federal court decisions relating to navigability of the waterbody, if any:

(10) Remarks:

(11) Finding of navigability (with date) and recommendation for determination:

§ 329.15 Inquiries regarding determinations.

(a) Findings and determinations should be made whenever a question arises regarding the navigability of a waterbody. Where no determination has been made, a report of findings will be prepared and forwarded to the Division Engineer, as described above. Inquiries may be answered by an interim reply which indicates that a final agency determination must be made by the Division Engineer. If a need develops for an emergency determination, District Engineers may act in reliance on a finding prepared as in § 329.14 of this part. The report of findings should then be forwarded to the Division Engineer on an expedited basis.

(b) Where determinations have been made by the Division Engineer, inquiries regarding the *navigability* of specific portions of waterbodies covered by these determinations may be answered as follows:

This Department, in the administration of the laws enacted by Congress for the protection and preservation of the navigable waters of the United States, has determined that _____ (River) (Bay) (Lake, etc.) is a navigable water of the United States from _____ to _____. Actions which modify or otherwise affect those waters are subject to the jurisdiction of this Department, whether such actions occur within or outside the navigable areas.

(c) Specific inquiries regarding the *jurisdiction* of the Corps of Engineers can be answered only after a determination whether (1) the waters are navigable waters of the United States or (2) if not navigable, whether the proposed type of activity may nevertheless so affect the navigable waters of the United States that the assertion of regulatory jurisdiction is deemed necessary.

§ 329.16 Use and maintenance of lists of determinations.

(a) Tabulated lists of final determinations of navigability are to be maintained in each District office, and

be updated as necessitated by court decisions, jurisdictional inquiries, or other changed conditions.

(b) It should be noted that the lists represent only those waterbodies for which determinations have been made; absence from that list should not be taken as an indication that the waterbody is not navigable.

(c) Deletions from the list are not authorized. If a change in status of a waterbody from navigable to non-navigable is deemed necessary, an updated finding should be forwarded to the Division Engineer; changes are not considered final until a determination has been made by the Division Engineer.

PART 330—NATIONWIDE PERMITS

Sec.

330.1 General.

330.2 Definitions.

330.3 Nationwide permits for activities occurring before certain dates.

330.4 Nationwide permits for discharges into certain waters.

330.5 Nationwide permits for specific activities.

330.6 Management practices.

330.7 Discretionary authority.

330.8 Expiration of nationwide permits.

Authority: 33 U.S.C. 403; 33 U.S.C. 1344.

§ 330.1 General.

The purpose of this regulation is to describe the Department of the Army's nationwide permit program and to list all current nationwide permits which have been issued by publication herein. The two types of general permits are referred to as "nationwide permits" and "regional permits." A nationwide permit is a form of general permit which authorizes a category of activities throughout the nation. The authority for general permits to be issued by district engineers on a regional basis is contained in 33 CFR Part 325. Copies of regional permits can be obtained from the appropriate district engineer. Nationwide permits are designed to allow the work to occur with little, if any, delay or paperwork. However, the nationwide permits are valid only if the conditions applicable to the nationwide permits are met. Just because a condition cannot be met does not necessarily mean the activity cannot be authorized but rather that the activity will have to be authorized by an individual or regional permit. Additionally, division engineers have the discretion, under situations and procedures described herein, to override the nationwide permit coverage and require an individual or regional permit. The nationwide permits are issued to satisfy the requirements of both Section 10 of the River and Harbor Act of 1890

and Section 404 of the Clean Water Act unless otherwise stated. These nationwide permits apply only to Department of the Army regulatory programs (other Federal agency, state and local authorizations may be required for the activity).

§ 330.2 Definitions.

(a) The definitions of 33 CFR Parts 321-329 are applicable to the terms used in this part.

(b) Discretionary authority means the authority delegated to division engineers in § 330.7 of this Part to override provisions of nationwide permits to add regional conditions or to require individual permit applications.

§ 330.3 Nationwide permits for activities occurring before certain dates.

The following activities are permitted by a nationwide permit which was issued on 19 July 1977 and need not be further permitted:

(a) Discharges of dredged or fill material in waters of the United States outside the limits of navigable waters of the United States that occurred before the phase-in dates which began July 25, 1975, and extended Section 404 jurisdiction to *all* waters of the United States. These phase-in dates are: after July 25, 1975, discharges into navigable waters of the United States and adjacent wetlands; after September 1, 1976, discharges into navigable waters of the United States and their primary tributaries, including adjacent wetlands, and into natural lakes, greater than 5 acres in surface area; and after July 1, 1977, discharges into all waters of the United States.

(b) Structures or work completed before 18 December 1968 or in waterbodies over which the District Engineer was not asserting jurisdiction at the time the activity occurred provided, in both instances, there is no interference with navigation.

§ 330.4 Nationwide permits for discharges into certain waters.

(a) *Authorized discharges.* Discharges of dredge or fill material into the following waters of the United States are hereby permitted provided the conditions listed in paragraph (b) of this section below are met:

(1) Non-tidal rivers, streams and their lakes and impoundments, including adjacent wetlands, that are located above the headwaters.¹

¹ The State of Wisconsin has denied water quality certification pursuant to Section 401 of the Clean Water Act for certain waters within these two Nationwide Permit Categories. Discharges of dredged or fill material into those specified waters are not authorized under these two nationwide permits. A list of the specific waters may be

(2) Other non-tidal waters of the United States (see 33 CFR 323.2(a)(3)) that are not part of a surface tributary system to interstate waters or navigable waters of the United States.¹

(b) *Conditions.* The following special conditions must be followed in order for the nationwide permits identified in paragraph (a) of this section to be valid:

(1) That the discharge will not be located in the proximity of a public water supply intake;

(2) That the discharge will not destroy a threatened or endangered species as identified under the Endangered Species Act, or destroy or adversely modify the critical habitat of such species. In the case of Federal agencies, it is the agencies' responsibility to review its activities to determine if the action "may affect" any listed species or critical habitat. If so, the Federal agency must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service;

(3) That the discharge will consist of suitable material free from toxic pollutants in toxic amounts;

(4) That the fill created by the discharge will be properly maintained to prevent erosion and other non-point sources of pollution;

(5) That the discharge will not occur in a component of the National Wild and Scenic River System.

(6) That the best management practices listed in § 330.6 of this Part should be followed to the maximum extent practicable.

§ 330.5 Nationwide permits for specific activities.

(a) *Authorized activities.* The following activities are hereby permitted provided the conditions specified in this paragraph and listed in paragraph (b) of this section are met:

(1) The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard (33 CFR Part 66, Subchapter C).

(2) Structures constructed in artificial canals within principally residential developments where the connection of the canal to a navigable water of the United States has been previously authorized (see 33 CFR 322.4(g)).

(3) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure or fill or of any currently serviceable structure or fill constructed prior to the requirement for authorization; provided such repair,

obtained from the St. Paul District Engineer, 1136 U.S. Post Office & Customhouse, St. Paul, MN 55101.

rehabilitation, or replacement does not result in a deviation² from the plans of the original structure or fill, and further provided that the structure or fill to be maintained has not been put to uses differing from uses specified for it in any permit authorizing its original construction. Maintenance dredging is not authorized by this nationwide permit.

(4) Fish and wildlife harvesting devices and activities such as pound nets, crab traps, eel pots, lobster traps, duck blinds, clam and oyster digging.

(5) Staff gages, tide gages, water recording devices, water quality testing and improvement devices, and similar scientific structures.

(6) Survey activities including core sampling, seismic exploratory operations, and plugging of seismic shot holes and other exploratory-type bore holes.

(7) Outfall structures³ where the effluent from that outfall has been permitted under the National Pollutant Discharge Elimination System program (Section 402 of the Clean Water Act) (see 40 CFR Part 122) provided that the individual and cumulative adverse environmental effects of the structure itself are minimal.

(8) Structures for the exploration, production, and transport of oil, gas, and minerals on the outer continental shelf within areas leased for such purposes by the Department of Interior, Bureau of Land Management, provided those structures are not placed within the limits of any designated shipping safety fairway or traffic separation scheme (where such limits have not been designated or where changes are anticipated, District Engineers will consider recommending the discretionary authority provided by § 330.7 of this Part), and further subject to the provisions of the fairway regulations in 33 CFR 209.135.

(9) Structures placed within anchorage or fleeting areas to facilitate moorage of vessels where such areas have been established by the US Coast Guard.

(10) Non-commercial, single-boat, mooring buoys.

(11) Temporary buoys and markers placed for recreational use such as water skiing and boat racing provided that the buoy or marker is removed within 30 days after its use has been

² Minor deviations due to changes in materials or construction techniques and which are necessary to make repair, rehabilitation, or replacement are permitted.

³ Intake structures per se are not included—only those directly associated with an outfall structure are covered by this nationwide permit.

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discontinued. At Corps of Engineers reservoirs, the reservoir manager must approve each buoy or marker individually.

(12) Discharge of material for backfill or bedding for utility lines including outfall and intake structures provided there is no change in preconstruction bottom contours (excess material must be removed to an upland disposal area). A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquifiable, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone and telegraph messages, and radio and television communication. (The utility line and outfall and intake structures will require a Section 10 permit if in navigable waters of the United States. See 33 CFR Part 322. See also paragraph (a)(7) of this section.)

(13) Bank stabilization activities provided:

(i) The bank stabilization activity is less than 500 feet in length;

(ii) The activity is necessary for erosion prevention;

(iii) The activity is limited to less than an average of one cubic yard per running foot placed along the bank within waters of the United States;

(iv) No material is placed in excess of the minimum needed for erosion protection;

(v) No material is placed in any wetland area;

(vi) No material is placed in any location or in any manner so as to impair surface water flow into or out of any wetland area;

(vii) Only clean material free of waste metal products, organic materials, unsightly debris, etc. is used; and

(viii) The activity is a single and complete project.

(14) Minor road crossing fills including all attendant features both temporary and permanent that are part of a single and complete project for crossing of a non-tidal waterbody, provided that the crossing is culverted, bridged or otherwise designed to prevent the restriction of and to withstand expected high flows and provided further that discharges into any wetlands adjacent to the waterbody do not extend beyond 100 feet on either side of the ordinary high water mark of that waterbody. A "minor road crossing fill" is defined as a crossing that involves the discharge of less than 200 cubic yards of fill material below the plane of ordinary high water.

The crossing will require a permit from the US Coast Guard if located in navigable waters of the United States (see 33 U.S.C. 301). Some road fills may be eligible for an exemption from the need for a Section 404 permit altogether (see 33 CFR 323.4).

(15) Fill placed incidental to the construction of bridges across navigable waters of the United States including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided such fill has been authorized by the US Coast Guard under Section 9 of the River and Harbor Act of 1899 as part of the bridge permit. Causeways and approach fills are not included in this nationwide permit and will require an individual or regional Section 404 permit.

(16) Return water⁵ from a contained dredged material disposal area provided the State has issued a certification under Section 401 of the Clean Water Act (see 33 CFR 325.2(b)(1)). The dredging itself requires a Section 10 permit if located in navigable waters of the United States.

(17) Fills associated with small hydropower projects at existing reservoirs where the project which includes the fill is licensed by the Department of Energy under the Federal Power Act of 1920, as amended; has a total generating capacity of not more than 1500 kw (2,000 horsepower); qualifies for the short-form licensing procedures of the Department of Energy (see 18 CFR 4.61); and the individual and cumulative adverse effects on the environment are minimal.

(18) Discharges of dredged or fill material into waters of the United States that do not exceed ten cubic yards as part of a single and complete project provided no material is placed in wetlands⁶.

(19) Dredging of no more than ten cubic yards from navigable waters of the United States as part of a single and complete project.⁶

(20) Structures, work and discharges for the containment and cleanup of oil and hazardous substances which are subject to the National Oil and Hazardous Substances Pollution

⁵ The return water or runoff from a contained disposal area is administratively defined as a discharge of dredged material by 33 CFR 323.2(j) even though the disposal itself occurs on the upland and thus does not require a Section 404 permit. This nationwide permit satisfies the technical requirement for a Section 404 for the return water where the quality of the return water is controlled by the state through the Section 401 certification procedures.

⁶ These nationwide permits are designed for very minor dredge and fill activities such as the removal of a small shoal in a boat slip; they cannot be used for piecemeal dredge and fill activities.

Contingency Plan provided the Regional Response Team which is activated under the Plan concurs with the proposed containment and cleanup action.

(21) Structures, work, and discharges associated with surface coal mining activities provided they are authorized by the Department of the Interior, Office of Surface Mining, or by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977; the appropriate district engineer is given the opportunity to review the Title V permit application and all relevant Office of Surface Mining or state (as the case may be) documentation prior to any decision on that application; and the district engineer makes a determination that the individual and cumulative adverse effects on the environment from such structures, work, or discharges are minimal.

(22) Minor work or temporary structures required for the removal of wrecked, abandoned, or disabled vessels or the removal of obstructions to navigation.

(23) Activities, work, and discharges undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where that agency or department has determined, pursuant to the CEQ Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Part 1500 et seq.), that the activity, work, or discharge is categorically excluded from environmental documentation because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment and the Office of the Chief of Engineers (ATTN: DAEN-CWO-N) has been furnished notice of the agency or department's application for the categorical exclusion and concurs with that determination.⁷

(24) Any activity permitted by a state administering its own permit program for the discharge of dredged or fill material authorized at 33 U.S.C. 1344(g)-(1) shall be permitted pursuant to Section 10 of the River and Harbor Act of 1899 (33 U.S.C. Part 403). Those activities which do not involve a Section 404 state permit are not included in this nationwide permit but many will be exempted by Sec. 154 of Pub. L. 94-587. (See 33 CFR 322.2(a)(2)).

(25) Discharge of concrete into tightly

⁴ District Engineers are authorized, where regional conditions indicate the need, to define the term "expected high flows" for the purpose of establishing applicability of this nationwide permit.

⁷ The State of Wisconsin has denied water quality certifications pursuant to Section 401 of the Clean Water Act for these two nationwide permits. Consequently, the permits do not apply in Wisconsin.

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sealed forms or cells where the concrete is used as a structural member which would not otherwise be subject to Clean Water Act jurisdiction.

(b) *Conditions.* The following special conditions must be followed in order for the nationwide permits identified in paragraph (a) of this section to be valid:

(1) That any discharge of dredged or fill material will not occur in the proximity of a public water supply intake;

(2) That any discharge of dredged or fill material will not occur in areas of concentrated shellfish production unless the discharge is directly related to a shellfish harvesting activity authorized by paragraph (a)(4) of this section.

(3) That the activity will not jeopardize a threatened or endangered species as identified under the Endangered Species Act, or destroy or adversely modify the critical habitat of such species. In the case of Federal agencies, it is the agencies' responsibility to review its activities to determine if the action "may affect" any listed species or critical habitat. If so, the Federal agency must consult with the Fish and Wildlife Service and/or National Marine Fisheries Service;

(4) That the activity will not significantly disrupt the movement of those species of aquatic life indigenous to the waterbody (unless the primary purpose of the fill is to impound water);

(5) That any discharge of dredged or fill material will consist of suitable material free from toxic pollutants (See Section 307 of Clean Water Act) in toxic amounts;

(6) That any structure or fill authorized will be properly maintained;

(7) That the activity will not occur in a component of the National Wild and Scenic River System; and

(8) That the activity will not cause an unacceptable interference with navigation.

(9) That the best management practices listed in § 330.6 of this Part should be followed to the maximum extent practicable.

§ 330.6 Management practices.

(a) In addition to the conditions specified in §§ 330.4 and 330.5 of this Part, the following management practices should be followed, to the maximum extent practicable, in the discharge of dredged or fill material under nationwide permits in order to minimize the adverse effects of these

discharges on the aquatic environment. Failure to comply with these practices may be cause for the district engineer to recommend or the division engineer to take discretionary authority to regulate the activity on an individual or regional basis pursuant to § 330.7 of this Part.

(1) Discharges of dredged or fill material into waters of the United States shall be avoided or minimized through the use of other practical alternatives.

(2) Discharges in spawning areas during spawning seasons shall be avoided.

(3) Discharges shall not restrict or impede the movement of aquatic species indigenous to the waters or the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).

(4) If the discharge creates an impoundment of water, adverse impacts on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow, shall be minimized.

(5) Discharge in wetlands areas shall be avoided.

(6) Heavy equipment working in wetlands shall be placed on mats.

(7) Discharges into breeding areas for migratory waterfowl shall be avoided.

(8) All temporary fills shall be removed in their entirety.

§ 330.7 Discretionary Authority.

Division engineers on their own initiative or upon recommendation of a district engineer are authorized to modify nationwide permits by adding regional conditions or to override nationwide permits by requiring individual permit applications on a case-by-case basis. Discretionary authority will be based on concerns for the aquatic environment as expressed in the guidelines published by EPA pursuant to § 404(b)(1). (40 CFR Part 230)

(a) *Regional conditions.* Division engineers are authorized to modify nationwide permits by adding conditions applicable to certain activities or specific geographic areas within their divisions. In developing regional conditions, division and district engineers will follow standard permit processing procedures as prescribed in 33 CFR Part 325 applying the evaluation criteria of 33 CFR Part 320 and appropriate parts of 33 CFR Parts 321, 322, 323, and 324. A copy of the Statement of Findings will be forwarded

to the Office of the Chief of Engineers. ATTN: DAEN-CWO-N. Division and district engineers will take appropriate measures to inform the public at large of the additional conditions.

(b) *Individual permits.* In nationwide permit cases where additional regional conditioning may not be sufficient or where there is not sufficient time to develop regional conditions under paragraph (a) of this section, the division engineer may require individual permit applications on a case-by-case basis. Where time is of the essence, the district engineer may telephonically recommend that the division engineer assert discretionary authority to require an individual permit application for a specific activity. If the division engineer concurs, he may verbally authorize the district engineer to implement that authority. Both actions will be followed by written confirmation with copy to the Chief of Engineers (DAEN-CWO-N). Additionally, after notice and opportunity for public hearing, division engineers may recommend to the Chief of Engineers that individual permit applications be required for categories of activities, or in a specific geographic area. The division engineer will announce the decision to persons affected by the action. The district engineer will then regulate the activity or activities by processing an application(s) for individual permit(s) pursuant to 33 CFR Part 325.

(c) Discretionary authority which has been exercised under nationwide permits issued on 19 July 1977 expires four months from the effective date of this regulation. Such authority may be extended or reinstated after appropriate procedures of this regulation and 33 CFR Parts 320 through 325 have been followed.

§ 330.8 Expiration of nationwide permits.

The Chief of Engineers will review nationwide permits at least every five years. Based on this review, which will include public notice and opportunity for public hearing through publication in the Federal Register, he will either modify, reissue (extend) or revoke the permits. If a nationwide permit is not modified or reissued within five years of publication in the Federal Register, it automatically expires and becomes null and void.

(FR Doc. 82-18858 Filed 7-21-82; 8:48 am)

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My name is Walter Smith. I am employed by, and represent here today, Hartz Mountain Industries, one of the largest real estate developers in New Jersey.

I appreciate the opportunity to appear before the committee today to provide input to your consideration of Assembly Bill A672, designed to regulate development in New Jersey's Wetlands.

The process of bringing a development from concept to completion can be very long and complex. Part of this complexity is the regulatory maze that must be traversed through the various local, state and federal agencies that plan an active role in ensuring that a project conforms to the standards set forth in all of the laws and regulations that define the public interest. Some of these laws result in overlapping, or concurrent jurisdictions. Such duplication of authority, if not recognized and eliminated, results in an unnecessary waste of time and money during the development process with no corresponding gain in public benefit.

in some cases this waste could be sufficient to make a development proposal uneconomic and at the very least consumes resources that would be better spent as capital investment, increasing jobs and economic activity for New Jersey.

Assembly Bill A672 properly recognizes duplicative state jurisdictions by exempting:

1. The Hackensack Meadowlands area
2. The Pinelands area
3. "Coastal" wetlands

This same exemption should be provided for Wetlands that are regulated by Federal law through the US Army Corps of Engineers. These wetlands are regulated by the Corps under the provisions of Section 404 of the Clean Water Act in consultation with the Environmental Protection Agency, Fish and Wildlife Service and National Marine Fisheries organization.

In March 1984, the Corps published proposed new regulations which will greatly increase the extent of their jurisdiction. The final regulations are due to be published shortly.

In order to eliminate areas of regulatory duplication, I recommend that "Wetlands under the jurisdiction of the US Army Corps of Engineers" be added to the exemption paragraph of any bill passed by the committee.

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A SUMMARY AND TECHNICAL REVIEW
OF A-2348

Department of Environmental Protection
September 24, 1984

A-2348: SUMMARY OF REVIEW

Reviews of A-2348 and comparisons with ACS-672 by the New Jersey Conservation Foundation and the New Jersey Builders Association are, as expected, divergent in interpretations and characterizations of provisions within each bill. In our considered judgment, however, the details and comparisons are peripheral to the major contention we must adhere to concerning A-2348; that is, within the 39 technical-scientific errors and limits to protection of freshwater wetlands that we have identified, there lie basic elements which effectively eliminate from A-2348 any wetlands protection strengths. In addition, the bill effectively divests the Flood Hazard Area Control Act, Coastal Area Facility Review Act, Water Pollution Control Act, and the Water Quality Planning Act of any substantive provisions for freshwater wetlands protection.

Central to A-2348 are four basic problem elements: 1) inaccurate definitions; 2) listed exclusions which compound the implicit exclusions of the definitions; 3) allowance for wetlands fill; 4) effect on other Acts.

DEFINITIONS

"Hydric soils," as defined in the Act, would include only soils that are saturated during the growing season. According to the United States Department of Agriculture, Soil Conservation Service, "hydric soils" can be those soils which are saturated during significant periods or long periods during the growing season. This SCS definition does not limit hydric soils to that which are saturated throughout the entire growing period.

The Act fails to distinguish hydrophytes as including obligate hydrophytes (i.e., requiring saturated conditions) and facultative hydrophytes (i.e., capable of existing under saturated and unsaturated conditions). Wetlands are characterized as those areas supporting a predominance of hydrophytes. The coup de grace is that this Act excludes "lands supporting upland vegetation," as defined in this Act, from the purview of the Act. A minority of upland vegetative species within a wetlands area is not uncommon.

It would take a great deal of time and effort to estimate the actual percentage of wetland areas that would be excluded by these definitions and this exception. However, it would not be surprising if this exception precluded regulation of 50% or more of all New Jersey wetlands.

EXCLUSIONS

This Act specifically provides for exclusion of: 1) "areas drained prior to the effective date of the act" -- experience in Coastal Wetlands enforcement shows that a majority percentage of

project areas involving wetlands show some signs of drainage or ditching, whether recent or long ago; 2) "wetlands artificially created due to manmade or natural obstructions" -- almost all wetlands have been created by manmade or natural obstructions, whether by manmade diversions in recent or ancient history, trees felled by climatic extremes or wildlife, or naturally occurring and changing land surface or subsurface formations; 3) "lands within uppermost 20 acres of an intermittent stream corridor" and "wetlands within an isolated depression or discontinuous area of less than 10 acres" -- a map has been prepared which serves as an example of the significance of this provision; 4) "any lands regulated pursuant to the ...United States Army Corps of Engineers' permit jurisdiction, authorized pursuant to provisions of the 'Clean Water Act' " -- around 90% of New Jersey's freshwater wetlands fall within that jurisdiction, the real issue being, however, is the authority coming within the jurisdiction.

PERMITTED FILL

The effect of the errors in definition of terms are compounded by the stated exclusions within the Act; that is, virtually all wetlands are excluded. Solidifying the exemptions, however, is a provision which gives the County "Board" the power to "allow use of a portion" of the wetlands if the applicant creates new wetlands on or off-site within the same drainage basin. The most apparent observation to be made about this provision is that "a portion" can be defined as 99.9% of any wetland. However, a more subtle observation can be made which further supports our contention that this Act has "no effect" for freshwater wetlands protection.

Proposals for projects involving wetlands could effectively circumvent the entire Act by phasing; first phase -- fill wetlands, develop wetlands, create new wetlands on or off-site; second phase -- fill the manmade wetlands, since manmade wetlands are exempt from provisions of this Act. The net result is continued loss of wetlands.

EFFECT ON OTHER ACTS

It must be noted that the effectuation of a "no protection" policy precludes any wetlands protection measures available under the Flood Hazard Area Control Act, Coastal Area Facility Review Act, Water Pollution Control Act, and the Water Quality Planning Act. Provisions of A-2348 allow for this "no protection" policy to supersede the substantive wetlands protection measures available within these four Acts.

CONCLUSION

The above noted problem elements constitute major provisions within A-2348. Without substantial revisions of these three elements, A-2348 should rightfully be characterized as detrimental to environmental protection efforts for the State of New Jersey.

A-2348: INDEX TO COMMENTS

The comments which follow are referenced as policy points (P) and technical points. Policy points highlight portions of the bill which are at basic variance from established natural resource protection policies. While these provisions are not "working provisions" within the bill, they serve to guide judicial interpretation of underlying intent and purpose of legislation, should disputes arise under the legislation.

Technical points are those comments which reference technical and scientific errors within the bill. Technical points also reference provisions of the bill which serve to protect the protection of freshwater wetlands.

| CITATION FROM A-2348 | POLICY (P); TECHNICAL (T) | PAGE OF TOTAL |
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| Master List of New Jersey Vegetation and Their Affinity for Wetlands, Joseph Lomax and Associates | | page A-1 |
| Letters to Army Corps of Engineers concerning the '404' program | | page B-1 |

REVIEW OF A-2348, "FRESHWATER WETLANDS ACT"

The description of A-2348 raises questions as to the underlying intent and purpose of the Act; "AN ACT providing for the management of freshwater wetlands." (p. 1)

POLICY POINT 1: The primary need is for wetlands protection and preservation. The greatest problems have occurred in efforts at managing, engineering, and manipulating wetland resources. "Management" as a primary goal suggests a continuation of wetlands destruction. "Management should be deleted and the term "protection" should be inserted.

Natural resources are protected, conserved, and managed to benefit human existence within the environment. This bill states, "an extraordinary effort must be made to find a balance between human use and conservation of our natural resources."

(p. 1, §2, lines 7, 8)

POLICY POINT 2: This statement, along with statements in Section 10, implies that there is a basic right of property owners to develop and manipulate wetlands in contravention of the State's duty to protect the health, safety and welfare of its citizenry. Moreover, the statement implies that the public interest itself requires further destruction of wetlands. Protection of wetlands is sought because of a long history of problems attributable to destruction, development, and manipulation of wetlands. It is in the public interest to protect neighborhoods, adjoining municipalities and others from actions which will aggravate flood problems and associated public cost burdens. It is in the public interest to protect specialized and dwindling habitat types and their concurrent values for fish and wildlife protection and water filtration purposes. Further loss or alteration of wetlands should be permitted only under extraordinary circumstances.

As development occurs within a drainage basin there is a reduction in land surface which can absorb floodwaters. Volumes of flow increase within existing stream corridors and wetlands. There is a need to preserve wetland areas for peak flow periods. The net loss of wetlands will compound problems created by increasing urbanization.

This problem is addressed in the amended Flood Hazard Area Regulations. N.J.A.C. 7:13-7. Here, it is recognized that a basic deficiency exists in flood plain management programs.

"Established procedures base the extent of the 100-year flood plain, and the predicted elevation of the flood, entirely upon present hydrology..." (emphasis added) "Flood discharges occurring with given rainfall are greatly increased by development. With urbanization, the peak flood discharge from small storms may be more than doubled..."

The summary continues, "(an) equally serious engineering deficiency (is the) failure to take account of valley storage loss when determining 100 year flood profiles." The summary concludes that even the newly recommended "20 percent fill rule as applied throughout the flood fringe areas of the watershed, will allow a considerable increase in flood discharges..."

The stated purpose of the Municipal Land Use Law includes: "(a) To encourage municipal action to guide the appropriate use or development of all lands in this State in a manner which will promote the public health, safety, morals, and general welfare; (b) To secure safety from fire, flood, panic and other natural and man-made disasters." N.J.S.A. 40:55D-2(a)(b). This will not be achieved through the continued balancing of use of wetlands as A-2348 suggests. Wetlands serve vital functions towards the protection of the human use of our environment; health, safety, welfare.

Wetlands are such a valuable natural resource that in DEP's judgment the public interest is best served by restricting their further destruction or alteration and that allowances for such alteration or destruction be made only under extraordinary circumstances. The first paragraphs of Section 2 should be deleted. (§2, lines 1-8 and 37-53)

Within the Legislative findings section of this bill there is a notation that freshwater wetlands are important to preservation of economic values; namely, "maintaining the habitat of wildlife,

including waterfowl, which produces food, fur and feather resources." (p. 2, §2, lines 29-34)

TECHNICAL POINT 1: "Feather resources" should be deleted pursuant to provisions of the U.S. Migratory Bird Treaty Act of 1913 which prohibits sale of feathers from migratory birds.

With the conclusory sections of the Legislative findings, the bill re-emphasizes the "balancing" approach of this Act -- "that in order to protect the public interest, a balance must be achieved between the conservation of wetlands and the use of lands for other human uses"; "...it is necessary to provide a method for defining freshwater wetlands and a regulatory procedure designed to balance the competing needs for wetlands preservation, waterfront access, residential and commercial needs and the public and private goals for the utilization of these lands"; "The method and regulatory procedure should be designed to maintain the overall integrity and continuity of stream corridors and to protect the wetlands so that they may continue to function in a manner to preserve their physical, chemical, biological, social and economic values;" "All wetlands are not of comparable value, however, and some wetlands can be utilized for other purposes without unduly harming our basic environmental goals." (emphasis added) (p. 2, §2, lines 37-53)

POLICY POINT 3: The questions raised in policy point 2 are repeated. A continuation of wetlands destruction and manipulation of wetlands will result in commensurate loss of natural resource values and an increase in flood damages.

Damages within the PRB during the spring of '84 are over \$50 million, a figure confirmed by the Federal Emergency Management Agency (FEMA). The estimated \$980 million price tag for resolving these problems

exposes the magnitude of losses and long term liabilities and burdens to society from flooding problems created and aggravated by improper development.

Creation of jobs and municipal quest for rateables are of unquestionable importance. Absent a statewide law which applies equally to all municipalities, these factors will generally be politically favored over protection of wetlands values.

It is suggested that certain environmental issues cannot be compromised and that wetlands protection is one of these issues. The net benefits of preserving wetlands is clear. The above noted sections of the Act should be deleted.

The first sentence of Section 3 of the Act defines "Biotic community" as meaning "any assemblage of populations living in a prescribed area or physical habitat." [p. 2, §3(a), lines 1-2] This definition is technically correct and sufficient in detail for scientists and laymen alike.

TECHNICAL POINT 2: Eliminate the description of biotic community which starts with "It is an organized unit [p. 2, §3(a), line 3], and ends with "... similar communities may have different species compositions." [p. 3, §3(a), line 123]. This section adds little to technical understanding and tends to bring in ambiguities to the point of providing for varying interpretations.

Hydric soils, as defined by this Act, are those soils listed by the United States Department of Agriculture Soil Conservation Service. However, the Act attempts to define that soil group, and that definition varies from that provided by the referenced agency. (p. 3, §3, lines 15-18)

TECHNICAL POINT 3: Revise the definition of "hydric soils" as provided in the Act. Reference to the Soil Conservation Service definition is sufficient. The USDA, SCS defines hydric soils as soil that is: "(1) either saturated at or near the soil surface with water that is virtually lacking free oxygen for significant periods during the growing season, or; (2) flooded

frequently for long periods during the growing season."¹

The definition provided by the Act suggests that soils must be saturated during the entire growing season. This is clearly not the case and room for misinterpretation should be eliminated.

The definition of "hydrophytic vegetation" as contained in the Act is not acceptable. Again, the temporal nature of saturated conditions is not recognized. [p. 3, §3(c), lines 19,20]

TECHNICAL POINT 4: The definition of "hydrophytic vegetation" should be changed to reflect that accepted by the U.S. Fish and Wildlife Services as "any plant growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content (plants typically found in wet habitats)."²

Wetlands are not always saturated throughout the growing season, as the Act suggests.

¹U.S.D.A., S.C.S., Soils-Hydric Soils of the United States, USDA. National Bulletin No. 430-2-7 (January 4, 1982).

²Cowardin, L.M., U. Carter, F.C. Golet, E.T. LaRoe, 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS - 79-31. Washington, D.C.

This Act defines types of wetlands without defining wetlands,
[p.3, §3(e)(f)(g), lines 21-36]

TECHNICAL POINT 5: Definitions of wetlands types can be eliminated. The Act uses USFWS classifications for wetland types without using the full USFWS definitions.

The premise for a wetlands protection bill should be the protection of wetlands from activities which inhibit the valued functions of wetlands. This Act eliminates from its purview a wide variety of activities which historically have created the problems which precipitated drafting of wetlands protection legislation. In addition, this Act fails to anticipate that, in the future, activities will be proposed which are uncommon or unheard of now. An example of this involves the original drafting of the CAFRA Act. Casino development was unanticipated; however, casino development had the potential to affect the coastline as any other traditional development proposal, such as residential or industrial development.

"Regulated activity," as cited in the Act [p. 3, §3(h), lines 37-46], should not focus on a limited set of activities which may be of present concern but rather regulate, in general, any activity which may result in the undesirable impacts.

TECHNICAL POINT 6: As it reads presently, only plans and proposals for subdivisions and development and dredge or fill are regulated. The meaning of "Regulated activity" should be stated as:

1. any activity which results in the "alteration of freshwater wetlands and buffer zones in any of the following ways:
 - a) the removal, excavation or dredging of soil, sand, gravel, or aggregate material of any kind;

- b) the drainage or disturbance of the water level or water table;
- c) discharging of dredged or fill materials or the dumping or filling with any materials;
- d) the driving of pilings, or the erection of buildings or structures of any kind;
- e) the placing of obstructions whether or not they interfere with the flow of water;
- f) the destruction of plant life, including the cutting of trees, which could result in harm to freshwater wetlands.¹

"Regulated activity" is further defined as not including "the repair or rebuilding of any lawful preexisting building or structure." [p. 3, §3(h), lines 40,41]

TECHNICAL POINT 7: The Department advocated in proposals for the Flood Hazard Control Act that structures and buildings which experience 50 percent or greater destruction from flood and which are shown to aggravate flood conditions off-site should not be rebuilt without exception. It is suggested that a hardship provision may be included within the freshwater wetland permit process if and only if the applicant can and will mitigate the off-site flood impacts of the renewed development. While this provision was provided for under a former proposal for c. 58:16A-55 or 58, the legislature eliminated this feature under P.L. 1977, c. 385, §1, effective February 10, 1978.

"Regulated activity" also exempts "the use of agricultural management practices recommended pursuant to P.L. 1983, c. 32 (C. 4:1C-11 et. al)." [p. 3, §3(h), lines 41-43] [The cite should refer to the Right to Farm Act which is P.L. 1983, c. 31 (C.4:1C-1 et. al.)]

¹ Adapted from proposed Assembly Committee Substitute for Assembly Bill No. 672, by Assemblywoman Ogden, §2.

TECHNICAL POINT 8: U.S.F.W.S. estimates that 87 percent of the wetlands destruction nationwide, during the most recent decades, were for agricultural purposes.¹ In addition, 53 percent of agricultural land in New Jersey is not owner operated.² Any exemption should be tempered with the realization that practices which have as their primary purpose or effect the permanent alteration of wetlands may, in actuality, be for future non-agricultural development purposes.

It is suggested that the agricultural exemption not apply to "any activity which has as its purpose or effect the permanent alteration of any area of freshwater wetlands."³

"Regulated activity" also precludes regulation of "construction of any transportation or public utility system, provided that such transportation or utility system does not promote additional development in regulated wetlands." (p. 3, §3, lines 43-46)

TECHNICAL POINT 9: There should not be an automatic exemption for transportation and public utility systems. This implies that transportation and public utility corridors are always more important or more valuable to society than the value of the wetlands which will be destroyed. Construction of transportation and public utility corridors should be prohibited within wetland areas unless there is a demonstrated need and unless the applicant can demonstrate that:

- "(1) There is no prudent or feasible alternative alignment which would have less impact on the freshwater wetland;
- (2) There will be no permanent or long-term loss of unique or irreplaceable wetland resources;
- (3) Appropriate measures to restore disturbed vegetation, habitats, and land and water features are carried out to mitigate adverse environmental impacts;
- (4) The alignment of the linear development is located in existing transportation corridors to the maximum extent practicable;

¹Executive Summary of the Status and Trends of Wetlands and Deepwater Habitats in the Conterminous United States, 1950's to 1970's. Unpublished U.S.D.O.I., U.S.F.W.S. Feb. 1, 83.

²Grassroots: An Agriculture Retention and Development Program for New Jersey, p. 16. NJ Department of Agriculture and NJ Department of Environmental Protection, October 31, 1980.

³Adapted from ACS-672. §4(b)

- (5) The area of freshwater wetlands disturbance will be minimized;
- (6) The applicant will provide for the restoration of degraded freshwater wetlands and/or the creation of new freshwater wetlands to mitigate the significant alteration of freshwater wetlands.

[This should include] roads, sewerage rights of way, electricity and other transmission lines whose basic function is to connect two points to serve a public purpose."¹

The Act defines "upland vegetation" as "plantlife requiring a portion of root zone aerated during the growing season." [p. 3, §3(i), lines 47, 48]. The context of this definition is not acceptable.

TECHNICAL POINT 10: The context of this definition implies that plantlife requiring a portion of their root zone aerated during the growing season do not exist in areas characterized as wetlands. In addition, the context of this definition ignores the fact that many wetland species cannot grow under conditions where soils are saturated throughout the growing season. Wetlands can harbor vegetation defined in this Act as "upland vegetation."

The definition of "upland vegetation" should be deleted. This definition is not required for legislative purposes.

Freshwater wetlands, for purposes of this Act, are not defined scientifically. Specifically, the element which suggests that freshwater wetlands must be "naturally occurring and growing vigorously, but shall not include lands supporting upland vegetation" is not acceptable. [p. 4, §4(a), lines 5,6]

TECHNICAL POINT 11: The U.S. Fish and Wildlife Service uses a wetlands definition which is as follows: "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and, (3) the substrate is nonsoil and is saturated with water or covered by

¹ACS-672. §4(b).

shallow water at some time during the growing season of each year." This definition includes areas regardless of whether they are natural or man induced. This definition has been developed by scientists and will continue to be revised by scientists, if necessary. Reference to the U.S. Fish and Wildlife Service and Soil Conservation Service definitions for hydrophytes, hydric soils, and wetlands will assure scientifically accurate descriptions.

TECHNICAL POINT 12: "Naturally occurring" and "vigorously growing" is an unworkable and unacceptable qualifier of scientific definitions of wetlands. Vigorous growth may be influenced by soil contaminants, unusual and extreme climatic conditions, or other factors unrelated to the degree of value of wetlands. Degrees of vigor should not be a factor in evaluating permit issuance.

Equally problematical is the "naturally occurring" qualifier. "Naturally occurring" may refer to whether or not a species is classified as alien or whether native vegetation was planted or encouraged as opposed to natural succession. Either way, the qualifier serves little importance in evaluating the value of wetlands.

This Act references a "master list" of vegetative families and species. (p.4, §4, lines 9-10) This list was prepared for the purposes of this proposal. The authors apparently attempted to separate obligate and facultative hydrophytes, however, the implication given is that plants which are classified as "A", adapted to a wide range of habitats and their associated soil moisture/hydrologic conditions,"¹ are not hydrophytes. Several of the plant species listed as class "A" plants are, in actuality, defined by scientists as hydrophytes; e.g. royal fern (Osmunda regalis), curly-grass fern (Schizaea pusilla), spatulate-leaved sundew (Drosera intermedia), cross-leaved milkwort (Polygala cruciata), orange milkwort (Polygala lutea), and dwarf huckleberry (Gaylussacia dumosa).

¹ Master List of New Jersey Vegetation Species with Their Affinity for Wetlands, p.1, Lomax and Associates. July, 1984.

TECHNICAL POINT 13: The U.S.F.W.S. has prepared a wetlands species list which will be finalized shortly. It is a list which uses presently accepted scientific categorizations of plant types. This list has been subjected to intense national peer review. This list should be adopted by reference.

This Act recognizes that there will be land areas which are not easily classified. In such cases, this proposal recommends reliance on hydrologic factors, namely, depth to high water. "Lands where the water table is at or within 0.3 meters of the surface at some time during the growing season shall be considered wetlands." [p. 4, §4(a), lines 13-15]

This definition is inclusive in that lands with greater depths to high water can still be classified as wetlands by analysis of the combination of soil factors, vegetation factors, and hydrologic conditions. The practical effect of this definition appears to be contrary to the overall intents and purposes shown to characterize this bill; that is, to limit, to the greatest extent allowable, that which may be considered wetlands.

TECHNICAL POINT 14: This provision should be changed to reflect current standards: "...lands where the water table is at or within 0.3 meters of the surface at sometime during the [growing season] year shall be considered wetlands."

A plant species list is included within the Act. [p. 4-15, §4(a)] Much scientific work has been involved with the development of a species list by U.S.F.W.S. It is suggested that this list be adopted by reference.

TECHNICAL POINT 15: Refer to Technical Point 13.

Section 4(b) of this Act further refines what freshwater wetlands will not include. [p. 16, §4(b), lines 491-502] There are problems with each.

The bill excepts "areas drained prior to the effective date of this act."

TECHNICAL POINT 16: Areas drained may continue to support a predominance of hydrophytes in relation to amount of drainage and period of time drained. A significant percentage of fresh and salt water wetlands have been ditched and drained at some time in the last 50-60 years. These ditches are evident on many sites. If an area no longer exhibits wetlands characteristics, the area ceases to fall within the purview of this bill.

This exception is not acceptable.

TECHNICAL POINT 17: The bill excepts "wetlands artificially created due to manmade or natural obstructions." Plants and wildlife inhabit wetlands regardless of their manner of creation. Wetlands are created by accumulations of water brought about by insufficient outlet.

Natural and man-made wetlands can serve equally valuable functions. A provision of this type would exclude thousands of acres of New Jersey wetlands created by natural obstructions. This exception is conducive to litigation.

This exception is not acceptable.

This bill excepts "wetlands which were created by the action of any person other than the owner of record of that wetlands on or after the effective date of this act during the period of that ownership and without the record owner's knowledge or consent."

TECHNICAL POINT 18: This provision is unsatisfactory in its present form. An acceptable hardship provision might require that upon a property owner's proof that the wetlands were created after the effective date of the Act by other persons, a freshwater wetlands permit may be issued provided the owner is required to exhaust actions against the party responsible for altering drainage patterns in the interest of returning drainage patterns to their former condition.

The bill also exempts "(a) lands within the uppermost 20 acres of an intermittent stream corridor; or (b) wetlands within an isolated depression or discontinuous area of less than 10 acres, unless it can be demonstrated that the wetlands in both (a) and (b) above are unique and irreplaceable to the people of the state of New Jersey."

TECHNICAL POINT 19: There is no justification for excluding these areas and, additionally, there are no reasons to only protect unique and irreplaceable wetlands in these categories.

Experience has shown that threshold limits in environmental regulations may merely serve to change the market place. In the state's CAFRA zone, regulatory jurisdiction is limited to 25 residential units or greater.¹ This has resulted in a proliferation of 24 unit developments. It is envisioned that a threshold acreage will merely trigger a change in strategy for land sales marketing and subdivision of development sites which will put development pressure upon sites with below threshold acreage. Without total review authority an important regulatory handle is lost, cumulative impacts become a reality, and the purposes of a freshwater wetlands protection bill are circumvented.

Areas within the "uppermost 20 acres of an intermittent stream corridor; or (b) wetlands within an isolated depression or discontinuous area of less than 10 acres" occupy a significant percentage of New Jersey's total freshwater wetlands acreage. A sample map has been prepared for two 7½ minute quadrangles to impress upon viewers the magnitude of impact this exception provides.

These exemptions should be deleted.

This Act also exempts lands regulated pursuant to "the United States Army Corps of Engineers' permit jurisdiction, authorized pursuant to the provisions of the "Clean Water Act." P.L. 95-217 (33 USC §1344 et. al.)

¹N.J.S.A. 13:19-1 et. seq.

TECHNICAL POINT 20: Commissioner Hughey, in a letter to Assistant Secretary of the Army-Civil Works, stated, "The Corps of Engineers' proposed regulations do not reflect the best interest of New Jersey's water quality goals and objectives."¹ (See attachment B) In addition, the ACOE has jurisdiction over the discharge of dredged or fill material, but not the drainage of wetlands, destruction of wetlands vegetation, or activities in buffer areas surrounding wetlands.

This exception should be deleted.

This Act includes a provision for protection of "buffer zone."

[p. 16-17, §4(d), lines 511-534] While the widths chosen are narrow, the concept of prohibiting development within areas adjacent to wetlands which would adversely impact the valued wetlands functions is a good one.

TECHNICAL POINT 21: Wetlands buffer zones widths provided should be considered a minimum. Field inspection should be required to set the final setback requirement (up to 300 feet) based upon a determination of land conditions which would expose adjacent wetlands to adverse impacts from the proposed development activity.

This Act contains special provisions for the protection of unique and irreplaceable wetlands. However, the special provisions are conditioned upon sites being sufficiently unique "to warrant the wetlands area to be designated as a National Natural Landmark in accordance with the Natural Landmarks Program administered the United States Department of the Interior, National Park Service."

[p. 17, §4(e), lines 540-43]

TECHNICAL POINT 22: Unique and irreplaceable to the State of New Jersey is vastly different from having national significance. This designation process is expensive and time consuming. This provision will provide little, if any, protection to "unique" wetlands.

¹Letter dated May 25, 1984, from Commissioner Robert E. Hughey to Assistant Secretary of the Army-Civil Works, William Gianelli.

As mentioned previously, this Act seeks to define wetlands as areas excluding "upland vegetation" as defined in this Act. An "applicant shall utilize field investigations to identify those areas which support hydrophytic vegetation and exclude upland vegetation." [p. 17, §5(a), lines 3-5]

TECHNICAL POINT 23: Wetlands, by their definition, include hydrophytes, both obligate and facultative. The test of this definition involves a finding of "predominance of hydrophytes." Obligate upland plant species may exist within a wetlands area.

An applicant should be required to identify those areas which support a predominance of hydrophytic vegetation. As mentioned previously, this bill characterizes many facultative hydrophytes as "upland vegetation." For this and other reasons mentioned, references to "upland vegetation" should be deleted.

This bill equates "uniqueness" of certain wetlands with the ability or desire of conservation organizations or the government to purchase an area for preservation. [p. 17, §5(b), lines 9-19] The ability or desire to purchase has no bearing on uniqueness. Further, mere ownership of land has no direct bearing on the allowable uses of land; the public interest, land types, land sensitivity, and land support capacity affect determination of permissible uses of land.

TECHNICAL POINT 24: Guidelines for establishing a wetlands area as unique should be established in the permit process. The guidelines for making this determination should be directly related to the

evaluation of relative uniqueness of the site within the State. The guidelines for determination must bear a rational relation to the qualities to be preserved and not to an arbitrary willingness or unwillingness to purchase an area for its unique qualities.

If this bill is to contain special provisions for protection of unique wetlands, appropriate guidelines for determination of uniqueness should be inserted.

TECHNICAL POINT 25: In furtherance of the preceding Technical Point 24, it is unlikely that any organization would be prepared to purchase areas within a six month time frame. If the preceding section is included, a 6 month time frame should be provided for a contractual commitment from an organization or government agency to purchase.

The values of freshwater wetlands are, in large part, affected by activities in adjacent areas. Areas where activities must be restricted in order to protect wetlands have been described as buffer zones. These buffer zones require regulatory protection under the freshwater wetlands permitting process.

TECHNICAL POINT 26: Section 6, lines 1-4, should be modified as follows: "No person may undertake any regulated activity on any property containing freshwater wetlands or properties determined to be a freshwater wetlands buffer zone without first obtaining a freshwater wetlands permit from the county planning board [as provided in this act.] prior to undertaking a regulated activity as provided in this act."

The bill gives the county review board fifteen working days to declare an application complete or incomplete. If the application is declared incomplete, the board may require the applicant to submit additional information. The bill adds that "only one such request shall be made by the board." [p. 18, §8(b), line 10]

TECHNICAL POINT 27: Most County Review Boards meet once monthly. Therefore, 15 days is inappropriate for review. Thirty or sixty days should be considered a practical minimum.

TECHNICAL POINT 28: This section should be changed to read--"The board's request for information to complete the application shall be thorough, and shall not be followed at later dates with requests for additional types or categories of information."

Presently, the bill can be interpreted as suggesting that an applicant's ignoring of the board's request will leave the board powerless to repeat requests or stand with the initial request.

As previously discussed, the "balancing" provisions are inappropriate because they do not recognize the paramount need for freshwater wetlands protection. The balancing of economic development interests against environmental concerns will result in most of the very impacts which precipitated action on wetlands protection legislation.

This Act repeatedly declares an intent and purpose of balancing "the public's right to regulate land use and the private landowner's right to utilize his land." (p. 18, §10, lines 1-50) Concurrently, the bill states that the board give "due consideration to the advice of the environmental commission and planning board of the municipality wherein the regulated wetlands are located." (p. 18, §10, lines 5-8)

TECHNICAL POINT 29: These sections should be changed to reflect that enforcement should include a liberal interpretation of the bill, such interpretation to afford maximum protection to freshwater wetlands.

This bill contains a hardship provision which bears no relation to the values of wetlands sought to be protected. "The board may

approve a permit, if denial of the permit would create exceptional and undue hardship upon the applicant, or if there is an unreasonably disproportionate relationship between protection of these resources and the added cost of avoiding such damage."

(p. 18, §10, lines 9-13)

TECHNICAL POINT 30: Applicants very often have unreasonable uses planned for their property, such uses improperly infringing upon the property interests of adjoining landowners and the public interest at large. The fact that a landowner's financial success or failure is linked to the destruction of wetlands has no bearing upon the assertion of the public interest, and property interests of others, to protect critical wetlands.

If hardship provisions are included, it is recommended that language be adopted from the Municipal Land Use Law [C. 40:55D-70(d)] or the Flood Hazard Area Regulations (7:13-1.2, 2.9) which in general require that hardship allowances or variances from usual policies only be granted if there is no substantial detriment to the public good and will not substantially impair the intent and purpose of the protective acts.

These provisions, as stated, should be deleted.

Overall, Section 11 of this bill, for all practical purposes, permits continued destruction and development of all wetlands in New Jersey as long as there is mitigation. "The board may authorize the use of a portion of the wetlands provided that one of the following conditions are met..." (p. 18, §11, lines 1-21)

TECHNICAL POINT 31: The use of the term "portion" is ambiguous (e.g., 99.9% of a tract can be considered "portion") and bears no relation to the values of wetlands to be protected. Furthermore, the conditions provided in a and b are inadequate in combination with one another, let alone the suggestion that only one provision need apply.

TECHNICAL POINT 32: The conditions for exempting wetlands destruction in §11(a) should be deleted. These mitigative measures have been in place throughout the history of wetlands destruction, loss of critical habitat, and aggravated flood conditions.

New Jersey has experienced a substantial loss of wetlands for economic development purposes, particularly in the urban flood prone areas of this state. Externalization of flood control costs by developers should be recognized as a burden upon the taxpayers of this state.

TECHNICAL POINT 33: Mitigation should be considered only when a proposed project meets all other acceptability conditions for development. Mitigation results in the loss of habitat value, either on a temporary or permanent basis. Mitigation through on-site creation of wetlands or off-site creation of wetlands within the same drainage basin may be acceptable under hardship provisions, which, as mentioned previously, are not satisfactorily developed in this Act. The use of this type of mitigation for all projects as a general practice is not acceptable. It allows for the destruction of wetlands habitats which harbor significant plant and animal species. It allows for the continued mind-set that wetlands are to be manipulated and that they are a secondary consideration in choice of site and design of site. Wetlands should be a primary consideration in choice of site and design of site; whether to avoid purchase of sites with wetlands or to understand that wetlands within a site represent a natural feature to be respected and protected as a valuable natural resource for ameliorating flood conditions off-site and on-site.

Section 12, in combination with provisions in section 11, practically defeats any wetlands protection measures suggested in this Act. (p. 19, §12, lines 1-15) While the creation of additional wetlands for permitting destruction of wetlands for a given project may be acceptable under limited hardship conditions, the open ended allowance to "buy out" design approval conditions is not acceptable.

TECHNICAL POINT 34: This section should be deleted. As mentioned, there is a net deficit of wetlands. Such net deficits are aggravating flood conditions in urban areas. A one for one trade off, particularly when

off-site wetlands are dedicated for protection, does nothing for the on-site or adjoining area flood problems or habitat protection. In addition, the mere purchase for protection of comparable wetlands merely allows for an enlarging of our net wetlands deficit.

Section 15 provides for the mapping of wetlands. As mentioned, this Act provides a definition of wetlands which is not acceptable. This bill requires that "delineations shall be in accordance with the definition as set forth in sections 5 and 6 of this act..." (p. 19, §15, lines 1-5)

TECHNICAL POINT 35: The reference to the definitions of freshwater wetlands as provided in sections 5 and 6 is acceptable only if the definitions in sections 5 and 6 are changed to reflect that recommended under Technical Point 5. The recommended definition is that definition developed by the U.S. Fish and Wildlife Service.

Section 15(c) allows for the amending of the freshwater wetlands map adopted by the county board if an applicant can prove that the line is too broad, using the criteria set forth in the Act [p. 20, §15(c), lines (2-24)]

TECHNICAL POINT 36: This provision does not allow for the county board to refine its lines if on-site inspection determines that the adopted map is too conservative with regard to the extent of on-site wetlands. On-site review should be required to finalize wetlands boundary determination.

Section 16, in conjunction with the exception provisions of sections 11 and 12, eliminates freshwater wetlands protection under the Flood Hazard Area Control Act,¹ the Coastal Area Facility Review Act,² the Water Pollution Control Act,³ and the Water Quality Planning Act⁴ by requiring that A-2348 supersede these other Acts. (p. 20, §16, lines 1-7)

¹Flood Hazard Area Control Act. P.L. 1962, c. 19 (C. 58:16A-50 et. seq.)
²Coastal Area Facility Review Act. P.L. 1973, c. 185 (C. 13:19-1 et. seq.)
³Water Pollution Control Act. P.L. 1977, c. 74 (C. 58:10A-1 et. seq.)
⁴Water Quality Planning Act. P.L. 1977, c. 75 (C.58:11A-1 et. seq.)

TECHNICAL POINT 37: This section must be deleted unless the major revisions recommended are implemented.. As A-2348 provides little to no protection of freshwater wetlands, section 16 essentially wipes out all practical significance of wetlands protection measures provided in the four other Acts mentioned.

Penalty provisions within this Act are inadequate and will not serve as a deterrent to those that would callously disregard provisions for wetlands protection. (p. 20, §17, lines 1-7)

TECHNICAL POINT 38: Penalty provisions should provide deterrents to the actions sought to be avoided. This Act should allow for judicial discretion as to what constitutes deterrence or proper punishment. A range of \$25 to \$1,000 is clearly insufficient. A range up to \$2,500¹ per day of violation is more appropriate.

Section 20 provides \$25,000 for each county which has freshwater wetlands. In addition, the bill provides for Department of Treasury review of funding upon consultation with county planning boards. The Governor and Legislature will consider requests for further funding.

TECHNICAL POINT 39: It is questionable whether or not \$525,000 will be adequate for county delineation of wetlands. This figure should be carefully reviewed and, more appropriately, allocations should be based upon extent of mapping necessary unique to each county.

¹ Flood Hazard Area Control Act. Violations; penalties; injunctions. 58:16A-63

REVIEW OF A-2348, "FRESHWATER WETLANDS ACT"
Master List of New Jersey Vegetation with Their Affinity for Wetlands

The Master List which supplements A-2348 was prepared by Joseph L. Lomax and Associates. This list was prepared specifically for purposes of this legislation. The analysis which follows represents a critique based upon review of scientific literature. Sources of information for this critique follow.

LITERATURE CITATIONS

The Check List of the Plants of New Jersey (Anderson) was used as the basis for preparing the Master List. The choice of this source was appropriate since this Check List represents a comprehensive compilation of scientific work concerning New Jersey. There are some nomenclature problems, however, these are addressed and explained by Anderson. The Check List presents 2490 species following the format of Fernald (1950).

The works cited as being used in the preparation of the Master List are well respected in the scientific community; Fernald (1950), Gleason (1952), Hitchcock (1971), Small (1972), Strausbaugh and Core (1970). However, these are taxonomic works that stress systematics, as opposed to the ecological context in which various plant species occur. The generalized habitat descriptions provided cannot appropriately be extrapolated to finite habitat descriptions, as the Lomax Master List suggests.

Many of the more recent works concerning wetlands were apparently overlooked. Other works that should have been consulted include: USFWS (1981), Cowardin et al (1979), Niering and Goodin (1973), Cobb (1963), Roman and Good (1983), Snyder and Vivian (1981), Fairbrothers and Hough (1973), Hanks (1971), Ferren and Schyler (1980), Ferren et al (1981), Ferren (1976), and Hart (1980).

CLASSIFICATION

The Lomax Master List classification system is technically inadequate: 1) it represents inaccurate and imprecise definitions in attempting to distinguish between wetland and nonwetland species; 2) it fails to present the reader with an understanding that wetland plants can be both obligate (i.e., require saturated conditions) or facultative (i.e., can exist under both saturated and unsaturated conditions); 3) it inaccurately categorizes facultative and obligate species. Moreover, there are no indications that the Master List has been subjected to this critical review.

The Master List categories are evidently based upon habitat descriptions provided by early authors. This is not adequate for regulatory review. The early authors, cited in the preparation of this report, did not concern themselves with the details of hydrology and seasonal soil saturation. These factors are critical to the development of definitions for wetlands. Early classification systems cannot be used since the authors do not provide criteria or methods for classification of areas as wet or moist.

DISCREPANCIES IN CLASSIFICATION

The following is an analysis of a portion of the listing for the subclass of plants known as Monocotyledons. The categorizations provided by the Master List are questionable as indicated by comparison to classifications provided by the USFWS and that researched by Joseph Arsenault, Senior Environmental Specialist, Office of Environmental Analysis, NJDEP.

The USFWS listing was prepared through survey of national literature by the ACOE and USFWS. This was followed by critical review by selected wetlands scientists throughout the East. This USFWS list represents a concerted effort to survey the scientific community in the development of an acceptable classification system.

This selected critique of a portion of the Lomax Master List is provided to indicate the discrepancies which may be found throughout the Lomax Master List.

Discrepancies in classification of species within the subclass Monocotyledon

| SPECIES | PAGE | MASTER LIST LOMAX DESIGNATION | JOSEPH ARSENAULT NJDEP, USING LOMAX DESIGNATION TYPES | 1981 USFWS LIST DESIGNATION |
|------------------------------|------|----------------------------------|---|--------------------------------|
| 1. Equisetum hyemale | 2 | A | W | FACW |
| 2. Lycopodium carolinianum | 2 | A | W | OBL |
| 3. Botrychium simplex | 2 | U | A | FAC |
| 4. B. multifidum | 2 | * | A | FAC |
| 5. Ophioglossum vulgatum | 2 | A | W | FACW |
| 6. Osmunda claytoniana | 2 | A | W | FACW |
| 7. O. regalis | 2 | A | W | OBL |
| 8. Lygodium palmatum | 2 | A | W | FACW |
| 9. Schizaea pusilla | 2 | A | W | OBL |
| 10. Druopteris celsa | 3 | * | W | OBL? |
| 11. Pteridium aquilinum | 3 | U | A | FACU? |
| 12. Schenckia palustris | 4 | * | W | OBL |
| 13. Echinodorus tenellus | 4 | A | W | OBL |
| 14. Andropogon gerardii | 5 | U | A | FAC |
| 15. A. virginicus | 5 | U | A | FAC |
| 16. Bromus japonicus | 6 | W | A/U | FACU |
| 17. Calamagrostis canadensis | 6 | A | W | OBL |
| 18. Cyna arundinacea | 6 | A | W | FACW |
| 19. C. latifolia | 6 | A | W | OBL |
| 20. Danthonia sericea | 6 | U | A | () |
| 21. Deschampsia flexuosa | 6 | W | U | (not listed)=U |
| 22. Elymus virginicus | 6 | A | W | OBL? |
| 23. Eriophorum giganteum | 7 | A | W | — |
| 24. Hierochloa odorata | 7 | A | W | FACW |
| 25. Leersia virginica | 7 | A | W | FACW |
| 26. Muhlenbergia uniflora | 7 | A | W | OBL |
| 27. M. torreyana | 7 | A | W | OBL |
| 28. Panicum hemitomon | 8 | A | W | OBL |
| 29. P. matlanskeutense | 8 | A | W | N.L. |

| | | | | | |
|------------------|-----------------|----|---|-----|--------------|
| 30. P. | hirstii | 8 | * | W | N.L. |
| 31. P. | microcarpon | 8 | A | W | N.L. |
| 32. P. | scoparium | 8 | A | W | N.L. |
| 33. Phalaris | arundinacea | 8 | A | W | OBL |
| 34. Phragmites | australis | 8 | A | A/W | FACW |
| 35. Puccinella | distans | 9 | A | W | OBL |
| 36. Setaria | geniculate | 9 | A | W | FACU? |
| 37. Spartina | patens | 9 | A | W | FACW |
| 38. Sphenopholis | intermedia | 9 | A | W | — |
| 39. S. | pallens | 9 | A | W | — |
| 40. Carex | debilis | 10 | A | W | (no comment) |
| 41. C. | normalis | 11 | A | W | (no comment) |
| 42. C. | squarrosa | 12 | A | W | (no comment) |
| 43. C. | typhina | 12 | A | W | OBL |
| 44. Cyperus | dentatus | 12 | A | W | OBL |
| 45. C. | filicinus | 12 | A | W | OBL |
| 46. C. | strigosus | 12 | A | W | OBL? |
| 47. Eleocharis | melanocarpa | 13 | A | W | OBL? |
| 48. E. | microcarpa | 13 | A | W | OBL |
| 49. E. | pauciflora | 13 | A | W | OBL |
| 50. E. | tenuis | 13 | A | W | OBL |
| 51. Hemicarpha | micrantha | 13 | A | W | OBL |
| 52. Rhynchospora | capitellata | 13 | A | W | OBL |
| 53. R. | torreyana | 14 | A | W | OBL |
| 54. Scirpus | pedicellatus | 14 | * | W | OBL |
| 55. Scleria | minor | 14 | A | W | FACW |
| 56. Arisaema | dracontium | 14 | A | W | FACW |
| 57. A. | triphyllum | 14 | A | W | FACW |
| 58. Xyris | flexuosa | 14 | A | W | OBL (torta) |
| 59. X. | torta | 14 | A | W | OBL |
| 60. Juncus | acuminatus | 15 | A | W | OBL |
| 61. J. | bufonis | 15 | A | W | OBL |
| 62. J. | clebilis | 15 | A | W | OBL |
| 63. J. | pelocarpus | 15 | A | W | OBL |
| 64. J. | scirpoides | 15 | A | W | OBL |
| 65. Asparagus | officinalis | | W | U | N.L. |
| 66. Calopogon | pulchellus | | A | W | OBL |
| 67. Listera | smallii | | A | W | OBL |
| 68. Pogonia | ophioglossoides | 18 | A | W | OBL |

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STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ROBERT E. HUGHEY, COMMISSIONER
CN 402
TRENTON, N.J. 08625
609 - 292 - 2885

May 25, 1984

Mr. William Giannelli
Assistant Secretary of the Army - Civil Works
US Department of Defense
Washington, D. C. 20314

Attention: DAEN-CWO-N (Mr. B. Goode)

Dear Mr. Giannelli:

Attached is the final position of the New Jersey Department of Environmental Protection's (DEP) Section 401 Water Quality Certification Statement concerning the nationwide permits promulgated, proposed and amended by the U. S. Corps of Engineers on March 29, 1984.

It is our understanding that any proposed activity affected by our certification denial statement will have to obtain individual 401 Water Quality Certification from our Department prior to being permitted by the Corps, and that the Corps will have to take into account any special condition(s) imposed as a result of such 401 certification when permitting these activities.

This position is in addition to our previous comments of July 8, 1983 which dealt with the proposed regulation of May 12, 1983.

We support the Settlement Agreement recently reached on the Section 404 litigation, but realize that it does not adequately address all of our environmental concerns. The Corps of Engineers' proposed regulations do not reflect the best interest of New Jersey's water quality goals and objectives.

If you have any questions concerning this 401 Water Quality Certification Statement, please call Lawrence Schmidt, Acting Director, Planning Group at 609-292-2662.

Sincerely,

Enclosure

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

FINAL POSITION ON CERTIFICATION

PURSUANT TO SECTION 401 OF THE

FEDERAL CLEAN WATER ACT

The New Jersey Department of Environmental Protection hereby makes the following certification to the U.S. Army Corps of Engineers (the Corps), pursuant to Section 401(a) of the federal Clean Water Act, as amended, 33 U.S.C. Section 1341(a). This certification relates to several Nationwide permits which have been issued or proposed by the Corps for activities which are regulated by the Corps pursuant to Section 10 of the River and Harbors Act of 1899 and Section 404 of the federal Clean Water Act.

Final Certification

The New Jersey Department of Environmental Protection hereby certifies that, with the exception of those activities and associated nationwide permits listed below, the nationwide permits for activities summarized in 33 C.F.R. Part 330 (as promulgated on July 22, 1982, as proposed on May 12, 1983 and as amended on March 29, 1984) will comply with the applicable provisions of Sections 301, 302, 303, 306 and 307 of the federal Clean Water Act, and that their construction and operation will not violate applicable federal and state water quality standards regulations.

This certification is subject to the following conditions and exceptions:

Conditions

Coverage of an activity in a nationwide permit under 33 CFR §330.4(a) or 330.5 does not waive or otherwise modify any requirement to obtain an individual permit or approval from the State of New Jersey, Department of Environmental Protection, pursuant to any applicable statute or rule or regulation of the Department prior to commencing the activity.

Exceptions

1. The Department hereby denies 401 certification for the following activities and associated nationwide permits which were proposed by the U.S. Army Corps of Engineers on July 22, 1982 (47 C.F.R. 31794-31834):

330.5(a)(14). Minor road crossing fills including all attendant features both temporary and permanent that are part of a single and complete project for crossing of a non-tidal waterbody, provided that the crossing is culverted, bridged or otherwise designed to prevent the restriction of and to withstand expected high flows and provided further that discharges into any wetlands adjacent to the waterbody do not extend beyond 100 feet on either side of the ordinary high water mark of that waterbody. A "minor road crossing fill" is defined as a crossing that involves the discharge of less than 200 cubic yards of fill material below the place of ordinary high water. The crossing will require a permit from the US Coast Guard if located in navigable waters of the United States (see 33 U.S.C. 301). Some road fills may be eligible for an exemption from the need for a Section 401 permit altogether (see 33 CFR 323.4).

2. The Department hereby denies 401 certification for the following activities and associated nationwide permits which were proposed by the U.S. Army Corps of Engineers on May 12, 1983, (48 C.F.R. 21466-21476):

330.5(a)(26). Structures, work, and discharges of dredged or fill material associated with projects undertaken, funded or authorized by another Federal agency or department where that agency or department determines that the structure, work, or discharge will not cause significant degradation of the waters of the United States through application of the 404(b)(1) guidelines, the appropriate district engineer has been furnished a copy of the agency's determination of no significant degradation, and the district engineer has made a determination that the proposal conforms to 404(b)(1) guidelines. (Section 10 and 404).

330.5(a)(27). Structures, work, and the discharges for facilities adjacent to Corps of Engineers civil works projects where justification for the Federal expenditure was based on construction of specific adjacent facilities, those facilities are constructed within a reasonable time of completion of the Federal project, and the district engineer conducts a case-by-case Section 404(b)(1) guidelines analysis. (Sections 10 and 404).

3. The Department hereby denies 401 certification for the following activities and associated nationwide permits which were proposed by the U.S. Army Corps of Engineers on March 29, 1984 (49FR12660-12664).

330.5(a)(26) which replaces 330.4(a)(1) and 330.4(a)(2) of the previous proposal. Discharges of dredge or fill material into non-tidal rivers, streams and their lakes and impoundments including adjacent wetlands that are located above the headwaters, and other non-tidal waters of the United States that are not part of a surface tributary system to interstate waters or navigable waters of the United States.

401 certification is denied for such discharges which cause the loss or substantial adverse modification of less than 1 to 10 acres of such waters, including wetlands.

4. In the event that the Corps adopts proposed nationwide permits 330.5(a)(14) of July 22, 1982, 330.5(a)(26), 330.5(a)(27) of May 12, 1983 and 330.5(a)(26) of March 29, 1984, the State requires that a regional condition for the State of New Jersey be added to these four permits requiring that all applicants obtain a Section 401 Water Quality Certificate from the Department of Environmental Protection. In this way, the State of New Jersey can assure that its concerns will be addressed and that there will be an opportunity for public input in the review process.

JUL 14 1983



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ROBERT E. HUGHEY, COMMISSIONER
CN 402
TRENTON, N.J. 08625
609-292-2885

July 8, 1983

Mr. William R. Gianelli
Assistant Secretary of the Army - Civil Works
U.S. Department of Defense
Washington, D.C. 20314

Dear Mr. Gianelli:

This letter contains the comments of the Department of Environmental Protection (DEP) on the Proposal to Amend Permit Regulations for Controlling Certain Activities in Waters of the United States, as published in the May 12, 1983, Federal Register. I disagree with many of the proposals to revise the Section 404 permit program regulations since they, for the most part, propose to limit the Corps' role in working towards achieving the goals of the Federal Clean Water Act.

DEP strongly supports a reasonable, simplified nationwide wetlands protection program. I am proud of New Jersey's record of coastal wetlands protection under the State's Wetlands Act of 1970. We are currently working with State legislators on a bill to authorize explicitly a State-based program of freshwater wetlands protection. We are also revising our flood hazard area regulations to provide more explicit protection for freshwater wetlands. These comments on the 404 permit program are intended to help the Corps of Engineers define and continue to carry out its important role in a cooperative state-federal program to protect the nation's wetlands.

Public Interest Review

The regulations as proposed would change the Corps' general regulatory policy concerning the role of the public interest in permit review. The proposal would shift the burden of proving that issuing a permit is in the public interest from the applicant to the Corps. The statement, "A permit will be granted unless its issuance is found to be contrary to the public interest," would replace the existing statement of policy, "No permit will be granted unless its issuance is found to be in the public interest." (33 CFR 320.4(a)(1)).

DEP opposes this proposal to shift the burden of proof from the applicant to the Corps because it may result in diminished protection for the nation's waters, including wetlands. The proposed language would make it more difficult for the Corps to deny permits since projects are presumed to be in the public interest. Therefore, the Corps will not be required to evaluate the public interest criteria listed below as strictly as it has previously evaluated them.

In addition, the presumption that a project is in the public interest contradicts EPA's 404(b)(1) guidelines, which state that, "dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact." (40 CFR 230.1). While the introduction to the proposed regulations states that an applicant's failure to rebut the statement of EPA's policy is cause to find that the project is not in the public interest, the regulation as proposed does not clarify the relationship with the EPA guidelines.

In addition, the Corps proposes to change one of the general criteria to be evaluated for every application to, "The extent and permanence of beneficial and/or detrimental effects which the proposed structure or work is likely to have..." from, "The extent... work may have..." (emphasis added). (33 CFR 320.4(a)(2)(iii)). This change eliminates from the scope of impacts to be considered those whose occurrence cannot be proven. DEP opposes this attempt to remove from consideration impacts that may be merely suspected or postulated.

The proposed regulations would add a factor to be considered in the public interest review, "considerations of property ownership." (33 CFR 320.4 (a)(1)). The proposed regulations would also add a statement acknowledging that the right to reasonable private use and development of property will be considered in the public interest review. (33 CFR 320.4 (g)(1)). Under the Commerce clause of the U.S. Constitution and the public trust doctrine, there is a recognized public interest in the use and preservation of the nation's waters and public trust lands, which cannot be outweighed by private property interests. DEP opposes this proposal to change the public interest review in a fashion which results in the outweighing by private interests of these national interests in protecting the nation's waters.

The proposed regulations would change the role of state laws and programs concerning wetlands protection and Congressional policy, as stated in the Estuary Protection Act, in the public interest review (33 CFR 320.4(b)(5)). State and federal policies would be simply "considered," whereas formerly they had been "given great weight." DEP opposes this change in the regulations because it may lead to

diminished protection of wetlands. The Corps would be well-advised to give great weight to state policies since an applicant will need to comply with them in order to receive a Water Quality Certificate from states.

Similarly, the Corps proposes to now merely consult with federal and state fish and wildlife officials regarding the conservation of fish and wildlife resources. (33 CFR 320.4(c)). Formerly, the opinions of these officials were "given great weight" by the Corps. DEP opposes this change to limit the role of those federal and state officials charged with fish and wildlife conservation in the 404 program.

The proposed regulations would change the role of navigation in the public interest review (33 CFR 320.4(o)(3)). Formerly, navigation was given great weight in determining the public interest. The proposed regulation would simply state that the protection of navigation is a primary concern to the federal government. This change in policy is unacceptable since the protection of navigation is one of the historic and most important objectives of the Corps' review.

The proposed regulations would add a provision that the Corps will consider the environmental benefits and detriments a project will bring in its public interest review (33 CFR 320.4(p)). This proposed statement seems to overstate the possibility that projects requiring permits from the Corps will bring benefits to the environment. Nor does this proposed regulation define the possible range of environmental benefits that will be considered. For these reasons, DEP believes that the proposed language is an unnecessary addition to the regulations and should be deleted.

The proposed regulations would also add a section on the economics of proposed projects which states that proposed projects are assumed to be economically feasible and that the economic benefits of many projects are important to the local community (33 CFR 320.4(q)). DEP believes that these statements do not belong in regulations governing the dredged and fill material disposal program. There is no language in the goals and policy section of the Clean Water Act (33 U.S.C. 466 et seq.) that supports the consideration of economic factors in the Corps' decision-making. The intent of the Clean Water Act is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." Therefore, any regulations under the Act should have, as their primary objective, provisions which give environmental factors the greatest weight. Economic factors do not belong in these regulations.

The final proposed addition to the public interest determination section is a provision which permits the Corps

to consider mitigation measures as part of the public interest review. (33 CFR 320.4(r)). DEP supports the concept of using mitigation measures to enable some projects to receive a permit. The proposed regulation, however, does not specify the degree of mitigation that would be required. I recommend the addition of the following sentence: "Proposed activities which would cause significant adverse impacts will be approved only if they are accompanied by mitigation measures which substantially reduce the adverse impacts of the proposed activity."

General Permits

The proposed definitions of general permits for both the Section 10 actions under the River and Harbor Act of 1899 and the Section 404 actions are acceptable (33 CFR 322.2(f)(2) and 33 CFR 323(n)(2)).

Waters of the United States

The proposed regulations change the definition of waters of the United States for the Section 404 permit program (33 CFR 323(n)(2)) and (33 CFR 328).

In particular, terms used in the definition of wetlands are now defined, including "inundation," "saturated," "prevalence of vegetation," and "typically adapted." These new definitions may limit the Corps' jurisdiction over wetland areas by excluding wetland areas where all voids (pores) between soil particles are not temporarily or permanently filled with water to the soil surface, or where rooted emergent plants do not "comprise at least 50% of the dominant species within a plant community." Rooted emergent plants generally do not include plants that grow in saturated, not water covered, soil. Consequently, areas such as forested swamps may not be considered wetlands under this definition. In addition, some wetland areas such as seasonal wetlands which are not saturated to the soil surface would be excluded from the Corps' jurisdiction. Therefore, DEP does not support this language that limits the scope of the Corps' jurisdiction over wetlands.

A further requirement of the Corps' jurisdiction is contained in the changed definition of "adjacent" wetlands. Adjacent wetlands are "bordering, contiguous, or immediately neighboring and having a reasonably perceptible surface or subsurface hydrological connection to a water of the United States." Formerly, adjacent wetlands were defined as "bordering, contiguous, or neighboring." This change further limits the scope of the Corps' jurisdiction over wetlands to those that are "immediately neighboring," not merely neighboring. Wetlands must show a "reasonably perceptible" hydrological connection to a water of the United States. This standard is vague and ambiguous and will lead to much

disagreement in its implementation. DEP recommends that the former definition of adjacent be reinstated to protect New Jersey's freshwater wetlands.

Nationwide Permits for Discharges into Certain Waters

The proposed regulations would reinstate, in the existing nationwide permit for discharges into non-tidal waters above headwaters, the inclusion of natural lakes of 10 acres or less in size (33 CFR 330.4(a)(1)). DEP disagrees with this reinstatement as the wetlands adjacent to such small natural lakes should be protected by the individual permit process.

The term "natural lakes" is confusing since it is defined nowhere in the regulations, while "lake" and "artificial lake" are defined. The introduction to the Interim Final 404 regulations in the July 22, 1982, Federal Register notes that the terms "natural lake" and "impoundment" were combined into one term, lake. (p. 31795). The 1983 proposal should clarify its reference to "natural lakes."

DEP recognizes the importance of the wetlands associated with headwaters and isolated waters. DEP will work with the North Atlantic Division Engineer to establish an appropriate regional condition to these two nationwide permits to protect wetlands in certain basins or watersheds of above a specified threshold area by requiring a Section 401 Water Quality Certificate for those activities.

Nationwide Permits for Specific Activities

DEP opposes the addition of two new nationwide permits for specific activities, one (33 CFR 330.5(a)(26)) authorizing structures, work and discharges of dredged or fill material for projects funded or authorized by another federal agency which makes a determination of no significant degradation, and the second (33 CFR 330.5(a)(27)) authorizing structures, work and discharges for facilities adjacent to Corps civil works projects where the justification for the federal expenditure was the construction of the specific adjacent facilities.

DEP opposes these two proposed nationwide permits because they authorize major activities which could have significant adverse environmental impacts. In addition, the first new permit would grant to other federal agencies the authority that only the Corps and EPA should wield concerning the determination of significant degradation. Under the second new permit, major activities could be conducted without any public participation in the process. The permitted activities would not be "similar in nature" or cause "only minimal adverse environmental impacts," as the Clean Water Act requires (Section 404(e)(1)). For these reasons, the two new proposed nationwide permits are unacceptable. DEP hereby

denies the waiver of the Section 401 Water Quality Certification and, in the attached letter from the Division of Coastal Resources, denies federal consistency certification under Section 307(c) of the federal Coastal Zone Management Act for these two nationwide permits, if the Corps does not withdraw them.

If the Corps does not withdraw its two new proposed nationwide permits, the State also requests that a regional condition for the State of New Jersey be added to these two permits requiring that all applicants obtain a Section 401 Water Quality Certificate from DEP. New Jersey also requests that a regional condition for the State of New Jersey be added to these two new nationwide permits requiring that all applicants obtain a federal consistency certification from DEP. In this way, therefore, the State of New Jersey can assure that its concerns will be addressed and that there will be an opportunity for public participation in the review process.

DEP recommends that the nationwide permit for minor road crossing fills (33 CFR 330.5(a)(14)) include the following language which is also found in 33 CFR 330.5(b)(13)(vii): "Only clean material free of waste metal products, organic materials, unsightly debris, etc. is used."

DEP disagrees with the statement regarding the Corp's role in nationwide permits that, "...the district engineer is not required to automatically adopt conditions in a 401 certification." (33 CFR 330.9). The refusal by the Corps to adopt conditions in a 401 certification could defeat the intent and effect of the state's certification. Therefore, whenever the Corps refuses to adopt the conditions in a 401 certification, the state should have the right to reconsider its position and deny the certification.

Letters of Permission

The proposed regulations (33 CFR 325.2(e)(1)) would extend the procedure to issue Letters of Permission authorizing minor projects under Section 10 of the River and Harbor Act of 1899 to minor projects under Section 404. The district engineer may, under this proposal, omit the public notice and authorize the work under a Letter of Permission. DEP opposes this proposal because it would grant too much discretionary authority to the Corps to determine which projects are minor. The lack of a public notice will prevent the public from learning about a proposed project and so from commenting on it in a timely fashion.

Review Period

The proposed regulations would reduce the amount of time a state has to act on the Section 401 Water Quality Certificate

(WQC) from 60 to 30 days (33 CFR 325.2(b)(1)(ii)). DEP opposes this reduction because 30 days is not enough time for the State to review completely a project. New Jersey has a standard 90 day review period for State permits. The reduction to 30 days to review a Water Quality Certification is unreasonable. DEP recommends that the 60 day review period be reinstated.

DEP concurs with the intent of the proposed regulations to simplify and streamline permit review. However, the procedures recommending a 60-day permit application determination process present a logistical problem in two areas.

First, the date of application for a WQC may differ considerably from the date of the Corps' public notice (PN). Many times an applicant will submit an application to the Corps first, wait for the issuance of a PN; and apply for a WQC several weeks later. A favorable or unfavorable determination could not be made until a WQC application is received. The timing between the two agencies would not be consistent, and determinations would have to wait until the WQC is issued.

Second, compounding the 60-day requirement is the interaction of certain New Jersey permits regulated by the 90-day law where DEP has 90 days to review the permit application (N.J.S.A. 13:1D-29 et seq.). Environmental reviews often take the full 90 days due to the complex nature of the project, and the required permit review and coordination effort established throughout this Department. A determination within 60 days could not be expected to be made on a regular basis.

The suggestions for a 60-day determination and 404 conditional permits would not be in the best interest of protecting New Jersey's waters. While a determination could be made to determine presence or absence of controversy, the permit decision should be predicated on DEP's determination on the WQC.

The regulations should give examples of the special circumstances under which the district engineer would require that action on an application be taken in less time than thirty days (33 CFR 325.2(b)(1)(ii)).

Coastal Zone Management

The proposed rules also affect New Jersey's federally-approved Coastal Management Program. The requirement that the district engineer consult with the State CZM agency at the end of the six months the state has to make a federal consistency determination on 404 permits would be deleted (33 CFR 325.2(b)(2)(ii)). In its place, the district

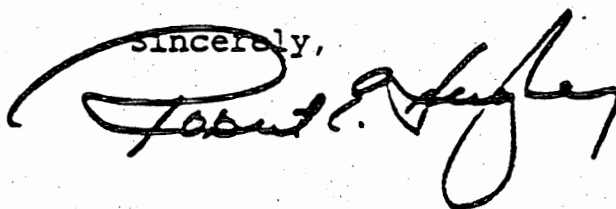
engineer would be required to seek an agreement with "State Coastal Zone Management agencies that no comment by the agencies during the public notice comment period will be considered as concurrence with the certification."

DEP opposes this change and believes that the district engineer should consult with the state agency if no consistency determination has been received by the end of the six month period to verify the State's concurrence with federal consistency. DEP does not object to the district engineer seeking agreements with State CZM agencies concerning comments during the public notice period, although it is unlikely that DEP will enter into such an agreement because the public notice period is proposed to be changed to only 30 days. Reducing the federal consistency certification response period to three months, rather than six, may be acceptable to DEP.

Conclusion

New Jersey opposes most of the proposed changes in the Section 404 permit program regulations because they consistently diminish the weight of environmental factors in the public interest determination and the role of public participation in the review process, and increase the Corps' discretion to authorize projects under the general permit program. I am also concerned that the Corps' reduced role in the Section 404 program will put a greater burden on the State to assume technically but not officially a large part of the Corps' responsibility under Section 404, without giving states increased resources to do so. If you have any questions about these comments, please contact David N. Kinsey, Director, Planning Group, at (609) 292-2662.

Sincerely,



Attachment

A Developer's Alternate Proposal for Wetland Encroachment

Wetland development bonus values should be permitted for structural and landscape manipulation of a development site. These would apply to projects of significant size to permit the developer to incorporate various approaches to create and perpetuate additional wetland values through hydrological design and proposed improvements to demonstrate environmental sensitivity. Listed below are examples with encroachment values.

Decrease the rate of run-off for streams leaving the site after development to less than natural condition for a 10, 25, 50 and 100 year storm event.

1. 10% reduction - 10% of the initial wetland area encroachment
2. 20% reduction - 20% of the initial wetland area encroachment
3. 30% reduction - 30% of the initial wetland area encroachment

Installing a system of water detention and filtration of surface run-off of the initial one inch rainfall prior to leaving the site.

15% of the initial wetland area encroachment.

By planting native ground cover, shrubs and tree cover to enhance diversity of wildlife.

Half acre encroachment for each one acre of such planting.

For upgrading marginally productive wetlands by controlling water levels and replanting.

Half acre encroachment for each one acre of such upgrading.

By constructing ribbon lakes and other wet storage systems to depths in excess of five feet to permit ground water recharge when existing perched water tables and impervious surface conditions are encountered in wetlands.

Two acres of wetland encroachment for each one acre of lake in excess of 5 feet.

For installing stream monitoring systems, potential recirculation and aeration systems and said system to be maintained and controlled by permanent viable funded permanent not-for-profit organization to maintain wetlands and water quality.

Ten percent of the initial wetland area encroachment.

Public Access - to be defined.

Up to 10% of the initial wetland area encroachment.

This initial list has been kept simple to illustrate areas of concern that need to be addressed in establishing viable long-term solutions that are an attempt to balance hydrology, environmental, and human values. Experts could arrive at an expanded list with more guidelines that should be supportable by all interested parties.

Finally, all discontinuous wetland areas of less than 15 acres should be eliminated from consideration.

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UII CRIDO

*As responsible citizens, we shall leave this land enhanced . . .
thereby enriching the lives of all who live on it.*

CODE OF ETHICS FOR MEMBERS OF THE DEVELOPMENT COMMUNITY

*As a land use and development professional, I dedicate my professional knowledge and expertise to further
the enhancement of the land and the advancement of the quality of life of all who live on it.
I therefore pledge my loyalty and support in maintaining the highest standards of
professional conduct for:*

1. *Respect for the Land*

I know that each parcel of land is a precious, distinct, and irreplaceable portion of this distinct and irreplaceable planet. I will treat it with the respect that it deserves, recognizing that I will be judged by the integrity and permanence of my developments, which will survive my lifetime.

2. *Respect for the Professional*

UII—the Urban Land Institute has pioneered many of the practices and techniques that have become standards in the land use and development profession. I will support the profession's continuing efforts to create a wider understanding of sound land use and development principles and practices and to disseminate knowledge thereof through its research and educational programs. I will observe the highest standards of professional conduct and will seek continually to maintain and improve my professional skills and competence.

3. *Respect for the Consumer*

Recognizing that a good reputation is a possession beyond price and that the quality of my product will determine the quality of my reputation, I will strive at all times to ensure the professional quality of my enterprise.

4. *Respect for the Public*

I will endeavor at all times to enhance public understanding of the development process, to preserve the public's confidence and trust in my profession, and to protect the public welfare.

5. *Respect for Equality of Opportunity*

I will support the private enterprise system which can provide the widest possible latitude for equality of opportunity, creativity, and innovation.

6. *Respect for Others in the Land Use and Development Profession*

I will treat others in my profession fairly and honestly. I will share with them my knowledge and experience, recognizing that both the people and the land will benefit from the dissemination of that knowledge.

7. *Respect for the Larger Environment*

In attempting to provide adequate staging for decent environments in which people will live, work, and play, I will be ever vigilant toward preserving the quality of the larger environment—the air, the water, and the land.

8. *Respect for the Future*

Recognizing that change is inevitable, I will pursue excellence with an open mind, challenged by the need to provide improved housing and facilities for employment, distribution, relaxation, and enjoyment.

9. *Respect for Future Generations*

Recognizing that younger generations will be more affected by what we do than what we say, I will do my utmost to set a good example and will participate wholeheartedly in the development community's efforts to inform and encourage future generations of land use and development professionals.

10. *Respect for Personal Integrity*

I will employ the highest ethical principles, and will observe the highest standards of integrity, proficiency, and honesty in my professional and personal dealings. I will remain free of compromising influences or loyalties and will exercise due diligence in ensuring that my performance is at all times creatively, competently, and responsibly managed.

By strict adherence to these operational standards, I will be able to say, with understandable pride, "I am a member of the development community."

*"Let us in this day and generation
perform something worthy to be
remembered." Thomas A. Edison*

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[Signature]
Chairman
UII Ethical Standards Committee

What value wetlands?

Effective wetlands conservation efforts require careful reasoning and strong incentives to landowners

By Michal J. Bardecki

ONE need only read the works of conservationists and naturalists to appreciate the aesthetic values of wetlands. Of course, wetlands do not provide the same aesthetic impact as do many other natural areas, perhaps because they lack broad vistas and dramatic landscapes. But they do provide natural beauty, albeit beauty that takes an appreciative eye.

One observer (8) puts it this way: "Wetlands are not conventional wild areas. They do not cater to established, classical concepts of vista, horizon, and landscape.... They force you inward, both upon yourself and upon the nonhuman world. They do not give you grand views; they humble you rather than reinforce your delusions of grandeur.... In a wetland you do not 'stand tall.' If you are to stand at all, you need to search for semi-firm ground, and you do not expect to find firm ground as a matter of course. When you move, you move slowly, tentatively, each step an exploration in its own right. You wait for things to come to you, rather than setting off to 'find out what's over the next ridge'."

Much of the recreational value of wetlands derives from these aesthetic values. Indeed, it is difficult to separate the aesthetic and recreational values of wetlands.

Wetlands are an important outdoor recreation resource. Recreational activities that depend upon or are enhanced by wetlands include sport fishing, hunting, camp-

ing, picnicking, hiking, nature study, and photography. The values of these uses have been reasonably well documented, but with the exception of hunting, there has been little investigation of the recreational uses of wetland areas.

Biological value

Wetland conservation efforts, where they do exist, are often based on the biological significance of such areas. On a broad scale, wetlands may be among the most productive of ecosystems (23).

Wetlands, particularly shallow open water and marshes, provide food, shelter, spawning sites, and nursery areas for a wide variety of fish species.

Many wildlife species are thought of as wetland species. Probably a larger number of species are occasional wetland users. Although not essential to their survival, the presence of wetlands allows for greater populations and wider ranges than would otherwise be possible. Wetlands are often breeding sites and nursery areas for a regional ecosystem. Even for adults, wetlands may provide food, escape cover, and winter protection for upland wildlife. As upland areas are developed for various uses, wetland areas may become progressively more important.

Clearly, waterfowl depend upon wetlands. In addition, several species of fur-bearing animals, particularly beaver and muskrat, are wetland denizens.

For flood control?

The second most often cited reason for wetlands protection is their supposed role

in flood control. There is an old notion that wetlands act as sponges (9). It holds that wetland areas provide storage of water during periods of high water, allowing the water to seep out during low periods in stress.

Virtually every publication on wetland protection includes the value of wetland areas. However, scientific literature does not wholly support this contention and really presents a somewhat contrary picture. This is attributable to the variety of situations studied.

Investigations differ from one another in a variety of ways, particularly in whether or not a study examines the hydrology of an individual wetland or an entire watershed containing wetland areas. The hydrological response of individual wetlands does not appear in studies of entire watersheds, or the response may even be different depending upon the synchronicity of tributary channel peaks. For example, even a crude model indicates that the "sponge" assumption is incorrect, that is, that wetlands act to diminish flood peaks, wetlands may, on a basinwide scale, reduce flood peaks. In light of the number of studies involved and different methodologies, there is a lack of consensus concerning the



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U.S. Fish and Wildlife Service

of wetlands to control flood peaks is not surprising.

The hydrologically active layer of many wetland soils is quite shallow. The hydraulic conductivity of organic soils declines rapidly with depth, sharply limiting vertical penetration of water (3). Also, surface soil layers in wetlands are usually at or near saturation. Therefore, wetlands have little capacity to reduce streamflow peaks through absorption. High water tables during spring runoff further suggest that wetlands are poor streamflow regulators at that time of year.

Nonetheless, some authors, most notably those basing their conclusions on macro-scale observations of wetland areas, suggest a much more significant role for wetlands in flood control. Many indicate a link between the presence of wetlands and the severity of flood damage. These studies are significant but may not be true indicators of wetland values *per se*. In fact, one can argue that it is the presence of topographically flat areas that reduces flood peaks. Many of these are, of course, occupied by wetlands, but it is not at all clear that removing the nature wetlands would significantly alter a river basin's hydrological response.

Contrary to such studies, wetlands may have little effect on streamflow. They may

even act to enhance floods, according to many detailed investigations. For example, a comparison of runoff from drained and undrained peatlands showed that peak flow from heavy summer rain was considerably lower on drained peatland due to an increased water storage capacity resulting from a lowering of the water table (13). The snowmelt flood began earlier and lasted longer, producing a lower peak flow. Similar results have been reported elsewhere (4, 6, 17). This evidence certainly raises questions about the magnitude and universality of the flood control benefits of wetlands.

As far as low flow augmentation is concerned, the literature is virtually unanimous in its rejection of the sponge hypothesis—that wetlands act to release water in storage during periods of low streamflow (2, 5).

There is no doubt that wetlands act as important water storage reservoirs. The question, however, is one of availability of this water. Much of the water may be associated with the wetland substrate and may be unavailable for low flow augmentation. It is likely that only in those situations where the wetlands act as groundwater discharge areas do wetlands contribute much to base flow.

Wetlands reportedly have value for

groundwater recharge (11). Despite this, it is possible that most wetlands are not in fact good groundwater recharge areas at all. Evapotranspiration may be higher than inflow. Upland areas are often reported as recharge areas for wetlands rather than vice versa.

The importance of a wetland for groundwater recharge lies in the hydrological transmissivity of the wetland. Hydraulic conductivity of many wetland soils is low, severely limiting the recharge capabilities of wetlands. The reported geographical association between wetlands and water wells may be simply a result of the dependence of both wells and wetlands on good aquifers.

What value for water quality?

However critical one may be of assertions about the water control benefits of wetlands, one can only attempt to emphasize more strongly their positive effects on water quality.

A broad range of recent studies deal with the impacts of wetlands on the quality of their discharge waters. It is widely accepted that wetlands do provide beneficial effects. Such studies have concentrated primarily on marshes and swamps. Because there is a strong association between

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the mobility and chemistry of wetland waters and the type of wetland vegetation (15, 20). It is difficult to generalize from much of the published data on water quality so as to include the entire variety of wetland types.

Nonetheless, many wetlands have potential for removing plant nutrients from incoming waters. The uptake of nitrogen and phosphorus in particular may be beneficial in reducing the potential for adverse eutrophic effects downstream. This storage may be long term (eventually as peat or muck deposits within the wetland), or it may merely be a short-term delay of nutrient transport from summer to the flushing of the following spring thaw, thus reducing the growing-season nutrient load downstream.

Nutrient removal is not the only beneficial water quality effect reported for wetland areas. Sediments, pathogens, and toxic substances may be removed as well.

Low flow velocities through wetlands lead to the deposition of suspended materials in the quiescent waters. The effect is similar to that of a reservoir. The wetland vegetation also acts to trap material.

Wetlands have potential for wastewater clean-up by removing pathogens, though studies show considerable variability of results (15). Wetlands with organic substrates may be better than those with mineral soils at reducing pathogens. Humic acid from peat even appears to possess certain antiviral properties (16).

Similarly, organic soils have potential for removing toxic substances through the absorption of metal ions by peat. By retaining sediments, wetlands can remove adsorbed metals and pesticides from waters. Furthermore, certain wetland plants absorb toxic pollutants, including heavy metals and organic chemicals (15).

The potential of wetlands for treatment of wastewater has produced considerable interest in the enhancement of these properties or even in the development of artificial wetlands specifically for wastewater treatment. Several such systems exist currently (7, 12, 19).

Despite this optimistic outlook, a word of caution is needed in considering the water purifying benefits of wetlands. A question still remains as to the ecological impact of pollution loads on wetlands. Marshes may deteriorate as a result of increased sediment loads introduced from engineering works, and although certain species of wetland vegetation may recover quickly, wetland ecosystems are somewhat difficult to reestablish.

A further value attributed to wetlands, at least shoreline wetlands, is that they also

provide protection from erosion. Most investigations of the shoreline protection values of wetlands involve qualitative descriptions. Despite several problems, wetlands can provide a low energy environment. However, high energy shorelines normally preclude growth of aquatic plants. Marsh development, therefore, does not seem to be a feasible alternative for stabilizing actively eroding shorelines, although it may be useful in less severe situations.

Atmospheric Interactions

The interplay between wetland areas and the atmosphere is not particularly well documented. Nonetheless, a variety of climatic and atmospheric effects have been attributed to wetlands. These range in scale from the local to the truly global.

Particularly interesting is the microclimatology of wetlands. Wetlands in distinct topographic depressions normally exhibit cooler soil temperatures (largely a result of heat losses through evaporation) and lower air temperatures (resulting from cold air drainage) than surrounding uplands. Frosts are much more prevalent. Indeed, in many ways such wetlands have conditions that might be expected at higher latitudes. This appears to play a significant role in the distribution of boreal species; wetlands often provide refuges for such species far south of their normal geographical limits.

Large wetlands often exert regional climatic effects as well. It is not clear how these effects differ from those of a body of open water, although the high surface-area-to-volume ratio and the presence of vegetation may well play a significant role.

Research and educational values

Concerning a final value of wetland areas, the U.S. Department of Interior has this to say: "Wetlands of all types have a high intrinsic value for education and research purposes because of the great number and variety of life forms they support. The biological, intimate associations of plant and animal communities present in marshes and swamps represent an important resource for teaching and study. They are especially valuable to the researcher interested in tracing the intricate relationship of plants and animals under an ever-changing environment" (22).

But other than general statements of this nature, little has been written about the use of wetlands for education or research. But such use may be extensive. For example, about one-half of the high schools in

Ontario incorporate at least one wetland visit as part of their science curriculum (2).

Numerous scientific papers on wetlands illustrate the general significance of wetland areas for research. Particularly worthy are the unique uses of wetlands in palynology for the reconstruction of past climatic and vegetative environments.

An economic perspective

From a purely economic point of view, a wetland owner is faced with a classic problem in resource allocation. In general, the owner may preserve the wetland in its largely natural state, or decide to convert it to use so as to reduce or destroy its wetlandness.

From the individual's point of view, the option to alter the wetland's use should be taken if the marginal benefits exceed the marginal costs. Herein lies the crucial problem. The individual need only compare those costs and benefits that may be internalized, "those that are private." But does this private economic analysis consider all benefits and all costs? Do such a decision result in a socially efficient allocation of resources? Most benefits of a wetland in its natural state are external. They cannot be realized by the landowner. The landowner can realize benefits only if the area is converted to some other use, such as agriculture. In either case, the benefits are generally private.

Several studies have attempted to place a value on the benefits derived from wetlands. There are many problems with these methods, largely related to the intangible or incommensurable character of many wetland benefits. There are no precise methods for determining relative values of the benefits and services of wetlands. Methods have evolved, but none are particularly satisfactory. Nonetheless, studies using these methods do provide some general insight into the problem of public versus private benefits. I will discuss three of these studies.

Economic values for the approximately 32,000 acres (13,000 hectares) of wetland marsh in Michigan have been derived by the Michigan Department of Natural Resources. The wetland uses included were hunting, trapping, and sport and commercial fishing as well as "non-consumptive recreation." It was concluded that Michigan's coastal wetlands generate a gross annual value of \$490 per wetland acre per year (\$1,210 hectares/year). By including other values, for example, for nutrient uptake and for "ecological functions," the average return increased to more than \$3,000 per wetland acre per year.

ve benefits included in the detailed analysis may be wholly internalized (an likely possibility), private benefits ould still total only one-fifth the suggest- value of the more general societal bene- s of nutrient uptake and "ecological nctions."

Wetland values in Virginia have been veloped based on the market value of the oducts produced, on the expenditures by reationists, on the costs of providing nventional tertiary treatment, and on tal life support" values from a study of ergy input-output in the United States onomy (10). Annual potential benefits rived were fisheries production, \$108 r acre (\$267/hectare); aquaculture, \$350 \$900 per acre (\$865-\$2,224/hectare); aste assimilation, \$2,500 per acre 5,178/hectare); and "total life support" ue, \$4,150 per acre (\$10,255/hectare). ence, the total annual potential benefit e derived from an acre of marsh is esti- ated to be \$7,108 to \$7,658 per acre 17,564 to \$18,923/hectare), of which a aximum of only 6 to 13 percent (fisheries d aquaculture) could reasonably be in- rnalized as a private benefit to the own-

The U.S. Army Corps of Engineers dy of the Charles River estimated the usual benefits to be derived from 8,421 res (3,408 hectares) of wetlands desig- nated for acquisition to be \$771,800, of hich \$124,800 (16.2%) was for recre- ion and fish and wildlife benefits and the mainder for flood control benefits (21). iven private ownership, the 16.2 percent ure would be an upper limit to the pro- ortion of private benefits.

It is difficult to reach definite conclu- ons about the private and public benefits e wetlands. Nevertheless, in none of the udies cited above did the benefits that ight conceivably be internalized exceed e-sixth of the total benefits. If this were hold true, and there is little reason to elieve otherwise, it is easy to understand e economic basis for wetland conversion. Many products and services that make etlands a valuable resource for society e public goods that are largely external e individual's proprietary rights. In her words, the owner of a wetland area ay have to bear the costs of ownership, for example; yet he or she cannot ful- realize the benefits that accrue from re- ing the wetland in its natural state, for mple, migratory bird habitat, ground- e recharge, or downstream water uality effects. As a result of the landown- e difficulty in capturing the value of his er land, the benefits derived from pre-



U.S. Fish and Wildlife Service

Cypress trees in the Okefenokee swamp: A strong public commitment to wetland protection is needed to counter incentives for conversion.

erving wetland areas, although they may play a part in any land use decision, are likely to be outweighed by the benefits of conversion, to agriculture, for example.

Added to this are certain potentially detrimental aspects of wetlands. For exam- ple, it takes longer and costs more to plant crops in irregular patterns to avoid wet spots. Machinery may become mired. And crop losses to waterfowl and other birds may reduce yields. From the owner's point of view, therefore, conversion of wetlands from their natural state may be highly desirable. The net public benefit may be reduced by such action, however.

Wetland owners convert their land be- cause it is economically logical for them to do so. To rely upon their economic altru- ism is naive.

Without strong policies to promote wet- land protection, wetlands will continue to disappear, and those benefits that people enjoy because of these areas' presence will disappear with them.

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New Jersey Conservation Foundation

300 Mendham Road, Morristown, N. J. 07960

September 24, 1984

201-539-7540

Testimony before the Agriculture and Environment Committee
concerning ACS-672, A-2348 and the Army Corps of Engineers 404 Program
by David F. Moore, Executive Director

The New Jersey Conservation Foundation is a nonprofit organization representing approximately 3,000 members throughout the state who are interested in the conservation of natural resources through the promotion of a balanced land use system, which encourages development and redevelopment in appropriate locations and discourages it in environmentally sensitive areas.

Over a decade ago the state took protective action on behalf of saline wetlands through the passage of the Coastal Wetlands Act. Since that time both our knowledge of the benefits provided by freshwater wetlands and the threats posed by inappropriate development in these areas have grown to a point where there is consensus among state government officials and conservation and development interests that these areas too are in need of greater legal protection.

The best evidence that development interests recognize the benefits provided by freshwater wetlands can be found in the legislative findings of A-2348, drafted by the N.J. Builders Association. Those findings list 19 reasons why these areas constitute an important natural resource including, for example, flood protection, maintenance of stream and ground water quality through filtration of pollutants and absorption and nutrients, preservation of habitat for native flora and fauna and provision of a quality environment which supports hunting, fishing, recreation and tourism generated incomes.

A recent survey of Passaic County by the U. S. Fish and Wildlife Service reveals that 14.5 percent of the freshwater wetlands in that county between 1940 and the mid-1970's no longer exist. A comparison of recent aerial photographs and soils maps with older surveys, such as those done by state geographers in the last century, shows us that as much as 65 percent of that county's wetlands have disappeared in the last 100 years or so. It comes as no surprise that portions of Passaic County and nearby areas were declared federal disaster areas due to flooding in 1971, 1972, 1973 and twice in 1975, and severe localized flooding occurred in 1977, 1979 and again this year. Considering the benefits provided by freshwater wetlands and the hazard posed by their development, it is incumbent upon the legislature to act to slow the rate of their loss.

The task before the committee is to examine existing programs governing freshwater wetlands, and based upon that examination to select a new program which offers adequate protection for these areas.

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without duplicating existing regulations. The New Jersey Conservation Foundation feels strongly that the passage of ACS-672 would provide the basis for such a program. This bill recognizes the existing state programs designed to protect wetlands, and it does not seek to regulate activities in the Pinelands, HMDC or mapped coastal wetlands.

There has been some discussion about this bill in relation to the potential duplication of the wetlands dredge and fill permit program administered by the Army Corps of Engineers under section 404 of the federal clean water act. We have provided each of you with our analysis of this issue. We have found that the 404 program is inadequate in protecting the state's freshwater wetlands. One problem involves the narrow scope of the 404 program -- it governs only dredging and filling. In addition, we have reviewed a number of 404 permit decisions, and have concluded that there is little predictability as to where the Corps will take jurisdiction. At Lee Meadows in Morris County after nearly three years and extensive communication among federal and state agencies, environmental groups and the applicant, the question of jurisdiction remains unresolved.

In instances where the Corps does take jurisdiction over proposed activities in freshwater wetlands it is impossible to anticipate the weight which will be attached to each of its many decision criteria. And according to our information enforcement is often non-existent or it occurs after wetlands resources have been destroyed.

The proposed regulatory changes in the 404 program as a result of the National Wildlife Federation vs. Marsh lawsuit will not address any of the previously described deficiencies, except for the issue of jurisdiction, and the revisions in this area will remain inadequate, allowing the destruction without permit of up to 10 acres of wetlands in some areas. Thus, ACS-672 can hardly be characterized as a potential duplication of a federal program that may appear adequate on paper, but has been ineffective in practice.

When ACS-672 becomes law we would support the concept of joint application and joint processing procedures to the extent practical, between counties and the Corps of Engineers on wetlands permits. This would cut down on processing time and would allow the applicant the opportunity to know at the outset the requirements of each agency. The Corps has already implemented joint application and processing procedures elsewhere. In addition, if ACS-672 is enacted it could, in combination with other existing statutes, provide the basis upon which the state could assume delegation of the 404 program from the federal government, thereby creating a single and more effective mechanism for reviewing activities in freshwater wetlands.

Of the two bills before you, ACS-672 would offer real protection for freshwater wetlands, while A-2348 would not. In A-2348, the builders association has made an effort to prevent effective regulation of freshwater wetlands through proposing a program containing numerous

loopholes. I will focus on only the most glaring examples.

Aside from being scientifically indefensible, the A-2348 definition of freshwater wetlands excludes so many areas from coverage that it is difficult to identify any area that would be covered. I refer you to the comparison which we prepared for the list of specific exclusions.

A-2348 also exempts many potentially harmful activities from regulation including, for example, construction of new transportation or public utility systems, pile driving, and drainage or disturbance of the water level or water table.

Of equal concern in A-2348 is the lack of any firm criteria relating to wetlands resource protection for the counties to use in permit decisions. The only finding a county must make before approving a permit is that denial would "create exceptional and undue hardship upon the applicant or if there is an unreasonably disproportionate relationship between protection of these resources and the added cost of avoiding such damage." With only this one subjective, economic criterion upon which to base their decisions, counties will be forced in every instance to approve applications or face judicial challenges. An especially irritating aspect of A-2348 would allow applicants who are granted permission to destroy wetlands, to pay off environmental groups or government agencies rather than provide mitigation for the diminished wetlands values.

ACS-672 requires that objective, resource-based conditions be met before a permit can be issued. This is based upon the fact that freshwater wetlands are a public resource of finite dimensions, which should not be manipulated or destroyed to provide for land uses that can be accommodated at less environmentally sensitive locations.

ACS-672 recognizes that under certain conditions public roads and utilities may have to be sited in wetlands. For all other types of activities the basic requirement for approval is that the activity by its nature requires a waterfront or wetlands location in order to function. We view this requirement to be basic to the success of any wetlands protection program, for without it all of our state's existing freshwater wetlands would remain open to destruction in the name of mitigation and compensation, as proposed in A-2348.

We urge you to reject A-2348, and to actively support ACS-672.

To: Assembly Agriculture & Environment Committee
From: Annette Petrick
Date: September 4, 1984
Re: A2348, A672
Freshwater wetlands legislation

Knowing that the committee is having a public hearing on this legislation on September 24, we wish to have our comments on this issue read into the record for that hearing.

Government's approach to cutting down duplication and unnecessary regulation has been lauded. In the economy in which we live, red tape for the sake of red tape cannot be allowed or justified.

Bill A2348, now under consideration by this committee, recognizes the Army Corps' 404 permit jurisdiction and exempts such areas from regulation under this bill. A-672 does not. This would create confusion and a duplication of permits.

A2348 limits the ability of the Department of Environmental Protection to regulate freshwater wetlands. It states that any regulations administered by the Department must be consistent with the definition and procedures of A2348. A672 contains no such provisions for consistency.

A2348 contains procedures for the obtaining of permits. They are specific, so as to prevent delays and confusion. A672 contains no procedures for processing permits.

A2348 has specifically defines freshwater wetlands. A672 has a loosely outlined definition that could lead to misinterpretation and confusion.

NJ MBA sincerely requests that the committee gives these advantages and disadvantages serious consideration when deciding this issue. Thank you for your consideration.

AEP:pk

Annette Petrick
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UTILITY and TRANSPORTATION CONTRACTORS ASSOCIATION



PROPOSED FRESHWATER WETLANDS LEGISLATION

(A-2348 and A-672)

Association Testimony

September 24, 1984

The Utility and Transportation Contractors Association is a statewide organization representing approximately 475 firms that perform all types of heavy, highway and utility construction. At this time, our association has major concerns regarding the proposed wetland legislation (A-2348 and A-672).

After reviewing these two bills, we feel that A-672 will duplicate the jurisdiction and intent of the Army Corp's 404 permit system. A-672 has no real procedure for processing permits and its definition of wetlands will lead to broad interpretations. We feel this will ultimately lead to many delays and appeals by all parties. The proposed bill also contains language concerning several buffer zones which also may lead to these same broad interpretations. Furthermore, A-672 has no provision which will coordinate regulatory efforts between New Jersey DEP and the state's many county governmental agencies. This bill contains no mitigation procedures, compensation or land replacement. It does mention wetland encroachment; however, the conditions that must be followed make any activity almost impossible.

We feel A-2348 will provide a much more reasonable and administratable wetlands permit system. This bill acknowledges the Army Corp's 404 permit system while coordinating simple procedures for permit application. It also has distinctive language which makes clear where a permit is necessary. A-2348 contains guidelines for exact distances where buffer zones are applicable, thus eliminating any arbitrary interpretations. This bill acknowledges limited encroachment of wetlands where the county agencies feel it is necessary, provided certain protective conditions are fulfilled. A-2348 provides for sufficient fundability for the counties to administer this permit program while A-672 offers limited financial resources.

For these reasons, the Utility and Transportation Contractors Association supports A-2348 rather than A-672. We thank the Assembly Agriculture and Environment Committee for giving us the opportunity to submit this written testimony.

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