



# New Jersey

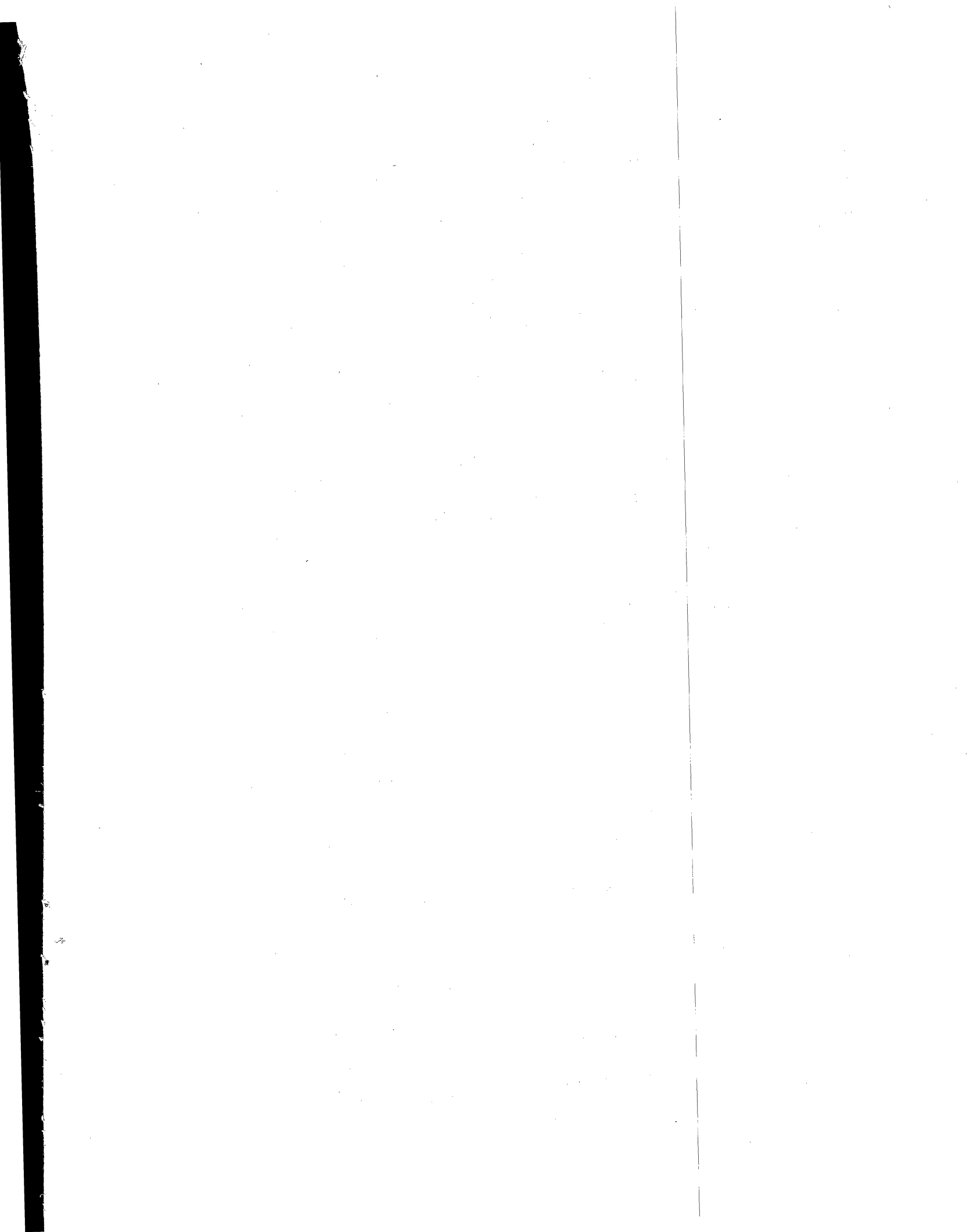
## THE NEW JERSEY CONTINUING PLANNING PROCESS FOR WATER QUALITY MANAGEMENT

Descriptions of Selected  
Management Processes

SUMMARY

March 1987

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**SUMMARY**

**THE NEW JERSEY CONTINUING PLANNING PROCESS  
FOR WATER QUALITY MANAGEMENT  
DESCRIPTIONS OF SELECTED MANAGEMENT PROCESSES**

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March 1987

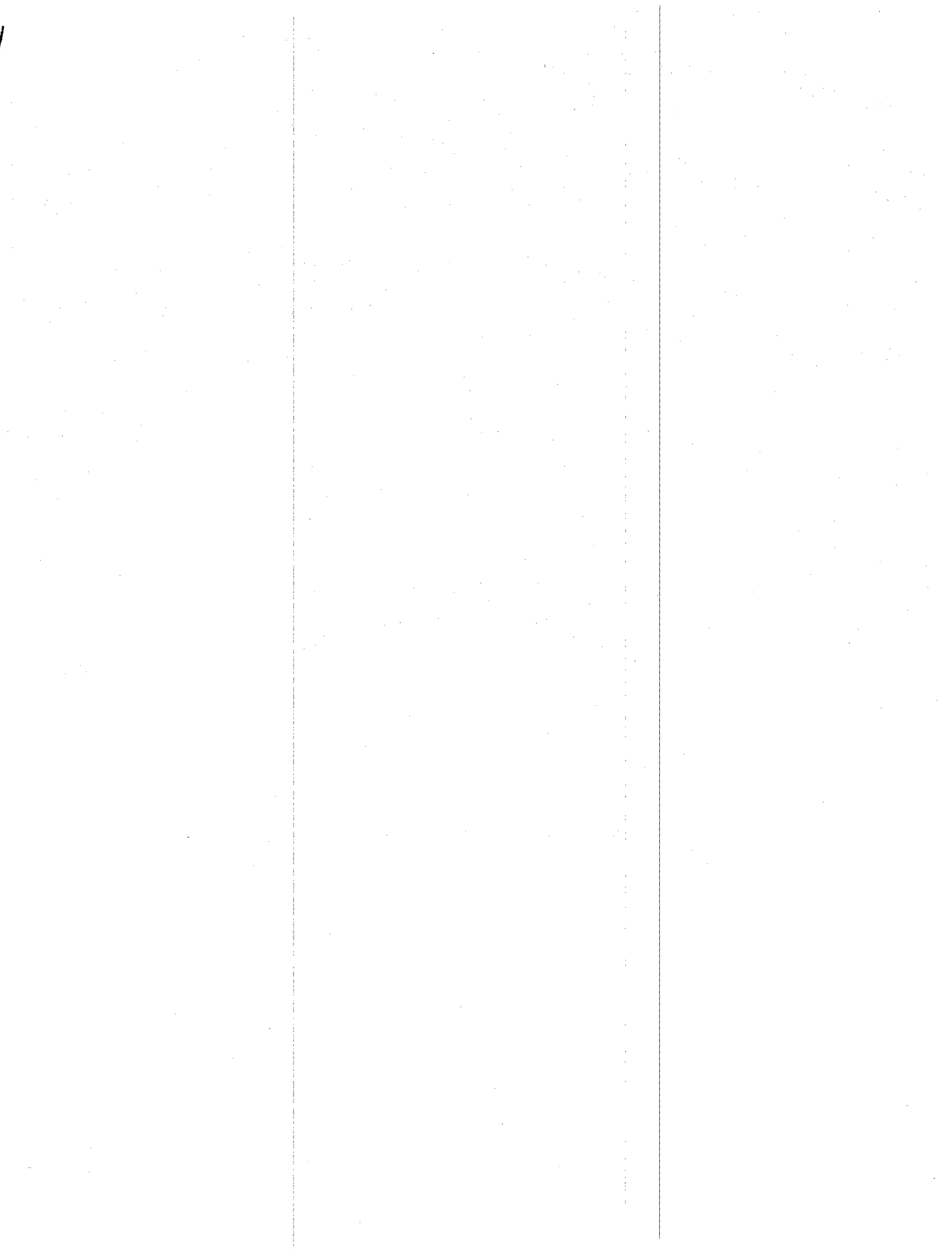
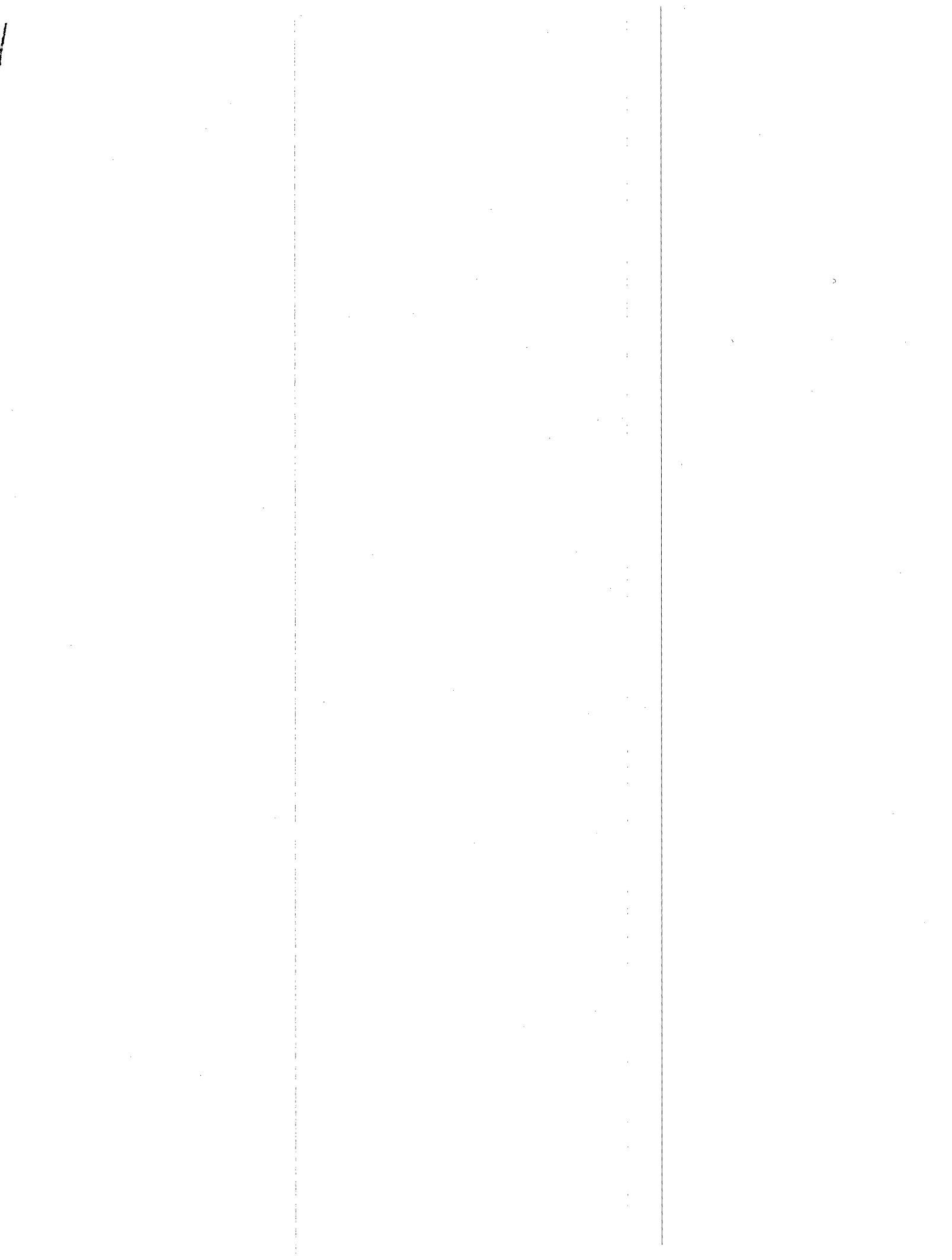


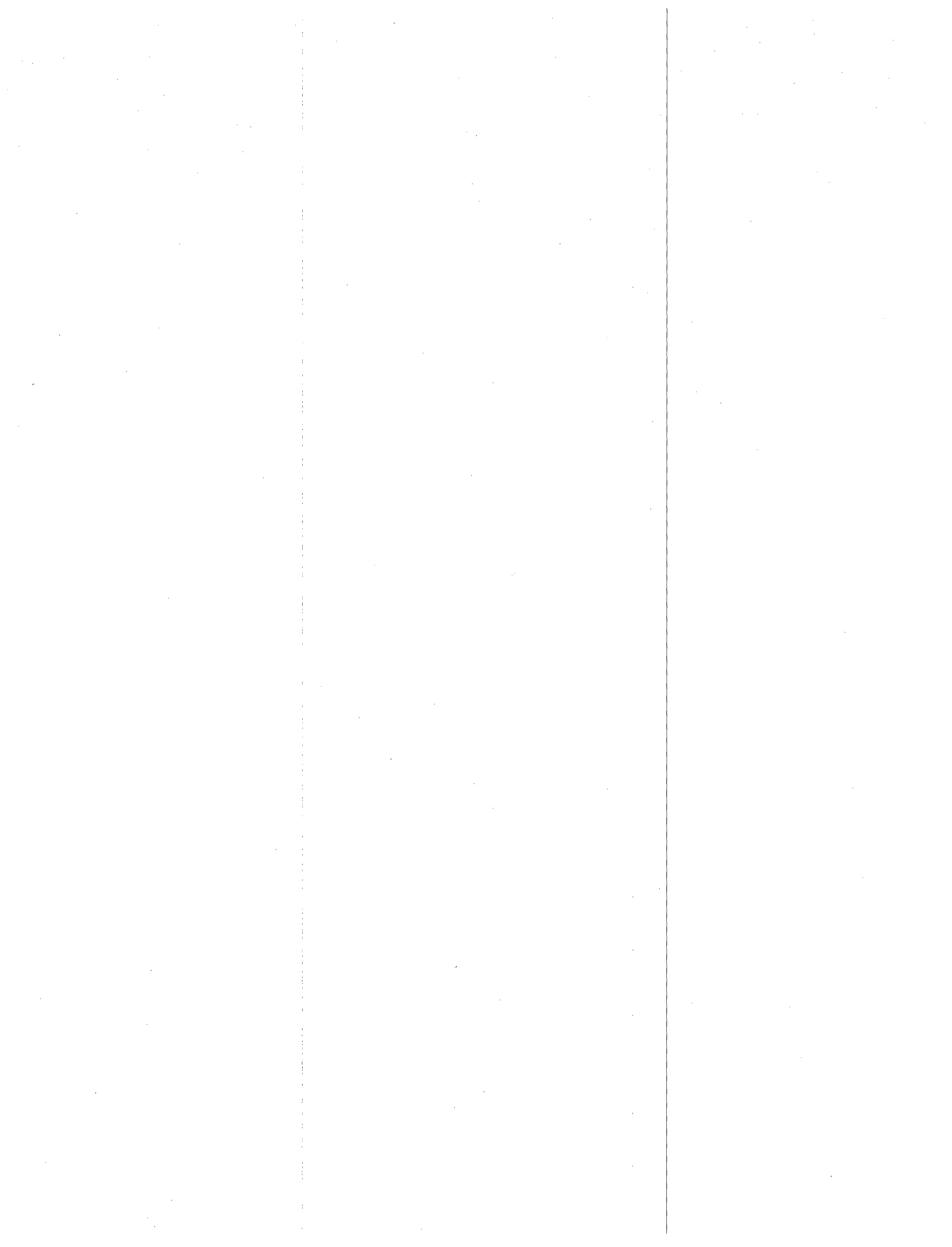
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## SUMMARY

### CHAPTER I. INTRODUCTION

Section 303(e) of the federal Clean Water Act (33 U.S.C. 1251 et seq.), and Sections 2 and 7 of the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.), require the New Jersey Department of Environmental Protection (Department) to have a Continuing Planning Process (CPP) for water quality management. The United States Environmental Protection Agency (EPA) Water Quality Planning and Management Regulation establishes requirements for the CPP at 40 CFR 130.5. The Department's Water Quality Management Planning and Implementation Process rules (N.J.A.C. 7:15) include a section entitled "Continuing Planning Process (CPP)" at N.J.A.C. 7:15-2.1. Although the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.), County Environmental Health Act (N.J.S.A. 26:3A2-21 et seq.), and Department of Environmental Protection Act of 1970 (N.J.S.A. 13:1D-1 et seq.) do not mention the "continuing planning process" by name, each of these statutes contributes to the legal basis for the CPP. (Provisions of N.J.S.A. 13:1D-1 et seq. that apply to the entire CPP are not cited again in each chapter.)

Under Department rules, the Statewide Water Quality Management Plan (Statewide WQM Plan) contains the written provisions of the CPP (N.J.A.C. 7:15-2.2(a)). The Department adopted its initial Statewide WQM Plan on December 5, 1985. The Department has amended Chapter I.D (page I-6) of the main text of the Statewide WQM Plan to identify the document entitled "The New Jersey Continuing Planning Process for Water Quality Management -- Descriptions of Selected Management Processes" as one of the components of that Plan. The document supplements the CPP provisions contained elsewhere in the Statewide WQM Plan. The Department is now submitting the entire, amended Statewide WQM Plan, including the document, to EPA as the written description of its Continuing Planning Process.

Notice of the Department's intention to propose this amendment to the Statewide WQM Plan was published at 18 N.J.R. 711(d) on April 7, 1986. Notice that the Department had completed a final draft of the document (dated May 1986), and notice of the proposed amendment to the Statewide WQM Plan, was published at 18 N.J.R. 1842(c) on September 8, 1986. More information about the Department's 1986 public participation activities concerning the proposed amendment, and about the Department's response to public comments, is provided in Appendix A of the document.

The document was prepared in response to a request made by EPA in 1983. (Extensive changes in the Department's water quality management program required the comprehensive revision of the Department's 1976 CPP description.) The phrase "Selected Management Processes" in the document title refers to eight management processes that were of particular nationwide interest to EPA:

- Determining Priority Water Bodies
- Identifying Water Quality Limited Segments
- Developing Total Maximum Daily Loads and Wasteload Allocations
- Reviewing Water Quality Standards
- Conducting Water Quality Monitoring Activities and Developing Monitoring Strategies
- Developing the Construction Grant Priority List

Reviewing Discharge Permits and Construction Grants for Consistency With  
Water Quality Management Plans  
Completing the Water Quality Inventory (305(b)) Report

The document consists of an introductory chapter and eight chapters for the eight processes (the subject matter of the document and the initial Statewide WQM Plan partially overlap). At the request of EPA each of these chapters had the following common format:

- A. DATE OF THE SUMMARY DESCRIPTION OF THE PROCESS
- B. TITLE OF PROCESS
- C. LEAD ADMINISTRATIVE UNIT FOR THE PROCESS
- D. OBJECTIVE OF THE PROCESS
- E. LEGAL BASIS FOR THE PROCESS
- F. SUMMARY DESCRIPTION OF THE PERFORMANCE OF THE PROCESS
- G. COORDINATION OF THE PROCESS

In January 1985, the EPA adopted a new Water Quality Planning and Management Regulation (40 CFR 130) whose requirements concerning the CPP did not fully coincide with the guidance EPA had given in 1983. EPA-Region II has agreed that the Department should complete and submit the document that was prepared under the 1983 guidance (for the eight identified processes) and subsequently update the document to bring its contents into conformance with the 1985 EPA regulation.

The State agency with primary responsibility for the Continuing Planning Process is the Department's Division of Water Resources (Division). Within that Division, the Monitoring and Planning Element is the lead administrative unit for most of the eight processes discussed in the document. The Division coordinates its activities in the Delaware River Basin and in the tidal interstate waters of the New Jersey-New York metropolitan area with the Delaware River Basin Commission (DRBC) and the Interstate Sanitation Commission (ISC), respectively. (Much of the coordination with DRBC takes place through the DRBC Water Quality Advisory Committee.)

The Division coordinates with county and regional water quality management planning activities under the New Jersey Water Quality Planning Act. In particular, the Division works with the following designated areawide water quality management planning agencies:

Atlantic County Board of Chosen Freeholders  
Cape May County Board of Chosen Freeholders  
Delaware Valley Regional Planning Commission  
Mercer County Board of Chosen Freeholders  
Middlesex County Board of Chosen Freeholders  
Ocean County Board of Chosen Freeholders  
Sussex County Board of Chosen Freeholders

The Division also works with county and local health agencies under the County Environmental Health Act, federal agencies such as EPA and the U.S. Geological Survey, and other Department units such as the Division of Fish, Game and Wildlife, the Green Acres/Recreation Program, the Division of Hazardous Site Mitigation, the Office of Regulatory Services, and the Office of Science and Research.

The document is descriptive, does not establish new legal requirements, and is not binding upon the Department or other parties. If any statements in the document conflict with federal or State statutes or regulations, or with the "policies and procedures" component of the Statewide WQM Plan, such statements shall be superseded to the extent that such conflict exists. References in the document to various statutory or regulatory provisions should not preclude the State of New Jersey from changing or seeking to change those provisions or from citing or enforcing different applicable statutory or regulatory provisions in legal proceedings. The document shall not be construed to affect the power of the Department to administer its water quality management program in a manner consistent with applicable statutes and regulations.

Only Chapters I and VIII of the document have been updated since May 1986. Some information in the other chapters is already outdated. For example, in June and July 1986 all four Bureaus in the Monitoring and Planning Element were renamed, and the Department's Division of Waste Management was reorganized into three new Divisions.

## CHAPTER II. DETERMINING PRIORITY WATER BODIES (May 1986)

The lead administrative unit for the process is the Monitoring and Planning Element. The objective is to identify priority water bodies for water quality management, in order to encourage the best use of manpower and funds. Legal basis is provided by Sections 101(f), 303(d), and 303(e) of the federal Clean Water Act, Section 7 of the New Jersey Water Quality Planning Act, and Section 5 of the New Jersey Water Pollution Control Act. The term "priority water bodies" was originated by EPA to encourage States to focus resources where water quality decisions are needed. The federal Clean Water Act does not require States to develop a general priority water body list.

The Division recognizes the need for systematic evaluation of waterways to promote effective and efficient pollution control. The "New Jersey 1982 State Water Quality Inventory Report" (the "1982 305(b) report") included a "Surface Water Rating System" that consisted of a Water Quality Index and a Water Use Index calculated for 29 "segments" (individual watersheds, sections of watersheds, or grouped watersheds). The 1982 rating system presented water quality and water use information that has been used in selected water quality management programs. Examples included the implementation of the National Municipal Policy in New Jersey (the policy for bringing municipal dischargers into compliance with discharge permits), the identification of intensive water quality monitoring surveys, and the conceptual development of a permit fee methodology for wastewater dischargers. Some of the water quality parameters and water uses that were considered in the 1982 rating system have also been considered in the Division's priority system for construction grants.

A refined "System for Rating Waterbodies and Their Water Quality Management Needs" was developed for the 1984 305(b) report. The 1984 rating system used 148 segments and consisted of a quantitative assessment and a qualitative assessment. The quantitative system incorporated many elements from the 1982 rating system. Like the 1982 system, the quantitative assessment contained a Water Quality Index and a Water Use Index. However, there were differences in the individual parameters and how they were evaluated. The Water Quality Index considered dissolved oxygen, total phosphorus, total dissolved solids, un-ionized ammonia, biochemical oxygen demand, fecal coliform, and toxic substances. The Water Use Index considered surface water diversions for

potable water supplies, fish stocking, confirmed anadromous fish spawning runs, bathing beaches, and approved or seasonal shellfish waters. The new qualitative assessment, called the Water Use and Resource Assessment, considered freshwater fisheries, marine fisheries, shellfisheries, primary contact recreation, and potable water supplies. The information in the Water Use and Resource Assessment was to be based on questionnaires, for completion by State and local agencies, concerning the quality of existing resources, use intensity, and the potential for impairing or restoring the resource or use.

For the 1986 305(b) report which is now being prepared, the Division is using portions of the rating system in the 1984 305(b) report and has further modified the Water Quality Index. (The Water Quality and Water Use Indices, but not the qualitative assessment, will be used in the 1986 305(b) report.) The Water Quality Index is now based on the Profile Water Quality Index developed by EPA Region X, which is a modified version of the National Sanitation Foundation's Water Quality Index. The Water Quality Index for New Jersey is made up of eight categories (temperature, oxygen, pH, bacteria, nutrients, solids, un-ionized ammonia, and metals), with each category containing from two to five components. Index values range from zero (highest water quality) to 100 (worst case), using data from long-term ambient monitoring stations.

The 1982 and 1984 305(b) reports (including their waterbody rating systems) constitute the "problem identification component of the Statewide WQM Plan" that the Department adopted on December 5, 1985. Future waterbody rating systems will be included in future 305(b) reports, which will be incorporated into the Statewide WQM Plan following the submission of such reports to EPA pursuant to section 305(b) of the federal Clean Water Act.

The 1982 rating system coordinated data from several sources within and outside the Division. Coordination has also occurred in the design and use of the 1982 rating system. Likewise, the 1984 rating system (as subsequently modified by the Division) coordinates data from diverse sources. EPA Region X has been instrumental in applying the Profile Water Quality Index. The Bureau of Management Services provides retrievals of water quality data from STORET. The Water Supply and Watershed Management Element provides information about potable water supplies. The Division of Fish, Game and Wildlife provides information about fisheries and shellfisheries resources. The Division of Parks and Forestry, the Green Acres program, and local health agencies provide information about primary contact recreation. The segmentation in the rating system is based principally on the approximately 140 "small watersheds" that have been delineated by the federal Soil Conservation Service. Within the Monitoring and Planning Element, the Bureau of Planning and Standards designs, refines, and processes information for the rating system. The Bureau of Monitoring and Data Management, the U.S. Geological Survey, and the county health departments in the County Cooperative Network are responsible for most of the water quality data used in the rating system's Water Quality Index. The Bureau of Shellfish Control provides information about shellfish growing waters. Various Division Elements and Department units were given the opportunity to comment on the draft 1984 305(b) report including the draft rating system. The Bureau of Planning and Standards will hold discussions with other Division Elements to promote the use of the rating system in Division programs.

The Department held a nonadversarial public hearing and public comment period on the draft Statewide WQM Plan in 1985. Through this procedure, other agencies such as designated planning agencies and county health departments, as well as various interest groups and the general public, had the opportunity to comment on the use of these 305(b) reports (including their waterbody rating systems) as the problem identification component of the Statewide WQM Plan. When future waterbody rating systems are included in future 305(b) reports that are proposed for incorporation into the Statewide WQM Plan, such agencies, interest groups, and the general public may likewise have the opportunity to comment on these waterbody rating systems by commenting on the use of these 305(b) reports.

### CHAPTER III. IDENTIFYING WATER QUALITY LIMITED SEGMENTS (May 1986)

The lead administrative unit for the process is the Monitoring and Planning Element. The objective is to identify segments where it is known that water quality does not meet (or is not expected to meet) applicable water quality standards even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the federal Clean Water Act. Legal basis is provided by Sections 303(d) and (e) of the federal Clean Water Act and Section 7 of the New Jersey Water Quality Planning Act.

In the 1970s, the Department criteria for identifying segments were that each segment should contain generally similar physical characteristics, that similar technical approaches should be applicable for managing water quality within a segment, and that common needs for the preservation of high quality water should exist within a segment. The Department's 1976 State Continuing Planning Process (CPP) Description divided New Jersey into 26 segments, each classified as "water quality limited" or "effluent limited". In much of the State, the 1976 description has been superseded by segment delineations and classifications in areawide Water Quality Management (WQM) Plans. Some of the segment boundaries are ambiguous or inconsistent. Segment boundaries also differ from the 148 segments in the waterbody rating system in the "New Jersey 1984 State Water Quality Inventory Report" (the "1984 305(b) report"), which will increasingly be used to organize water pollution and water use information. The Department expects to propose an amendment to the Statewide Water Quality Management Program Plan (the Statewide WQM Plan) that would replace the segments delineated in the 1976 CPP Description and subsequent areawide WQM Plans with segments that are, to the maximum extent practicable, the same as the 148 segments in the 1984 305(b) report.

EPA stated in 1985 that segment boundaries should be established to facilitate developing wasteload allocations, load allocations, and total maximum daily loads. Some of the segments delineated in the 1976 CPP Description and subsequent areawide WQM Plans, and some of the segments in the 1984 305(b) report, may have boundaries that are not fully suitable for the establishment of total maximum daily loads and wasteload allocations. The Department expects to propose an amendment to the Statewide WQM Plan that would establish priority rankings for water quality limited segments still requiring total maximum daily loads and wasteload allocations. The Department expects that the proposed amendment would further refine some of the boundaries of high priority segments. Additional refinements to these segment boundaries may be made when the Department establishes total maximum daily loads and wasteload allocations. Any change to segment boundaries would be submitted to EPA for approval as an amendment to the Statewide WQM Plan.

The present EPA definition of "water quality limited segment" is found at 40 CFR 130.2(i). Water quality limited segments have been identified in all areawide WQM Plans prepared by the Department and designated planning agencies. The plans for the Atlantic County, Lower Raritan/Middlesex County, and Sussex County planning areas include unintentional errors. For segments of the Delaware River not classified in areawide WQM Plans, the classifications in the 1976 CPP Description remain in effect. All water bodies are included within water quality limited segments except the Hudson River, Upper New York Bay, Kill Van Kull, Arthur Kill, Raritan Bay, Delaware River (Zones 1C, 1D, and 1E), Delaware Bay (Zone 6), and the Atlantic Ocean (all waters formerly classified as CW-2 waters), which are included within effluent limited segments. The classification of a segment as water quality limited does not necessarily mean that point source discharges will receive more stringent effluent requirements. Conversely, the Department reserves the right to establish water quality based effluent limitations in appropriate circumstances for discharges to segments presently classified as effluent limited.

New Jersey inland waters (except Zones 1C, 1D, and 1E of the Delaware River) are classified as water quality limited because of their generally low base stream flow and corresponding low assimilative capacity for wastewater discharges (e.g., total residual chlorine), the widespread presence of water quality problems (fecal coliforms and phosphorus) that will not be remedied by the technology-based effluent limitations required by sections 301(b) and 306 of the federal Clean Water Act, and antidegradation policies in the Department's Surface Water Quality Standards (N.J.A.C. 7:9-4.5(d)), which can require the establishment of effluent limitations more stringent than those necessary to meet the minimum water quality criteria (for water quality characteristics that are presently better than the criteria).

The Department does not presently expect to change any segment classifications from water quality limited to effluent limited. Segments can be classified as water quality limited for so many different reasons that very detailed studies would be necessary to demonstrate that segment classifications should be changed to effluent limited. The resources necessary for such studies could better be used for more productive water quality management activities. The Department does expect to review the classification of all segments that are presently classified as effluent limited in light of antidegradation policy and water pollution problems. The result of such review may be the conclusion that no New Jersey surface waters should be classified as effluent limited. Any change to segment classifications would be submitted to EPA for approval as an amendment to the Statewide WQM Plan.

Any review of segment boundaries or classifications would be discussed with EPA-Region II. The review of boundaries or classifications for the Delaware River and Delaware Bay would be coordinated with the Delaware River Basin Commission and member states. The review of boundaries or classifications for interstate tidal waters in the New Jersey-New York metropolitan area would be coordinated with the Interstate Sanitation Commission and member states. The Department will not delegate the review process to other water quality management planning agencies, but would allow such agencies to provide comments during the process.

Within the Monitoring and Planning Element, the Bureau of Systems Analysis and Wasteload Allocation would have the principal responsibility for the review of

segment boundaries or classifications, and the Bureau of Planning and Standards would make the administrative arrangements for the proposal and adoption of revised boundaries or classifications as amendments to the Statewide WQM Plan. Other Division Elements would have the opportunity to comment on the draft amendments before their proposal. After the amendments are proposed, agencies such as designated planning agencies and county health departments, as well as interest groups, dischargers, and the general public, would have the opportunity to comment on the proposed amendments prior to their adoption.

CHAPTER IV. DEVELOPING TOTAL MAXIMUM DAILY LOADS AND WASTELOAD ALLOCATIONS  
(May 1986)

The lead administrative unit for the process is the Monitoring and Planning Element. The objective is to establish total maximum daily loads and wasteload allocations to implement applicable surface water quality standards. Legal basis is provided by Sections 303(d) and (e) of the federal Clean Water Act, Section 7 of the New Jersey Water Quality Planning Act, and Sections 4, 6, and 8 of the New Jersey Water Pollution Control Act.

The term "wasteload allocation" is not used in the federal Clean Water Act. Because of language in 40 CFR 130 and related EPA statements, the Department has restricted the term "wasteload allocation" in this chapter to those water quality based effluent limitations that are components of total maximum daily loads established under section 303(d). The Department has never formally established a "total maximum daily load" or "wasteload allocation". (The Department has, however, established water quality based effluent limitations for certain pollutants from many point source discharges.) The existing "wasteload allocations" included in the Northeast and Sussex County Water Quality Management Plans or established by the Delaware River Basin Commission, and all existing "wasteload allocations" or "water quality based effluent limitations" established under present or previous Department rules, are not considered to be "wasteload allocations" under the EPA regulation, but are considered to be water quality based effluent limitations.

The Department expects to propose an amendment to the Statewide Water Quality Management Program Plan (the Statewide WQM Plan) that would state that all water quality limited segments still require total maximum daily loads. The Department presumes that total maximum daily loads are generally required for at least some pollutants in these segments. The Division also believes that wasteload allocations are generally required for at least some point source discharges in these segments. The Department expects to consider this further after it revises segment boundaries (see Chapter III) and identifies the point source discharges in each segment. The Division expects to begin developing wasteload allocations for high priority segments before it completes a definitive evaluation of whether each segment requires wasteload allocations.

The Department does not now have a priority ranking for water quality limited segments still requiring total maximum daily loads and wasteload allocations. In the Department's judgement, establishing total maximum daily loads and wasteload allocations is often not the most practical means for implementing water quality standards. The Department expects, however, to propose an amendment to the Statewide WQM Plan that would establish a priority ranking system and a priority ranking. The amendment would link the establishment of total maximum daily loads to the establishment of wasteload allocations based

on intensive water quality surveys conducted or otherwise directly supported by the Department. Segments that receive high priority for the performance of intensive surveys to establish wasteload allocations would receive equivalently high priority for the establishment of total maximum daily loads. In assigning priorities, the Department would consider factors including the requirements of the discharge permit, enforcement, sewerage facilities construction, and water supply programs; the size and toxicity of the discharges; and the sensitivity and complexity of the receiving waters (to the extent that information on these factors is available).

Because of the linkage between total maximum daily loads and wasteload allocations, and because wasteload allocations are a type of water quality based effluent limitation, the Department would, in the establishment of total maximum daily loads and wasteload allocations, follow regulatory and technical procedures similar to those the Department uses for the establishment of water quality based effluent limitations based on intensive surveys.

In addition to surface water classifications, use designations, and water quality criteria, the Department's Surface Water Quality Standards include several provisions directly applicable to the establishment of water quality based effluent limitations. These include provisions entitled "Statements of Policy", "Establishment of Water Quality Based Effluent Limitations", "Water Quality Based Effluent Limitations and Water Quality Management Planning", "Procedures for Modifying Water Quality Based Effluent Limitations for Individual Dischargers to Category One Waters", and "Procedures for Modifying Water Quality Based Effluent Limitations for Individual Discharges to Category Two Waters". Chapter V discusses the process for reviewing these standards. N.J.A.C. 7:9-4.6 and 4.7 provide for the establishment of water quality based effluent limitations through the New Jersey Pollutant Discharge Elimination System (NJPDES), or, alternatively, through the direct amendment of Water Quality Management (WQM) Plans. All total maximum daily loads and wasteload allocations will be proposed and adopted as direct amendments to the Statewide WQM Plan. Administrative procedures for amendments to the Statewide WQM Plan are specified in N.J.A.C. 7:15-3.4 and 3.5.

The wasteload allocation procedures in the initial areawide WQM Plans were superseded by subsequent Department rules. The Statewide WQM Plan includes a "Water Quality Based Effluent Limitations" strategy that outlines suggested actions. Like the other "strategies" in that Plan, the strategy is not binding on the Division or other parties.

To develop total maximum daily loads and wasteload allocations, water quality surveys will be performed, considering point and nonpoint sources of pollution. Using field and other data and a water quality model, alternatives will be evaluated to estimate the effectiveness of point source control and identify treatment requirements. For a given segment, total maximum daily loads and wasteload allocations for some parameters would be based on calibrated and verified water quality models, while for other parameters they may be based on other scientifically defensible approaches such as simplified modeling as outlined in "Water Quality Assessment" (EPA-600/6-82-004), a simple mass balance, or bioassay procedures (as provided for in N.J.A.C. 7:9-4.6(c)4.ii). Examples of Department reports about the development of water quality based effluent limitations based on intensive surveys are identified below. These reports include descriptions of water quality monitoring, modeling, data analysis, and calculation methods, and identify pollutants to

be regulated. These descriptions illustrate the kinds of approaches that the Department expects to use for the establishment of total maximum daily loads and wasteload allocations, with appropriate changes in response to such factors as revisions to the Department's Surface Water Quality Standards and Quality Assurance program.

"Water Quality Modeling of the Upper Lamington River" (March 1985) described the development of a calibrated and verified, steady-state dissolved oxygen model for a nontidal stream, and the use of this model and antidegradation policy to recommend seasonal effluent limitations for biochemical oxygen demand, suspended solids, ammonia, dissolved oxygen, total phosphorus, and total residual chlorine in a wastewater effluent. "Steady State Water Quality Modeling of Conventional Pollutants in the Berry's Creek Estuary" (June 1984) described the development and use of a calibrated and verified, steady-state dissolved oxygen model for an estuarine system. Effluent limitations for ammonia toxicity were discussed in "Ammonia Limitation for the Borough of Mendham STP" (November 1983) and "Effluent Limitations for the Somerset Raritan Valley Sewerage Authority Based on Water Quality Impacts on the Raritan River and Cuckels Brook" (April 1984), which also discussed effluent limitations for total residual chlorine and the application of a simplified dissolved oxygen model to Cuckels Brook.

The Department would submit draft amendments to the Statewide WQM Plan to EPA. This would not constitute formal submission under section 303(d) of the federal Clean Water Act and 40 CFR 130.7, but would give EPA (and others) the opportunity to comment on the draft amendments prior to their adoption and certification. Immediately after the Department adopts and certifies amendments, the Department would submit them to EPA pursuant to 40 CFR 130.6 and 130.10(b)(4). This submission would also constitute formal submission under section 303(d) and 40 CFR 130.7. The Department also expects to propose an amendment to N.J.A.C. 7:15, to stipulate that any segment listings, total maximum daily loads, and wasteload allocations established by EPA shall be considered to be adopted in the Statewide WQM Plan without the need for further adoption procedures, and to preserve the Department's authority to include in the Statewide WQM Plan segment listings, total maximum daily loads, and wasteload allocations more stringent than those established by EPA. The process for ensuring that discharge permits are consistent with Water Quality Management Plans (including total maximum daily loads and wasteload allocations in the Statewide WQM Plan) is described in Chapter VIII.

For the Delaware River and Delaware Bay, the development of total maximum daily loads and wasteload allocations will be closely coordinated with the Delaware River Basin Commission and the other member states. For the interstate tidal waters in the New Jersey-New York metropolitan area, such development should be closely coordinated with the Interstate Sanitation Commission and the other member states. The Department will not delegate the development of total maximum daily loads and wasteload allocations to other water quality management planning agencies, but will allow such agencies to provide comments before segment listings, priority rankings, total maximum daily loads, or wasteload allocations are adopted.

Within the Monitoring and Planning Element, the Bureau of Systems Analysis and Wasteload Allocation has the principal responsibility for developing total maximum daily loads and wasteload allocations. The Bureau of Planning and Standards will make administrative arrangements for the proposal and adoption

of amendments to the Statewide WQM Plan and N.J.A.C. 7:15, and may assist in developing the priority ranking. Other Division Elements would have the opportunity to comment on the draft amendments before they are proposed. After the amendments are proposed, other agencies such as EPA-Region II, designated planning agencies, county health departments, and local governments, as well as interest groups, dischargers, and the general public, would have the opportunity to comment on the proposed amendments prior to their adoption.

The number and kind of intensive surveys that can be performed to develop total maximum daily loads and wasteload allocations depend on Department priorities and the availability of resources. In developing the priority ranking, the Monitoring and Planning Element will consult with other Division Elements and EPA-Region II. The Bureau of Monitoring and Data Management and the Bureau of Systems Analysis and Wasteload Allocation would jointly design and coordinate intensive surveys. The design and performance of intensive surveys would often require coordination with other agencies and Division Elements. After the internal review of technical reports within the Department, such reports would be made available to point source dischargers and other interested parties for review and comment.

#### CHAPTER V. REVIEWING WATER QUALITY STANDARDS (May 1986)

The lead administrative unit for the process is the Monitoring and Planning Element. The objective is to review the Department's Surface Water Quality Standards, in accordance with the federal Clean Water Act, EPA regulations (40 CFR 131), and Department rules. Legal basis is provided by Sections 101(a) and 303(c) of the federal Clean Water Act, Section 24 of the Municipal Wastewater Treatment Construction Grant Amendments of 1981 (P.L. 97-117), Section 7 of the New Jersey Water Quality Planning Act, and Section 4 of the New Jersey Water Pollution Control Act.

The Department adopted new Surface Water Quality Standards on April 29, 1985 (N.J.A.C. 7:9-4). These became effective on May 20, 1985 (N.J.R. 1270(a)), and were approved by EPA on July 8, 1985. The methods used and analyses conducted to support these Standards were described in Department documents entitled "Basis and Background for the Proposed Surface Water Quality Standards & Wastewater Discharge Requirements" and "Response to Public Comments on the Surface Water Quality Standards & Wastewater Discharge Requirements", hereinafter called, respectively, the Basis and Background Document (November 1984) and the Response to Comments Document (April 29, 1985). On August 7, 1985, the Department adopted amendments to Index D of these Standards, based on a use attainability analysis of SE2 and SE3 waters within the Passaic, Hackensack and New York Harbor Complex Basin. These amendments became effective on September 3, 1985 (17 N.J.R. 2109(a)), and were approved by EPA on September 13, 1985. The methods used and analyses conducted to support the amendments were described in the Department document entitled "Use Attainability Analysis of the New York Harbor Complex" (June 1985). On April 2, 1986, the Department submitted for EPA approval a "short term" report on the "Use Attainability Analysis of the Delaware River Estuary", which concluded that the presently designated uses in the Delaware River Estuary should remain unchanged until a more detailed ("long term") use attainability analysis is performed. This "long term" study is being conducted by DRBC with support from the Department and other agencies.

The Surface Water Quality Standards are a component of the Statewide WQM Plan, and supersede descriptions or recommendations in the initial areawide WQM Plans. The Statewide WQM Plan also includes a "Surface Water Quality Standards Review" strategy. (Like the other "strategies" in that Plan, the strategy outlines suggested actions but is not binding upon the Department or other parties.) The strategy discusses five "priority topics": "Use Attainability Analyses", "Water Quality Criteria for Toxic Substances", "Water Quality Criteria for Chlorine", "Morses Creek and Cuckels Brook Reclassification", and "Mapping of FWL Waters". For brevity, the discussion is not repeated here. (The Monitoring and Planning Element's FY 87 work program under section 205(j) of the federal Clean Water Act has a "Water Quality Standards Review and Revision" activity, with tasks related to these priority topics. The Department expects future section 205(j) work plans to have this activity, with updated tasks.) The Response to Comments Document (April 29, 1985) identified possible additional topics for review. The Department may identify additional priority topics as EPA develops Section 304(a) Guidance or revises its policies, and as the Department implements the Standards, prepares future section 205(j) work programs, updates the Statewide WQM Plan, and meets with interest groups.

The Department conducts "general" and "provision-specific" review processes for the Surface Water Quality Standards. The general review process is not conducted under specific provisions of the Standards, whereas the provision-specific review process is restricted to the establishment of water quality criteria for toxic substances and nutrients under N.J.A.C. 7:9-4.5(f) and (g), the modification of water quality based effluent limitations under N.J.A.C. 7:9-4.8 and 4.9 ("variances" under 40 CFR 131) and the reclassification of waterway segments for more restrictive or less restrictive uses under N.J.A.C. 7:9-4.10 and 4.11.

The general review process includes the review of the Surface Water Quality Standards that is scheduled to be performed every three years. The next such review is scheduled for completion by May 1988. Reviews of specific sections of the Standards can also be conducted under the general review process in the periods between triennial reviews. Four of the five topics identified in the "Surface Water Quality Standards Review" strategy in the Statewide WQM Plan fall mainly or entirely under the general review process. The consideration of reclassification requests for Morses Creek and Cuckels Brook constitutes reclassification proceedings under N.J.A.C. 7:9-4.10, and therefore falls under the provision-specific review process. The schedule for the formal Department proposal of water quality criteria for toxic substances and possible revisions to water quality criteria for chlorine has not yet been developed. The Department may make formal proposals on these subjects prior to the next triennial review of the entire Surface Water Quality Standards. Formal proposals that result from the mapping of FWL waters and from use attainability analysis will likely be part of the next triennial review.

The Department may allow or require alternative application factors based on acute and chronic toxicity testing of specific discharge-receiving water combinations (N.J.A.C. 7:9-4.5(f)4). Such action constitutes site-specific modification of water quality criteria for toxic substances. The Department may establish parameter specific water quality criteria for toxic substances in a waterbody (N.J.A.C. 7:9-4.5(f)5) when adequate data is available from bioassays or scientific literature. (The Basis and Background Document (November 1984, pp. 13-14) and Response to Comments Document (April 29, 1985,

pp. 28-29) discussed how the Department would implement these provisions.) The Department may also establish site-specific water quality criteria for nutrients in FW waters (N.J.A.C. 7:9-4.5(g)3). The Department has linked the establishment of criteria under these provisions to the establishment of water quality based effluent limitations in NJPDES permits under N.J.A.C. 7:14A or as amendments to WQM Plans under N.J.A.C. 7:15. Any criteria adopted would be part of the Surface Water Quality Standards, and would be submitted for EPA approval under section 303(c) of the federal Clean Water Act and 40 CFR 131.

N.J.A.C. 7:9-4.8 and 4.9 are variance procedures for modifying water quality based effluent limitations for individual discharges to Category One and Category Two Waters (and supersede any inconsistent provisions in N.J.A.C. 7:14A). Requests for modification can be made after the Division issues a draft Discharge Allocation Certificate (DAC) or draft NJPDES permit. Also, any water quality based effluent limitation in a WQM Plan may be modified by amending that plan, provided that the amendment is consistent with N.J.A.C. 7:9-4 (including 7:9-4.8, and 4.9). Any modified effluent limitation will be submitted for EPA approval as a variance under section 303(c) of the federal Clean Water Act and 40 CFR 131.

N.J.A.C. 7:9-4.10 and 4.11 govern reclassifications for less restrictive or more restrictive uses between triennial reviews. The results of any review of use designations will be submitted for EPA approval under section 303(c) of the federal Clean Water Act and 40 CFR 131. The upgrading of parts of the Hackensack and Hudson Rivers (17 N.J.R. 1625(a)) was a reclassification proceeding initiated by the Department under N.J.A.C. 7:9-4.11(a). Exxon Company, U.S.A. (Exxon) and the Somerset Raritan Valley Sewerage Authority (SRVSA) have requested the Department to reclassify portions of Morses Creek and Cuckels Brook for less restrictive uses under N.J.A.C. 7:9-4.10.

The Monitoring and Planning Element works with the Office of Regulatory Services and, in some cases, the Water Quality Management Element (water quality criteria for toxic substances and nutrients proposed through the NJPDES process and modifications of water quality based effluent limitations). The entire review process is discussed with EPA-Region II. The Department's Surface Water Quality Standards cannot be less stringent than, and should be fully consistent with, prevailing regulations adopted by the DRBC. The Department, DRBC, Pennsylvania, and Delaware should, if practicable, coordinate their administrative procedures through joint public hearings. For interstate tidal waters in the New Jersey-New York metropolitan area, there should be coordination with ISC and the New York State Department of Environmental Conservation. The Department will not delegate the review process to other water quality management planning agencies, but such agencies may provide comments during the process.

Within the Monitoring and Planning Element, the Bureau of Systems Analysis and Wasteload Allocation has the principal responsibility for the general review process. Other Bureaus in that Element have provided assistance. Other Division elements had the opportunity to comment on the draft Surface Water Quality Standards before they were proposed, as did some other units of the Department. Revisions to trout subclassifications were as recommended by the Division of Fish, Game and Wildlife. Information used in the mapping of Category One waters was contributed by several agencies.

As noted in the Response to Comments Document (April 29, 1985), the proposed Surface Water Quality Standards were circulated in draft form to interested persons and other governmental agencies. Meetings were held with several interest groups. Notice of the proposed rules was published in the New Jersey Register (16 N.J.R. 3080). About 1100 copies were mailed to interested parties. Copies were also available at public depositories throughout the State. The Department carefully reviewed comments received at three public hearings and during the public comment period. The Department expects to follow similar procedures for the next triennial review of the Standards. For reviews of sections of the Standards that are conducted under the general review process between triennial reviews, the procedure would be similar, except that informational meetings with interest groups and other preliminary discussions may be omitted if the proposed revisions are minor or noncontroversial (or if there is insufficient time), and the number of public hearings may be reduced as appropriate in the particular case.

The Bureau of Systems Analysis and Wasteload Allocation and the Bureau of Planning and Standards drafted the "Surface Water Quality Standards Review" strategy in the Statewide WQM Plan. Some of the priority topics in the strategy have special coordination features. The development of human health related water quality criteria for toxic substances will be affected by the recommendations of the Drinking Water Quality Institute. The mapping of FWL waters has required consultations with land management agencies. Participating agencies in the "long term" use attainability analysis for the Delaware River Basin will include DRBC, EPA Regions II and III, the Delaware Department of Natural Resources and Environmental Control, this Department, the Pennsylvania Department of Environmental Resources, and State and federal fisheries experts. (The "short term" report that the Department submitted on April 2, 1986 was prepared through a joint effort coordinated by DRBC in consultation with the Department and EPA-Region II.) Changes to the Statewide WQM Plan will be made in accordance with N.J.A.C. 7:15, including applicable public notice and public hearing requirements. The Bureau of Planning and Standards makes the administrative arrangements for changes to the Statewide WQM Plan.

The Bureau of Systems Analysis and Wasteload Allocation has the principal responsibility for the establishment of water quality criteria for toxic substances and nutrients under N.J.A.C. 7:9-4.5 (f) and (g), and for variances under N.J.A.C. 7:9-4.8 and 4.9. If site-specific water quality criteria or variances are proposed through the NJPDES permit process, close coordination with the Water Quality Management Element is required, and public review is provided under N.J.A.C. 7:14A. If criteria or variances are proposed as amendments to WQM Plans, close coordination with the Bureau of Planning and Standards is required, and public review is provided under N.J.A.C. 7:15. Any adopted criteria or variances are subject to review as part of the triennial review of the entire Surface Water Quality Standards.

Coordination for reclassification proceedings under N.J.A.C. 7:9-4.10 or 4.11 generally resembles coordination for the general review process. In addition, as required by N.J.A.C. 7:9-4.10 and 4.11, all petitions for less restrictive uses, and some petitions for more restrictive uses, must be sponsored or endorsed by county or municipal governing bodies. Also, the Department shall hold public hearing(s) as a part of any reclassification proceeding. The Bureau of Systems Analysis and Wasteload Allocation has the principal responsibility for reclassification proceedings. Other Elements will generally have the opportunity to comment on a reclassification proceeding

prior to the public proposal. In many cases, other Department units would also have the opportunity to comment prior to the public proposal. The Division could also hold meetings with local interests in the geographic area that would be most directly affected by a reclassification.

In preparing the use attainability analysis for for the SE2 and SE3 waters in the Passaic, Hackensack, and New York Harbor Complex basin, the Bureau of Systems Analysis and Wasteload Allocation obtained information from other Division Elements and worked closely with ISC, EPA-Region II, and the New York State Department of Environmental Conservation. The "Response to Public Comments on the Amendments to the Surface Water Quality Standards (N.J.A.C. 7:9-4 Index D)" document (August 1985) described the public review process for the corresponding amendments to Index D. The Department expects to schedule public hearings concerning the reclassification of portions of Morses Creek and Cuckels Brook, based on the revised applications that the Department has received from Exxon and SRVSA. Because the original requests were received during the public comment period on the proposed Surface Water Quality Standards, the revised applications did not have to be sponsored by county or municipal governing bodies.

CHAPTER VI. CONDUCTING WATER QUALITY MONITORING ACTIVITIES AND DEVELOPING MONITORING STRATEGIES (May 1986)

Administrative units with lead responsibility for monitoring activities are the Monitoring and Planning, Enforcement, Water Quality Management, and Geological Survey Elements and Bureau of Management Services in the Division of Water Resources; the Office of Science and Research; and the Division of Waste Management. The objective is to collect scientifically valid physical, chemical, and biological data on water quality and discharges, as necessary to determine pollution control priorities; develop and review water quality standards, total maximum daily loads, wasteload allocations, load allocations, and water quality based effluent limitations; protect public health; determine compliance with wastewater discharge permits; and prepare section 305(b) reports. Legal basis is provided by the federal Clean Water Act (e.g., Sections 106, 205(j), 303(e), 305(b), 308(c), 402(b)), the New Jersey Water Quality Planning Act (e.g., Section 7), the New Jersey Water Pollution Control Act (e.g., Sections 4 and 6), the Department of Environmental Protection Act of 1970, and the County Environmental Health Act.

Most monitoring activities are discussed in the state fiscal year 1987 (FY 87) work plans for the Division of Water Resources. In particular, work plans for the Bureau of Monitoring and Data Management and the Bureau of Shellfish Control in the Monitoring and Planning Element discuss Routine Ambient Monitoring (Surface Water and Ground Water); Intensive Survey Monitoring (Surface Water); Compliance Monitoring; Quality Assurance and Data Management; Marine and Estuarine Monitoring (Shellfish Control); and Laboratory Services.

The Division of Water Resources monitors surface water at 25 fixed stations for the EPA Basic Water Monitoring Network. The U.S. Geological Survey (USGS) and the Division monitor about 80 fixed stations in the Ambient (or Primary) Surface Water Quality Monitoring Network. The Division also uses data from other USGS surface water networks (7 fixed stations). The Division monitors the Delaware River at Trenton for the Delaware River Basin Commission (DRBC). For the Delaware River estuary and Delaware Bay, the Division uses data generated for DRBC by the State of Delaware. For interstate tidal waters in

the New Jersey-New York metropolitan area, the Division uses data from the Interstate Sanitation Commission (ISC). The Division, the Atlantic, Burlington, Cape May, Monmouth, and Ocean County health departments, and the Paterson Division of Health are in the County Cooperative Network, which includes routine surface water quality monitoring (including greatly expanded bacteriological monitoring of coastal bathing waters in FY 87). The Division and USGS established the Primary Monitoring Network for routine monitoring of ground water quality. Sampling is focused each year on one or two aquifers of the state. (In FY 87, 30 samples will be taken in the Reading Prong, and 20 samples will be taken in a single glacial buried valley in northern New Jersey.) For the County Cooperative Network, the Ocean County Health Department implements, and the Atlantic, Burlington, and Cape May County Health Departments and the Paterson Division of Health have agreed to develop, a routine monitoring program for ground water quality.

Detailed evaluation of individual waterways requires intensive surveys. Survey design varies with survey purpose and available resources. Intensive surveys, limited to a small fraction of the state's waterways each year, are sometimes restricted to very specific purposes. The FY 87 Bureau of Monitoring and Data Management work plan identifies the following intensive surveys: baseline water quality studies on Great Egg Inlet and on the coastal waters of Atlantic and Cape May Counties (the Department is giving priority consideration to green algal blooms in coastal waters and has made cooperative arrangements with EPA-Region II and the National Oceanic and Atmospheric Administration (NOAA) to monitor such blooms if they recur); coordination and support for a coastal outfall disinfection study with the University of Rhode Island; continued study of the effects of stormwater discharges on water quality in the Navesink River (in cooperation with the Bureau of Planning and Standards and the Bureau of Shellfish Control); and toxics studies on Hohokus Brook and the West Branch of the Elizabeth River, in support of the Enforcement Element.

The FY 87 Monitoring and Planning Element section 205(j) work plan identifies two intensive surveys to be performed for the Bureau of Systems Analysis and Wasteload Allocation by universities or other institutions: Upper Millstone/Stony Brook/Carnegie Lake Point and Nonpoint Tradeoff Study and Passaic River Nutrient Study. Also described there is a study on the South Branch of the Raritan River, for which sampling may be performed by the Bureau of Monitoring and Data Management.

The Division uses special studies by DRBC and ISC. The Division also monitors coastal water for other phytoplankton blooms, and may request county health departments to collect water at bathing areas for phytoplankton analysis.

The Bureau of Monitoring and Data Management will perform 24-hour Compliance Sampling Inspections on ten industrial wastewater treatment facilities in FY 87, and 20 additional 24-hour Compliance Sampling Inspections on municipal and industrial wastewater facilities in the the lower Delaware River Basin to determine compliance with DRBC and NJPDES permits. Compliance bioassay monitoring (three flow-through bioassays and three screening bioassays) is limited by laboratory facilities. A new laboratory facility is expected in FY 87. Some Enforcement Element compliance inspections include grab or four-hour composite samples. The Enforcement and Water Quality Management Elements review self-monitoring reports from wastewater dischargers, and use compliance monitoring by EPA-Region II and ISC. The Water Quality Management Element establishes self-monitoring requirements for discharge permits pursuant to

N.J.A.C. 7:14A. The Monitoring and Planning Element sometimes assists in the identification of self-monitoring requirements and the review of self-monitoring reports.

The Quality Assurance program is designed to ensure scientifically valid and defensible monitoring data. The Department has adopted "Regulations Governing Laboratory Certification and Standards of Performance" (N.J.A.C. 7:18). The FY 87 work plan for the Office of Quality Assurance in the Office of Science and Research is expected to include laboratory certification activities for water pollution and drinking water. In June 1986, the Office of Quality Assurance will submit the Department's FY 87 Quality Assurance Program Plan to EPA-Region II for approval. The Division of Water Resources prepares Work/Quality Assurance Plans (or "Quality Assurance Project Plans") for its individual monitoring activities; the Office of Quality Assurance approves these plans and audits their implementation. The Division is responsible for incorporating its routine procedures for generating and processing data in Standard Operating Procedures Manuals, and issued a "Field Procedures Manual for Water Data Acquisition". The Division of Waste Management has issued a "Field Sampling Procedures Manual". The agreements for the County Cooperative Network require quality assurance practices. Data from routine monitoring networks and intensive surveys is entered on the EPA STORET data base. The Bureau of Monitoring and Data Management submits data, but the Bureau of Management Services is responsible for STORET activities and overall data management.

The Department's Shellfish Growing Water Classifications (N.J.A.C. 7:12) are based mainly on ambient bacteriological monitoring by the Bureau of Shellfish Control; 2500 stations will be monitored in FY 87. A special survey of toxic contamination in bays and estuaries will be expanded, and a marina impacts study will be continued. Two years of bacteriological monitoring in Delaware Bay will be initiated as part of the DRBC seasonal disinfection study.

The Bureau of Shellfish Control operates the Southern Coastal Regional Laboratory, which supports the Enforcement, Monitoring and Planning, and Water Supply and Watershed Management Elements, and the Atlantic County Health Department (many samples are unrelated to shellfish control). The Bureau of Monitoring and Data Management operates a biological services laboratory. The Division of Water Resources obtains laboratory services from the New Jersey Department of Health, the Department of Environmental Protection's Environmental Laboratories Administration, USGS, and EPA. County health departments in the County Cooperative Network operate laboratory facilities. The Office of Quality Assurance develops analytical and quality control requirements for incorporation into Department laboratory service agreements and contracts.

The Enforcement Element conducts ground water pollution investigations. The Division of Waste Management monitors surface and ground water quality at non-hazardous landfills, and at hazardous waste disposal sites where public funds are used for clean-up activities. The Geological Survey Element provides technical support to the Enforcement Element and Division of Waste Management. The Office of Science and Research investigates toxic contamination in selected waterways. The Director of that Office chairs the Department's Toxics in Biota Policy Committee.

The Statewide WQM Plan has a "Surface and Ground Water Quality Monitoring" strategy that describes the Department's general approach for monitoring in

upcoming years. Like the other "strategies" in that Plan, the strategy is not binding on the Department or other parties. For brevity, the description in the strategy is not repeated here (other than the following highlights). The Statewide WQM Plan may be changed pursuant to N.J.A.C. 7:15.

The strategy supports reduction of Division participation in routine fixed-station monitoring of surface water, in order to expand intensive surveys of surface water and support ambient monitoring of ground water. The strategy supports continued Division participation in the EPA National Basic Water Monitoring Network and eventual reduction of the USGS/Division Ambient Monitoring Network for surface water to perhaps 30-40 stations. The Division would like counties or other substate agencies to conduct most routine, fixed-station surface water monitoring under the County Environmental Health Act. The strategy supports completion of the coordinated, computerized ground water data base pool being developed by the USGS, the Department, USEPA and DRBC; continuation of the Primary Monitoring Network for ground water quality; and ambient monitoring of ground water quality by additional county or substate agencies under the County Environmental Health Act. In 1985 the Department received an EPA grant to support a Ground Water Work Plan. Recommendations for changes to the data collection and management system will be developed as part of a comprehensive Ground-Water Quality Management Strategy.

Coordination of monitoring activities occurs through interagency work groups and committees; discussions between or within agencies; cooperative monitoring networks and agreements; short-term contracts; and quality assurance, data management, and laboratory service programs.

The Water Monitoring Work Group (WMWG), established in 1982 for information exchange and interagency cooperation, included DRBC, ISC, the New Jersey Departments of Environmental Protection and Transportation, EPA-Region II, and USGS. The "Water Monitoring Activities Document, Fiscal Year 1983" prepared by the Bureau of Monitoring and Data Management summarized monitoring programs of these agencies for eight categories (streams, lakes, estuarine-marine, ground water, potable water, dischargers, landfills, emergency response). In August 1983 the Department established a Toxics in Biota Policy Committee and Technical Group, with representatives from the Office of Science and Research, the Division of Fish, Game and Wildlife, and the Division of Water Resources. The Policy Committee evaluates objectives and reviews Department progress in evaluating toxics in biota, oversees administration of regulatory actions, and disseminates results. The Technical Group is responsible for sampling design, strategy, and schedules; data analysis; and regulatory recommendations. In 1986, EPA-Region II, NOAA, and the Department (the Bureau of Monitoring and Data Management and the Planning Group) created the Interagency Committee on the Green Tide to monitor green algae in coastal waters.

The Ground-Water Working Group for the Ground Water Work Plan includes the Division of Water Resources (Monitoring and Planning, Water Quality Management, Water Supply and Watershed Management, and Geological Survey Elements), the Division of Waste Management, and the Office of Science and Research. EPA representatives from the Office of Ground-Water Programs also attend. Meetings will also be held with county officials (through a County Review Committee to be organized in FY 87), local officials, and the public.

The Bureau of Monitoring and Data Management and EPA-Region II meet every two months to discuss monitoring activities. To prevent duplication of compliance

monitoring the Bureau consults with the Enforcement Element, EPA-Region II, and ISC. That Bureau and the Bureau of Systems Analysis and Wasteload Allocation jointly design and coordinate intensive surveys to develop water quality based effluent limitations. The FY 87 work plan for intensive surveys incorporates recommendations from these Bureaus, the Bureau of Planning and Standards, and the Bureau of Shellfish Control; and the Enforcement, Construction Grants Administration, Water Supply and Watershed Management, and Water Quality Management Elements. The work plan also responds to widespread public and agency interest in the quality of ocean waters. Surveys will be cooperatively integrated with other Department units (Division of Coastal Resources, Division of Fish, Game and Wildlife, Office of Science and Research, Planning Group), county health departments (Ocean, Atlantic, Cape May, Monmouth), NOAA, and the Environmental Support Division of EPA-Region II.

Cooperative monitoring networks are based on coordination. For example, the Work/Quality Assurance Plan for the Ambient Surface Water Quality Monitoring Network specifies stations sampled by USGS and the Bureau of Monitoring and Data Management, parameters analyzed at the USGS and Department of Health laboratories, and features applicable to the entire network (e.g., monitoring network design, frequency, sampling procedures). The design of the Primary Monitoring Network for ambient ground water quality is based on consultations between USGS, the Geological Survey Element, and the Bureau of Monitoring and Data Management. The Department performs ambient and compliance monitoring under a Cooperative Agreement with DRBC. Of increasing importance are the Cooperative Monitoring Agreements between the Department and county or other substate agencies. Agreements have been signed with five county Health Departments and the Paterson Division of Health; more agreements are expected in the future. For special monitoring projects, another coordination mechanism is a short-term contract between the Department and other monitoring agencies.

Quality assurance programs assist coordination by ensuring the comparability of data. The approval of Work/Quality Assurance Plans and Standard Operating Procedures Manuals ensures coordination between Department divisions and the Office of Quality Assurance. The Department Quality Assurance Program Plan sets forth the responsibilities of that Office and individual divisions. Coordinated data management systems ensure data accessibility and prevent duplication of effort. Quality assured surface water data is entered into the EPA STORET system. The coordinated data pool for ground water uses a common information identifier in USGS, Department, and DRBC data files. The Bureau of Management Services is responsible for the general operation of Division of Water Resources data systems and data retrieval; other elements such as the Monitoring and Planning and Geological Survey Elements are responsible for data entry. Cooperative arrangements have been made for laboratory services. For example, the Southern Coastal Regional Laboratory, operated by the Bureau of Shellfish Control, supports many Division functions besides shellfish control. The Division also obtains laboratory services from other agencies and Department units. In 1985 the Office of Quality Assurance prepared the RFP for Professional Analytical Services (X-085), in cooperation with the Divisions of Water Resources, Waste Management, and Environmental Quality.

The Bureau of Monitoring and Data Management, Bureau of Planning and Standards, and Geological Survey Element contributed to the "Surface and Ground Water Quality Monitoring" strategy in the Statewide WQM Plan. The Department held a public hearing and public comment period on the draft Statewide WQM Plan in 1985. Through this procedure, other agencies such as

USGS, DRBC, ISC, county health departments, and water quality management planning agencies, as well as various interest groups and the general public, had the opportunity to comment on the strategy. Opportunities for comment may likewise be available for future changes to the strategy.

#### CHAPTER VII. DEVELOPING THE CONSTRUCTION GRANT PRIORITY LIST (May 1986)

The lead administrative unit for the process is the Construction Grants Administration Element. The objective is to develop the State's project priority list for the construction of treatment works to be funded by the federal Clean Water Act, in order to achieve optimum water quality management. Legal basis is provided by Sections 204(a), 205(j), 216, and 303(e) of the federal Clean Water Act (Title II of the Clean Water Act identifies the legislative requirements regarding Grants for Construction of Treatment Works), Section 7 of the New Jersey Water Quality Planning Act, and Section 5 of the New Jersey Water Pollution Control Act.

The construction grants priority list is a schedule of proposed projects, in priority order, for construction of municipal wastewater treatment facilities using Federal construction grants. Priority is established by the criteria and methodologies in the priority system, which also establishes Department policies governing award of Federal grants. The priority list is significant because only those projects designated in the fundable range of the list can receive Federal grants for 55 or 75 percent of eligible project costs. The priority list for each federal fiscal year expires at the end of that fiscal year (September 30). The February 17, 1984 EPA construction grants regulation includes specific provisions governing the development of the construction grant priority system and priority list (40 CFR 35.2015, 35.2020). The proposed priority system and priority list are submitted to EPA-Region II, for review for compliance with the enforceable requirements of the federal Clean Water Act and the requirements of the Municipal Wastewater Treatment Construction Grants Amendments of 1981 and subsequent Federal regulations.

As discussed on pages 4-6 of the "Executive Summary" in the Department's "Priority System and Project Priority List for Fiscal Year 1986", substantial changes to the Construction Grants Program have affected the development of priority systems since FY82. These changes were established by the 1981 amendments to the federal Clean Water Act and subsequent Federal regulations issued May 12, 1982 and February 17, 1984. The major changes addressed funding levels; categories eligible for grants; reserve capacity funding; allowances to offset planning and design costs; bonuses for Innovative or Alternative treatment works; use of funds for managing the State Construction Grants Program, certain other State water pollution control programs, and water quality management planning; reserves for project increases; and increased emphasis to achieve optimum water quality management consistent with State and Federal water quality goals. The major requirement in the development of priority systems is the need to give high priority to those projects that provide for water use restoration and public health improvement.

Since fiscal year 1982, the Department priority list has consisted of a general section and a separate section for projects that meet Federal criteria for innovative or alternative (I/A) wastewater treatment systems (to ensure full use of the mandatory I/A reserve). All projects appear in either section but in no case do they appear in both. The priority system uses a separate ranking system for I/A projects, based on different categories than those used

for the general project priority system, in recognition of the inherent difference in the nature of the proposed I/A technology projects on the list.

On July 26, 1985, the Department gave notice of public hearings for the development of the priority system and project priority list for federal fiscal year 1986. On August 9, 1985, copies of the Department's "Proposed Priority System and Project Priority List for Fiscal Year 1986" were mailed to local and county governments, sewerage authorities, environmental groups and other organizations, members of the Legislature as well as interested individuals. A copy of the detailed project narratives and ranking worksheets was distributed to one library in each county. The Department published notice of the hearings in the August 19, 1985 New Jersey Register (17 N.J.R. 2051(a)) and DEP Bulletin (August 14 and 28, 1985 issues). Public hearings were held on September 10, 11, and 12, 1985. On May 16, 1986, EPA-Region II approved the Department's "Priority System and Project Priority List for Fiscal Year 1986". These will remain in effect (with any revisions) until September 30, 1986.

As discussed on page 25 of the Department's "Priority System and Project Priority List for Fiscal Year 1986", the Department will continuously evaluate the progress of projects on the priority list within the fundable range. If a project is not on schedule, the funding date may be deferred to a future fiscal year. As discussed on page 34, any significant revisions to the FY 86 priority list would be the subject of a public hearing. The Department will not, however, consider some kinds of revisions to be significant. As discussed on page 35, a project may be removed from the priority list if one or more specified conditions are met. As discussed on pages 35-37, where project conditions are determined to constitute a public health hazard, the project will receive high funding priority over other projects. However, funding of Public Health Hazard Bypass projects will be limited to a maximum of three percent of the State's allocation for FY 86.

The Department is optimistic that the federal Clean Water Act will soon be reauthorized. The FY86 priority list identifies projects targeted to receive federal construction grants (with approximately \$100 million that is anticipated to be allocated to the state). The FY86 priority system is similar to the FY85 priority system. Federal assistance will continue to be awarded as grants in FY86 for all projects. However, to further address clean water needs, the State is implementing a "Wastewater Treatment Trust/Fund" program to supplement and expand the Construction Grants Program. The Trust/Fund legislation establishes a revolving loan program to be subsidized initially by \$190 million approved in the November 1985 Bond Act referendum. New Jersey now has the opportunity to implement a long-term, self-sustaining funding program to continue the progress the federal program has begun. The use of private capital to assist in achieving water quality goals was also investigated, with encouraging results. With adoption of the wastewater privatization bill (C.58:27-1 et al.) in 1985, the State has provided the incentives and assurances needed by the private investor while protecting the interests of the public, and municipalities are encouraged to investigate this financing option (see pages 2-4 in the "Executive Summary" in the "Priority System and Project Priority List for Fiscal Year 1986").

The summary of the FY86 priority system in Chapter VII was generally copied from pages 6-11 of the "Executive Summary" in the "Priority System and Project Priority List for Fiscal Year 1986". The summary highlights the following provisions of the FY86 priority system: funding level for new project

segments; the mandate that wastewater facilities provide secondary treatment by July 1, 1988; the revised format of the priority list; the Governor's discretionary fund and Public Health Hazard Bypass provision; the Innovative/Alternative project funding bonus; the reserve fund programs; grant increases, excess funds, and project schedule deadlines; and reserve capacity.

The FY86 priority system establishes ranking criteria and funding policies for two distinct components, the general project priority list section and the Innovative/Alternative project priority list section. Both sections rank projects from highest to lowest, based on summation of category points.

The general project list section consists of a segment category which ranks projects in accordance with water quality improvements that will be achieved and existing water quality conditions, and a discharge category which ranks projects on the basis of water pollution problems associated with the existing wastewater discharge. Both categories assign the highest point values to the most severe water quality conditions. The project priority list is developed by adding the segment and discharge category point scores and ordering the projects according to total points, highest to lowest. Equivalent total scores are ranked in accordance with population served by the project (the greater the population, the higher the rank). Each project has been subdivided into operable segments which are independently ranked for water quality impacts and discharge conditions.

The segment category assigns points to reflect existing water quality conditions impacted by each project segment (highest priority for unsatisfactory dissolved oxygen and fecal coliform impacts; lower values for elevated nutrients and toxic substances). The segment category also assigns priorities, in descending order, to projects that adversely impact potable water supplies, primary recreation and shellfish areas, trout production and maintenance areas, public nuisances, nontrout areas, industrial and agricultural water uses.

The discharge category assigns highest priority to primary discharges followed by routine raw sewage overflows from inadequate sewer systems, then inadequate secondary discharges. New wastewater systems have lower points, followed by projects to upgrade from adequate secondary treatment to advanced wastewater treatment. The lowest value is assigned to infiltration/inflow correction projects which do not result in direct water quality impacts. CSO projects are not ranked on the FY86 priority list, since they are an ineligible category not included in the Governor's discretionary fund for FY86.

The separate ranking system for I/A projects is based on different categories than those utilized for the general system. (Note: in cases where an I/A project falls within the fundable range of the general list section, the project will be presented on the general rather than the I/A list.)

The FY86 priority list only includes step 3 (and eligible 2 + 3) projects. Funding will be awarded to cover the low bid construction cost (i.e., no construction cost overruns or contingencies) and the administrative/fiscal/legal costs (limited to one percent of the total eligible building cost), engineering costs, as well as the allowance and I/A bonuses, if applicable. The anticipated fundable range of the priority list assumes reauthorization of the federal Clean Water Act at the \$99.97 million level for New Jersey. If the reauthorization act changes the FY 86 Federal funding level for New Jersey,

the fundable range will be revised accordingly.

A major factor in the development of the FY87 priority system and project priority list will be the expected reauthorization of the federal Clean Water Act, including the resolution of such issues as the use of federal allocations for loans instead of or in addition to grants, the dollar amount and years of authorization, and identification of eligible categories of projects.

The Construction Grants Administration Element frequently discusses the development of the construction grants priority list with EPA-Region II. The Monitoring and Planning Element provides information used in the "Water Use/Water Quality" Segment Priorities category of the ranking methodology for the general project priority list section. All Division Elements are given the opportunity to comment on draft priority systems and priority lists prior to their statewide distribution.

The Department holds public hearings annually for the development of priority lists, to ensure that municipalities are adequately notified of the changes to the State's Construction Grants Program that may impact their project(s), and to afford municipalities and the public the opportunity to provide specific comment regarding the Priority System/List proposal. Any significant change in the priority list must also be the subject of a public hearing. Each year, the Department forwards a proposed priority system and priority list to units of local and county governments, sewerage authorities, environmental and conservation groups and other organizations, members of the Legislature as well as individuals having an interest in water pollution control in the State. The proposed priority system and priority list is the subject of public hearings held at least 30 days after the documents are available for public review. Notice of the hearings is also published in the New Jersey Register and DEP Bulletin. All interested parties have the opportunity to make presentations at public hearings and provide written comments before the close of the public comment period. As a result of the public hearings and public comments, appropriate changes to the proposed priority system and priority list are made by the Department.

The Department contacts grantees for recent cost estimates to present up-to-date information on the priority list (including inflation impacts on older cost estimates). Where grantees do not respond or where submitted cost updates appear excessive, costs are adjusted based on staff knowledge and experience of anticipated project costs. In addition, justified revised costs submitted by grantees in response to the public participation program are included on the revised priority list. The Construction Grants Administration Element also communicates with prospective grantees as part of its continuing evaluation of the progress of projects on the priority list within the fundable range.

Within the Construction Grants Administration Element, the Office of the Administrator and the Bureau of Design and Technical Services are responsible for the development of the construction grants priority system and priority list. The official, detailed priority list is maintained (and updated as needed) in the Grants Information Control System (GICS) by the Bureau of Construction and Grants Management.

CHAPTER VIII. REVIEWING DISCHARGE PERMITS AND CONSTRUCTION GRANTS FOR  
CONSISTENCY WITH WATER QUALITY MANAGEMENT PLANS (January 1987)

The lead administrative unit for the process is the Monitoring and Planning Element. The objective is to review discharge permits and construction grants for consistency with Water Quality Management (WQM) Plans, as required by the federal Clean Water Act and State law. Legal basis is provided by Sections 204(a), 208(d), and 208(e) of the federal Clean Water Act, Sections 7 and 10 of the New Jersey Water Quality Planning Act, and Sections 5 and 6 of the New Jersey Water Pollution Control Act.

The term "Water Quality Management Plans" includes areawide and Statewide WQM Plans. Areawide plans were developed by "designated planning agencies" (substate or interstate agencies designated by the Governor) for seven "designated areas" and by the Department for five "non-designated areas". All twelve areawide plans have been adopted and certified by the Governor and approved by EPA. The Department adopted its initial Statewide WQM Plan on December 5, 1985. The "Policy on Incorporation of 201 Facilities Plans" in that Plan provides that water quality management planning related documentation in 201 Facilities Plans approved and certified after May 31, 1975 is "hereby incorporated" in the appropriate WQM Plans.

The review of discharge permits and construction grants for consistency with WQM Plans is governed by N.J.A.C. 7:15 and by policies and procedures in the Statewide WQM Plan. Under N.J.A.C. 7:15-3.1, the Department shall not authorize through the issuance of a permit, approval, or any similar action, any project or activity that is inconsistent with WQM Plans. N.J.A.C. 7:15-3.1 identifies projects and activities that require formal "consistency determinations", and projects and activities that do not require such "consistency determinations" but that still must be consistent with WQM Plans. Consistency determinations are required for some discharge permits but not for construction grants.

Under the New Jersey Water Pollution Control Act and section 402 of the federal Clean Water Act, New Jersey administers its own discharge permit program, called the New Jersey Pollutant Discharge Elimination System (NJPDDES), for discharges to ground and surface waters. The NJPDDES rules require consistency of discharge permits with WQM Plans (N.J.A.C. 7:14A-1.3 and 3.13(a)). If a proposed discharge is found to be inconsistent with a WQM Plan, the applicant may pursue the conflict resolution procedure under N.J.A.C. 7:15-3.3. The applicant may revise the proposed discharge to conform to the WQM Plan, seek amendment of the WQM Plan under N.J.A.C. 7:15-3.4, or appeal the decision under the Administrative Procedure Act. Petitions for plan amendment may also be submitted in advance of permit applications. The Division has identified several elements in areawide WQM Plans that need to be strengthened for more proper consideration in the consistency review process.

New discharges and existing discharges proposing major modifications require formal "consistency determinations", which are written determinations by the Department or designated planning agency, issued prior to the issuing of a Department permit, that a project or activity affecting water quality is consistent, not inconsistent, or inconsistent with the WQM Plan (N.J.A.C. 7:15-1.5, 3.1(b), 3.2(b)3). N.J.A.C. 7:15 includes several provisions specifically applicable to consistency determinations, under "Role of the Department", "Role of Designated Water Quality Management Planning Agencies",

"Water Quality Management Plan(s) Consistency Determinations", and "Procedures for Making Consistency Determinations".

For example, under N.J.A.C. 7:15-3.1, the Department shall require the applicant to obtain a consistency determination stating that the discharge is consistent (or not inconsistent) with the WQM Plan. The consistency determination review may be conducted concurrently with review of the discharge permit or on a pre-application basis. No final discharge permit may be issued if the discharge is found to be inconsistent with the WQM Plan. Information that must be submitted to obtain a consistency determination, and WQM Plan components included in the consistency determination review, are identified in N.J.A.C. 7:15-3.2. The consistency determination will be issued within 90 days of a completed discharge proposal.

A discharge will be found to be "consistent" if it is in accordance with the policies, goals, objectives and/or recommendations of the WQM Plans. If these plans do not contain provisions precluding a discharge, the discharge will be found to be "not inconsistent" (a finding equivalent in effect to a finding of "consistent"). A finding of "inconsistent" means the discharge is in conflict with the WQM Plan (N.J.A.C. 7:15-3.2(b)3). Under the "Policy for Interim Construction, Expansion, Upgrade and Unplanned Wastewater Treatment Facilities" in the Statewide WQM Plan, all "unplanned" (as defined in that policy) wastewater treatment facilities are inconsistent with the WQM Plans.

Formal consistency determinations are not required for renewals or modifications of existing permitted discharges that do not propose major modifications (as determined by the Department). However, such renewals or modifications must still be consistent with WQM Plans. Ensuring such consistency is an integral part of the Department administration of the NJPDES program. The principal means of ensuring consistency is the review of draft discharge permits prior to issuance by Department staff.

On October 7, 1981 the Department and EPA-Region II executed a Delegation Agreement providing for total Department assumption of the federal Clean Water Act construction grant program, including full responsibility for program review and certification of projects to EPA. (The Delegation Agreement is being revised to address the December 1981 amendments to that Act and subsequent federal regulations.) The EPA construction grants regulation (40 CFR 35) and Delegation Agreement require the Department (when approving a facilities plan or certifying a grant application) to furnish written certification to the EPA Regional Administrator, on a project-by-project basis, that the project is consistent with the WQM plan.

Formal "consistency determinations" are not required for construction grants. However, the Department may not certify a grant application that is inconsistent with a WQM Plan. The Department's determination that a construction grant is consistent with applicable WQM Plans is based on Department approval of the facilities plan included in the grant application. Because the "Policy on Incorporation of 201 Facilities Plans" in the Statewide WQM Plan provides that water quality management planning related documentation in 201 Facilities Plans approved after May 31, 1975 is "hereby incorporated" in the appropriate WQM Plans (and supersedes any provisions in those WQM Plans that conflict with such documentation), any facilities plan that is approved after May 31, 1975 is automatically consistent with applicable WQM Plans.

Under Division Order Number 46, the Bureau of Water Resources Management Planning in the Monitoring and Planning Element has lead responsibility for the consistency review process. The Bureau of Ground Water Quality Management in the Water Quality Management Element has been delegated the responsibility to perform consistency reviews for NJPDES permits for land application of sludge and septage. (Some administrative functions for such reviews continue to be performed by the Bureau of Water Resources Management Planning.) The Bureau of Ground Water Quality Management also reviews Sludge and Septage Management Plans. The consistency review process is governed by N.J.A.C. 7:15 and by policies and procedures in the Statewide WQM Plan. These were adopted after public notice in the New Jersey Register and public hearings. Designated planning agencies and other parties had opportunity to comment on the proposed rules and the draft Statewide WQM Plan prior to their adoption.

At present, all consistency determinations for new discharges and existing discharges proposing major modifications (land application of sludge and septage excepted) are issued by the Bureau of Water Resources Management Planning. The Bureau may request comments from other Division units or designated planning agencies. The Bureau of Ground Water Quality Management issues consistency determinations for application of sludge and septage. The Water Quality Management Element will not issue a final discharge permit unless the applicant has obtained a favorable consistency determination.

Under N.J.A.C. 7:15-2.3 and 3.1(f), the Department or its delegated agency prepares consistency determinations for non-designated areas, for those designated areas where the Department is responsible for consistency determinations, and for projects and activities proposed, constructed, or operated by the State. Under N.J.A.C. 7:15-2.4, a designated planning agency makes consistency determinations upon mutual agreement between the agency and the Department, or if the Department assigns the responsibility to the agency.

According to the "Water Quality Management Planning Delegation" strategy in the Statewide WQM Plan, the Department would like to delegate responsibility for consistency determination to designated planning agencies in designated areas, and to county governments (where feasible) in nondesignated areas. However, the delegation process described in that strategy has not proceeded as originally expected (no delegations are now in effect), and the Department is now considering whether to abandon the concept of consistency determinations and permits being issued by different agencies for the same project. (Like the other "strategies" in the Statewide WQM Plan, the strategy is not binding upon the Department or other parties.)

Ensuring that discharge permits for existing permitted discharges that do not propose major modifications are consistent with WQM Plans is an integral part of the administration of the NJPDES program. The Department does not intend to delegate this element of the NJPDES program to other agencies. The Water Quality Management Element will not issue the final discharge permit if the Bureau of Water Resources Management Planning finds that the discharge is inconsistent with a WQM Plan. The Bureau of Water Resources Management Planning may request comments from other Division units or designated planning agencies before completing its consistency review. The Bureau of Ground Water Quality Management performs consistency reviews for land application of sludge and septage.

Designated planning agencies, county governments, and other parties may comment on the consistency of discharges with WQM Plans through the public comment process in the NJPDES rules (N.J.A.C. 7:14A). Such comments will be considered by the Bureau of Water Resources Management Planning (or the Bureau of Ground Water Quality Management, as appropriate) before the Water Quality Management Element issues a final discharge permit. This would remain the case even after delegation; however, the Water Quality Management Element would not issue a final discharge permit if the applicant had not obtained a favorable consistency determination from the delegated agency.

Ensuring that construction grants are consistent with WQM Plans is accomplished through Department approval of facilities plans that are part of construction grant applications. The Department does not intend to delegate this element of the construction grants program to other agencies. The Construction Grants Administration Element will not certify a grant application, or approve and certify a facilities plan, unless the Monitoring and Planning Element and Water Quality Management Element (or, for Sludge and Septage Management Plans, just the Water Quality Management Element) concur with the draft facilities plan. County governments and certain State agencies may comment on proposed construction grants through the State Review Process for federal financial assistance (see N.J.A.C. 5:38 and the March 1985 Department of Community Affairs Guidelines for the State Review Process). Each application for a construction grant must include State certification that there has been adequate public participation based on State and local statutes (40 CFR 35.2040). Also, the public involvement provisions of the EPA National Environmental Policy Act (NEPA) regulation must be satisfied (40 CFR 6).

CHAPTER IX. COMPLETING THE STATE WATER QUALITY INVENTORY (305(b)) REPORT  
(May 1986)

The lead administrative unit for the process is the Monitoring and Planning Element. The objective is to assess water quality conditions, determine water quality trends, and make recommendations for water quality improvements. Legal basis is provided by Section 305(b) of the federal Clean Water Act and Section 7 of the New Jersey Water Quality Planning Act.

Under Department rules, the Department prepares biennial 305(b) reports which are the principal problem identification component of the Statewide Water Quality Management (WQM) Program Plan (N.J.A.C. 7:15-2.1(c)1.i and 2.3(a)8). The Department adopted its initial Statewide WQM Plan on December 5, 1985. The Plan incorporates the 1982 and 1984 305(b) reports, which assess surface water quality conditions throughout the State, estimate where "fishable and swimmable" clean water goals will be met, identify pollution control actions needed to achieve these goals, and estimate the required costs. Also included is a review of ground water quality and quantity conditions.

The Division has produced six 305(b) reports since 1975. The 1984 305(b) report was designed to update and supplement the 1982 305(b) report. Whereas the 1982 305(b) report reviewed in detail the results of water monitoring from 1977 to 1981 and how water quality affected water uses (drinking water supplies, primary contact recreation, shellfish harvesting and fisheries resources), the 1984 305(b) report provided a summary evaluation of progress in New Jersey's clean water programs, and selected supplemental water quality information based on intensive surveys and other programs. Since only two additional years of water quality data (from 1982 and 1983) were available, it

was determined that comprehensive reevaluation of water quality was not warranted until additional data was collected.

The 1986 305(b) report is scheduled for submission during the summer of 1986 and will be consistent with final EPA Guidance. The 1986 305(b) report will comprehensively review the results of routine, fixed-station surface water quality monitoring available in STORET, including post-1981 data and data from the County Cooperative Network. The Division expects to present quantitative statistical data analyses including trend analysis. The 1986 305(b) report will also provide updated summaries of intensive surveys and updated elements of the "Water Quality Management Progress Report" in the 1984 305(b) report. The waterbody rating system will be refined. The 1986 305(b) report will include a chapter describing ground water conditions and problems, and provide other ground water information as outlined in final EPA Guidance.

Whereas the 1986 305(b) report will be broadly analagous, in its comprehensive scope, to the 1982 305(b) report, the 1988 305(b) report may resemble the 1984 305(b) report (with appropriate modifications to reflect current conditions, Department data strengths, revised EPA guidance, and implementation of the rating system). The 1988 305(b) report may be designed to update and supplement the comprehensive 1986 305(b) report with selective monitoring results, rather than to stand on its own as a comprehensive water quality inventory. Comprehensive 305(b) reports may be prepared every four years, with the next such report (after the 1986 report) being prepared for 1990. Future 305(b) reports (including the 1986 report) will be proposed for incorporation into the Statewide WQM Plan following submission of such reports to EPA under section 305(b) of the federal Clean Water Act.

The completion of 305(b) reports is the subject of ongoing discussions between the Department and EPA-Region II. EPA expects States to use water quality measures and information from the "States Evaluation of Progress (STEP)" project as the baseline in their 305(b) reports, to improve the comparability of reports used in formulating the National Water Quality Inventory Report to Congress. The "Water Quality Management Progress Report" in the Department's 1984 305(b) report is a modified version of the Department's 1983 STEP Report. The STEP Report was prepared in conjunction with the Association of State and Interstate Water Pollution Control Administrators, which received an EPA grant to develop a standardized reporting format for evaluating progress towards achieving clean water goals. As noted above, selected elements of the "Water Quality Management Progress Report" will be updated in the 1986 305(b) report.

Future 305(b) reports will continue to include a "Water Quality Inventory Report for the Delaware River" prepared by the Delaware River Basin Commission and a "Status Report on the Interstate Sanitation District Waters" prepared by the Interstate Sanitation Commission. The Department will not delegate completion of other sections of 305(b) reports to other water quality management planning agencies, but may request such agencies to contribute to 305(b) reports by providing comments on water quality conditions, water pollution sources, and water uses.

Within the Monitoring and Planning Element, the Bureau of Planning and Standards has lead responsibility for preparing 305(b) reports. The Bureau of Monitoring and Data Management provides summaries of intensive surveys, lake classification surveys, ambient biomonitoring (macroinvertebrate and periphyton) reports, and information on summer ocean monitoring of algal

blooms. The Bureau of Shellfish Control provides information about shellfish waters. The Bureau of Systems Analysis and Wasteload Allocation assists in interpreting results of some intensive surveys, and provides results from water quality modeling activities.

Retrieval and processing of data from STORET is a major task in preparing comprehensive 305(b) reports. The Bureau of Management Services assisted in retrieving STORET data and performed statistical analyses for the 1986 305(b) report. The Bureau of Management Services consulted with the Monitoring and Planning Element about what data was retrieved and how data was processed.

Other Division Elements and Department units contributed to 305(b) reports in the past and will probably do so in the future. Contributions to the 1986 305(b) report were based on data needs and the availability of these Elements and units for performing the necessary work. The Water Quality Management Element prepared a Statewide point source discharge inventory. The Enforcement Element provided information about point sources and enforcement actions. The Construction Grants Administration Element provided information about municipal wastewater treatment. The Water Supply and Watershed Management Element provided information about potable water supply diversions and the quality of drinking water supplies. The Division of Fish, Game and Wildlife provided information about fisheries and shellfisheries. The Green Acres program provided information about recreation uses of surface waters. The Division of Waste Management provided lists of hazardous waste disposal sites. The Office of Science and Research provided information about toxics studies in selected waters. Division Elements and contributing Department units have opportunity to review draft 305(b) reports before their submission to EPA.

The Department held a nonadversarial public hearing and public comment period on the draft Statewide WQM Plan in 1985. Through this procedure, other agencies such as designated planning agencies and county health departments, as well as interest groups and the general public, had opportunity to comment on the use of these 305(b) reports as the problem identification component of the Statewide WQM Plan. When future 305(b) reports are proposed for incorporation into the Statewide WQM Plan, such agencies, interest groups, and the general public may likewise have opportunity to comment on the use of these 305(b) reports.

