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ADDENDUM # 1

Delaware River Basin Commission

COMPREHENSIVE PLAN

Phase I

Section VII -- PRE-EXISTING PROJECTS

Municipal Water Supply & Waste Disposal Facilities

Federal, State and Local Non-Urban Recreation Areas

River Stage and Stream Gauging Stations

Interstate Water Quality Standards

Adopted July 25, 1962

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MUNICIPAL WATER SUPPLY AND WASTE DISPOSAL FACILITIES

As inventoried in Attachment 1 of Appendix C, entitled "Municipal and Industrial Water Use and Stream Quality": a report by the U.S. Department of Health, Education and Welfare, Public Health Service, prepared for the U.S. Army Corps of Engineers, Philadelphia District, 1960

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ATTACHMENT 1

INVENTORY OF MUNICIPAL WATER SUPPLY
AND WASTE DISPOSAL FACILITIES

ATTACHMENT 1

INVENTORY OF MUNICIPAL WATER SUPPLY
AND WASTE DISPOSAL FACILITIES

1. General This inventory obtained through the cooperation of the appropriate agencies of the States of New York, New Jersey, Pennsylvania and Delaware and the Interstate Commission on the Delaware River shows both the water and waste facilities for individual communities or groups of communities. The purpose of the inventory is to provide a concise presentation of the use and subsequent disposal of the waters of the Delaware River basin in order to assist in more accurately assessing future needs and changes necessary to maintain maximum utilization of potential water resources.

2. Industrial water use and waste disposal facilities are not listed since the collection of individual industrial data was predicated on the commitment that the data would not be released on an individual basis.

3. The inventory accounts for approximately 90% of the population of the Delaware River basin served by community type water and waste facilities. Municipalities with connected populations with less than 5000 were not listed nor were communities which withdraw water from ground water sources and thence dispose of their waste water to ground. More detailed data on the water and waste facilities of all communities are available in the regularly published inventories of the Public Health Service. The work reported on in the three parts of this Appendix did however include all municipal and industrial facilities of water supply and waste disposal.

4. It will be noted that each entry is listed under a particular water course from which it either draws water or into which it discharges wastes. Some communities are listed more than once depending on their source of supply or point of discharge to the stream. The controlling element then is the particular stream. Under each stream heading are listed the communities as well as the entering tributaries on which other communities may be located.

5. Detailed notes on columns:

(a) Under the first column are listed either a community, tributary, or private company which services communities or authorities formed by a group of communities for purposes of water supply or waste disposal. Under each stream heading, the entries are listed in accordance with distance from the mouth of the stream.

(b) Source, River Mile - For the stream heading, the distance in miles from the mouth of the stream at which point the entry (except for tributaries) withdraws water. (See paragraph 6).

(c) Treatment - The principal water treatment features are identified according to the code listed below. In general, the symbols are arranged in the order in which treatment occurs.

A - Aeration
C - Chemical dosage for coagulation or softening
D - Disinfection
F - Filters
K - Chemical dosage for corrosion control or water stabilization
M - Mixing device or tank
N - Ammoniation
R - Recarbonation
S - Sedimentation
T - Chemical taste and odor control
V - Fluoride adjustment.

(d) Population served, 1955 - The estimated 1955 population in thousands served by the water facilities of the entry listed.

(e) Use (mgd), 1955 - The estimated 1955 average daily use in million gallons per day provided to the distribution system by the water facilities of the entry listed.

(f) Population served, 1958 - See note (d).

(g) Use (mgd) 1958 - See note (c).

(h) Population served, 1958 - The estimated 1958 population in thousands served by the waste disposal facilities of the entry listed.

(i) Flow (mgd), 1958 - The estimated 1958 average daily flow discharged to the water course by the waste outlet or treatment facilities of the entry listed.

(j) Treatment - The principal waste treatment facilities are identified according to the code listed below. In general, the symbols are arranged in the order of sewage flow, with sludge treatment symbols following thereafter.

A - Aeration
B - Sludge beds
C - Settling tanks
D - Digester, separate sludge
E - Chlorination
F - Filters
G - Grit chambers-
H - Sludge storage tanks (not second stage digestion units)
I - Sewage application to land
K - Chemical treatment
L - Lagoons
O - Grease removal or skimming tanks - not incidental to settlings tanks
S - Screens
T - Sludge thickener
V - Mechanical sludge dewatering
Z - Sludge conditioning

CANNONSVILLE RESERVOIR

Cannonsville Reservoir, impounding basin for the water supply system of the City of New York, is to be located on the West Branch of the Delaware River in Delaware County, New York. The dam will be about four miles upstream from the village of Deposit or some four miles downstream from the site of the hamlet of Cannonsville, whence it gets its name.

Cannonsville dam as planned and inclusive of a hill for part of its length is approximately 2,800 feet long (at the top) with a maximum height of about 175 feet above the original river channel. It has a top width of about 45 feet and is to be of the compacted (rolled) earth type with flat slopes protected upstream by a stone blanket, on the downstream surface, by earth, soil and grass. As the dam traverses the valley from south to north it bends to the northwest just beyond its midpoint. At its northerly contact with the valley wall there is to be a two-level waste weir. The lower level will be 240 feet long and at elevation 1150. The upper spillway will be 560 feet long and at elevation 1158. Spillage over both levels is to be directed into a waste channel, through a stilling basin and into an outlet channel that will guide the flow into the West Branch of the Delaware River. Further downstream there has already been constructed a gauging weir with recording mechanism.

Cannonsville Reservoir, behind the dam, will cover roughly 4,800 acres at flow line elevation 1150 with a capacity above sill elevation 1027.5 of some 97 billion gallons. The upstream end of the reservoir will include part of the community of Beerston.

Cannonsville Reservoir will impound the runoff from a watershed of about 450 square miles. The safe yield therefrom will be used for the supplying of necessary water to the City of New York and for providing sufficient release flows to the Delaware River in order to develop the full requirements, together with flows obtainable from the Neversink and Pepacton systems, called for by the Montague Formula of the Supreme Court Decree of 1954. As in the case of Neversink and Pepacton Reservoirs, Cannonsville Reservoir will provide certain conservation flows to its effluent stream. To deliver up to 310 million gallons daily, the permitted supply to New York City, a 45 mile-long tunnel, 11' 4" in finished diameter, extends to Rondout Reservoir. To supply release waters to the stream below, the dam control works and a twelve foot diameter conduit have been provided.

Cannonsville Reservoir is now under construction. It is expected to be completed in 1964. The reservoir location is shown on the map appearing at the front of the Comprehensive Plan, Phase I, adopted by the Delaware River Basin Commission on March 28, 1962.

NON-URBAN RECREATION AREAS

As inventoried in Chapter V of Appendix I, entitled "Recreation Resources": a report by the National Park Service prepared for the U.S. Army Corps of Engineers, Philadelphia District, 1961

V. INVENTORY OF NONURBAN RECREATION AREAS

(See Plate 6 following page 81)

189. Within the Delaware River Basin and included study area there are 227 publicly-owned areas devoted wholly or in part to nonurban recreation purposes. Of this number, only three are administered by the Federal Government with the remainder being administered at the State or county level. The many municipalities, including the large metropolitan cities, have not been active in providing recreation areas and facilities in nonurban sections of the Basin.

190. Table 5 indicates the distribution of these areas by State and general type, and Plate 6 indicates the geographic location within the Basin and included study area.

PUBLIC NONURBAN RECREATION AREAS IN THE DELAWARE RIVER BASIN AND INCLUDED STUDY AREA

TYPE OF AREA	DEL.	N.J.	N.Y.	PA.	TOTAL
Parks and Recreation Areas					
State	3	15	-	13	31
County	*16	24	-	15	55
Municipal	4	-	-	5	9
Forests					
State	6	8	-	1	15
Public Hunting and/or Fishing Areas					
State	28	33	1	37	99
Wildlife Refuges					
National	1	2	-	-	3
Historic Sites					
National	-	-	-	1	1
State	1	3	-	4	8
County	-	-	1	-	1
Forest-Park Reservation					
State	-	2	1	-	3
Miscellaneous					
Federal Reservation (C.& D.Canal)	1	-	-	-	1
State Beach Lands	1	-	-	-	1
TOTAL	61	87	3	76	227

*Residues from Suburban Developments

TABLE 5

FEDERAL AREAS

191. In the Delaware River Basin, only two agencies of the Federal Government, the National Park Service and the United States Fish and Wildlife Service, administer land areas that contribute to the nonurban recreation needs of the Basin population. Both of these Services are bureaus of the Department of the Interior.

NATIONAL PARK SERVICE

192. It is the responsibility of the National Park Service to "promote and regulate the use of the Federal areas known as national parks, monuments and reservations....by such means and measures as conform to the fundamental purpose of the....parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations".(22)

193. In 1936 the Congress passed an act which declared that "it is a national policy to preserve for public use historic sites, buildings and objects of national significance for the inspiration and benefit of the people of the United States".(23) This act authorized the Secretary of the Interior, through the National Park Service, "to restore, rehabilitate, preserve, and maintain historic or prehistoric sites, buildings, objects and properties of national historical or archaeological significance and where deemed desirable, establish and maintain museums in connection therewith" and to operate and maintain such historic and archaeological sites for the benefit of the public. In accordance with this Act, Hopewell Village National Historic Site was established August 3, 1938.

Hopewell Village National Historic Site

194. This historic site, consisting of 848 acres, is the only federally-owned area administered by the National Park Service, located within the Basin and outside of Philadelphia. Here, the Service is in the process of restoring an early American ironmaking village that was operated from 1770 to 1883 for the production of iron castings and pig iron. The site today includes the original furnace stack, water wheel for operating the air compressors, a large charcoal house, the blacksmith shop, some of the old tenant houses, the water raceways and the Ironmaster's Mansion and several of the outbuildings.

195. Hopewell Village is located 37 miles northwest of Philadelphia and can be reached from Philadelphia and Reading via U.S. 422, State Route 82, and hard-surfaced county roads. From the south, the area can be reached over State Route 23 and hard-surfaced county roads. It is close to the Morgantown Interchange of the Pennsylvania Turnpike.

196. No recreation facilities such as camp or picnic areas are provided within the area. Such facilities are available at French

Creek State Park, which adjoins the site and is described in another section of this report.

UNITED STATES FISH AND WILDLIFE SERVICE

197. The United States Fish and Wildlife Service was created in the Department of the Interior as provided by the Fish and Wildlife Act of 1956.(24) It replaced and succeeded the former Fish and Wildlife Service, Department of the Interior. The new Service is composed of the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife. The Service through the Bureau of Sport Fisheries and Wildlife is responsible for wild birds, terrestrial mammals, and sport fisheries.

198. The objectives of the Service with regard to sport fisheries and wildlife are to insure the conservation of the Nation's wild birds, mammals and sport fish, both for their recreational and economic values, with a view to preventing their destruction or depletion, and to encourage the maximum present use of the Nation's fish and wildlife resources that is compatible with their perpetuity. This objective is to be achieved by the acquisition and application of fundamental knowledge necessary for intelligent management of fish and wildlife resources so that hunters, anglers, and others may continue to enjoy and use these resources.

199. The Fish and Wildlife Service is assigned the responsibility of performing, among other things, the following function: The conservation of migratory bird resources through a national system of strategically located wildlife lands managed to serve primarily as nesting, resting, and wintering sanctuaries for migratory birds. Incidental to this main purpose, these lands also yield substantial benefits to big game, upland birds, other wildlife, and to public recreation.

200. Within the Delaware River Basin there are three national wildlife refuges with a total of 32,216 acres devoted primarily to the protection of migratory waterfowl.

Bombay Hook National Wildlife Refuge

201. Located in Kent County, Del., this refuge is the only federally-owned and administered area in the State that contributes to the fulfillment of nonurban recreation needs. The primary purpose of the refuge is to provide a haven for migratory waterfowl. In so doing, it improves waterfowl hunting opportunities on private and State-owned hunting areas adjacent to refuge lands. Hunting for upland game, including deer, is permitted on 1,300 acres of refuge land; however, bird watching is considered to be a more important activity, particularly from the standpoint of number of participants. Other activities such as fishing, picnicking, and camping are relatively minor.

202. This refuge is located on the shore of Delaware Bay and consists of 12,612 acres of water and marsh and 1,300 acres of upland.

Brigantine National Wildlife Refuge (Included Study Area)

203. This refuge is located on the coast in Atlantic County, N.J., 11 miles north of Atlantic City and is accessible over U.S. 9.

204. The 15,942 acres in the refuge consist primarily of tidal marsh interspersed with tidal bays and channels. Scrub pine and mixed hardwood constitute the cover of a brushy upland section in the western portion of the refuge.

205. The refuge was created primarily for the protection and management of waterfowl in the Atlantic Flyway. Habitat and protection are afforded to all indigenous wildlife, which presents opportunities for the management of species by applied research and/or harvest of surpluses.

206. Recreation use of the refuge includes opportunities for public waterfowl hunting on two units, sport fishing, bird watching, nature study, photography, etc. There are no facilities for such activities as picnics, camping, or swimming.

Killcohook National Wildlife Refuge

207. This refuge, containing 1,362 acres, is situated on the east shore of the Delaware River in Salem County, N.J., at the head of Delaware Bay approximately five miles northwest of the Town of Salem.

208. Ownership of the refuge lands is in the Corps of Engineers, Department of the Army, which uses the area for the deposit of material dredged from the channel of the Delaware River. The Fish and Wildlife Service has secondary rights. Only a small percentage of the area is presently useable for specific wildlife management.

209. There are no recreation facilities provided. Bird watching is the principal recreation activity and 258 species have been recorded in the area.

STATE AREAS - DELAWARE (See Table 6 following page 50)

210. Within the framework of the State government, 5 different agencies are concerned with the management of State-owned lands which are used for nonurban recreation activities or which possess recreation potential. These agencies are the State Park Commission, the State Highway Commission, the State Forestry Commission, the Board of Game and Fish Commissioners, and the Public Archives Commission. These agencies administer 3 State parks, 6 State forests, 28 wildlife and fishing areas, 1 historic site and 1 State beach within the Basin portion of Delaware and the included study area of the State.

STATE PARKS

211. The Delaware State Park Commission was established to protect

scenic, historic, scientific, prehistoric, and wildlife resources and to make them available to the public (25), and to develop lands for recreation. All State parks and other areas acquired primarily for recreation are closed to hunting.(26) The Commission administers three State parks with an aggregate of 1,079 acres.

Brandywine Springs State Park

212. Located in the Brandywine Creek drainage of the Piedmont Plateau at the suburban fringe of Wilmington, this 59-acre park is readily accessible from the surrounding area. State Route 41 forms the west boundary of the park and is the principal access route. The park is situated in a wooded area of varying topography and contains two streams.

213. Visitation to the park originates in the surrounding urban and suburban communities and is attracted by the sylvan setting and limited facilities that are not provided elsewhere in the general area. Facilities are available for family and group picnics, and a playfield is provided for sports and games. The park is in heavy demand as a setting for day camps. Informal nature study and hiking are popular activities. During 1956, 18,000 visitors used the park.

214. Plans have been prepared for the intensive development of the park by the addition of facilities for swimming, picnic areas, softball fields, children's play area, day camp, roads, and trails.

Fort Delaware State Park

215. Infamous as a Federal military prison for Confederate prisoners of war, Fort Delaware was completed in 1860 on Pea Patch Island in the Delaware River. This huge granite pentagon, with jutting bastions, tiers of empty gun ports, water-filled moat, drawbridge and sally port, presents a grim and determined appearance. Two, three-story brick buildings standing in the spacious courtyard once served as barracks, officer's quarters, and guardrooms.

216. The exterior walls of the fort are in excellent condition. The brick structures in the courtyard have not been so durable; yet they remain in fairly good condition. The fort has suffered at the hands of vandals and salvage operations, which removed guns, cannon balls and all bronze fixtures.

217. Having been recently acquired by the State, there were no visitor facilities available in 1957; however, one room is being restored for use as a museum by the Fort Delaware Society, an independent advisory group. No definite plans have been prepared for the development of the surrounding 60-acre island.

218. The park can be reached by boat from Delaware City. Water taxi service is available on weekends during the summer. An estimated 1,500 persons visited the area during 1956.

Trap Pond State Park (Included Study Area)

219. This 960-acre park is located in Sussex County in the extreme south central position of the State, five miles southeast of Laurel. The park is accessible over State Route 24.

220. The principal feature is 60-acre Trap Pond, around which are located picnic and swimming areas on a segregated basis, a temporary camping area, playfields and concession facilities. The flat topography is covered by good stands of pine and abandoned agricultural fields. Small areas of cypress swamp add interesting variety to the park.

221. Approximately 160,000 visitors from the surrounding urban and rural communities used the park during 1956.

STATE FORESTS

222. The Delaware State Forestry Department administers a total of 4,709 acres of forest land divided among six State forests that range in size from 5-acres to 2,820-acres. Three of these forests are within the included study area.

223. The Department is authorized to set aside unusual historic groves or natural features and make them accessible for public use and recreation, and to make expenditures from any funds available, and not otherwise allocated, for managing and developing such lands as State forests or State parks, as in the judgement of the Department, will further the forest and park interests of the State.(27) The present goal of forest management on State forest lands is directed primarily toward saw-timber production.(28)

Appenzellar State Forest

224. This forest of 45 acres in Sussex County has no recreational development or use, except hunting.

Blackbird State Forest

225. This hardwood forest of 676 acres in New Castle County, 5-miles northwest of Smyrna, can be reached over State Route 471 from U.S. 13. The forest cover of hardwoods present a considerably more pleasing environment than the mixed pine stands characteristic of the forests in the southern part of the State. Two small streams run through the forest.

226. There are no facilities for recreational activity, and the only use made of the area is for hunting and very limited fishing.

Ellendale State Forest (Included Study Area)

227. Located in Sussex County, 6-miles northwest of Georgetown, this 993-acre forest is cut by U.S. 113. This forest was 80 percent worked over by the former Civilian Conservation Corps as a forested improvement project. The forest cover consists of dense stands of mixed pines of little aesthetic value.

228. This forest has one planned and well-developed roadside picnic area that receives fairly heavy use from the surrounding communities as well as passers-by on the highway. One other roadside stop is available.

229. Upland hunting is permitted.

Owens Tract State Forest (Included Study Area)

230. Similar in character to Redden and Ellendale State Forests, this 170 acres is located in Sussex County, 4 miles from the village of Greenwood, and is reached over State Route 16 and U.S. 13 and 113.

231. One roadside stop is available. Hunting is permitted.

Red Lion State Forest

232. This 5-acre area, located in New Castle County, 11 miles southwest of Wilmington adjacent to U.S. 13 (Du Pont Parkway) at Red Lion Creek, is a reforested area now being used as roadside picnic area. Developed in 1954, this roadside area has been so heavily used that soil compaction is evident and damage to the sheltering pines will probably occur.

Redden State Forest (Included Study Area)

233. Consisting of three tracts, this State forest, aggregating 2,820 acres, located in Sussex County, 5 miles north of Georgetown, is divided by U.S. 113 and is readily accessible. Ranger headquarters are located here for this and two other State forests in the county. Reforestation and other silvicultural practices are being conducted to reclaim cutover and abandoned land. The forest cover consists of dense stands of mixed pines of little aesthetic value.

234. Recreational developments consists of one roadside picnic area and a lodge with limited overnight accommodations for organized civic groups.

235. Hunting for upland game is permitted.

STATE WILDLIFE AREAS

236. The Board of Game and Fish Commissioners is charged with the responsibility of protecting, conserving, and propagating all forms of protected wildlife of the State (29) and is authorized to acquire, lease , create, maintain, repair, and administer refuges, spillways, and dams for wildlife, including public hunting and fishing grounds (30) and to provide public hunting, fishing or other recreational grounds or waters to be used as areas in which the public may hunt, fish, or camp.(31)

237. Within the Basin portion and the included study area of the State, the Board administers 7 State-owned wildlife areas and 21 fishing areas, and holds under lease from the Corps of Engineers, Department of

the Army, the lands of the Chesapeake and Delaware Canal for fisheries and wildlife management. These areas have an aggregate of 14,858 acres, of which 5,000 acres are Chesapeake and Delaware Canal lands. Numerous public access points have been acquired along the shore of Delaware River, Delaware Bay, inland lakes, ponds, and streams. One hundred-acre Augustine Beach and Fowler Beach are examples of this activity.

238. The wildlife areas of the State were created and are managed primarily as free public hunting and fishing sites; however, other forms of nonurban recreation are enjoyed and encouraged wherever such activities can be carried out. For example, Petersburg Wildlife Area includes training areas for hunting dogs, extensive areas for nature study, and suitable lands for tent camping by Boy Scouts and other organizations. Assowoman Wildlife Area has picnic facilities and an organized camp for underprivileged boys.

239. The State's program of lake and pond rehabilitation offers many opportunities for increased recreation use of these areas through cooperative development with the State Park Commission. These rehabilitated lakes and ponds could fill, at least in part, a tremendous void that exists throughout the State with regard to small day use areas.

HISTORIC SITES

240. In the State of Delaware, the Public Archives Commission has supervision over the State museum and historic sites and may survey, examine, select for preservation, acquire, restore, operate, and make available for public visitation and use such historic buildings, sites, and objects as it deems worthy of preservation.(32) In addition to one historic site the State conducts and maintains an excellent roadside marker program.

John Dickinson Mansion

241. South of the Dover Air Force Base, just off U.S. 113, stands the home of the "Penman of the Revolution". John Dickinson wrote practically all of the important documents of the American Congress up to the Declaration of Independence. His best known, Letters of a Farmer in Pennsylvania, contributed in a large measure toward showing the colonists that their rights as freemen were being abused by the English Parliament.

242. The brick dwelling laid in Flemish bond, was given by the National Society of Colonial Dames in America, in the State of Delaware, to the State and was restored by an appropriation of State funds. The furnishings have been contributed by patriotic organizations and individuals, and by purchases. The gardens are being developed through contributions from garden clubs of the State.

243. This State Historic Site is a good example of what can be done to preserve and make available to the public points of historic

interest. An excellent job of rehabilitation, furnishing, and providing necessary visitor facilities has been accomplished.

STATE BEACH LANDS (Included Study Area)

244. The State of Delaware owns approximately 14.6 miles (2,650 acres) of ocean front land in Sussex County. These holdings constitute two-thirds of the total ocean frontage of the State. These lands constitute a barrier beach between the Atlantic and Rehoboth and Indian River Bays and Little Assowoman Bay. State Route 14 extends through these beach lands from Rehoboth Beach to the Maryland State line. State lands north of Rehoboth Beach are not accessible by improved roads. The State Highway Department presently exercises administrative control over these lands.

245. Rather primitive camp and picnic areas have been provided as a temporary measure until such time as a master plan of development can be put into effect. The State of Delaware is interested in the creation of a State park to preserve the natural conditions that exist north of Rehoboth Beach. Day-use areas with beach and picnic facilities and camping areas for weekend and vacation purposes are planned for other sections of the beach.

COUNTY AREAS - DELAWARE

KENT COUNTY

246. None

NEW CASTLE COUNTY

247. As the result of a new zoning regulation, 68 acres of land in 16 parcels have been deeded to the County by residential developers since January 1957. These areas for the most part lie along stream courses and have not been developed for recreation use.

248. The New Castle County Park and Recreation Commission conducts studies and acts in an advisory capacity to the Levy Court Commissioners.

SUSSEX COUNTY

249. None

MUNICIPAL AREAS - DELAWARE

250. The City of Wilmington in New Castle County now owns 308 acres of land in four tracts outside the city limits. One area, Valley Gardens, is maintained as a pseudonatural area and the other three areas are undeveloped.

COMMERCIAL DEVELOPMENTS - DELAWARE

251. Commercial recreation developments in Delaware are centered in Sussex County in direct relation to seashore environments. With the exception of small boat liveries and limited cottage rentals at inland lakes and ponds, no resort or privately-owned and developed recreation area exists anywhere else in the State. Furthermore, present commercial developments are concentrated in the Rehoboth Beach area. Bethany Beach and Lewes also share in the total vacation activity.

252. Proximity to Baltimore and Washington makes Rehoboth easily accessible to those population centers and the people from various embassies in Washington are frequently seen in Rehoboth. Those of the social register are part of the summer population, but many others enter into the activities of the area. Rehoboth has often been referred to as the "Summer Capital" because of the number of summer homes owned by Government officials and heavy visitation from the Washington area.

253. The resorts from Lewes to Fenwick Island are small and the emphasis is frequently on fishing; deep sea, surf or bay. Unlike the seaside resorts of New Jersey, activities are centered about the ocean and the beach and include fishing, boating, and basking in the sun. A large portion of vacationers along the Delaware shore own their own cottages; however, several small hotels, motels, and numerous private homes rent rooms during the vacation season.

STATE AREAS - NEW JERSEY (See Table 7 following page 65)

254. The Department of Conservation and Economic Development, through the Bureau of Forestry, the Bureau of Parks and Recreation and the Bureau of Historic Sites, the Division of Fish and Games, is the administrative agency of the State, having jurisdiction over State-owned lands used primarily for nonurban recreation in New Jersey.(33)

255. These publicly-owned areas are fairly well distributed throughout the State and one or more are within 1-hour driving time from nearly any section of the State, making it possible to plan an afternoon visit, an all day picnic, or a week's camping trip with minimum travel. Many scenic views, interesting physiographic features, and a wide variety of plants and animal life are included within the more than 74,000 acres of State park and forest land. A portion of the State's history is preserved in historic sites and other areas under State ownership. More than 100 sites of historic significance have been marked with roadside descriptive plaques for the convenience of motorists.

STATE PARKS

256. Within the Department of Conservation and Economic Development (33) the Division of Planning and Development formulates comprehensive policies for the preservation and use of all State parks

(except those regulated by interstate compact), forests, and historic sites. A Bureau of Recreation is operative in this Division to promote a recreation program on a State-wide basis.(34) The Bureau of Parks and Recreation administers all State parks and State forest recreation areas.

257. Within the State there are 22 State parks, 15 of which are located within the Basin and included study area. The area of these parks range from 12 acres to 10,935 acres and only two of the Basin parks exceed 1,000 acres in size. The average size of the remainder is 276 acres. Two of the Basin parks are undeveloped.

258. The State parks preserve the native flora and fauna in their natural conditions and preserve areas of outstanding historic significance. All of New Jersey's State parks, except Voorhees, have been set aside as wildlife sanctuaries and hunting is prohibited. Day-use recreation facilities are provided for visitors, although only two of the Basin parks provide opportunities for camping.

Allaire State Park (Included Study Area)

259. This 1,170-acre park is located in Monmouth County, 6 miles northeast of Lakewood. County Route 524 passes through the area.

260. Allaire was once a prosperous and compact industrial community. Iron mining and smelting, its basic industry, furnished employment to several hundred workers in the early 19th century. For more than 100 years, the once thriving village has been a ghost town. The village is now being restored and opened to the public. Picnic facilities are available.

261. Approximately 10,000 persons visited the park during 1956.

262. Allaire is a good example of a type of cultural recreation often overlooked by many states. The State with the assistance of Deserted Village of Allaire Inc., a nonprofit corporation, is restoring the village in order to give the visitor a glimpse of industrial community life of a bygone era so important in the development of America. The use of this park for its historical, inspirational, and aesthetic values is more significant than the use of the available acreage for intensive recreation purposes.

Barnegat Lighthouse State Park (Included Study Area)

263. Barnegat Lighthouse stands on the northern tip of Long Beach Island and is the principal feature of this 12-acre State park located in Ocean County, 6 miles east of the Village of Barnegat on the mainland.

264. The present lighthouse was completed in 1858 to replace an earlier one built in 1834 which toppled into the water during a storm. The light continued in use for 69 years, and in 1927 a lightship was anchored off Barnegat and delegated the responsibility of standing

guard over the "Graveyard of the Atlantic".

265. The State acquired the lighthouse and surrounding property for preservation as a State park. The original light-crown, consisting of a lens assembly of 1,024 separate prisms, has been replaced and the original condition of the lighthouse has been restored as nearly as possible.

266. The park is historically significant and affords magnificent views from the top of the lighthouse. The present plan of operation is in keeping with the significance of the area, and any increase in present picnic facilities or the addition of other facilities to clutter the area would detract materially from the area.

Cranberry State Park (Undeveloped)

267. This 199-acres of land on the south shore of Cranberry Lake in Sussex County, is located 7 miles south of Newton and is readily accessible from U.S. 206. Cranberry Lake and the park property is surrounded by cottage developments and the lake is now heavily used by the cottage residents. No facilities or developments are provided for public use of the area.

Fort Mott State Park

268. This 104-acre park is located on the east bank of the Delaware River midway between Salem and Pennsville, in Salem County, and is accessible over a hard-surfaced county road connecting with State Route 49. Finns Point National Cemetery adjoins the park on the north and the Killcohook National Wildlife Refuge occupies 1,500 acres to the northwest of the park.

269. Fort Mott is strictly a day-use area catering to picnickers and sightseers. The Delaware River water quality is such that swimming has been prohibited during the past 2 years. Day-use purposes constitute the best use of the park, which could accommodate approximately twice the present capacity. Boating facilities are needed in the area and adequate sites exist in the park for this activity.

270. Fort Mott was formerly a part of the defenses guarding the port of Philadelphia. The gun mounts and underground fortifications are the primary attractions in the park. The promenade atop the revetments offers a vantage point for viewing river shipping, which passes within a few hundred yards of the shore. Recreation activities include picnicking, fishing, boating, and swimming. A natural sand beach has been developed and bathhouse facilities are available, although these are closed to public use because of poor water quality.

271. Approximately 80,000 persons visit the park annually from the surrounding counties and the metropolitan areas of Philadelphia, Camden, and Wilmington.

High Point State Park

272. In the extreme northwest corner of New Jersey, along the

crest of the Kittatinny Mountains in Sussex County, lies 10,935-acre High Point State Park. It extends from the New York State line, southwesterly along the mountain chain for a distance of 8 miles, where it joins Stokes State Forest. The park is located 8 miles northwest of the Town of Sussex, N.J. and 5 miles south of Port Jervis, N.Y. State Route 23 passes through the park and connects these two towns.

273. Day-use recreation activities are centered about 20-acre Lake Marcia where beach, bathhouse, and picnic facilities are available. In the general vicinity of this lake is the Lodge, formerly the mansion home of the donor of the park, The Inn, and the Monument dedicated to New Jersey's war dead. The monument stands on the highest point (1,803 feet) in New Jersey.

274. The area around 20-acre Sawmill Lake has been developed for camping. Campsites are complete with tent platforms or adequate tent space, fireplace, tables, and parking area. A bathing beach has been developed for the camping area.

275. Other activities include fishing, winter sports, nature study, and panoramic sightseeing.

276. New Jersey residents account for 75 percent of the park's 382,000 annual visitation, most of whom come from the metropolitan area. Eighty percent of out-of-state visitors come from the New York City area.

Hopatcong State Park

277. This State park in Morris and Sussex Counties at the western end of Lake Hopatcong, one of the largest lakes in New Jersey, can be reached from U.S. 46 and 206 and over hard-surfaced State roads. The park is located 26 miles northwest of Newark and 37 miles from Manhattan. Numerous paved roads and highways provide avenues of approach from the sprawling New York Metropolitan Area.

278. Although 2,685-acre Lake Hopatcong is in State ownership, only 107 acres of land and water at the extreme western tip of the lake is considered to be within the park. This is exclusively a day-use area for swimming and picnics. A concessioner provides a snack bar and speedboat rides for sightseeing around the lake.

279. Two hundred sixty-two thousand persons visit the park annually, most of whom come from metropolitan areas of New Jersey and New York. Less than 5 percent come from out-of-State (other than New York).

280. Improvements made in 1957 include a new bathhouse, a terraced picnic area, and an extension of the bathing beach. The limitation of available space precludes extensive developments to accommodate a greater number of visitors. Present parking facilities will accommodate only one-half of the demand.

281. The land surrounding the lake is in private ownership and has been subdivided into cottage sites. The greater bulk of the lake shore has been taken up for cottage development and concession purposes. Numerous privately-owned boat docks, beaches, and related water and recreation facilities are available to vacationers in the area.

282. The crowding of 10,000 visitors into 107 acres of park land is clearly indicative of the tremendous demand for public swimming and picnic facilities in this vacation cottage section of the State. Parking facilities will accommodate less than one-half the demand, and terraced hillsides for picnic space are inadequate to meet existing needs.

Island Beach State Park (Undeveloped) (Included Study Area)

283. A 2,200-acre stretch of barrier beach separating Barnegate Bay from the Atlantic is being preserved in an essentially natural condition as a State park. To date, no visitor facilities have been provided, yet 50,000 persons visited the area during 1956. This park occupies one of the very few remaining undeveloped stretches of beach in New Jersey.

284. It would be possible to accommodate a tremendous number of beach recreationists within the park, but to do so would require extensive developments that would, to a large extent, destroy the natural features that should be preserved.

Mount Laurel State Park (Undeveloped)

285. Located 10 miles east of Camden and accessible by paved county roads from State Route 70 at Marlton, this State park of 20 acres has not been developed for public use, and is too small to be considered for State park purposes.

Musconetcong State Park

286. Lying astride the county line between Morris and Sussex Counties, this 343-acre park includes the whole of Lake Musconetcong and a narrow fringe of the lake shore.

287. Only one small area adjacent to U.S. 206 is available for public use and no facilities are provided. Swimming and fishing are permitted and a boat livery is available.

288. Approximately 41,000 predominately local visitors use the area annually.

Parvin State Park

289. The park, located in southern New Jersey in the eastern part of Salem County and centrally located with respect to the surrounding towns of Vineland, Bridgeton, and Millville, contains 1,025 acres and includes 93-acre Parvin Lake and 14-acre Thundergust Lake, and nearly 2 miles of streams. The park is well served by hard-surfaced roads,

and is easily reached from any direction.

290. The park is entirely forested with hardwoods and pines of better-than-average quality for this section of the State. These natural woodlands contain dogwood, laurel, holly, magnolia, and many flowering plants. Birdlife is particularly abundant during the migration season. More than 9 miles of trails pass through cedar swamps and pine forests.

291. Developed recreation facilities include vacation cabins, campgrounds, picnic areas, beach, bathhouse, and playfields. Fishing and boating are permitted.

292. Since 1951, an average of 182,500 persons have visited the park annually. The greater portion of this activity is day-use and originates in the surrounding counties and towns during the week, and from Philadelphia, Camden, and Wilmington on weekends.

293. Parvin is one of New Jersey's better designed parks and it receives considerable day, weekend, and vacation use from the many urban areas in the southern portion of the State. Present facilities are meeting the demands placed upon the park; however, picnic facilities are crowded on peak days.

Princeton Battlefield State Park

294. This park of 40 acres in Mercer County, divided by County Route 583, is located at the edge of the Town of Princeton and preserves the site of the famous battle of the Revolution. No recreation facilities are provided.

Stephens State Park

295. This 222-acre park, located along a 1-mile section of the Musconetcong River, 2 miles north of Hackettstown, lies in Morris and Warren Counties. A hard-surfaced road leads directly to the park from Hackettstown and U.S. 206.

296. Public use of the park is limited to day activities for picnicking, swimming, and fishing. The Musconetcong River is considered to be one of the best trout streams within the State.

297. Metropolitan New Jersey-New York accounts for 90 percent of the 98,000 annual visitation.

Swartswood State Park

298. This park is located on the south shore of Swartswood Lake, 5 miles west of Newton and U.S. 206. A paved road provides access from Newton. The 704 land acres have about 1 mile of lake frontage.

299. There are no overnight facilities and public use in restricted to day activities. Excellent facilities for picnic, swimming, boating, and fishing are provided.

300. The metropolitan area of New Jersey-New York and Eastern Pennsylvania provide the bulk of the 98,000 annual visitation.

301. Plans presently exist for the expansion of bathing facilities and an increase in the number of picnic units.

302. Only day-use facilities for picnics and swimming are available in Swartswood. Soil compaction in the picnic area offers evidence of crowding and overuse in spite of continued expansion of these facilities.

Voorhees State Park (Included Study Area)

303. Situated in the hills of Hunterdon County, this 429-acre park is located 1 mile north of High Bridge over County Route 513. The park offers striking views of rural countryside and has facilities for picnicking.

Washington Crossing State Park

304. This park is located in Mercer County, 8 miles north of Trenton, on the east bank of the Delaware River, and extends about 1 mile back from the river. The park contains 372 acres, and commemorates General Washington's crossing of the Delaware with the Revolutionary Army, from Pennsylvania into New Jersey, on Christmas night 1776, preceding the Battle of Trenton.

305. The principal attraction is the park's historic significance. Continental Lane, over which the Revolutionary troops are reputed to have marched on that memorable night, extends nearly the full length of the park and is flanked on both sides by park drives. The McKonkey Ferry House, extant at the time of the crossing, now serves as a museum and the site of Bear Tavern, where the two columns of troops separated on their march to Trenton, is located within the park.(35) The average annual visitation of 490,000 finds easy access over State roads from the surrounding countryside and Pennsylvania. Approximately 75 percent of all visitors to the park reside in New Jersey. Pennsylvania residents contribute the next largest group and all States are represented in the annual visitor count.

306. Day outings for picnics constitute the prime attraction for an overwhelming majority of the visitors. Fishing in the Delaware is permitted; however, no facilities for swimming are provided because of the poor water quality.

STATE FORESTS

307. The Department of Conservation and Economic Development, through the Division of Planning and Development and the Bureau of Forestry, administers the State's forest lands.

308. New Jersey has ten State forests, with a total area of 60,327 acres, located in the least-developed sections of the State.

These forests are found in the northern mountain and lake region and the southern pine barrens. They serve as laboratories for forestry experiments and demonstrations of the many problems involved in wild-land use.

309. Although legislation designates that State forests are to be managed primarily for timber production, wildlife protection, conservation of water supplies, and watershed protection, recreation has emerged as the principal product of the State's forest land.

310. Eight State forests, with a total area of 56,177 acres, are located in the Delaware Basin and the included study area. Each of these forests has one or more developed recreation areas for day-use activities and/or camping. Each forest is open for hunting and fishing in accordance with New Jersey Fish and Game Laws.

Bass River State Forest (Included Study Area)

311. This forest of 9,270 acres is located in Burlington and Ocean Counties and is accessible directly from the Garden State Parkway and State highways. Recreation facilities provide for swimming, picnicking, hiking, hunting, and fishing. Vacation cabins and camp shelters are available. Average annual visitation is 76,000.

Belleplain State Forest

312. Located in the Coastal Plain region of Southern New Jersey in Cape May County, this 6,492-acre forest of mixed pines, oaks, and southern white cedar is accessible over State Route 47 and improved county roads.

313. Lake Nummy Recreation Area has a 26-acre lake for swimming, boating, and fishing. An excellent beach has been developed. A picnic area and bathhouse facilities are available for day-use. Approximately 56,000 visitors from surrounding counties, Camden, and Philadelphia, use the area annually.

314. East Creek Lake in the forest has a surface area of 65 acres but has not been developed for recreation use. A lodge building is available for group use and has accommodations for 16 persons.

Greenbank State Forest (Included Study Area)

315. This forest of 1,833 acres along the Mullica River in Atlantic and Burlington Counties is accessible over State Route 542 from the Garden State Parkway and U.S. 30. Most of this forest is a southern white cedar swamp and generally inaccessible for recreation. Along the Mullica River near the village of Green Bank, bathing facilities and picnic tables have been provided. Approximately 12,000 visitors use this area each year.

Jackson State Forest (Included Study Area)

316. Located in Ocean County 9 miles northwest of Lakewood, this 43-acre experimental forest is accessible over State Route 528, which

forms the north boundary. No recreation facilities are provided and hunting constitutes the only recreation use.

Jenny Jump State Forest

317. This forest of 967 acres is located in Warren County along the Jenny Jump Mountains, 8 miles northwest of Hackettstown. The only developed recreation area can be reached over improved county roads from the village of Hope.

318. Recreation facilities include five tent campsites, two camp shelters, and a picnic area. The absence of a usable water area precludes any extensive recreation use of this forest area.

319. Hunting is permitted in accordance with New Jersey Fish and Game Laws.

320. The metropolitan New York-New Jersey region is the origin of the greater percentage of forest users; however, Philadelphia, Trenton, and other urban centers in the vicinity contributes also to the 11,000 annual visitors.

321. Jenny Jump is a "dry forest", i.e., no water areas are available for recreation. This is the primary deterrent to recreation use of the area.

Lebanon State Forest

322. Located in Burlington County, this forest of mixed pines and oaks has an area of 22,185 acres and is easily reached from Camden and Philadelphia over State Route 70. Pakim Pond and Deep Hollow Pond Recreation Areas, with a combined area of 60 acres, provide limited recreation opportunities. Facilities include picnic and camping areas, vacation cabins, beach, and bathhouse. Approximately 95,000 visitors use these facilities annually. Overuse is evident.

323. Lebanon Forest is located on the divide between the Delaware River Basin and the New Jersey coastal drainage area and consequently does not receive sufficient drainage for the formation of large ponds or lakes, thus precluding extensive recreation use of this vast public reservation, except for hunting purposes. The present use of existing facilities far exceeds optimum conditions.

Penn State Forest (Included Study Area)

324. Located in the heart of the pine belt in Burlington County, this 2,958-acre forest affords views of New Jersey's "wilderness" and can be reached over county roads from State Route 72. Ninety-acre Lake Oswego has been developed from a cranberry bog. Facilities are available for swimming, picnicking, hiking, hunting, and fishing. Twenty-five thousand visitors use the area annually.

Stokes State Forest

325. Lying along the Kittatinny Mountains in Sussex County, 10

miles north of Newton, 12,429-acre Stokes State Forest joins High Point State Park to the north. U.S. 206 crosses the forest and constitutes the principal highway approach.

326. Recreation opportunities are varied and include facilities for day-use activities such as picnics, swimming, sports and games, hiking, and nature study. Nine-acre Lake Ocquittunk is the center of the principal recreation development, where, in addition to day-use facilities, rustic cabins and campsites are available for family units. An area for trailer camping is located near the lake.

327. There are more than 75 miles of roads and well-defined trails throughout the forest. The Appalachian Trail extends through the full length of the forest and into High Point State Park.

328. Hunting and fishing are permitted in accordance with New Jersey Fish and Game Laws.

329. Approximately 250,000 visitors are attracted to the forest annually for vacation and day outing purposes. Of this number, 90 percent are New Jersey residents, mostly from the metropolitan area adjacent to New York City.

FOREST-PARK RESERVATIONS

330. The forest-park reservations of New Jersey are two extensive land areas administered by the Department of Conservation and Economic Development. The ultimate purpose of these areas has not been determined except that multiple-use, including recreation, hunting, fishing, water conservation, and watershed protection, are assured.

Wharton Tract (State Forests and Parks - Undeveloped)
(Included Study Area)

331. The Wharton Tract is an area of 96,000 acres located in Burlington, Camden, and Atlantic Counties, in the south central section of New Jersey. In 1957, the tract was in the process of development in the Batsto vicinity, where a manorial farm and lake were being restored for visitor use.

332. The tract contains a wealth of recreation potential in the form of forests, wildlife, streams and lakes. Plans are being formulated for the best recreation and other use of this area and it has been estimated that 1,000,000 visitors can be accommodated annually after development. The significance of this area becomes apparent in view of the short distance (35 miles) from the heart of the Philadelphia metropolitan area.

Worthington Tract (State Forests and Parks - Undeveloped)

334. A tract of 6,200 acres has been acquired by the State of New Jersey in the vicinity of Delaware Water Gap, extending up the

Delaware River for a distance of 6 miles. Approximately 1 mile of the area borders on the river in the vicinity of the proposed Tocks Island dam site. U.S. 611 provides access to the area from New Jersey and Pennsylvania, and an improved county road parallels the river through the full length of the tract.

335. To date the area is undeveloped; however, limited use of organized groups is permitted for camping at primitive sites and fishermen are allowed to use the several streams on a day-use basis.

336. Plans are being formulated for the development of the tract for multiple-use recreation purposes.

PUBLIC SHOOTING AND FISHING GROUNDS

337. Within the Department of Conservation and Economic Development, the Division of Fish and Game was established "for the purpose of providing an adequate and flexible system of protection, propagation, increase, control, and conservation of fresh water fish, game birds, game animals and fur-bearing animals in this State, and for their use and development for public recreation and food supply". (36)

338. Under the provisions of this Act, the State operates 33 public shooting and fishing grounds with a total of 87,027 acres in the Delaware River Basin and the included study area. In addition to hunting and fishing, other forms of nonurban recreation are pursued.

339. The public shooting and fishing areas of New Jersey are maintained and operated for purposes directly associated with those activities; however, other types of nonurban recreation are permitted and encouraged.

HISTORIC SITES

340. The Historic Sites Section in the Bureau of Parks and Recreation administers the State-owned historic areas. This Bureau now administers a total of eighteen historic sites throughout the State and more than one hundred roadside markers.

341. There are six State-maintained and operated historic sites within the Basin and large number of roadside markers. The historic buildings are open to the public.

Hancock House

342. This fine example of the architecture of Southern New Jersey is located at Hancock's Bridge. Built in 1734, this two-story structure has blue glazed header bricks, laid in patterns to form a zig-zag design on the end of the building. As was typical of that era, the house also contains the date of erection and initials of the builder in brick on the end wall.

343. It was the home of William Hancock, a Judge of the Courts of Salem and an assemblyman from 1733 to 1751. Hancock was killed in his home during the Battle of Hancock's Bridge on March 21, 1778 when the British attacked and massacred a number of the militia troops guarding the bridge.

Oxford Furnace

344. Located in the town of Oxford in Warren County, this charcoal blast furnace was built in 1741-1742 and was blown out in 1884. It supplied cannon balls for American Troops during the French and Indian, Revolutionary and Civil Wars. It was the first furnace in America to make use of the hot blast. There are no visitor services or facilities available.

345. This historic site is of significance to the State in relation to the development of the iron industry in New Jersey and the association of the furnace with colonial wars. Presently, the site is in a state of progressive deterioration. Through stabilization and interpretive devices, this site could be made into a valuable point of interest.

Somers House (Included Study Area)

346. Located in Atlantic County just east of the Garden State Parkway, this historic site is the birthplace of Lieutenant Commander Richard Somers, III who distinguished himself in the early history of the United State Navy in the Battle of Tripoli in 1804. The mansion was built in 1720-30 and is now furnished with antiques and relics.

COUNTY AREAS - NEW JERSEY

347. Only five of the Basin counties in New Jersey administer recreation lands of any type and only two of these have an organized park or recreation department. The 22 separate areas are more urban in character than nonurban and 15 of this number are located in highly urban Camden County. With one exception, these county parks are local in interest and cater to the immediately surrounding communities. Ocean County Park is the exception in that visitors are attracted from neighboring Monmouth County where no park or recreation area exists.

ATLANTIC COUNTY

348. None

BURLINGTON COUNTY

349. None

CAMDEN COUNTY

350. The Camden County Park Commission administers 15 parks with a combined area of 4,000 acres. Six of these parks are located within

the city and the remainder are in the suburban areas of the county. The theme of these parks is conservation centering about sports, fishing, boating, tennis, picnics and other outdoor activities. Although not falling within the nonurban classification, these parks do contribute materially toward fulfilling the need for open space activities in this highly urbanized county.

CAPE MAY COUNTY

351. A total of 37 acres in two areas are administered by the Board of Chosen Freeholders. Tracts of 25 acres and 12 acres, respectively, have been developed from county-owned lands at the County Airport and the County Farm. Facilities for picnics and field sports are provided.

CUMBERLAND COUNTY

352. None

GLOUCESTER COUNTY

353. Red Bank Battlefield Park is administered by the Board of Chosen Freeholders although the land is owned by the Federal Government. The park contains a dry moat, several cannons, and monuments that mark the battlefield site. Within the park is the Whitall House (1748) which was struck by gunfire during the Battle of Redbank.

354. The park contains 20 acres.

HUNTERDON COUNTY

355. None

MERCER COUNTY

356. The Mercer County Recreation Commission expects to have 289 acres of land dedicated to recreation purposes by the end of 1959. In 1958 only 6 acres had been developed and plans had been made for the development of a 200-acre tract.

MONMOUTH COUNTY

357. None

OCEAN COUNTY

358. A total of 303 acres of park land is administered by the Board of Chosen Freeholders. Ocean County Park, with an area of 300 acres, is a former estate of the late John D. Rockefeller and attracts visitors from surrounding counties, particularly Monmouth County which has no park or recreation area. Two small lake beach areas, with a

combined area of 3 acres, have facilities for swimming and picnics.

SALEM COUNTY

359. None

SUSSEX COUNTY

360. None

WARREN COUNTY

361. None

COMMERCIAL DEVELOPMENTS - NEW JERSEY

362. Commercial recreation developments in New Jersey are concentrated primarily in the seashore counties and to a lesser degree in the northwest lake region of the State. Atlantic County is far out in front as the largest resort center, followed by Cape May, Ocean, and Monmouth Counties along the seashore. The lake region of the State embraces Sussex and Warren Counties within the Basin.

363. The 125-mile beachfront from Sandy Hook to Cape May is, no doubt, the most concentrated playtime strand in the United States. The famous resort towns of Long Branch, Asbury Park, Atlantic City, Wildwood, and Cape May dominate the almost continuous chain of seaside resort communities. This is particularly true in the northern segment from Highlands to Point Pleasant Beach, and to a lesser extent to Seaside Heights. From Barnegat Light to Beach Haven Inlet, 13-mile long Long Beach Island is fast becoming a continuous development. The southern third of this coastal area is somewhat less consolidated; however, several communities comprise Greater Atlantic City, and the four Wildwoods make up the Wildwood area. Cape May remains as a community apart.

364. The recreational opportunities offered for sale along "the shore" are directly opposed to the sedate tranquility normally associated with the serenity of national and state parks. Attractions here run the gamut from horse racing with pari mutuel betting to diving horses and the hottest jazz and "rock and roll" bands. This, of course, is in addition to sea, sun, sand, and surf. Virtually every settlement of any size boasts of a boardwalk that is the center of its attractions. Amusement piers extend seaward and offer every conceivable type of "canned" pleasure. The boardwalk is lined with hotels, rooming houses, stores of every description, movie and burlesque theaters, and salt water taffy shops. Commercialization of the New Jersey seashore is virtually complete.

365. Atlantic City (14) is in a class by itself. It combines the convenience and culture of metropolitan life with carefree, timeless

leisure. Built on an island, the city has a beach and a back bay, a boardwalk, and boat piers. It has skyscrapers and cabanas, airports and bicycles, seafood and hot dogs, ticker tape and timetables, fashion parades and water skiing. It is the metropolitan host in the grand manner. It has huge hotels and a convention hall large enough to house the entire resident population. Resort facilities are available in every season of the year, and promotions are geared to every holiday of the calendar. Overnight accommodations with push-button service are in abundance and do-it-yourself housekeeping units are also available. Room accommodations of all kinds are sufficient to take care of 100,000 guests. Motels, once frowned upon, have made their appearance in recent years. Their number has multiplied rapidly, and the accommodations offered are on par with those available in the boardwalk skyscraper hotels.

366. The entire seashore of Cape May County is a broken chain of little islands separated from the mainland. On the map, these islands resemble crumbs of all sizes and shapes, brushed off the tableland. Almost the entire insular formation is a resort land. The City of Cape May on the southern tip of the peninsula; Wildwood, a short distance to the north; and Ocean City, whose residents can see the skyscrapers of Atlantic City across Great Egg Harbor, are the principal resort centers of Cape May County.

367. Compared with some of the other resorts, Cape May still has some of the subdued and refined qualities that characterized the resorts in the days before the turn of the century. The hotels have the dignity and charm and grace that go with age. To this day, rest and recreation are interspersed with social activity, but it is never conspicuous, it is always "proper" and "quiet".

368. Wildwood, just a short spin up the ocean drive, goes in for more of the excitement and gaiety of amusement rides and nightlife; and for daytime hours it offers the most expansive beach of the New Jersey shore. After dark, the night clubs take over and it is alleged that Wildwood has more clubs and taverns than any other spot on the coast. As in other seashore resorts, rooming accommodations are at a premium at the height of the season.

369. Ocean City is predominately a "family resort". Guests, including children, arrive in the family car and bring the family habits of living with them. Games of chance and alcoholic beverages are prohibited, and the usual workday business ventures are not a part of Sunday activity. Sunday evening church services move into the boardwalk theaters and the boardwalk shops and places of amusement, open all week, take their rest on the Sabbath.

370. A large portion of Cape May County's visitors choose to rent cottages or apartments. Only in Wildwood are rooming accommodations fairly important. This division is consistant with the general pattern observed all along the shore - the larger the resort, the higher the proportion of accommodations in rooms in contrast to housekeeping units.

Visitors who remain only a short time prefer a room to a housekeeping unit. Vacationers planning a long stay often seek a small, quiet resort; the short trip or visit is more likely to have as its destination a large resort with a variety of amusements and activities. Therefore, the large resort needs rooms and the small resort needs housekeeping units.

371. Ocean County has a large number of privately-owned cottages and quite a few rental units. This community complex changes the nature of the resort area to a large extent. There is a minimum of commercial activity and very little party atmosphere. Suburban living is transplanted for the summer with the emphasis placed on quiet cottage vacationing.

372. Long Beach Island, from Barnegat Light to Beach Haven, has a variety of resort communities and still more resorts have developed further up the New Jersey shore from Seaside to Point Pleasant. None is large, but great is the variation from the carnival atmosphere of Seaside Heights to the large summer homes of Bay Head and Mantoloking. Inland is Lakewood, one of the few winter resorts of New Jersey.

STATE AREAS - NEW YORK (See Table 8 following page 68)

373. In the State of New York, the Conservation Department, through the Division of Parks, the Division of Lands and Forests, and the Division of Fish and Game, administers State-owned lands devoted to or used in part for nonurban recreation purposes.

STATE PARKS

374. The Division of Parks does not administer any land area within the New York portion of the Delaware River Basin.

FOREST PRESERVES

375. The Division of Lands and Forests has custody and control over the forest preserves, parks, and other State lands in the sixth park region and may establish, acquire and manage other State parks and parkways in the forest preserve counties.(37)

376. The present and future use of forest preserve land is specified in the State Constitution as follows: "The lands of the State now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild lands. They shall not be leased, sold or exchanged or taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed. Nothing herein contained shall prevent the State from constructing, completing and maintaining any highway heretofore specifically authorized by constitutional amendment, nor from constructing and maintaining "ski trails as specifically described".(38)

Catskill Forest Preserve (Catskill Park)

377. Catskill Park is a geographically-defined area with legally-defined boundaries and lies in the heart of the Catskill Mountains directly west of Kingston, N.Y. The State-owned lands within the "blue line" or legal boundary of the park constitute lands of the Catskill Forest Preserve. The present and future use of these lands are as described in the preceding paragraph.

378. The State Constitution has been amended and approved by vote of the people to provide for the construction of ski centers and 70 miles of ski trails. In addition to these specifically authorized ski developments, limited facilities such as camp and picnic areas, shelters, trails, etc., have been constructed within the park for forest preserve land as forest protection measures. One such area, Beaverkill Campsite, is located within the Delaware River Basin.

379. This single improved area is located 23 miles east of Hancock, N.Y., on Beaverkill (Creek), a noted trout stream. The campsite has facilities for camping, picnicking and swimming and can be reached from State Route 17 over a paved county road. A total of 41,000 visitors used the area during 1956.

380. Approximately 40 percent of this 234,610-acre wilderness forest preserve lies within the Delaware River Basin. The present use of this publicly-owned area is infinitesimal in proportion to the recreation use which the area could carry without the loss of any park or forest values. The area possesses outstanding qualities for non-urban recreation purposes.

GAME MANAGEMENT AREAS

381. The Conservation Department, through the Division of Fish and Game, is responsible for the management and control of public hunting and fishing grounds owned, operated, or acquired by the State. The Department has authority to acquire by lease, purchase, gift, devise, agreement, or otherwise from any source, lands, waters, or lands and waters, or any rights or interests therein for the purpose of establishing and maintaining public hunting, trapping, and fishing grounds.

382. There is one game management area located in the New York portion of the Basin. This single area is in Delaware County and is administered primarily for hunters and fishermen and has primitive facilities for these and associated activities such as camping and picnicking. Approximately 11,000 visitors use the area annually.

383. In addition to this hunting area, 57 miles of stream easement 33 to 66 feet wide are available to anglers. These public fishing areas provide improved fish habitat, access trails, and parking areas for fishermen and receive heavy fishing pressures.

COUNTY AREAS - NEW YORK

DELAWARE COUNTY

384. None

SULLIVAN COUNTY

385. The Sullivan County Board of Supervisors administers Minisink Battlefield Park, a 6-acre area near the village of Minisink Ford on the Delaware River. The park commemorates the battle that took place on the site during the Revolutionary War. A monument dedicated to the patriots who died here constitutes the sole improvement.

386. Plans have been prepared to improve and enlarge this memorial park. The area is unsuited for other than local use.

COMMERCIAL DEVELOPMENTS - NEW YORK

387. Commercial recreation developments in the New York portion of the Basin are centered in the Catskill Mountain region of Delaware, Sullivan, and Ulster Counties. In the Catskills, emphasis is placed on vacation accommodations centered around a hotel or lodge. Many of these resorts are self-contained developments catering to every wish and whim of guests. Recreation facilities such as golf courses, tennis courts, swimming pools, lake developments, boat basins, ski runs with lifts, riding stables, miniature golf, croquet and handball courts, ballfields, and similar activities provide daytime recreation. Evening entertainment often consists of dancing to "name bands" and shows featuring Broadway, Hollywood, and television celebrities. The serving of fine food is considered a "must" for the successful operation of the more exclusive resorts where nationally-and internationally-known chefs prepare selected delicacies. This type of establishment is not universal throughout the Catskills; however, it is the general pattern. Each commercial development endeavors to fulfill the needs and desires of its guests. A complete range of accommodations exists from the very expensive plush hotels, with the ultimate in luxurious comfort, to vacation farms where summer guests find relaxation in assisting the farmer with his daily chores.

388. This resort center is just 2-hours driving time over superhighways from Times Square. The counties have a resident population of 40,000 and a seasonal turnover of more than 600,000. Vacationers are attracted to the area by 385 resort hotels, 27,000 family rental cottages, 350 rooming houses, 15 motels, and 5,000 privately-owned summer cottages. During 1957, a total of 603,000 visitors were accommodated in these facilities.(39)

389. Although the Catskill region is renowned for its lakes and streams and good fishing, hunting, boating, and skiing, the great majority of the visitors to the region seem to prefer the organized

social activities of the big resorts. "Most Sullivan (County) vacationists are so busy enjoying the fun laid out for them on the premises that they rarely get around to the most scenic parts of the County, and they don't know what they are missing".(40)

390. The Catskills have been a summering place for nearly a century, particularly for New Yorkers who constitute approximately 95 percent of the total visitation. The peak season between Memorial Day and Labor Day has been extended on both ends by many resorts through the installation of winter attractions and facilities for skiing, skating, tobogganing, etc., so that numerous resorts in the area remain open throughout the year.

STATE AREAS - PENNSYLVANIA (See Table 9 following page 81)

391. Within the State of Pennsylvania, nonurban State owned recreation lands are administered by the Department of Forests and Waters, the Department of Property and Supplies, the Game Commission, the Fish Commission, and the Historical and Museum Commission. All State forests and State parks, except those administered by separate commissions or departments, are under the jurisdiction of the Bureau of Forests and the Division of State Parks, respectively. The Game Commission supervises public hunting grounds and game refuges as well as other matters relating to wildlife within the State. The Fish Commission has cognizance of fish matters and maintains a system of public fishing areas and access points to streams and water areas for the use of the public. The Historical and Museum Commission is the State's custodian of historical buildings, military markers and monuments, and objects of historic interest.

392. In the Pennsylvania portion of the Delaware River Basin, the State has set aside 13 State parks, 1 State forest, 29 State game land areas, 8 public fishing areas, and 4 historic sites, all of which are located in the nonurban areas of the Basin.

STATE PARKS

393. The Department of Forests and Waters (41), through the Division of State Parks, has supervision and control of all State parks in the Delaware River Basin, except Washington Crossing, Brandywine Battlefield, and Valley Forge, each of which is supervised by a park commission. The Secretary of Forests and Waters is an ex-officio member of each commission.

394. The Department is empowered to acquire lands to be maintained and utilized as State parks for the purpose of promoting healthful outdoor recreation and education and making available such natural areas of unusal scenic beauty, especially those which provide impressive views, waterfalls, gorges, creeks, caves, or other unique and interesting features. The design and construction of public facilities and conveniences for the transportation, shelter, comfort, and education

of the people is to be in such a manner as to preserve the naturalistic appearance of State park areas, surrounding and approaches.

395. There are 13 State parks with a total of 34,526 acres in the Pennsylvania portion of the Delaware River Basin. These areas are fairly well distributed with regard to population centers and offer opportunities for day outing activities, tent camping, and vacationing in rustic cabins, all within reasonable driving time from any point within the Basin.

Big Pocono State Park

396. Overlooking the entire Pocono Plateau, this 1,305-acre State park on Camelback Mountain offers outstanding scenic views of the countryside from an elevation of 2,100 feet. The park is located in Monroe County, 9 miles northwest of Stroudsburg and is accessible from U.S. 611 over a State road that leads to the top of the mountain.

397. The outstanding attraction is the view from the mountain top, A scenic drive makes available views in all directions for the motorist. Picnic facilities are provided and hunting is permitted. Approximately 100,000 persons visit the park annually.

Brandywine Battlefield Park

398. This 50-acre park, located on a rolling hillside overlooking Brandywine Creek and adjacent to U.S. 1 at a point 25 miles west of Philadelphia, is administered by the Department of Property and Supplies through the Brandywine Battlefield Commission.

399. The principal attractions in the park are the reconstructed and restored headquarters of Generals Washington and Lafayette. Some of the outbuildings have been restored to recreate the farmstead atmosphere of the Revolutionary period.

400. Approximately 28,000 persons visit the park annually. This figure represents only those visitors who actually visit the houses and does not include picnickers who use the park for that purpose only.

Fort Washington State Park

401. This State park, consisting of 493 acres in five detached parcels, is located 12 miles northwest of Central Philadelphia. The park is divided by the Pennsylvania Turnpike and is reached from Philadelphia via U.S. 309. Philadelphia residents constitute 70 percent of the park visitors.

402. The earthworks that constituted the original Fort Washington have been reformed and the surrounding area is maintained as a semi-formal park. The fort occupies a hill crest that affords views of the Pennsylvania Turnpike and the surrounding suburban areas.

403. The Flourtown tract has been highly developed as a day-use area for picnics and sports activities. A good flow of water runs

through this area; however, pollution precludes any recreation use of the stream.

404. The Militia Hill tract is currently used as a primitive camping area and receives considerable use by scout groups. Extensive park development is now underway in this area.

405. Fort Washington State Park is primarily of local interest and is used by the urban and suburban residents of the greater Philadelphia area.

French Creek State Park

406. Located 14 miles southeast of Reading and 40 miles northwest of Philadelphia, this 5,933-acre park was originally developed by the National Park Service as a Recreation Demonstration Area and was turned over to the State of Pennsylvania in 1946 for State park purposes. The park now receives more than 1,000,000 visitors each year, most of whom come from the Philadelphia area.

407. The park is well situated in rolling hills of hardwoods and has one 65-acre lake for recreation use and a smaller one for fishing only. The larger lake is the principal attraction in the park and the focal point of all recreation use. Swimming is the most popular activity. Year-round group camping is an important feature of the park use. Day-use facilities include picnic areas, bathing beach and bathhouses, playfields, and hiking trails. Family camping is a popular park activity and many visitors from the surrounding cities spend their vacations in the area. Hunting is permitted on 2,000 acres of park land.

408. Access to the park is easily had over hard-surfaced roads. The Pennsylvania Turnpike runs just south of the park, U.S. 422 and 122 are on the north and west sides and State Route 100 is on the east side.

George W. Childs State Park

409. This 281-acre State park, located in the Eastern Pocono section of Pike County, 21 miles northeast of Stroudsburg, is served by a paved State road connection with U.S. 209 and Dingman's Ferry.

410. The principal feature of the park is a rugged ravine with hemlock covered hillsides. Approximately 75,000 visitors use this park annually for day outings. Picnic facilities are the only recreation development present.

411. Tentative plans have been prepared for the development of recently acquired land. Expansion of picnic facilities and the installation of a bathing area on Dingman's Creek are possible new developments. These improvements will enhance the day-use capacity of the park.

Gouldsboro State Park

412. This 2,800-acre park in Monroe and Wayne Counties is the product of the combined efforts of the Department of Forests and Waters and the Pennsylvania Fish Commission. Having recently acquired title to Gouldsboro Lake, the Fish Commission leased to the Department of Forests and Waters an extensive shoreline area and in this manner made possible the construction, by the Department of Forests and Waters, of a fine beach and swimming area, boat launching ramp, picnic areas, parking lots, and access road.

413. This new State park, located on U.S. 611, is located midway between Scranton and Stroudsburg.

Hickory Run State Park

414. This 13,386-acre park in Carbon County was developed by the National Park Service as a Recreation Demonstration Area and was turned over to the State as a State park in 1946. It is centrally located with respect to urban areas in Pennsylvania's eastern coal and steel section and is 72 miles north of Philadelphia.

415. The northeast extension of the Pennsylvania Turnpike, Philadelphia to Scranton, passes directly through the park and the Pocono Interchange is located just outside the northern boundary. This high-speed, limited-access highway has brought the park to within 1½ hours' driving time from Philadelphia. Visitation has increased materially since the opening of this highway.

416. State Route 940 provides access from the east and west and was the primary access route prior to the opening of the Turnpike.

417. The park is located in a heavily-forested section of the glaciated Pocono Plateau. The extremely thin, rocky soil, leads to difficulties in providing recreation facilities. However, evidence of glacial action is an outstanding feature of the park and a 30 acre boulder field is thought to be one of the most unusual glacial phenomenon in the country. Other attractions include streams, waterfalls, forest, and wildlife.

418. Approximately 350,000 visitors are attracted to the park annually for vacation, weekend, and day-use activities. Facilities are provided for tent and trailer camping, and day-use picnicking and swimming. The cool nights and warm days have proven to be a large factor in the heavy use of the park.

419. Hunting is allowed on 13,000 acres of park land and fishing is a popular activity.

Promised Land State Park

420. Located on the glaciated Pocono Plateau, this 2,328-acre park has good access over State Routes 290 and 390 from Stroudsburg, 20 miles to the south.

421. The outstanding feature of the park is the 422-acre Lake about which all recreation activities are centered. Developed facilities include three camping areas, vacation cabins and a day-use area with picnic and swimming facilities.

422. Approximately 400,000 visitors, principally from Philadelphia, Trenton and the counties surrounding the park, use the area annually.

Ralph Stover State Park

423. This 44-acre park, located in a gorge along Tohickon Creek in Bucks County, 27 miles north of Philadelphia, is readily accessible over U.S. 611 from Philadelphia or scenic State Route 32. The park is 1 mile upstream from the Delaware River.

424. Recreation facilities include six vacation cabins, and picnic and swimming areas. Approximately 100,000 visitors from the Philadelphia, Trenton, and Bethlehem areas use the park annually.

425. The outstanding features in the park are the rocky creek gorge and the picturesque hemlock slopes.

Roosevelt State Park

426. Located in Bucks and Northampton Counties along the Delaware River, this 600-acre State park preserves a 60 mile section of the Delaware Canal. The park consists of the canal, tow-path and associated locks, and canal structures.

427. This park, with an average width of 40 feet, is used for swimming, canoeing, fishing, riding, hiking, picnicking, and ice skating. Barge trip parties are scheduled during the summer months. Approximately 70,000 persons visit the park annually.

428. This park is an example of what can be done with the physical remains of a bygone era. The historic aspects of canal transportation are preserved for 20th century visitors. The significance of this park is not the number of people who can be accommodated but the preservation of the historic scene.

Tobyhanna State Park

429. Located in the Monroe County near the summit of the Pocono Plateau, this 7,500-acre State park is served by U.S. 611 from Scranton and Stroudsburg.

430. Tobyhanna Lake is the principal feature and the center of recreation activities. Only day-use facilities for picnicking, swimming, and boating are available to visitors. Camping facilities have not been provided; however, current plans include areas for tent and trailer purposes.

431. Approximately 63,000 visitors from the surrounding industrial

cities, New Jersey, and vacationers in the Pocono area use the park annually.

432. Hunting is permitted outside of developed areas.

Valley Forge State Park

433. Within the 2,033 acres of Valley Forge State Park is preserved the winter encampment scene of the American Continental Army from December 17, 1777 to June 19, 1778 and it is probably the most widely-known geographical area referred to in the United States history. Valley Forge has long been a mecca for visitors from all parts of the United States, as attested by an average annual visitation of 2,400,000 since 1951.

434. The historical significance of the area, plus cultural features such as the National Memorial Arch, the Washington Memorial Chapel and bell tower, Washington's Headquarters, reconstructed soldier's huts, museums, restored earthworks, fortifications, monuments, and statues constitute the principal attractions in the park. The spring flowers, particularly the eastern dogwood, attract many thousands of visitors to the park in April and May.

435. Picnic facilities and playfields are available for day-use activities. A small camp and trailer area is maintained for overnight visitors. Valley Forge has twice been the scene of the National Boy Scout Jamboree. More than 50,000 scouts were present on each occasion.

436. The park is surrounded by excellent highways, the Pennsylvania Turnpike is just outside the park, and U.S. 30, 202, and 422 provide ready access to the area. State Route 43 from Philadelphia leads directly to the park and State Route 23 runs through the area.

Washington Crossing State Park

437. To commemorate the historic crossing of the Delaware River by General Washington and the Continental Army on Christmas night 1776, preceding the victory at Trenton, the Commonwealth authorized the creation of a state park at the scene of this event.

438. This 478-acre park is divided into two sections; Bowman's Hill and Washington Crossing. Basically historical in origin, the park contains several historic landmarks and monuments. The Thompson Neely House (1702) is restored and maintained as a museum.

439. Visitors are attracted to this area by its "open space" appeal for family picnics and out-of-doors relaxation. The Delaware River affords opportunities for fishing; however, swimming is not possible because of poor water quality. A wildflower preserve has proven to be popular and the hiking trails are heavily used. A bird banding station in the park has developed into a "nature center" with interpretive lectures as a regular feature. Restored colonial buildings add to the appeal of the area.

440. Located 23 miles northeast of Philadelphia and 8 miles northwest of Trenton, and easily reached from all points by good roads, the park has an annual average visitation of more than 1,500,000 persons. Of this number, 75 percent come from the cities and towns of Pennsylvania and New Jersey, and the remainder from surrounding States and across the Nation.

441. Present plans include a continuing program of restoration and rehabilitation of colonial structures and the construction of launching facilities for boating on the Delaware River.

STATE FORESTS

442. Pennsylvania's State forests are administered by the Department of Forests and Waters, through the State Forester.(37) The purpose of these forests is "to provide a continuous supply of timber, lumber, wood and other forest products, to protect the watersheds, conserve the waters, regulate the flow of rivers and streams, and to furnish opportunities for healthful recreation to the public". The Department is authorized to reserve within the State forests, unusual or historical groves of trees, or natural features especially worthy of permanent preservation, and to make the same accessible and convenient to the public use, and to dedicate them in perpetuity to the people of the State for their recreation enjoyment. Any State-owned land under the jurisdiction of the Department of Forests and Waters may be set aside for exclusive use as parks, parkways, and other places of scientific, scenic, historic, or wildlife interest and to provide additional recreation areas.

443. Within the Pennsylvania portion of the Delaware River Basin, there is one State forest. Forest lands within the Basin aggregate 71,387 acres, on which are located four recreation areas for the use and enjoyment of the public. These areas are equipped with tables and benches, fireplaces, safe water, parking space, and other facilities for the convenience of visitors.

Delaware State Forest

444. This forest derives its name from the Delaware River, which forms its eastern boundary and drains the entire forest.

445. The area is easily accessible, being located 100 miles from Philadelphia and 90 miles from New York City. Although 14 detached tracts make up the 71,387 acres, each area can be reached over hard-surfaced or improved roads. The great bulk of the forest is in Pike County and only one-eighth of the total area is in Monroe County.

446. The terrain is typical of the Pocono Plateau region, being characterized by a series of broad mountain plateaus at varying elevations. Within the forest are eight lakes, four of which are glacial and four artificial.

447. There are three developed recreation areas on the forest offering facilities for camping, picnicking, swimming, hiking, hunting, and fishing. Three hundred and twenty-five acres are contained in these developments. These areas receive approximately 5,000 visitors annually.

448. Bruce Lake and Stillwater Forest Monument are wilderness areas with a total of 5,700 acres. No extensive developments have been permitted and these areas are in their natural condition, with the exception of numerous trails. No roads traverse the area and access is by foot travel only. Camping permits are issued for periods of 24 hours only.

449. Hunting is permitted on lands at a safe distance from developed recreation areas.

450. The present recreation developments in the Delaware State Forest are not used to full capacity, chiefly because of the absence of suitable recreation water areas. The two wilderness areas are the only such areas preserved in the Basin.

STATE GAME AND FISH LANDS

451. The Board of Game Commissioners (37) has jurisdiction over game and wildlife matters of the State. The Game Commission is authorized to acquire title to or control of lands and/or buildings or hunting rights or other rights on land suitable, among other things, for public hunting and trapping. Lands so acquired may be used for the purpose of creating and maintaining state game refuges and/or hunting grounds or for the propagation of game. The Commission may grant rights to maintain ski runs or trails for towing, the Highway Department may construct roadside rests, any State or Federal agency may contruct and operate water impoundments or flowage for flood control or recreation; however, no campsite may be leased and no overnight camping is permitted on State game lands except for officers and agents of State or Federal agencies in the performance of duty.

452. Any natural stream or lake that has been stocked with fish by the State is open to the public for lawful fishing.

453. Within the Basin portion of the State there are 28 game land areas with a total of 109,560 acres. These public hunting areas are located principally in the Appalachian Province; however, 10 areas are situated in the Piedmont Province south of Blue Mountain.

454. To supplement these publicly-owned game lands, the Cooperative Farm-Game Program provides an additional 213,579 acres available for public hunting. This program was initially begun in the vicinity of Philadelphia as an effort to provide hunting area on lands previously closed to hunting.

HISTORIC SITES

455. The Pennsylvania Historical and Museum Commission is responsible for preserving or restoring ancient or historical public buildings, military works, or monuments connected with the history of the State, and to assume the care and maintenance of such historical buildings, grounds, monuments, or antiquities committed to its custody by the General Assembly; and to make and enforce rules for the visitation of such places by the public.(37)

456. Within the Basin portion of Pennsylvania, the State now has six historic sites in public ownership that are open to the public.

Conrad Weiser Memorial Park

457. The park consisting of 26 acres, is located on U.S.422 at the eastern edge of Wornelsdorf. Originally a community park, it was accepted by the Commonwealth in 1935 through appropriate legislative action. The original one-room Weiser house, to which a second room was added in 1751, is now used as a museum and contains appropriate furnishings of that period. The large stone house (1834) has been restored and is used as the park superintendent's home. The original Weiser spring has been renovated and the rest of the grounds laid out in suitable style.

Daniel Boone Homestead

458. About 9-miles southeast of Reading is the birthplace and boyhood home of Daniel Boone, symbol of the American pioneer spirit. As frontiersman and scout his name is legend to every American boy. The original log cabin is gone but the present storehouse is said to occupy the site of the Boone home.

459. There are picnic facilities available for day-use.

Pennsbury Manor

460. On the west bank of the Delaware River near Bristol stands Pennsbury Manor the reconstructed home of William Penn. The home was reconstructed by the Commonwealth of Pennsylvania to honor one of the great men in its history. The original house was in ruins by 1736 and beyond hope of repair. In 1932, the land was deeded to the Commonwealth and plans were prepared for the reconstruction of Pennsbury Manor. The manor house and outbuildings were completed in 1939. Since that time, the herculean task of restoring the gardens, landscaping the ground and furnishing the various structures has been accomplished.

Pottsgrove

461. One of Pennsylvania's outstanding examples of colonial architecture is the fine stone mansion built in 1752 by John Potts. The history of Pottsgrove is closely related to the Pennsylvania iron industry, for near here in 1716 Thomas Rutter and Thomas Potts began the first manufacture of iron in Pennsylvania. John Potts died in 1768 and his eldest son took up residence at Pottsgrove. Tradition

states that during the American Revolution, Washington used the house for a short time as his headquarters in 1777. There is a well-supported family tradition that during Washington's encampment at Valley Forge Martha Washington made her home at Pottsgrove and Washington was a frequent guest.

COUNTY AREAS - PENNSYLVANIA

BERKS COUNTY

462. None

BUCKS COUNTY

463. Bucks County has a newly formed park organization for the planning and development of a county system of parks. There are presently two undeveloped areas with a total of 212 acres of nonurban park land owned by the county.

CARBON COUNTY

464. None

CHESTER COUNTY

465. None

DELAWARE COUNTY

466. Delaware County has a total of 264 acres in ten areas devoted to recreation use. Four parks comprising 127 acres, are administered by the Delaware County Park and Recreation Board, and 105 acres in four tracts are undeveloped. Two areas of 32 acres are leased to local civic organizations.

467. The four active county parks are strictly municipal in character and fulfill urban needs. Picnic facilities are available in Glen Providence and Smedley County Parks. Kent and Shrigley County Parks are playgrounds for small children.

LEHIGH COUNTY

468. The City of Allentown-Lehigh County Recreation Department administers a 1,100-acre nonurban recreation area, Trexler Game Preserve. A fee is charged for admission to the area which is open weekends. No recreation facilities are provided.

MONROE COUNTY

469. None

MONTGOMERY COUNTY

470. The county parks are under the jurisdiction of the County Commissioners who are assisted in their development by the recommendations of the County Park Board, an advisory body that studies the county's recreational needs. (41)

471. This county park system includes four nonurban areas; Upper Perkiomen and Lower Perkiomen Valley Parks, Lorimer Park, and the Audubon Shrine and Bird Sanctuary. These four units have an aggregate area of 808 acres devoted to recreation uses. In addition to these county administered areas, 600-acre Camp Delmont is owned and operated by the Valley Forge Council of Boy Scouts for Montgomery and Delaware Counties and Camp Rainbow is a function of the County Court for underprivileged children.

472. Upper Perkiomen Valley Park is a highly-developed area of rolling hills, partly wooded and partly open meadows, extensively used for sports and games. A 38-acre artificial lake is available for swimming, boating, and fishing in summer, and skating in winter. Near the lake is an appropriately designed and constructed shelter and first aid station. Provision has been made for winter night skating by lighting a portion of the lake. Other facilities include picnic and camping areas, hiking trails, bathing beach, bathhouses, tennis courts, ballfields, paved roads, and parking areas. Total area of the park is 553 acres.

473. Lower Perkiomen Valley Park is a picnic and swimming area adjacent to the Audubon Shrine and provides a picnic area for visitors.

474. Lorimer Park is essentially a nature park with limited picnic facilities. Several miles of equestrian and foot trails wind through these 134 acres of woodland. Pennypack Creek flows through the park.

475. Although Montgomery County parks are better than average, they are inadequate to serve the 450,000 inhabitants of the county and are closed to nonresidents. This limitation on use is necessitated by the over-all lack of adequate facilities in surrounding counties and metropolitan areas, and is strictly enforced in the Upper Perkiomen Valley Park and on weekends in Lorimer Park. The Audubon Shrine is open to all visitors.

476. Mill Grove, the first home of John James Audubon in America, is preserved as an historic shrine and wildlife sanctuary in memory of the famous painter of American birdlife. The mansion is partially furnished with period pieces and contains many reproductions and original paintings by Audubon. The surrounding 121 acres have appropriately been designated a bird sanctuary. The shrine is open to the public.

477. Approximately 650,000 visitors use these county parks each year.

NORTHAMPTON COUNTY

478. None

PHILADELPHIA COUNTY

479. None

PIKE COUNTY

480. None

SCHUYLKILL COUNTY

481. None

WAYNE COUNTY

482. None

MUNICIPAL AREAS - PENNSYLVANIA

483. The City of Reading owns five tracts of land now used or available for nonurban recreation purposes. Four of these parcels were or are part of the City's water supply system. The fifth tract is an excellent park occupying a high hill overlooking the city and providing facilities for picnics, hiking, sightseeing, and nature study.

COMMERCIAL DEVELOPMENTS - PENNSYLVANIA

484. The Pocono Mountains are Pennsylvania 's major recreation region. The area includes Monroe, Pike, and Wayne Counties, the northeast part of Carbon County, and a narrow band along the eastern borders of Susquehanna, Luzerne, and Lackawanna Counties. Woods, trails streams, and lakes are the main attractions. Here, summer affords relief from heat and noise of the city. Winter attractions include hunting, skiing, and quiet relaxation. Camps for children and adults, plus large self-contained resort hotels, typify the Poconos. Many small establishments are in existence, but they offer few services and frequently function as family enterprises. This region owes its importance as a vacation and recreation center not only to the picturesque character of its terrain, but largely to its proximity to and accessibility from centers of urban population.

485. The first spots in the area to become resorts were Delaware Water Gap, Mount Pocono, and points along the Delaware, Lackawanna and Western Railroad. Today, the northeastern quarter of Monroe County has the most concentrated cluster of resorts. Other important centers have developed in the southeastern portion of the region along the Delaware River and the area between the northern tip of Lake Wallenpaupak and the boundary of Monroe County. Individual resorts are also

scattered over most of the western half of the region. A concentration of vacation farms may be found in the narrow strip of agricultural land situated between the eastern edge of the Pocono Mountains and the Kittatinny Ridge, on the southern boundary of the region. A recent estimate places the number of resorts at more than 300. At least 75 motels have invaded the resort industry by catering to guests who stay longer than overnight. A particularly heavy concentration of motels may be found on U.S. 611 between Stroudsburg and Mount Pocono. One hundred and twenty-five rooming houses and family unit rental cottages provide accommodations for the economy-minded. These facilities will handle 26,000 visitors per day, and 300,000 were accommodated during 1956.(42)

485. Variation in accommodations is pronounced. Some camps pride themselves on the opportunity for "roughing it". The other extreme is the plush modern hotel with luxurious accommodations. A comparatively recent development within the area is the sign "Honeymooners Only", and the sign means just what it says. As a result, the Poconos have become a rival for Niagara Falls, and local partisans claim this is the new honeymoon capital of the country.

486. The construction of the Northeast Extension of the Pennsylvania Turnpike through the extreme western edge of the Pocono Mountains makes the western and southern portions of the area much more accessible to Metropolitan Philadelphia than it was previously. It will undoubtedly attract greater development to this region, particularly the construction of motels in the vicinity of interchanges. Should the proposed east-west Keystone Shortway be constructed, having its eastern terminus at Stroudsburg, the southern and western portion of the Poconos would be made even more accessible to city dwellers. (43)

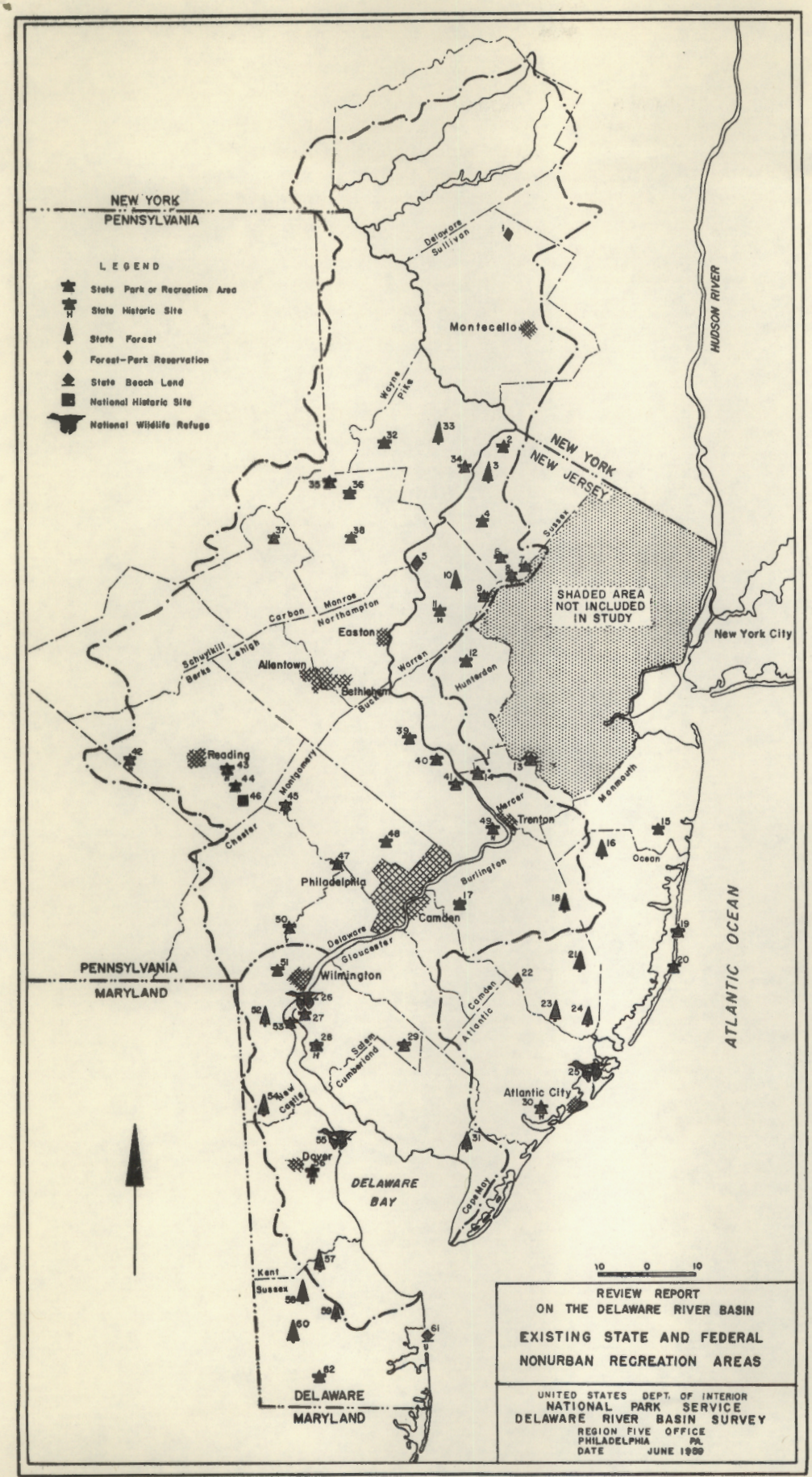


PLATE 6

EXISTING NONURBAN RECREATION AREAS

NEW YORK

1. Catskill Forest Preserve

NEW JERSEY

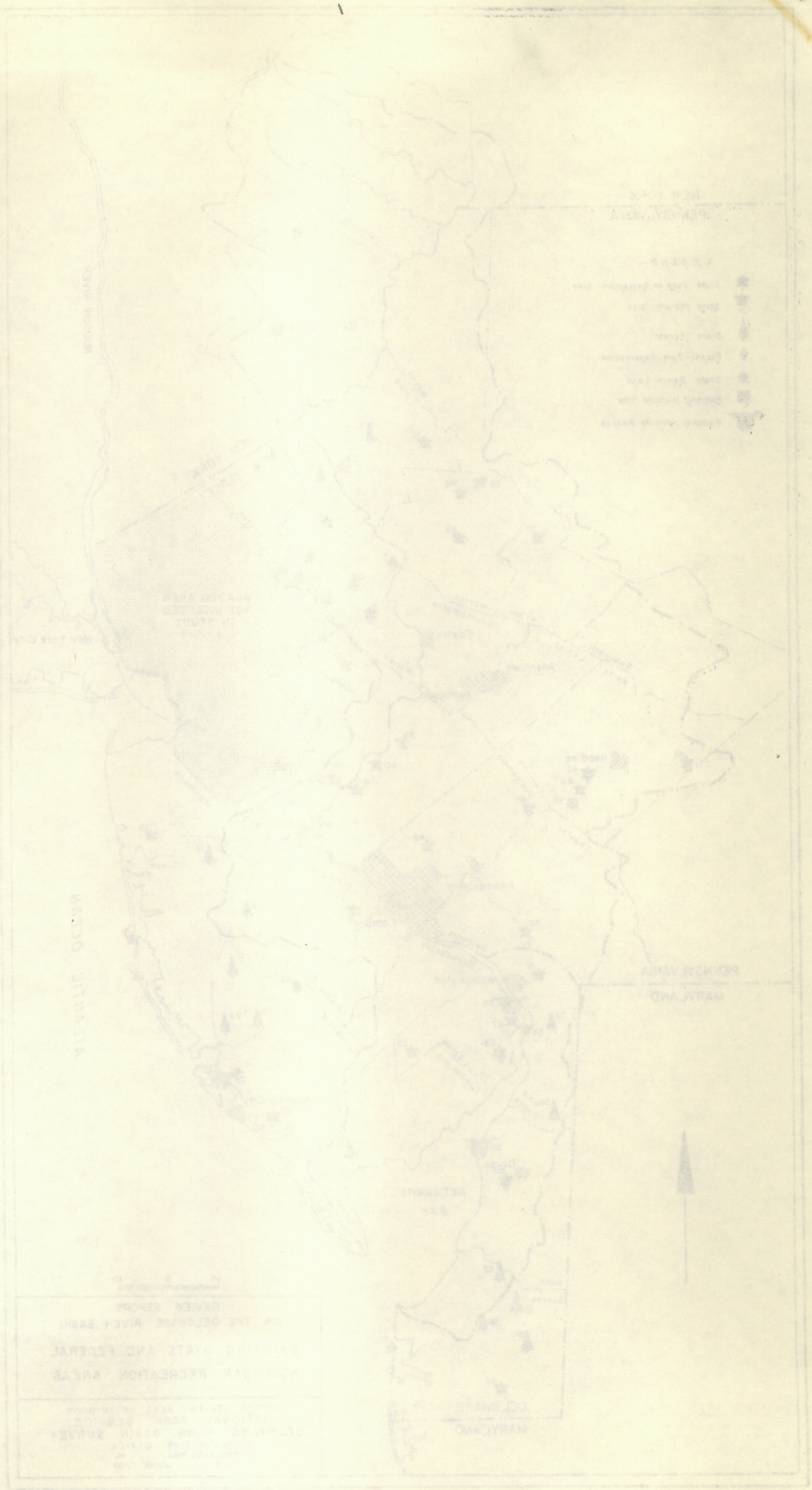
2. High Point State Park
3. Stokes State Forest
4. Swartswood State Park
5. Worthington Tract
6. Cranberry Lake State Park (Undeveloped)
7. Hopatcong State Park
8. Musconetcong State Park
9. Stephens State Park
10. Jenny Jump State Forest
11. Oxford Furnace State Historic Site
12. Voorhees State Park
13. Princeton Battlefield State Park
14. Washington Crossing State Park
15. Allaire State Park
16. Jackson State Forest
17. Mount Laurel State Park (Undeveloped)
18. Lebanon State Forest
19. Island Beach State Park
20. Barnegat State Park
21. Penn State Forest
22. Wharton Tract
23. Greenbank State Forest
24. Bass River State Forest
25. Brigantine National Wildlife Refuge
26. Killcohook National Wildlife Refuge
27. Fort Mott State Park
28. Hancock House State Historic Site
29. Parvin State Park
30. Somers House State Historic Site
31. Belleplain State Forest

PENNSYLVANIA

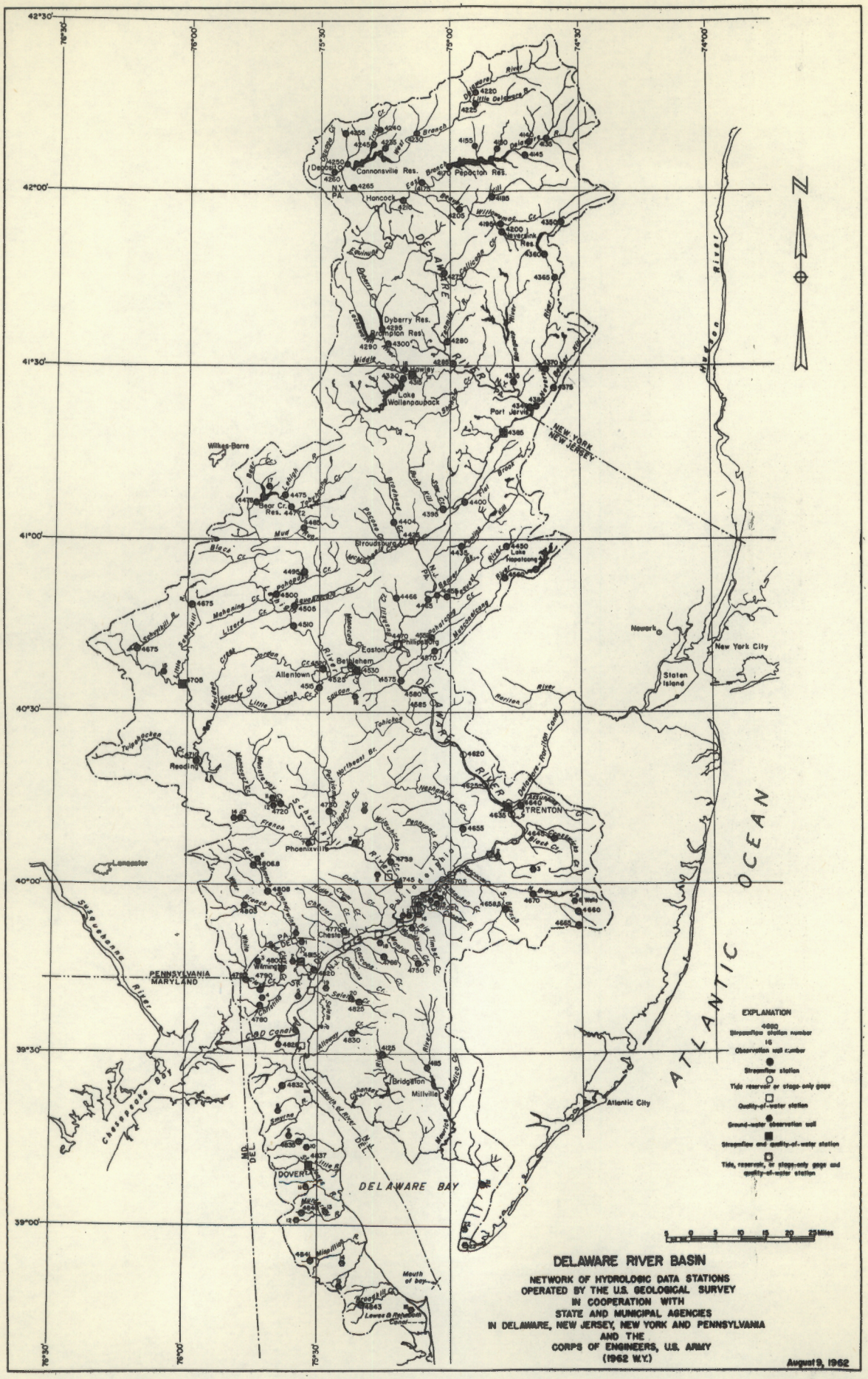
32. Promised Land State Park
33. Delaware State Forest
34. George W. Childs State Park
35. Gouldsboro State Park
36. Tobyhanna State Park
37. Hickory Run State Park
38. Big Pocono State Park
39. Ralph Stover State Park
40. Roosevelt State Park
41. Washington Crossing State Park
42. Conrad Weiser State Historic Site
43. Daniel Boone Homestead State Historic Site
44. French Creek State Park
45. Pottsgrove State Historic Site
46. Hopewell Village National Historic Site
47. Valley Forge State Park
48. Fort Washington State Park
49. Pennsbury Manor State Historic Site
50. Brandywine Battlefield State Park

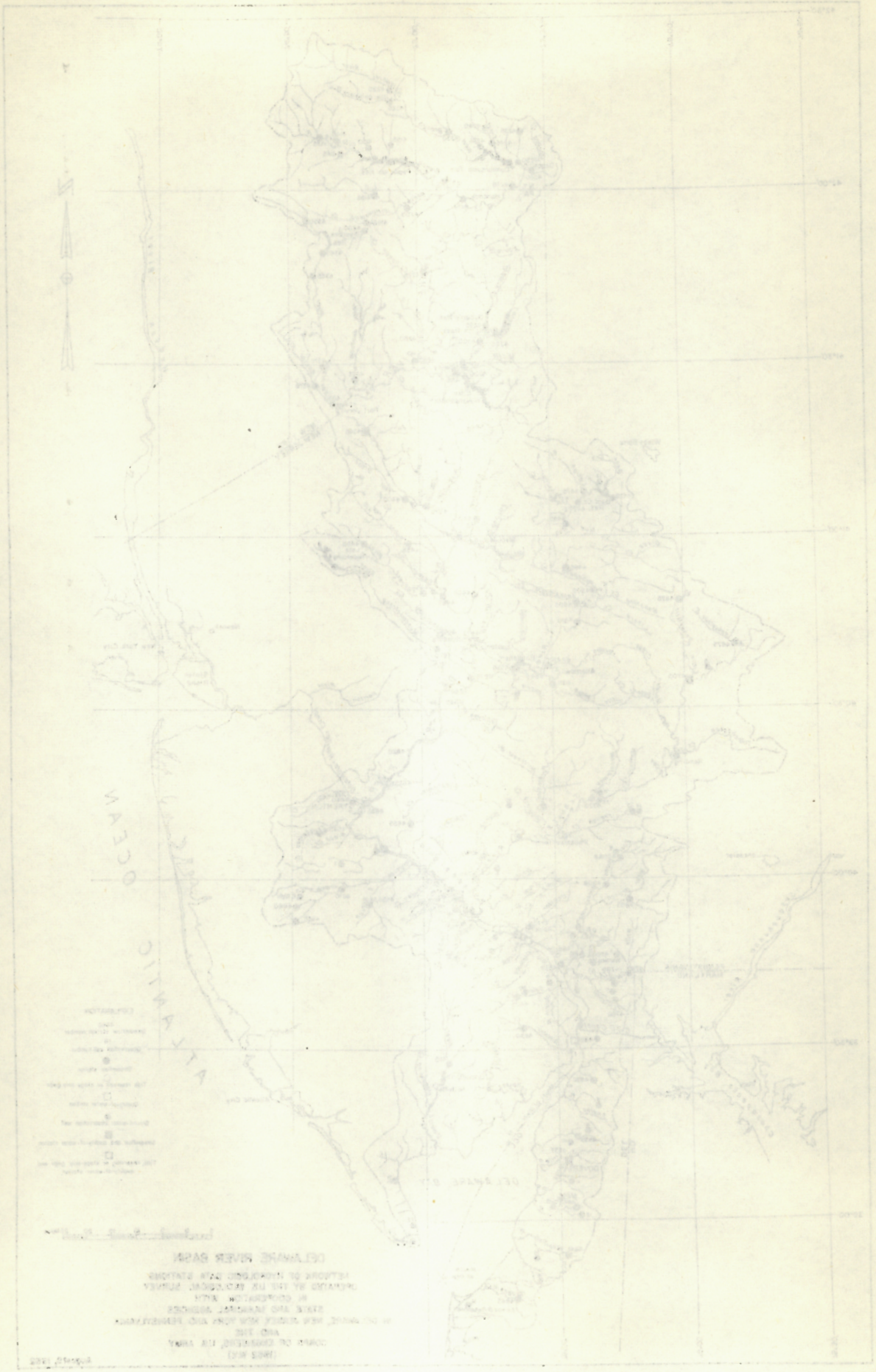
DELAWARE

51. Brandywine Springs State Park
52. Red Lion State Forest
53. Fort Delaware State Park
54. Blackbird State Forest
55. Bombay Hook National Wildlife Refuge
56. John Dickenson Mansion State Historic Site
57. Appenzellar State Forest
58. Ellendale State Forest
59. Redden State Forest
60. Owens State Forest
61. State Beach Lands
62. Trap Pond State Park



RIVER STAGE AND STREAM GAUGING STATIONS


DELAWARE RIVER BASIN
NETWORK OF HYDROLOGIC DATA STATIONS
OPERATED BY THE U.S. GEOLOGICAL SURVEY
IN COOPERATION WITH
STATE AND MUNICIPAL AGENCIES
IN DELAWARE, NEW JERSEY, NEW YORK AND PENNSYLVANIA
AND THE
CORPS OF ENGINEERS, U.S. ARMY
(1962 W.Y.)
August 9, 1962
EXPLANATION
4660
Streamflow station number
16
Observation well number
Streamflow station
Tide reservoir or stage-only gage
Quality-of-water station
Ground-water observation well
Streamflow and quality-of-water station
Tide, reservoir, or stage-only gage and quality-of-water station
5 0 5 10 15 20 25 Miles
ATLANTIC OCEAN
DELAWARE BAY
NEW YORK
NEW JERSEY
PENNSYLVANIA
MARYLAND
Cannonsville Res.
Pepacton Res.
Hancock
Dyberry Res.
Prompton Res.
Hawley
Lake Wallenpaupack
Port Jervis
Wilkes-Barre
Bear Cr. Res.
Stroudsburg
Lake Hopatcong
Easton
Phillipsburg
Bethlehem
Allentown
Reading
Phoenixville
TRENTON
Lancaster
Chester
Wilmington
Bridgeton
Millville
DOVER
Atlantic City
Newark
New York City
Staten Island
Hudson River
Susquehanna River
Chesapeake Bay
Delaware River
Raritan River
Mouth of bay
Lewes & Rehoboth Canal
42°30'
42°00'
41°30'
41°00'
40°30'
40°00'
39°30'
39°00'
76°30'
76°00'
75°30'
75°00'
74°30'
74°00'



RECIPROCAL AGREEMENT FOR THE CORRECTION AND CONTROL OF POLLUTION OF THE WATERS OF THE INTERSTATE DELAWARE RIVER

As embodied in:

New Jersey	-	Chapter 146, Laws of 1939
New York	-	Chapter 600, Laws of 1939
Delaware	-	Chapter 93, Laws of 1941
Pennsylvania	-	Act No. 123, April 19, 1945

Article I

Each of the signatory States pledges to each of the other signatory States faithful cooperation in the control of future pollution and in the correction of existing pollution of the waters of the interstate Delaware river and its west branch from the New York - Pennsylvania boundary line down to the Atlantic ocean. In order to effect such objects, each of the States agrees to enact adequate legislation, if necessary, to enable each such State so to require the treatment of sewage, industrial waste or other artificial polluting matter as to place and maintain the waters of the aforesaid interstate Delaware river, and of the tributaries thereof just above the confluence with the Delaware river, in the clean and sanitary condition required by the provisions of this agreement. Furthermore, each such State agrees so to enforce the provisions of these requirements, and other supplementary applicable legislation, if any, as to bring about the attainment of the objectives of pollution control and correction in accordance with such reasonable and effective programs as may be determined from time to time by the States in the manner prescribed herein.

Article II

It is recognized by the signatory States that due to such variable factors as location, size, character, and flow, and of the many varied uses of the waters of the interstate Delaware river and its aforesaid west branch, such as water supply, recreation, navigation, industrial developments, maintenance of fish life, shellfish culture, agriculture, and other purposes, that no single standard of sewage and waste treatment and of quality of receiving waters is practical for all parts of the river. Therefore, in order to apply minimum requirements for the attainment of correction and control of pollution which will be appropriate to the varied factors including the existing and potential quality and uses of the waters, the interstate Delaware river is hereby divided into four zones, to wit:

Zone I: Zone one is that part of the Delaware river and its west branch extending from the New York - Pennsylvania boundary line to the head of tidewater at Trenton, New Jersey, and Morrisville, Pennsylvania.

The drainage basin contributary to this zone, excepting part of the Lehigh River Basin, is relatively sparsely inhabited and contains few sewered communities and relatively few industrial establishments producing waste water. The streams draining this area being, in general, relatively clean and of high elevation are well adapted as sources of public water supplies, after treatment or purification.

The principal uses of the waters of the Delaware river in Zone one are expected to be for water supply after such treatment or purification as may be necessary, and for recreation, bathing, maintenance of fish and aquatic life, agriculture, and for other related purposes.

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The principal uses of the waters of the Delaware river in Zone one are expected to be for water supply after such treatment or purification as may be necessary, and for recreation, bathing, maintenance of fish and aquatic life, agriculture, and for other related purposes.

Zone II: Zone two is that part of the Delaware river extending from the head of tidewater at Trenton, New Jersey, and Morrisville, Pennsylvania, to a line drawn perpendicular to the channel of the Delaware river from the mouth of Pennypack creek in Philadelphia, Pennsylvania, to the corresponding point on the New Jersey shore.

The drainage basin contributary to this zone is somewhat more densely populated than that of Zone one, and it contains more sewered communities and industrial establishments.

The principal uses of the waters of the Delaware river in Zone two are expected to be for water supply, after treatment or purification, and for recreation, navigation, maintenance of fish and aquatic life, agricultural, industrial and other purposes.

Zone III: Zone three is that part of the Delaware river extending from the aforesaid line connecting the mouth of Pennypack creek in Philadelphia and the corresponding point in New Jersey to the Pennsylvania-Delaware boundary line.

The drainage basin contributary to this zone contains populous metropolitan areas including Philadelphia, Pennsylvania, and Camden, New Jersey.

The principal uses of the waters of the Delaware river in Zone three are expected to be for navigation, industrial water supply, and other purposes.

The water in this zone, however, should be of such sanitary quality that it will not be unfit for use as sources of water supply, will not be harmful to fish life, and will not adversely affect the quality of the waters of the tidal tributaries.

Zone IV: Zone four is that part of the Delaware river extending from the Pennsylvania - Delaware boundary line to the Atlantic ocean.

The principal uses of the waters of the Delaware river in Zone four are expected to be for navigation, industrial water supply, commercial fishing, shellfish culture, recreation and other purposes.

In order to attain conditions of cleanliness and sanitation of the waters of the Delaware river which will be consistent with the appropriate existing and future quality and uses of such waters, the following minimum requirements shall apply to the several zones herein provided. It is the purpose and intent of such requirements to apply to artificial (not natural) causes of pollution.

Article III

In order to put and maintain the waters of the interstate Delaware river and its west branch as aforesaid, in a clean and sanitary condition, no sewage, industrial wastes or other polluting matter shall be discharged into, or be permitted to flow or fall into, or be placed in any respective zone of the interstate Delaware river as herein established, unless such sewage, industrial waste or other artificial polluting matter shall first have been so treated as to produce an effluent which will meet the following minimum requirements:

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Zone 1: (1) Such effluent shall be free of noticeable floating solids, color, oil, grease, or sleek, and practically free of suspended solids.

(2) Such effluent shall be sufficiently free of turbidity that it will not cause noticeable turbidity in the water of the Delaware river.

(3) Such effluent shall show a reduction of organic substances of at least eighty-five per centum (85%) as measured by the bio-chemical oxygen demand, and furthermore, such effluent in no case shall exceed a biochemical oxygen demand of fifty (50) parts per million, and furthermore, the discharge of such effluent, after dispersion in the water of the river, shall not cause a reduction of the dissolved oxygen content of such water of more than five per centum (5%). The aforesaid reduction in dissolved oxygen content shall be determined by the average results obtained from dissolved oxygen tests made upon samples collected on not less than six (6) consecutive days from points in the river above and below the point or points of effluent discharge.

(4) Such effluent shall be of such quality that the most probable number of organisms of the Coli Aerogenes group shall not exceed one (1) per milliliter in more than ten per centum (10%) of the samples of sewage effluent tested by the confirmed test; and provided, further, that no single sample shall contain more than one hundred (100) organisms of the Coli Aerogenes group in one (1) milliliter.

(5) Such effluent shall be sufficiently free of acids, alkalis, and other toxic or deleterious substances, that it will not create a menace to the public health through the use of the waters of the Delaware river for public water supplies, for recreation, bathing, agriculture and other purposes; not be inimical to fish, animal or aquatic life.

(6) Such effluent shall be free of offensive odors and also be free of substances capable of producing offensive tastes and odors in public water supplies derived from the Delaware river at any place above or below the discharge of such effluent.

Zone 2: (1) Such effluent shall be free of noticeable floating solids, color, oil or grease, and practically free of both suspended solids and sleek.

(2) Such effluent shall be sufficiently free of turbidity that it will not cause noticeable turbidity in the water of the Delaware river.

(3) Such effluent shall show a reduction of organic substance of at least eighty-five (85) per centum as measured by the bio-chemical oxygen demand, and furthermore, such effluent in no case shall exceed a bio-chemical oxygen demand of one hundred (100) parts per million, and furthermore, the discharge of such effluent, after dispersion in the water of the river, shall not cause a reduction of the dissolved oxygen content of such water of more than ten (10) per centum. The aforesaid reduction in dissolved oxygen content shall be determined by the average results obtained by dissolved oxygen tests made upon samples collected on not less than six (6) consecutive days from points in the river above and below the point or points of effluent discharge.

(4) Such effluent shall be of such quality that the most probable number of organisms of the Coli Aerogenes group shall not exceed one (1) per milliliter in more than twenty-five (25) per centum of the samples of sewage effluent tested by the confirmed test; and provided, further, that no single sample shall contain more than one hundred (100) organisms of the Coli Aerogenes group in one (1) milliliter.

(5) Such effluent shall be sufficiently free of acids, alkalis, and other toxic or deleterious substances, that it will not create a menace to the public health through the use of the water of the Delaware river for public water supplies, for recreation, industrial and other purposes; nor be inimical to fish, animal or aquatic life.

(6) Such effluent shall be free of offensive odors and also be free of substances capable of producing offensive tastes or odors in public water supplies derived from the Delaware river at any place below the discharge of such effluent.

Zone 3: (1) Such effluent shall be free of noticeable floating, solids, oil or grease, and substantially free of both suspended solids and sleek.

(2) Such effluent shall be sufficiently free of turbidity that it will not cause substantial turbidity in the water of the Delaware river after dispersion in the water of the river.

(3) Such effluent shall show a reduction of at least fifty-five (55) per centum of the total suspended solids and a reduction of not less than thirty-five (35) per centum of the bio-chemical demand. (It is the intent of this requirement to restore the dissolved oxygen content of the river water in this zone to at least fifty (50) per centum saturation. To accomplish this it may be necessary in the case of certain wastes,to obtain reductions greater than those required under this item.)

(4) Such effluent, if it be discharged within two miles of a public water works intake or within prejudicial influence thereof, shall at all times be effectively treated with a germicide.

(5) Such effluent shall be sufficiently free of acids, alkalis, and other toxic or deleterious substances, that it will not create a menace to the public health through the use of the waters of the Delaware river for public water supplies, or render such waters unfit for industrial and other purposes; or cause the water of the Delaware river to be harmful to fish life.

(6) Such effluent shall be practically free of substances capable of producing offensive tastes or odors in public water supplies derived from the Delaware river.

Zone 4: (1) Such effluent shall be free of noticeable floating solids, oil, or grease, and substantially free of both suspended solids and sleek.

(2) Such effluent shall be sufficiently free of turbidity that it will not cause substantial turbidity in the waters of the Delaware river after dispersion in the water of the river.

(3) Such effluent shall show a reduction of at least fifty-five (55) per centum of the total suspended solids and shall be subject to such further treatment as may be needed to prevent a nuisance.

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water

(4) Such effluent, if it be discharged within prejudicial influence of a public works intake, or of recreational areas, or of shellfish grounds, shall at all times be effectively treated with a germicide, except that in the case of recreational area influence, such treatment need not be provided during the period from October fifteenth to May fifteenth of each year.

(5) Such effluent shall be sufficiently free of acids, alkalis, and other toxic or deleterious substances that it will not create a menace to the public health through the use of the waters of the Delaware river for public water supplies or render such waters unfit for commercial fishing, shellfish culture, recreational, industrial, or other purposes.

(6) Such effluent shall be practically free of substances capable of producing offensive tastes or odors in public water supplies derived from the Delaware river.

It is further recognized by the signatory States that the quality of the waters of the intrastate tributaries of the Delaware river and its aforesaid west branch are of interstate concern at their points of confluence with the Delaware river and its west branch. Therefore, it is also agreed that sewage, industrial waste or other artificial polluting matter discharged into, or permitted to flow or to fall into, or be placed in any intrastate tributary of the aforesaid Delaware river shall be treated to that degree, if any, necessary to maintain the waters of such intrastate tributary immediately above its confluence with the aforesaid Delaware river in a condition at least equal to the clean and sanitary condition of the waters of the Delaware river immediately above the confluence of such tributary.

Analyses and tests regarding the minimum requirements herein prescribed, shall be determined in accordance with the provisions contained in the American Public Health Association's latest edition on "Standard Methods for the Examination of Water and Sewage."

The aforesaid requirements as to treatment of sewage, industrial wastes or other artificial polluting matter and as to the sanitary quality of receiving waters are minima. It is the intent and purpose of these requirements to accomplish reasonable and adequate control and correction of pollution. Due to the many variable factors involved, however, and to the impossibility of forecasting future developments with certainty, it may be necessary in the future to impose additional requirements, particularly in Zones two and three.

The minima herein prescribed therefore shall be considered the first steps toward attaining the objectives sought, and if necessary may be required to be supplemented in the case that the general application of such minimum requirements does not adequately improve and maintain the sanitary quality of the waters of the Delaware river.

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