



New Jersey
Department of
Environmental
Protection

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Annual Report 1982

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

To the Honorable Thomas H. Kean,
Governor of the State of New Jersey
and Members of the New Jersey Legislature

This report summarizes the activities of the Department of Environmental Protection from January 1, 1982 to December 31, 1982. The year has been a challenging one, with federal budget cuts and pressing environmental problems demanding creative management solutions. With your support, the infrastructure bank concept is being realized. This innovative financial mechanism will provide a vehicle for state assumption of responsibility for federal programs while minimizing the financial impacts of these programs on users and on the state budget. We are looking for innovation in other areas as well: a "Green Trust" to provide long-term funding for Green Acres projects; pollution control advances like the bubble and emissions banking program which will enable industry to grow without sacrificing environmental standards; and revision of fee programs to assure that costs are covered by those affected, where possible.

As we implement these new programs and ideas, other areas of the department continue to grow in response to changing needs and technologies. Hazardous waste clean-up is well underway, with 65 Superfund sites ranked as eligible for federal funding. New hazardous waste disposal facilities are now being planned with comprehensive public participation. Water supply management in the state has taken a new direction with the establishment of the New Jersey Water Supply Authority. Important new acquisitions have been made on the Appalachian Trail and in the Pinelands. Our science and research unit provides an important backdrop for the whole department as it examines toxics and carcinogens in our environment and their impact on human health. And for the first time since 1976, a bald eagle chick was born . . . and flew into the wild.

This report will provide you with the highlights of an exciting year of environmental accomplishments for New Jersey.

ROBERT E. HUGHEY
Commissioner

*Cover: Sunrise after an ice storm in
Washington, New Jersey.
Photographed by James M. Staples.*

1982 Environmental Highlights

The NJ Infrastructure Bank—an innovative financial mechanism designed to leverage state, federal, and private funds for environmental programs—was announced and legislation to implement it moved forward on the state and federal level.

A new \$155 million Green Acres bond issue was proposed. Receipts would go into a “Green Trust” to provide long term funding for the Green Acres program.

65 New Jersey hazardous waste sites were placed on the federal Superfund priority list.

New Jersey became the first state to place its sections of the Appalachian Trail entirely on protected lands.

Agreements were signed with EPA for 14 Superfund clean-ups—more than any other state.

The largest Pinelands purchase ever made was completed, adding 5,513 acres to Wharton State Forest.

New Jersey joined New York, Pennsylvania, Delaware, and New York City in signing Good Faith Recommendations for cooperative management of the Delaware River Basin.

Recycling grants were awarded to 14 counties and 62 municipalities.

Over 99,000 taxpayers dedicated a portion of their state income tax refund to the Nongame and Endangered Wildlife Species Program, generating \$400,000.



The state accepted authority for three major air and water pollution control programs previously handled by the federal government.

A six year study on PCB's in Atlantic Coast fish resulted in advisory warnings to consumers and some sale bans.

Water consumption restrictions, first imposed during the drought of 1980-1981, were lifted.

New Jersey's lone pair of nesting bald eagles successfully raised a captive-bred eagle chick.

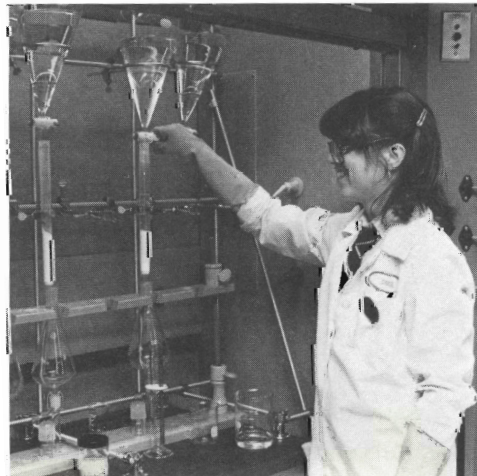
A comprehensive four year plan was announced for remedial clean-up of over 100 hazardous waste sites.

New Jersey legal action on Outer Continental Shelf leasing resulted in protection of our coast and the marine fishery industry.

The New Jersey Water Supply Authority became an independent entity designed to manage water supply facilities for the state.

A new division—Waste Management—was formed.

A planning group was established in the Commissioner's Office to coordinate planning, project review, and regional program coordination.



Natural Resources

Several initiatives were taken in 1982 in the area of natural resources management. Work began on preparation of the *Natural Resource Plan for the Eighties*. The plan intends to outline goals and objectives of the divisions and will serve as long and short term guidelines for capital improvements and funding.

In line with this plan, a greater emphasis is being placed on achieving multiple environmental management results from existing

grants and future Green Acres programs. This includes protecting aquifers and watersheds and considering stream encroachments when approving grants for recreational purposes.

The Resource Interpretive Service was established in 1982 in an effort to improve the outreach activities of the department. Progress is being made to improve the department's education programs, publications and displays used in informing the

public about environmental issues

A new bond proposal is being initiated which will create a major loan program for local natural resource projects. This "Green Trust" will provide \$93,000,000 in state bond funds for loans to local governments. The local program will be divided into three components under which project costs are paid from various mixes of state loans, state grants, and private donations ranging from 25 percent to 100 percent loans.

Fish, Game and Wildlife

With the dedication of the \$10 million Pequest Trout Hatchery and Natural Resources Education Center in December 1981, New Jersey opened one of the most modern fish hatcheries and conservation education centers in the United States. By 1984 the trout hatchery will be supplying all of New Jersey's brook, brown and rainbow trout production needs. Expected to open to the public in the summer of 1984, the Pequest Natural Resource Education Center will offer exhibits, picnic grounds, a "fish for fun" pond, fishing instructions, and an interpretive trail.

Lake trout stocked in 1977 at Round Valley Reservoir became legal last spring averaging five to six pounds. Thousands of anglers spent many happy hours seeking these trophy fish.

Some 1.5 million resident and 1.25 million non-resident recreational fishermen used New Jersey's marine waters this year. In addition, more than 5,000 commercial fishermen derived all or part of their livelihood from the sale of their catch. These activities contributed significantly to New Jersey's economy.

To stimulate the marine fishing industry, New Jersey initiated a

pioneering joint agreement between a commercial fishery in Cape May and a Portuguese squid processing vessel in September. U.S. fishermen catch squid and the foreign vessel processes and freezes them for shipment. More than 200 metric tons of squid were harvested by U.S. fishermen in New Jersey.

In the state's second wild turkey harvest, 1,200 hunters shot 96 wild turkeys during the spring gobbler season. Wild turkeys are now found in 10 of New Jersey's 21 counties.

A major land acquisition during 1982 was Union Lake at Millville in Cumberland County. This 800 acre



Wild turkeys are released for the state's second harvest. The birds are now found in 10 of New Jersey's 21 counties.

Fish, Game and Wildlife continued

lake is the largest in Southern Jersey and has excellent fishing, boating and hunting along the western shore. In addition to the lake, about 4,300 acres of woodland was acquired on the western shore and at the headwaters of the lake.

New Jersey's check-off law, which allows citizens to dedicate \$2, \$5, or \$10 from their state income tax refund to the Nongame and Endangered Wildlife species program, generated \$400,000 from

99,000 taxpayers in 1982. This was the second highest amount in the country for the first year of a check-off program.

A major accomplishment of the Nongame and Endangered Species program was the successful introduction of an eagle chick into New Jersey's last remaining bald eagle nest. Although this nest has existed for over 40 years, New Jersey had not produced young for six years because of pesticide-related egg

shell thinning. In the spring of 1982, a three week old captive-reared chick was placed in the nest. When it flew into the wild 50 days later, it was the first time since 1976 that an eaglet had "fledged" in New Jersey.

Peregrine falcons returned to all four of the coastal hacking towers and laid a total of 16 eggs. Ten young falcons fledged, the greatest number in New Jersey since the birds started breeding again in the state in 1980.

Parks and Forestry

Attendance at state parks and forests increased 17 percent in 1982, thanks in part to two new policies. The first, "Free Tuesdays," allowed visitors free admission to any state park on Tuesdays; the second allowed any car with five or more people to enter a park free of charge on any day of the week.

During six weeks in July and August, 97 participants in the Environmental Youth Program (EYP) completed 27 projects at nine parks worth \$160,000, including a boat house at Wawayanda State Park and sea wall fortification at Fort Mott. Each enrollee also participated in 10 hours of environmental education per week. The program cost only \$125,000, resulting in a net savings of \$35,000. The EYP has many other benefits. It accomplished needed conservation work on public property; it provided 97 young people with gainful employment; and it offered them the opportunity to learn about New Jersey's environment and heritage.

Fifteen thousand visitors enjoyed an Ethnic Festival at Liberty State Park, Jersey City, on September 11 and 12. Restoration work continues to develop the potential of this unique urban park.

Construction neared completion on the Liberty State Park Interpretive Center in 1982. Liberty State Park continued to have increasing numbers of visitors. It gets the highest use of any park in the state system with over one

million visitors in 1982.

Several facilities were completed during 1982. On October 2, at High Point State Park, Governor Kean, Commissioner Hughey and the NY-NJ Trail Conference opened new sections of the Appalachian Trail and signed a Cooperative Agreement to formally recognize a commitment to protect, preserve, maintain and manage the Appalachian Trail in New Jersey. New Jersey is the first state of 14 to have all the trail within its borders, some 70 miles, in public ownership.

The boat launching ramp at the Leonardo State Marina opened for public use on April 26. The ramp is designed so two boats can be launched simultaneously. The parking lot at the boat launching ramp can accommodate

approximately 100 cars with trailers.

The Shepherd Lake Bathing Facility and the Delaware and Raritan Canal Trail (Scudders Falls Section) were also opened in 1982.

Nearly 5,000 requests for forestry services and assistance for private woodland owners, municipalities, wood product industries, educational institutions, conservation districts, environmental associations, and other state agencies were provided during the year. Forest Management Plans were prepared for 31,367 acres of forest lands in addition to prescribed burning plans for 18,000 acres and reforestation plans for 1,000 acres.

Approximately 400,000 acres of forest land were surveyed to assess



Prescribed burning is done to protect trees at the New Lisbon Forest Experiment Station. Foresters burn ground debris in late winter to reduce the wildfire danger later in the year.

Parks and Forestry continued

gypsy moth damage, and 13,000 acres were treated.

Forest fires burned over 11,591 acres in 1,666 incidents. Total cost to suppress these fires was \$260,000. The number and severity of forest fires relate directly to weather, fuels, risk and effectiveness of the fire control organization. Approximately 2.7

million acres of forest, worth some \$7 billion, require protection from wildfire.

This year, state residents obtained over 4,000 cords of firewood through the Homeowner Firewood Program, producing over \$52,000 in state income and providing low cost wood fuel.



Governor Thomas Kean and DEP Commissioner Robert Hughey opened new sections of the Appalachian Trail this year, making New Jersey the first state to have the entire trail in public ownership.

Green Acres

Seventy-six local grant projects were approved in 1982. Twenty-seven of these were for acquisition grants to municipalities totaling \$7,747,638 and forty-nine were for development projects totaling \$12,131,956.

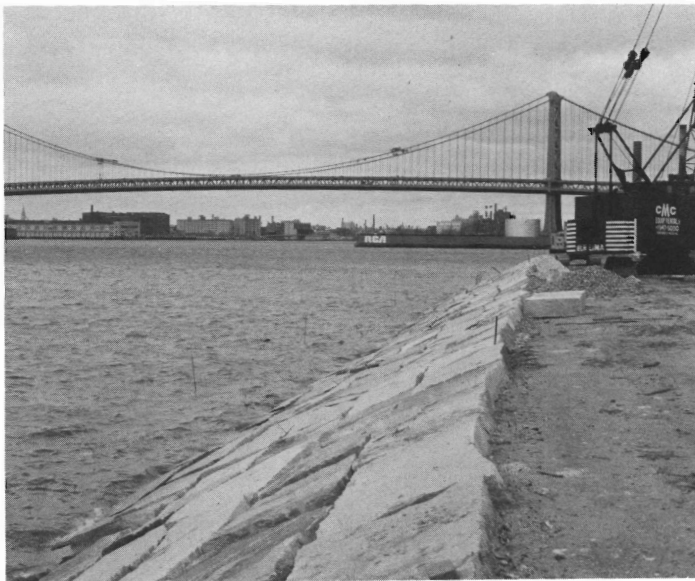
The local acquisition grant program accounted for 2,656 acres being acquired at the local level. Some outstanding projects completed include: Red Bank Marine Park, Berkley Township Golf Course and Recreation Area, Middlesex County's William Warren Park, Ocean County's

Cattus Island Park, pool projects in Elizabeth and Essex County's West Side Park.

New Jersey acquired over 12,000 acres of Pinelands in Burlington and Ocean Counties. The lands will be managed as additions to state parks, forests and wildlife management areas. The major acquisition areas include a 5,496 acre addition to the Wharton Tract along the Oswego River in Bass River Township, Burlington County and a 4,321 acre area that joins Double Trouble State Park to Greenwood Forest Wildlife

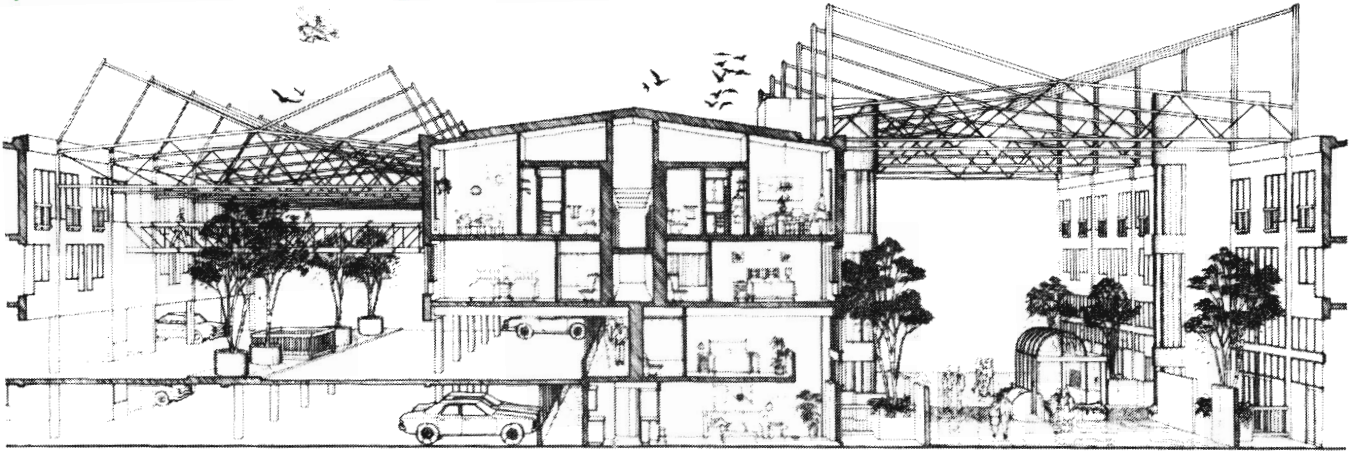
Management Area along the Cedar Creek in Lacey Township, Ocean County. Federal reimbursement of 75 percent from the Land and Water Conservation Fund has been approved.

During 1982 state acquisitions for recreation and conservation areas totaled 16,353 acres, with total expenditures/obligations of \$16,409,333. Notable acquisitions include the Appalachian Trail, Union Lake Wildlife Management Area and Spruce Run Recreation Area.



With the help of Green Acres funds, the state is enjoying a renaissance of its urban waterfronts. Shown here are before and after pictures of Ulysses S. Wiggins Park along the Camden waterfront.

Historic Preservation



The historic Ford Motor Company building in Edgewater is being redesigned to provide housing, commercial, and recreational uses under the federal Tax Act program.

In 1982, fourteen grants, totaling \$155,800, were awarded for county and municipal surveys, a Pinelands Cultural Resource Plan, a statewide survey of Black Historic Sites, and publication of a preservation newsletter, *Preservation Perspective*.

Five-thousand properties, including historic sites, buildings and districts throughout the state, were nominated to the State and National Registers of Historic

Places. They included historic districts along the Delaware and Raritan Canal at Rocky Hill, Lambertville, Titusville and East Millstone, and an early 20th century Russian ethnic community at Cassville.

Some 350 state and federal projects were reviewed to determine their impact on state and national register properties. The office also assisted state and federal agencies in mitigating

adverse effects on register-eligible properties.

The Tax Act program offers substantial tax benefits for the rehabilitation of historic buildings for income producing purposes. Activity in this program doubled in 1982 with 64 individual buildings evaluated for significance and 51 projects of rehabilitation, representing a potential tax credit of \$26 million.

Coastal Resources

The division continued to plan for and manage development and other activities in New Jersey's coastal zone, issuing 621 permit decisions under CAFRA, the Wetlands Act and the Waterfront Development Act, initiating beach nourishment and jetty construction projects under the New Jersey Shore Protection Master Plan in Ocean City, Atlantic City and Longport, and preparing the state's first long range dredging plan.

The Tidelands Resource Council adopted 854 claim maps for tidally flowed land along the Atlantic Coast and the state's northern Waterfront. At public meetings around the state, the Tidelands claim process was explained to interested public officials. Preparation was begun of conveyance overlay maps that show what land has been granted by the state to upland owners.

Local Coastal Grants totaling

\$105,000 were awarded to ten municipalities for waterfront park development, including a walkway along the Passaic River, mixed use redevelopment of Newark's downtown waterfront, and recreational development of Elizabeth's Arthur Kill Waterfront. An earlier local planning grant



Development of the Hudson River Waterfront is one of the projects being funded with a local coastal grant.

came to fruition in 1982 as Bridgeton completed a block long waterfront park along the Cohansey River in its business district. As part of a strategy to revitalize the Hudson River Waterfront, a plan is being developed for a walkway to extend from Fort Lee to Bayonne.

In July, a program attended by 400 people commemorated the 1962 northeaster which caused millions of dollars in property damage and killed 12 people on Long Beach Island. To prevent similar loss of life and property in the future in this vulnerable area, the Division of Coastal Resources is working with the Division of Water Resources and the New Jersey State Police under a \$120,000 grant from the Federal Emergency Management Agency to prepare a coastal storm hazard mitigation strategy for 24 miles of oceanfront from Brigantine to Ocean City.

Infrastructure Bank

Much of New Jersey's environment is dependent on sound infrastructure. Infrastructure is the underlying system upon which society depends for its basic physical needs (for example: wastewater treatment, water supplies, resource recovery, highways, etc.). In the past, infrastructure needs were financed principally by federal grants with some state or local matching funds. Dramatic cutbacks in all federal infrastructure grant programs has forced states to consider alternative funding options.

Since March 1982, DEP has been working with other state agencies, federal officials and the financial community to develop innovative approaches to financing the capital needs of New Jersey. This effort peaked on September 29, 1982 when Governor Kean announced his proposal for a New Jersey Infrastructure Bank. The bank proposal has been hailed as an important and creative step forward in solving the state's infrastructure financing problems.

The bank, as proposed, will be a non-profit institution which functions solely as a financing vehicle for infrastructure programs. It will be capitalized with proceeds of state general obligation bonds, federal funds, and specific state revenues. Using these funds, the bank will operate revolving loan accounts, funded by appropriations for particular purposes, which offer low or no-interest loans for some share of project costs. The bank also can finance the local share of project costs on behalf of communities where savings can be achieved through pooling of small issues, improved credit ratings, and reduction in issuance costs. Further, the bank can issue revenue backed debt of its own for state debt service requirements.

The wastewater treatment program provides a good example of how the bank will function. This federal grant program is authorized through Fiscal Year 1985, at which point it may be terminated by Congress. The remaining grants



Construction of wastewater treatment facilities is one program which will benefit from the New Jersey Infrastructure Bank.

are sufficient to fund only 23 of the 237 eligible sewer projects in the state. If these funds are captured in the bank, supplemented with state funds and used to make low or no-interest loans for project construction, every one of the 237 localities would be assured of assistance in completing their respective project. Without the bank, each of the 237 communities is required by federal law to construct their projects by 1988 using 100 percent local financing if necessary. Funding through the bank would cut costs in half or less compared to local financing. If future federal funding is greater than anticipated, projects can be funded more quickly, at even less cost to localities, through the bank. If not, maximum use of existing funds in a loan program becomes even more critical, since it guarantees all projects will be reached eventually.

New Jersey already has spent \$1.8 billion in federal funds in the sewer program, and there is no money left for rehabilitation, repair

or additional construction. Through the bank, not only will all projects receive funding, but the bank's capital will be retained to finance future wastewater needs.

Legislation has been introduced at the state and federal level to implement the bank concept.

The New Jersey Infrastructure Bank will allow the state to provide its citizens with the basic underpinnings to environmental improvement and economic growth. It will result in the creation of 50,000 jobs as a result of the wastewater program alone. Increases in project costs due to inflation can be minimized as projects are funded sooner, on a predictable schedule. Local planning will be greatly facilitated, and local governments will receive financial assistance where otherwise they would be left largely unequipped to deal with enormous financial needs. This proposal is a potential national prototype for all states attempting to solve the problem of financing capital needs.

Water Resources

Governor Kean, along with the Governors of New York, Pennsylvania and Delaware, and the Mayor of New York City, signed the Interstate Water Management document which recommends important steps on the long-term management of the waters of the Delaware River Basin. The droughts of the 1960's and the 1980's showed that there are insufficiently developed water resources in the basin to provide for depletive uses, instream requirements and water diversion to points outside the basin as provided in the Supreme Court Decree of 1954 which apportioned the waters of the Delaware. New Jersey, New York, Pennsylvania, Delaware and the City of New York are parties to the decree.

The 39-page document, a historic agreement, accepts reductions in each party's allotment of Delaware River water during droughts but also calls for the projects to provide flow augmentation; water conservation; a basin-wide water allocation program; interim and long term salinity standards for the Delaware estuary, and a drought operations formula.

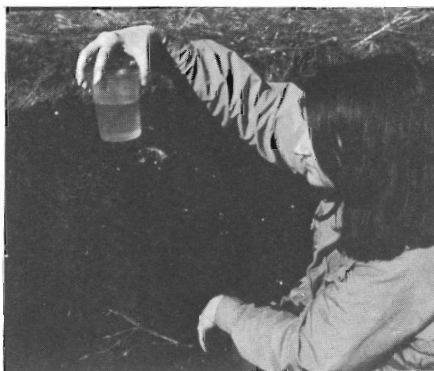
As a direct result of a July 1982 Jersey City water system failure, attention was focused on the need for improved reliability of the infrastructure through the promotion of improved rehabilitation and maintenance programs.

Through the use of the 1981 Water Supply Bond funds, loan opportunities to rehabilitate water supply systems were made available to public purveyors. This represents a major step in keeping New Jersey's infrastructure viable for all our citizens. Sixteen purveyors applied for loans in the amount totaling \$12 million out of the recent \$25 million appropriation.

The water supply rehabilitation program is one aspect of the Statewide Water Supply Master Plan which was adopted in April 1982. Progress on other programs of the action plan is advancing as scheduled.

Water consumption restrictions, imposed during the drought of 1980-81, were lifted by Governor Kean in April.

Water quality in the state's 38 watersheds remained stable and in some cases, it improved. Significant causes of improved water quality are the improvement in treatment works discharges, stricter management controls (from industrial pollution to stormwater management) and non-point source cleanups.



A priority system has been developed for investigation of groundwater pollution.

One important factor in the improvement is the result of the Septage Task Force. Through tough enforcement actions and surveillance, the state has reached 98 percent compliance of all septage haulers for the proper disposal of septage wastes.

A major non-point source problem in the Navesink area is being cleaned up with the cooperation of local landowners resulting in potential reopening of additional shellfishing resources. Making shellfishing beds viable closer to markets will save consumers money. The results of the pilot study will be investigated for use in other areas along the coast.

Non-point source pollution has been found to be the major pollutant source in every lake studied as part of the lakes management program. 1983 will see the implementation of non-point source controls and the development of local agencies

capable of administering long-term management programs.

Permitting point source discharges is a significant aspect of the state's cleanup program, and to aid in the implementation of this program, the federal National Pollutant Discharge Elimination System (NJPDES) program was delegated to the state of New Jersey on April 13, 1982. The state program is more comprehensive than the federal, including regulating discharges to groundwaters which are utilized by over 60 percent of the state's residents daily.

Permits have been issued for sludge and septage disposal sites, spray irrigation of wastewaters and surface impoundments. Additionally, the first indirect discharge permits (discharges to domestic treatment works) were issued to control toxic discharges to sewage treatment plants including hazardous waste site leachate treatment and disposal.

Efforts continue to make the new program more efficient and this includes a computerized tracking system of all compliance and permit dates, an established priority system for enforcement action against violators and the preparation of an annual financial statement to enhance accountability.

Efforts are now underway to coordinate permit review and processing to integrate and consolidate permit issuance to major facilities requiring multiple NJPDES permits.

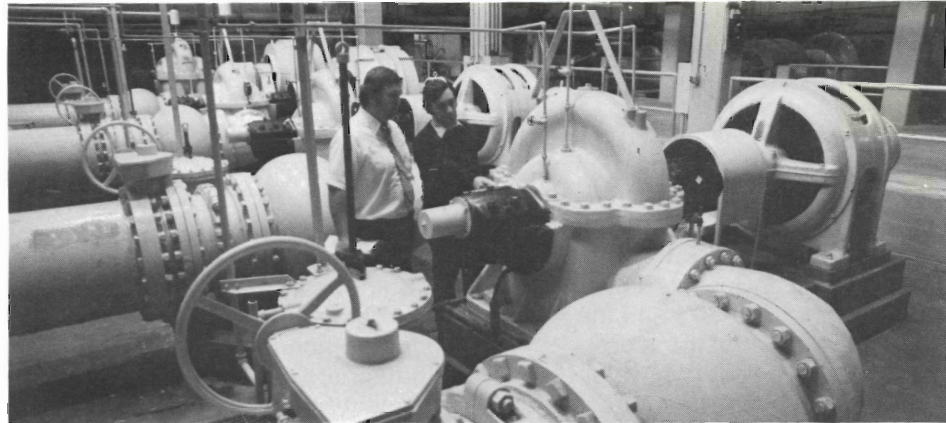
A 1982 needs assessment for award of federal construction grant monies revealed that New Jersey moved from ninth place to second place in the national ranking ahead of other states like California and Pennsylvania. The impact of this will be a larger allotment for the state from funds appropriated by Congress. In 1981, all federal dollars were awarded for projects. This represents a first, since never before has the state exhausted the federal allotment. The result will bring New Jersey closer to meeting its short- and long-term water quality goals.

Water Resources continued

The division is actively pursuing the delegation potential of several programs under the County Environmental Health Act. Cooperative monitoring agreements are being finalized with three counties for monitoring of ambient water quality conditions—both surface and groundwater. The agreements are the result of prior efforts to integrate the groundwater network in accordance with the Integrated Ground Water Strategy. This strategy has received national attention as a model on how to develop similar networks.

Groundwater pollution management efforts have begun to show results. In one such case of aquifer restoration, five years of pumping and treatment, at an estimated \$5 million cost to the company, is ready to be discontinued. The organic contaminant concentrations have been reduced by 90 percent since initiation of the cleanup. This aquifer restoration program is the largest cleanup of its kind in the state and possibly the nation.

286 groundwater pollution cases were investigated in 1982,



Water quality in the state improved due to stricter management controls and high standards for discharges from treatment plants.

averaging 40 cases per geologist. To help in addressing such a caseload, a priority system was developed. This system will be used extensively by the new Geologic Survey which will spend a considerable amount of time working on hazardous waste cleanups along with other duties.

This new element combined the talents of the New Jersey Geologic Survey with the Groundwater Management Bureau to become a major component of the division. The new element will provide

services which will include resource evaluation, geodetic needs, mapping services, well drilling and geophysical surveys.

The Division of Water Resources plays a key enforcement role in the state's efforts to clean up hazardous waste sites. Many of the 65 EPA priority Superfund sites in New Jersey are active Water Enforcement cases. Some of these cases are unique in that the cleanup is accomplished through the use of private sector dollars rather than public funds.

Water Supply Authority

The New Jersey Water Supply Authority, created on October 7, 1981, to acquire, finance, construct and operate wholesale water facilities, is playing an important role in meeting the state's water supply goals. New Jersey's water supply systems must be capable of permitting the state to experience periodic drought without endangering public health or the economy.

The six public members of the Authority, appointed by the Governor, include recognized experts in the field of water resource management and public finance, and also represent the agricultural community, industrial water users, residential water users and private watershed associations.

The Authority's immediate attention was directed to the wide search for and appointment of their

first executive director, Rocco Ricci.

On July 1, 1982, the Authority's operations were severed from the state's budgetary, administrative and fiscal control systems, and it was necessary to move quickly to establish fiscal self-sufficiency. The Authority retained an independent financial advisor, Public Financial Management-Philadelphia Suburban Corp., and a C.P.A. firm, Coopers and Lybrand. During 1982, the fiscal advisors were involved in the establishment of the proposed rate adjustment to cover debt service.

The activities in the initial year of Authority operation focused on establishment of a new rate program, a management structure and sound financial systems and records. There was also significant progress made during this first year in moving forward with the capital improvement program for

the Spruce Run/Round Valley Reservoir System-Delaware and Raritan Canal. A key project is to restore the Delaware and Raritan Canal's capability to divert 100 million gallons per day from the Delaware Basin to the Raritan Basin as authorized by law.

Work was completed on key segments of the construction program to improve the safety monitoring capability at the four dams at Spruce Run and Round Valley Reservoirs. This work is a result of the recommendations based on a U.S. Army Corps of Engineers report on the safety of these facilities.

Work also proceeded on the construction of a 60 million gallons per day interconnection pumping station. When completed in early 1983, it will give the Authority the ability to integrate the management of its water resources from the Delaware and Raritan Basins.

Air Quality

The department has long recognized the need to control the type and quantity of pollutants that are emitted within the state, and a body of regulations and administrative procedures have been developed to address the problems associated with air pollution. Under federal law, the State Implementation Plan (SIP) must outline various pollutant reduction strategies for both individual and commercial facilities and motor vehicles. These strategies must enable the state to meet the National Ambient Air Quality Standards by 1987.

New Jersey continues to satisfy the national air quality standards for sulfur dioxide and nitrogen dioxide, and most of the state meets the air quality standards for particulates. However, New Jersey has failed to meet the air quality standards for the two automobile related pollutants, carbon monoxide and ozone. The department completed a major revision of the SIP for the attainment and maintenance of ozone and carbon monoxide air

quality standards. The revised SIP has been judged by the EPA to demonstrate attainment by December 31, 1987.

Much has been done in the last decade to bring about an improvement for these two pollutants. Carbon monoxide air quality in New Jersey is improving at a rate of roughly 8 percent per year, and there has been a slow, but perceptible, improvement in the ozone air quality. This improvement is primarily attributable to vehicle emission control measures.

The revised SIP indicates that New Jersey can meet the standards for these pollutants through a combination of strategies with much emphasis being given to New Jersey's pioneer vehicle emission inspection/maintenance (I/M) program. The SIP commits New Jersey to evaluate a variety of reasonably available strategies for possible additional benefits. Existing regulations will be examined to tighten standards, expand coverage and reduce exclusionary exemptions for major

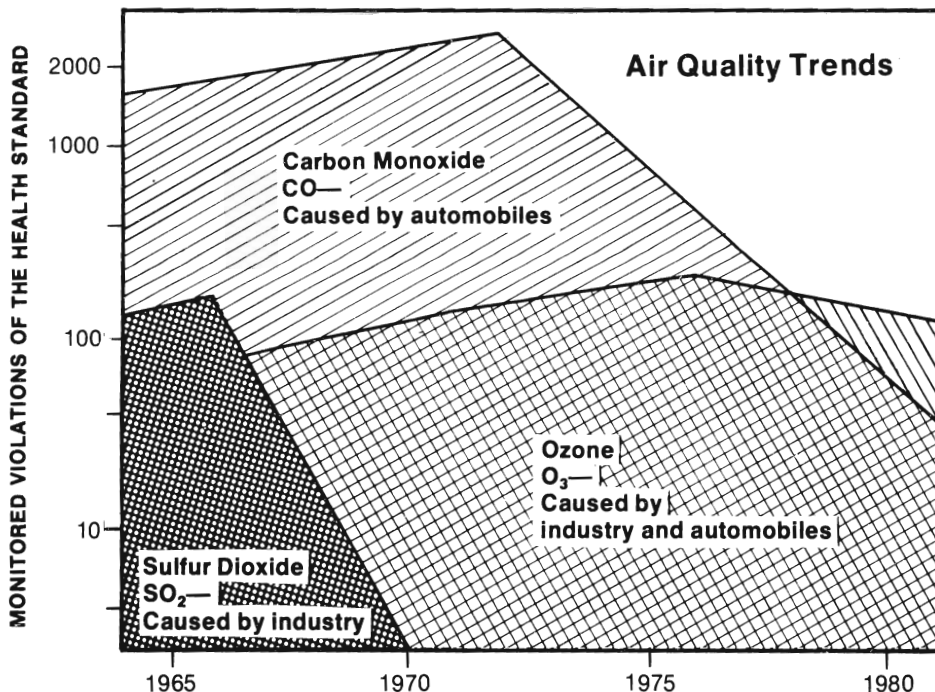
air pollution sources.

The SIP, therefore, is a dynamic, complex process. Cooperation at all levels of government and a sincere effort by the industrial community are necessary if the requisite air quality improvements are to be achieved.

The DEP significantly upgraded the state's air pollution control regulations to supplement New Jersey's solid and hazardous waste management programs.

The department adopted stringent standards for the design and performance of hazardous waste incinerators which will minimize the risk of public health threats from hazardous air pollutants. Efforts are underway to control the addition of hazardous wastes to fuel oil by restricting its use to large, efficient boilers with adequate safeguards. The DEP staff maintained a round-the-clock, comprehensive monitoring effort to evaluate and characterize the performance of the EPA's new mobile hazardous waste incinerator. This state-of-the-art incinerator could prove to be a key element in many of the hazardous waste clean-up projects in the state. In addition, guidelines have been developed for controlling air pollutants from resource recovery facilities and other non-hazardous waste incinerators. Stringent air pollution controls will alleviate much of the public concern surrounding the siting decisions of these facilities.

Alternative emission reduction strategies were developed and adopted. Under the state's innovative bubble rule for volatile organic substances, several large industries were able to effect considerable savings by installing more efficient pollution controls on large sources instead of more costly controls on smaller sources. The department implemented its own emission banking procedures and assisted Middlesex County in developing a program for reserving emission reduction credits to offset emissions from new sources. Both of these initiatives enable industry to reduce air pollutant emissions in



Fuel burning rules brought SO₂ levels within health standards around 1970. CO has shown considerable improvement due to emission control devices on cars, the statewide inspection and maintenance program and transportation control measures. O₃ progress has been made, but additional hydrocarbon controls on both industry and automobiles will be required.

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Endangered a
Non-game Spe
Enforcement
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DEP AT A GLANCE

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EMERGENCY RESPONSE COORDINATION

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COASTAL RESOURCES

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Liberty State Park
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RESOURCE INTERPRETIVE SERVICE

OFFICE OF ENVIRONMENTAL ANALYSIS

NEW JERSEY OUTDOORS

OFFICE OF HISTORIC PRESERVATION

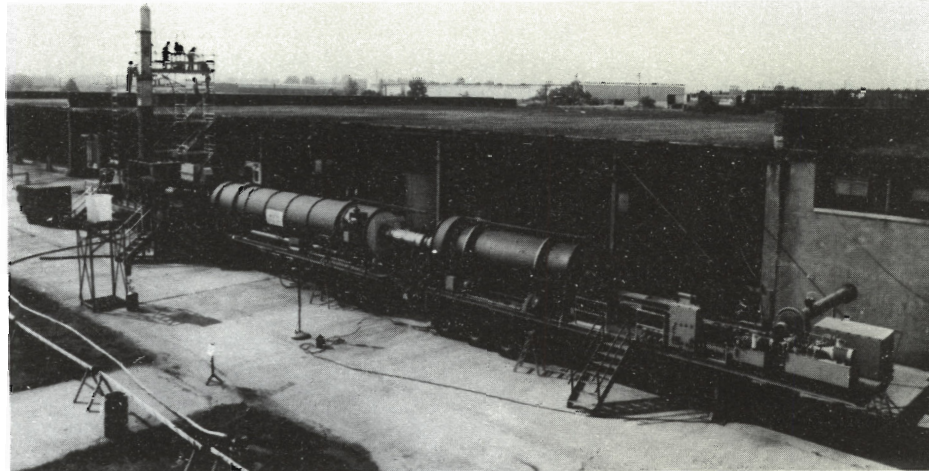
Air Quality continued

the most cost-effective way, improving air quality while enhancing opportunities for economic growth.

Substantial revisions to the sulfur-in-fuel regulations were completed to allow industrial sources to use cheaper high sulfur oil and to assist industry in converting to coal without any degradation of air quality. The "oil-gas bubble" revision allows industry to burn a combination of natural gas and high sulfur oil instead of expensive low sulfur oil. In addition, the "clean conversion incentive" allows industrial sources planning to permanently convert from oil to coal, or solid waste, to temporarily use high sulfur oil, provided air quality standards are protected. The cost saving generated by using the cheaper fuel oil is then used to defray the cost of stringent air pollution controls while burning coal or solid waste. Both of these efforts reduce emissions and the cost of pollution control.

One utility coal conversion was approved, with the provision that highly efficient air pollution controls be installed which will reduce particulate emissions below those from oil. Three major industrial conversions to coal also were approved.

The DEP opposed Consolidated Edison's proposal to convert its Ravenswood and Arthur Kill generating stations to coal because the proposal failed to provide for the effective control of sulfur emissions. The department also succeeded in having the New York



DEP worked with EPA to develop a comprehensive trial burn program for the mobile incinerator, including monitoring, sampling, and stack emission testing, all observed by DEP staff.

Department of Environmental Conservation (NYDEC) include the DEP recommendations in the provisions for the conversion of Orange and Rockland's Lovett Station to coal. Both activities were part of a larger joint effort with the NYDEC to develop a mutually acceptable interstate, and regional, coal conversion strategy which will maximize the region's economic growth potential and simultaneously protect the region's air quality.

In July 1982, waiting time at state motor vehicle inspections became intolerable. To provide temporary relief from the increasingly long lines, the odd-even inspection program was established. A joint DEP/DMV task force was formed to study and recommend ways to solve the waiting time problem and to improve the effectiveness of both the safety and emissions testing

programs.

The task force submitted its report to Governor Kean who endorsed the recommendations. The most significant recommendation calls for the development of a public/private inspection option. If approved by the legislature, motorists will be allowed to have their vehicles inspected at either state inspection stations or private inspection centers (PICs). The new program will strengthen the motor vehicle emission inspection/maintenance (I/M) program. With fewer vehicles reporting to state inspection stations, annual emissions testing can continue and more stringent I/M controls can be imposed. State examiners will be free to perform random roadside inspections and PIC quality assurance audits. The plan will become operational on May 1, 1983.

Pesticide Control

The department continued its efforts to ensure that pesticides are applied with great care. After extensive public review, the DEP adopted nine subchapters to the Pesticide Control Code. Existing regulations were updated and new regulatory areas were addressed. Under the new rules, an applicator must notify the affected community of the proposed day(s) of pesticide

spraying. The notification requirement allows individuals to take whatever preventive measures they deem necessary to avoid exposure to a pesticide without placing an undue burden on the pesticide industry. Under the new storage requirements, fire departments must be informed of existing stocks. The DEP also published a new restricted use

pesticide list. Registration and certification requirements for pesticide dealers and applicators were tightened.

The recently adopted regulations provide the citizens of New Jersey with a truly comprehensive and sophisticated pesticide control program.

Radiation Protection

The state-wide Nuclear Emergency Preparedness Network continues to be expanded and refined. With the organization of the state's radiological Emergency Response Plan and the signing of the Stewart-Herman Bill, a funding source is now available to train personnel and equip the state for nuclear emergencies. The DEP has trained more than 3,200 first-aid, fire and police personnel for emergencies. The grass roots

programs have been presented at hospitals and rescue squad facilities. The department has provided facilities within the 10 mile Emergency Planning Zones of nuclear generating stations with protective clothing, survey meters, gas masks and decontamination materials.

All x-ray machines must be registered with the DEP which conducts periodic inspections to ensure that the equipment is

operating within the prescribed safety standards. The department has joined forces with the federal Division of Radiological Health to develop an inspection program which will evaluate overall x-ray film developing procedures to ensure that a quality film is produced using the least possible amount of radiation. To further protect the public from excessive exposure to radiation, DEP requires the licensing of all medical x-ray equipment operators. To qualify for the licensing examination, a technologist must complete a state approved training program. Both the licensing examination and the training programs must be certified by the New Jersey Radiologic Board of Technologists. During 1982, the Board mandated the completion of a new curriculum for dental x-ray technologists. As a result, 37 additional school programs were approved. Enforcement personnel visited 525 facilities housing x-ray equipment to verify that the equipment operators had a board issued license. A total of 35 violations were found and appropriate action was taken.



First aid squads are taught how to properly handle radiation accident victims as part of the Nuclear Emergency Preparedness Network.

Noise Control

The Office of Noise Control concentrated on ways to expand its struggle against noise pollution without adding to the department's resource constraints. Three volunteers were recruited from United Progress, Inc., a non-profit senior citizen organization funded by the U.S. Department of Labor.

With the support and assistance of the Noise Control Council, model ordinances for both stationary and mobile sources of noise were prepared and will be made available to facilitate the adoption of regulations by municipalities. In addition, the Each Community Helps Others (ECHO) Program, in

its third year of operation, saw the cadre of local officials expand to cover 17 of the state's 21 counties.

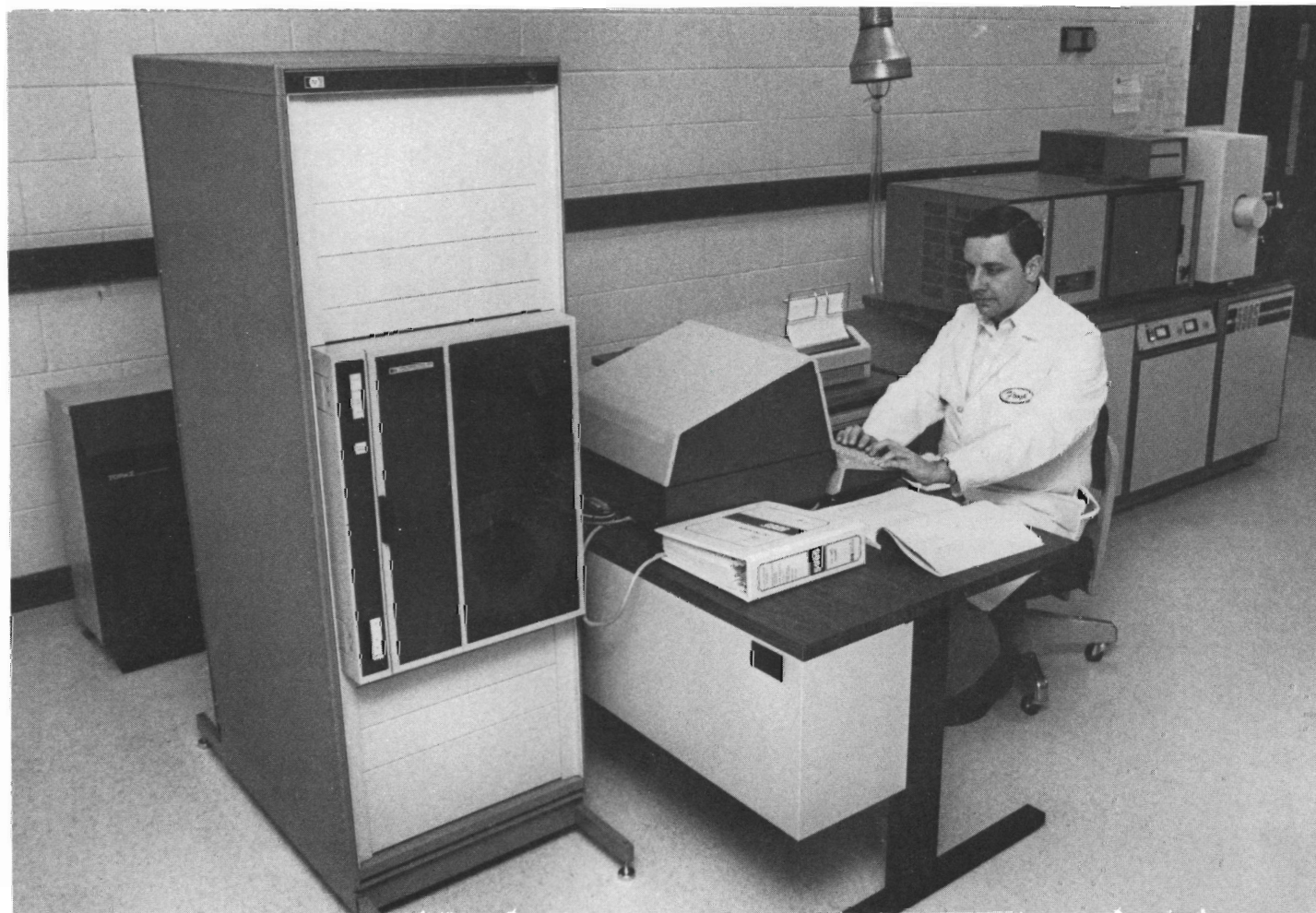
In a major enforcement action, a large steel mill in the state invested \$3 million in noise control, the most comprehensive noise abatement program ever undertaken in the nation.

Environmental Labs

New Jersey is the first state in the nation to have an operating Pesticide/Toxic Substance Laboratory. A federal program designed to provide states with laboratory capability in the area of pesticide control helped to make the laboratory a reality. The main thrust of the laboratory's expertise is priority pollutant analysis. The laboratory has the capability of analyzing samples ranging from air and water to sludge, oil and industrial residue. A unique aspect of the laboratory's operation is its management of samples: a

computer tracks the preparation, analysis, storage and disposal of each sample. The facility was designed with two wings to provide for two totally separate laboratories. The macro lab analyzes samples which may contain high levels of toxic materials such as formulated pesticides; the micro lab analyzes environmental samples for toxic substances which may be present in minute quantities. All analytical work is performed by a staff of qualified chemists and technicians. In its initial year of operation, the

laboratory was subsidized by a \$2 million federal grant and a \$200,000 state appropriation. The laboratory will contract its services to various DEP bureaus, local municipalities and other states. The laboratory's sophisticated monitoring and analytical equipment enhances the DEP's waste, water and natural resource protection programs and better equips the department to accomplish its goal of a safe, clean and healthful environment.



The new Pesticide/Toxic Substance Laboratory uses state-of-the-art instruments to evaluate environmental samples. The Hewlett Packard Gas Chromatograph-Mass Spectrograph provides sophisticated computer analysis of primary pollutants.

Hazardous Sites

In May of 1982, a major DEP reorganization occurred combining the Solid and Hazardous Waste elements of the Division of Environmental Quality with the Division of Hazard Management. The new Division of Waste Management (DWM) was formed to enhance the department's solid and hazardous waste management programs.

The reorganization established the Hazardous Site Mitigation Administration as an element of the division. The goal of the program is to eliminate or lessen the potential public health and environmental impacts posed by the numerous hazardous waste sites throughout the state.

On December 20, 1982, the U.S. EPA issued its National Priorities List. Only through the efforts of the DEP in early identification and prioritization of sites was New Jersey able to have 65 hazardous sites included on the priority list. In the competition for Superfund money, New Jersey successfully became the leader.

A total of 14 Cooperative Agreements and/or Contracts have already been signed allocating more than \$15 million to New Jersey for feasibility studies and cleanup actions. In addition, preliminary cleanup efforts have begun at 17 Superfund sites.

Prior to the enactment of the Superfund law, 36 hazardous waste sites were cleaned up by the DEP between 1980 and 1982 using approximately \$35 million in State Spill Fund monies. Two of the major sites which were addressed by the DEP in 1982 resulted in the removal and proper disposal of approximately 600 drums containing hazardous substances such as solvents, paint sludges and explosives.

In addition to the hazardous site cleanups, the DEP's emergency response team responded to a total of 774 spill and other related incidents in 1982.



The Hazardous Waste emergency response team responded to 774 incidents in 1982.

To develop a systematic approach to cleanups, the department developed a Four Year Plan which is a three pronged attack on New Jersey's hazardous waste problems. It represents the culmination of a review process which started with an original list of sites ranked by the DEP and EPA according to the Federal Hazard Ranking System. This system is based on the potential danger to public health and the environment, and considers surface and ground water pollution as well as the release of hazardous chemicals into the atmosphere.

The major components of the Plan are:

- **Drum Dump Cleanup:** This action has already eliminated 33 small drum dump sites. It involved the removal of approximately 400 drums of hazardous waste and 400 cubic yards of contaminated soil utilizing funds from the Spill Compensation and Control Act.
- **Major Drum Dump Cleanup:** This effort will involve the cleanup of 44 more complex hazardous sites which have up

to 1000 drums. This effort will also be funded through the Spill Compensation and Control Act.

- **Major Hazardous Waste Cleanup Sites:** This will be the major long-range cleanup effort. In some cases, DEP will have the responsibility for cleanup programs while in others, EPA will take the lead. Included in the cleanup are the most critical sites in New Jersey.

Through implementation of the reorganization and development of the Four Year Plan, New Jersey has built a solid foundation for solving the hazardous waste problems in New Jersey. Our pioneering work at hazardous sites has served as an example to other states. The DEP has developed techniques for personal safety, environmental risk assessment, and land use control in the environs of a hazardous waste site. These standards and procedures have been used by private industry and by government agencies throughout the nation, including EPA.

Hazardous/Solid Wastes

Recognizing the problems that have resulted from past inadequate hazardous waste disposal practices, the proper management of hazardous waste continues to be one of DEP's highest priorities. A comprehensive hazardous waste computer system known as NJWITS (New Jersey Waste Information Tracking System) was activated in 1982. The system allows access to information on hazardous waste generators, transporters and disposal facilities. The EPA has evaluated NJWITS and considers it to be the national standard for other states interested in developing a similar system.

Also in 1982, the DEP adopted a rule listing waste oil as a hazardous waste. The rule requires, with a few exceptions, that waste oil be handled, stored, transported and disposed of like any other hazardous waste, and limits its use in fuel burning equipment. The rule was promulgated as the result of enforcement history which indicates that the practice of waste oil adulteration is becoming more widespread as other "cheap" means of disposal are being regulated. PCBs and other extremely hazardous chemicals have been mixed with waste oil to disguise them, and used to "oil" roads or to burn in furnaces and commercial boilers. Waste oil poses a significant environmental and health threat due to its hazardous constituents and to the vast quantity that is transported throughout the state. In New Jersey, at least five million gallons and 15 million pounds of such waste travel in and out of the state each year.

Major enforcement actions were taken in 1982 with regard to several "grandfather" landfills in the state. Approximately 60 landfills were closed by the DEP in 1982 either as a result of enforcement actions or for having exhausted their design capacities.

In response to a legislative mandate, the DEP proposed rules to require that sanitary landfills set aside funds to insure that closure and post-closure care will be

accomplished in an environmentally sound manner. Additionally, a landfill tax was initiated in 1982 which is expected to grow at the rate of \$10 million per year to satisfy third party claims resulting from problems associated with discontinued landfills.

The Statewide Solid Waste Plan was published in September of 1982 in response to both federal and state mandates that DEP undertake a comprehensive and coordinated approach to solid waste management. The plan provides a compilation of 22 approved District Solid Waste Plans as well as DEP guidelines, rules and regulations. It culminates more than three years of work and cooperation on the part of DEP and the Solid Waste Districts toward the development of comprehensive plans to provide for the solid waste needs of every municipality in New Jersey.

On December 6, 1982, the department and the Board of Public Utilities jointly adopted "Interdistrict and Intradistrict Waste Flow Rules" (N.J.A.C. 7:26-6). This established a clear precedent of the state's authority to ensure that waste generated in the state will be directed to environmentally sound disposal

facilities. These rules were established in response to a court decision. The rules direct each municipality in the state where to dispose of its solid waste based on comprehensive planning and economic considerations. The rules also define the procedure for waste flow modification, and direct that any such modification be jointly approved by the DEP and the Board of Public Utilities.

On January 25, 1982, a waste flow surveillance operation was conducted at the large solid waste disposal facilities in the Hackensack Meadowlands District and at all access points to New Jersey from New York. The purpose of this operation was to enforce the Hackensack Meadowlands Development Commission (HMDC) waste flow certification and New Jersey collector/hauler regulations. The operation resulted in approximately 300 citations for waste flow violations, collector/hauler registration violations, and collector/hauler violations involving improper registration documents or improper vehicle numbering. The operation demonstrated that the DEP is intent upon enforcing the waste flow certifications in effect.



Municipal recycling programs have become increasingly popular with 400 operating in the state.

Hazardous/Solid Wastes continued

Following this operation, the HMDC established a full time program to monitor and enforce waste flow directives for the district. Evidence gathered by the department and the HMDC accounted for successful litigation by the state Attorney General's Office against several New York based carting companies.

New Jersey moved closer to its goal to develop resource recovery systems with the submission of an application from Wheelabrator Frye, Inc. for a 1200 ton per day

facility in Middlesex County, and an application for an 80 ton per day facility at the Fort Dix Army Base in Burlington County. Essex County also selected a site in Newark for its proposed resource recovery facility to be developed jointly by the County and the New York-New Jersey Port Authority. When operational, these facilities will not only provide much needed solid waste disposal capacity, but will also generate steam and/or electricity which will reduce New Jersey's reliance on foreign oil

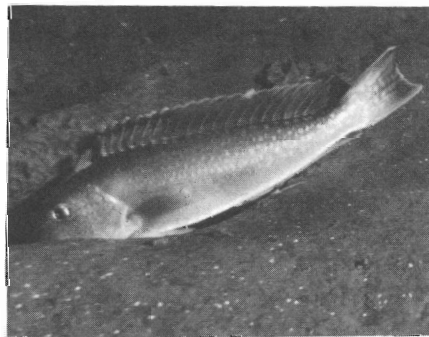
supplies.

The DEP's Office of Recycling provides technical assistance and recycling grants to promote the development of recycling programs throughout the state. With the adoption of the New Jersey Recycling Plan and the enactment of the Recycling Act, the number of municipal recycling programs has nearly doubled. There are now 400 recycling programs operating in 318 municipalities throughout New Jersey.

Planning

The Planning Group, established by Commissioner Hughey in May 1982, provides five types of services: planning integration and coordination, project review, regional program coordination, inter-agency liaison, and geographic information system oversight. The aim of the Planning Group is to help DEP speak with a single, united voice on matters that cut across division and program lines. For example, the Planning Group represented the DEP in negotiations with the Hackensack Meadowlands Development Commission that led to Governor Kean's announcement of an additional \$2.37 million in state Green Acres funds for park development purposes within the Hackensack Meadowlands, at DeKorte Park, Losen Slote Creek Park, and Meadows Path. The DEP's multiple interests in the negotiations include solid waste management, water resources, wildlife management, and tidelands real estate in addition to park development.

The Planning Group led state efforts to protect its \$1 billion marine commercial and recreational fishery from unwise



The tilefish, the most valuable commercial fish landed in New Jersey, is one of the species protected by the Kean v. Watt litigation.

offshore oil and gas exploration activities directed by the U.S. Department of Interior. A disagreement between the state and the federal government over the proper interpretation of the state's responsibilities and rights under the Outer Continental Shelf (OCS) Lands Act and the Federal Coastal Zone Management Act and the specific balance between offshore oil and gas exploration and marine fisheries protection in an OCS sale led to litigation in federal court. This case, *Kean vs. Watt*, was a partial victory for the state position. The 23 disputed

tracks offshore received no bids. Congress then acted later in 1982 to prohibit the Department of Interior from leasing those tracts and others at the heads of submerged canyons at the edge of the continental shelf during 1983, when another sale is expected to take place.

A Committee on Ocean Waste Management was established, which began the process of developing a comprehensive ocean waste management strategy for New Jersey. This encompasses those wastes currently, formerly, or likely to be proposed to be disposed of in the ocean, including dredged material, sewage sludge, acid waste, cellar dirt, low-level radioactive wastes, ocean incineration, and marine discharges to the effluent plume entering the New York Bight.

The Planning Group continues to conduct coordinated reviews of environmental impact statements mandated at both the state and federal level and to represent the DEP in matters involving the state Economic Development Authority, state Department of Transportation, and other key state and federal agencies.

Science and Research

Continuing its responsibility to investigate toxic contamination of the state's environmental and potential effects on both human and ecological health, the Office of Science and Research has culminated six years of research and evaluation by completing a comprehensive report of PCB contamination in the state's freshwater and marine fisheries. Substantial proportions of the finfish and shellfish included in this study had detectable levels of PCBs in their edible flesh. This study, the most comprehensive of its kind, has drawn national attention to the problems of contamination of the food chain and exemplifies department efforts to understand and minimize citizen exposure to harmful environmental pollutants.

Understanding the effects and dynamics of toxic pollutants in the environment is one of the most complex problems facing science today. The Industrial Investigations Unit this year completed a statewide survey of over 15,000 manufacturing industries to assess the use, discharge, and disposal of approximately 155 toxic and carcinogenic pollutants. This survey may provide the foundation

for future "Right to Know" legislation, in addition to providing new regulatory and enforcement tools for the control of toxic substances.

Comprehensive studies have been conducted of toxic contaminants in drinking water and groundwater. These investigations provide useful information for assessing potential hazards and often give assurance to communities about their water quality.

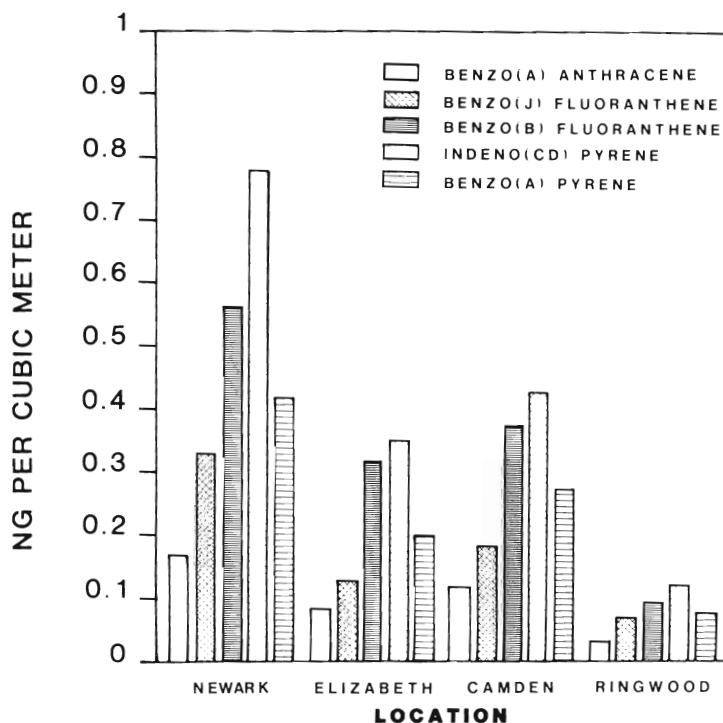
At a major symposium presented in May, the results of the integrated Toxic Air Pollutants project were presented. This project used a number of measurement techniques to provide the most complete evaluation of toxic air pollutants in the country. Fifty toxic air pollutants were monitored at three urban sites, Newark, Elizabeth, and Camden and one rural site, Ringwood. The results of this project provide new insights into the sources and transport of toxic pollutants and will offer a valuable regulatory tool for the evaluation of existing and future pollution sources.

A three year effort funded by the National Cancer Institute to construct a comprehensive

environmental health data base was completed. This project enabled the Office of Science and Research to develop state-of-the-art geographic analysis capabilities. Through the use of computerized mapping, environmental data can now be analyzed and presented to demonstrate statewide geographic patterns. By combining various environmental data bases, new insights have been gained concerning the dynamics of environmental pollution and the potential for population exposure. In addition to environmental health research applications, the Geographic Information System has widespread applications in the planning and evaluation of geographic trends.

An Information Resource Center was established to facilitate research in toxic and hazardous substances. The center has an extensive reference collection and the ability to provide computerized literature searches.

In addition to specific research projects, the Office of Science and Research provides technical guidance to the regulatory and enforcement divisions of the DEP. Modern, effective environmental regulation methods must be based on sound science, and the efforts of the office have provided the kinds of information necessary to support many of the department's major enforcement cases as well as several pieces of landmark legislation. As a result, New Jersey continues to remain in the forefront of public and environmental protection.



A study of fifty toxic air pollutants measured their presence in four varied New Jersey communities.

Management and Budget

Department administration is managed by the Office of the Assistant Commissioner, Management and Budget, and consists of the Division of Fiscal and Support Services and the Division of Personnel and Data Processing Services.

Administration responsibilities also encompass permit coordination, management of the capital improvement program, administration of the landfill closure fund, shared administration with the Department of Energy of the recycling fund, general support services, and administration of the Medical Surveillance Program.

During the year, the department completed the first phase of its work under the Governor's Management Improvement Program, identifying short-term methods of achieving increased efficiencies and cost reductions, which included consolidation of accounting operations, greatly increased use of accounting operations, greatly increased use of word processing technology in the department, and increased dependence on user fees. The unit is also assisting the Division of Waste Management in the development of a new series of contracts for hazardous waste cleanup to aid the

division in its four-year cleanup program.

A permit administration seminar was held in June to inform engineers, consultants, and other applicants on the proper procedures for completing and submitting DEP construction permit applications. Over 200 people attended the seminar and their overwhelming response was favorable.

During 1982, the department consolidated water quality certification with coastal zone waterfront development permits. This consolidation has significantly reduced the paperwork and processing time for those permit applications.

The Medical Surveillance Program (MSP), instituted in 1981, was expanded to provide medical monitoring to more than 300 employees who regularly work with hazardous and toxic materials. The environmental medicine specialists of the New Jersey University of Medicine and Dentistry have been brought in to perform the examinations and to provide counseling to help employees cope with the stress of dangerous work.

A permanent Medical Data Base is being developed using advanced microcomputers to permanently store medical data and to study the

effects of toxic exposure in order to anticipate and prevent adverse effects on employee health. Further preventive measures are being taken by the industrial hygiene specialists of the Department of Health who are assisting with safety equipment design, maintenance, and training.

The Environmental Awareness and Education Program acts as a liaison to New Jersey school children and teachers from kindergarten through 12th grade. Program personnel have successfully conducted teacher workshops and presentations to students throughout the state about the many aspects of our environment. They coordinate an annual poster and essay contest and have designed and developed three new environmental awareness and activity packages and other materials for use in the schools. The program goal is to teach children to respect and protect our environment.

The department anticipates state funding for fiscal year 1984 at the same level as for fiscal year 1983 and federal funding reductions as high as 25 percent. These federal reductions, if enacted, may force reductions in service in our air, water, and forestry programs.

Public Participation

Public participation played a major role in the effectiveness of the work being done by the Hazardous Waste Advisory Council. The Council, working under the direction of the Major Hazardous Waste Facilities Siting Act (S-1300), began early in 1982 to develop draft criteria for the siting of major hazardous waste facilities in the state. The final version of the preliminary draft criteria was presented in July to the Hazardous

Waste Facilities Siting Commission and to the citizens of New Jersey through seven public meetings. As a result of these public meetings, public comments regarding the draft criteria were reviewed, summarized, and presented to the Advisory Council for its consideration. The Council revised the draft criteria and expect their adoption in early 1983.

While the Hazardous Waste Facilities Siting Commission awaits

the final version of the criteria, it is developing a public information program.

The office was also involved in coordinating the public hearing on Trofe Incinerator's application for a permit to run a test burn in Mt. Laurel, and in the meetings of the Burnt Fly Bog Citizens' Advisory Group where site evaluation and the cleanup possibilities were discussed.

Intergovernmental Operation

Regulatory Services

The Office of Regulatory Services reviews and approves all of the department's regulatory proposals. Rules and regulations drafted in 1982 include the New Jersey Wild and Scenic River Regulations, which clarify the existing procedures for development activities within designated wild and scenic river corridors, and emergency regulations for the closing of certain fisheries due to possible PCB contamination.

The department issued a number of Notices of Prosecution through this office for violations ranging from operation of unregistered hazardous waste sites to improperly registered storage of PCB's. Three hundred penalties were issued in one month for violations uncovered by a massive surveillance operation undertaken by the department in the Hackensack Meadowlands.

The Office of Intergovernmental Operations develops and initiates legislation for the DEP and serves as the department's liaison to the state legislature, the New Jersey Congressional delegation and to county and local officials. The major legislative action in 1982 was the signing by the Governor of several bond appropriation acts totaling \$154,000,000 to be used for sewage, hazardous waste cleanup, beach protection, flood control, Green Acres, and harbor cleanup.

Various legislative initiatives related to the hazardous waste problem in New Jersey were signed into law in 1982, including a bill amending the Spill Compensation Act to allow the department to order a hazardous or solid waste factory closed while cleaning up discharge of a hazardous substance and another bill directing the department to prepare a master plan for all known sites where discharge of hazardous substances occurred or is in danger of occurring. Other legislation enacted in 1982 made it a criminal offense to knowingly or recklessly transport hazardous waste to a place not authorized by DEP.

Other legislative achievements included bills authorizing grants to be made from federal funds to implement the County Environmental Health Act, which provides for a joint municipal, county, state and federal effort to protect the environment, and bills authorizing the appropriation of \$158,850,000 for projects in the Statewide Water Supply Master Plan, including general improvement projects, rehabilitation of inadequate water systems, and interconnections.

Harbor Cleanup

In August 1982, the Office of Regulatory and Governmental Affairs organized a boat trip along the Hudson River. Legislators and representatives of local government were invited to participate in order to discuss any problems associated with the Hudson River Waterfront Redevelopment Project. During 1982, work began at five of the reaches of the program. Other reaches were not acted on due to lack of federal funds this fiscal year.

Work on the South Jersey Harbor Cleanup Project, as well as the Hoboken Terminal Historic Mitigation Renovations Project, is expected to begin sometime in mid-1983.

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

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DEP 1982 ANNUAL REPORT

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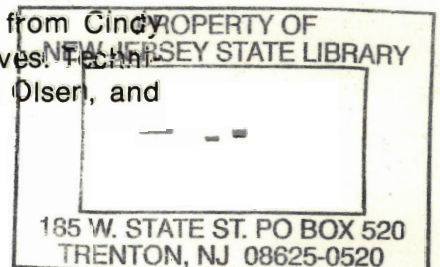


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