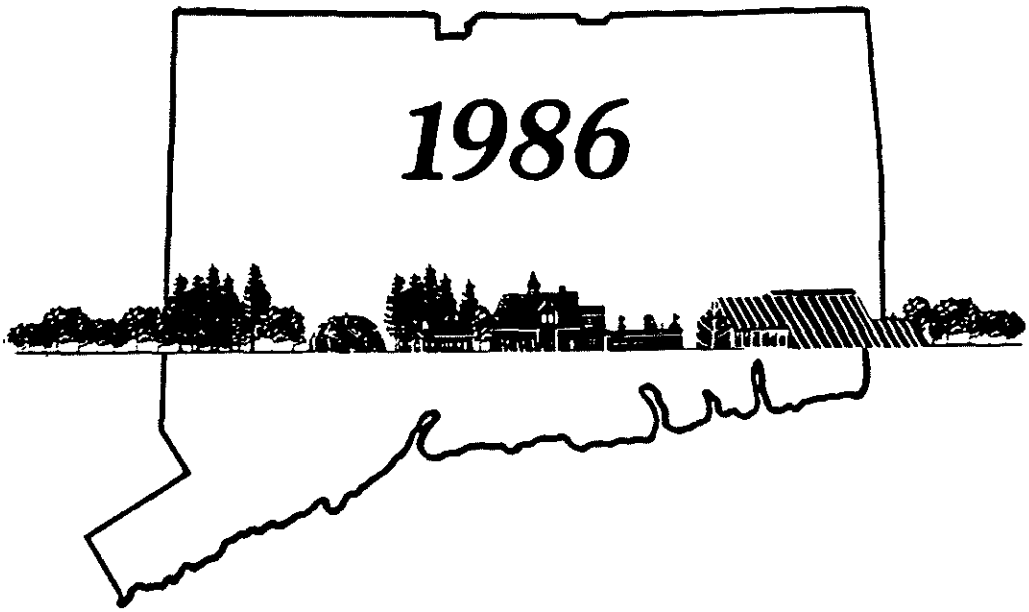
CONNECTICUT ENVIRONMENT REVIEW

The Annual Report of the Council on Environmental Quality



The Council on Environmental Quality

The duties and responsibilities of the Council on Environmental Quality are described in sections 22a-11 through 22a-13 of the Connecticut General Statutes. The Council is a nine-member, bi-partisan entity that functions independently of the Department of Environmental Protection (except for administrative functions). The chairman and four other members are appointed by the Governor; two members are appointed by the President Pro Tempore of the Senate, and two by the Speaker of the House.

The Council's three primary functions include:

1) Preparation of an annual report on the status of Connecticut's environment, for submittal to the Governor,
2) Review of state agencies' construction projects, and
3) Investigation of citizens' complaints and allegations of violations of environmental laws.

In addition, under the Connecticut Environmental Policy Act and its attendant regulations, the Council on Environmental Quality reviews Environmental Impact Evaluations that state agencies develop for major projects; the Council must be consulted when disputes arise regarding any Environmental Impact Evaluation.

COUNCIL MEMBERS -- 1986

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Glastonbury

Karl Wagener
Executive Director

STATE OF CONNECTICUT

COUNCIL ON ENVIRONMENTAL QUALITY

December 30, 1986

The Honorable William A. O'Neill
Governor of Connecticut
State Capitol
Hartford, CT 06106

Dear Governor O'Neill:

I am pleased to present the Annual Report of the Council on Environmental Quality for the year 1986.

As you know, as part of our mandate under Section 22a-12 of the General Statutes, the Council issues a report to you each year on the status of Connecticut's environment, on trends that might affect the state's economy and quality of life, and on the adequacy or deficiency of existing environmental protection programs.

Using the format established last year, the Council has summarized briefly the status of Connecticut's air, water, land, and wildlife in the six page Connecticut Environmental Quality Index.

The Council also selected two critical issues for detailed examination: inland wetlands and solid waste disposal. The selection of these two issues reflects the Council's concern that Connecticut's strong economy and accelerating development are placing new pressures on wetlands and that the state's geology and land use patterns are severely limiting the number of suitable areas for waste disposal.

Highlights of the Council's research include:

Inland Wetlands

- No data exist which could yield a reliable estimate of the rate of wetlands destruction in Connecticut. Review of some municipal records, testimony of experts, interviews with local wetlands commissioners, and results of a CEQ survey confirm that state and local regulatory agencies are finding it difficult to keep pace with the current pace of development, and wetlands are being lost.

- Municipal inland wetlands agencies need and desire more training and technical assistance. The CEQ recommends adding staff to the DEP to provide assistance to local

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commissions. Also recommended are improvements to the DEP's monitoring of wetlands activity statewide, and improvements to wetlands enforcement procedures.

Solid Waste

- All analyses predict a need for new solid waste landfills in Connecticut, even with the anticipated transition to resource recovery. Waste-to-energy plants will extend the life of some landfills, but they will not be built soon enough to avert the need to construct new landfills in the foreseeable future.

- Immediate implementation of recycling is the one opportunity Connecticut has to significantly extend the life of its landfills, and to minimize the need for new landfill sites. The Council recommends establishment of recycling goals for all municipalities, and also recommends continuation of funding for household hazardous waste collection as well as greater enforcement capabilities for the DEP.

Connecticut has demonstrated that it can have both a strong economy and strong environmental protection laws. It is important that the ability of the DEP and local agencies to enforce those laws keeps pace with expanding economic activity. Protection of wetlands and proper management of solid waste are of critical importance to future economic growth, and to neglect either one would place future water supplies and other important resources at risk.

I hope you will consider these recommendations of the Council on Environmental Quality as you prepare your legislative and administrative initiatives during the coming year. If you desire more information on any issue in this report, the Council stands ready to assist you.

In closing, I would like to acknowledge the excellent work performed by the Council's Executive Director, Karl J. Wagener, and our capable graduate student intern, David Sutherland, in preparing the information base for the Council's recommendations and in authoring this report.

Sincerely,

Gregory A. Sharp

Gregory A. Sharp
Chairman

CONTENT

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PART I

A CONNECTICUT ENVIRONMENTAL ALMANAC

A CONNECTICUT · ENVIRONMENTAL ALMANAC

THE TEEMING MASSES

Average number of people per square mile, Japan: 840

Taiwan: 1280

Fairfield County: 1290

Rank of Connecticut among 50 states, based on birthrate: 50

Based on growth in housing construction: 7

Number of states with a greater percentage of residents living in urban areas: 3

Number of cars per thousand people, Peoples' Republic of China: 0.1

Connecticut: 693

LAND AND CONNECTICUT'S ECONOMY

Number of Connecticut residents employed in mineral industries in 1982: 1900

In 1972: 700

Rank of Connecticut among 50 states based on size of mineral industry: 43

Among New England states: 1

Rank of hay, tobacco, apples, sweet corn among all Connecticut plant crops based on dollar value: 1,2,3,4

Number of other states where sweet corn ranks in top four: 1

Number of New England states where farmland value has increased since 1983: 6

Number of states outside New England: 2

Acres of State Forest in Connecticut: 138,000

Acres of water utility land: 133,000

Percentage of Connecticut forest landowners who rate aesthetics as the most important benefit of their land: 58

Percentage who rate timber or other economic benefits as most important: 23

CONNECTICUT'S WAR ON POLLUTION

Dollar amount of largest fine paid by any Connecticut company for spraying pesticides without a license: 25,000

Dollar amount of largest fine paid to the state for any violation of the inland wetlands law: 0

Rank of Connecticut among New England states based on percent of population served by adequate sewage treatment plants: 1

Average age (in years) of leaking underground storage tanks: 17

Percentage of underground storage tanks at Connecticut gas stations that are 15 years or older: 28

Tons of restricted pesticides sold in Connecticut in 1981: 118

In 1985: 75

Number of air pollutants covered by Connecticut regulations prior to 1986: 6

After 1986: 856

Percent change in federal grants to states and towns for pollution control, 1976 to 1979: +14

1980 to 1983: -30

Concentration (ppm) of PCBs in a discarded object which requires it to be incinerated or shipped to a chemical landfill: 50

Concentration found in a catfish in the Housatonic River: 55

CONNECTICUT'S GREAT OUTDOORS

Number of people who trapped furbearers last year in Connecticut: 872

Number who visited the bald eagle observation station in Southbury: 4400

Rank of Connecticut among 50 states, based on per capita expenditures for nongame wildlife conservation: 46

Percentage of Connecticut residents who want the state to spend more on nongame wildlife: 84

Minimum acreage of unbroken forest needed for nesting by some species of Connecticut songbirds: 250

Percentage of captured parrots and macaws that die before reaching pet stores in U.S.: 80

Number of reported bear sightings in Connecticut in 1985: 5

In 1986: 24

Acreage of Connecticut's smallest state park: 1

Number of trees felled to print 1000 copies of this report: 12*

References for all statistics available from the Council on Environmental Quality upon request.

* Nine of these trees were spared; this copy is printed on 75% recycled paper.

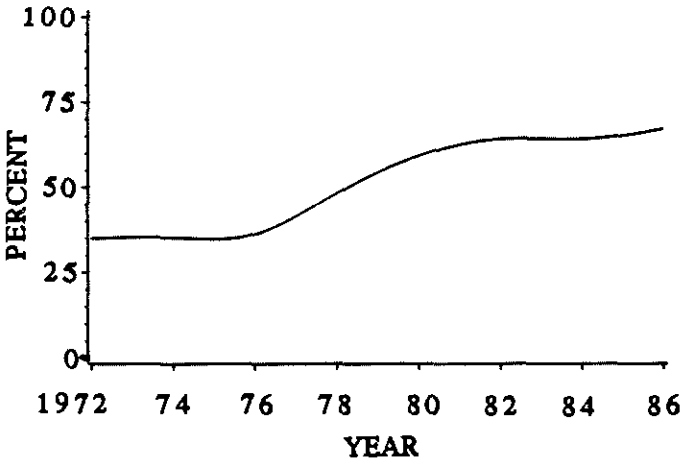
PART II

CONNECTICUT ENVIRONMENTAL QUALITY INDEX

RIVERS, STREAMS and LAKES

LONG TERM TRENDS

Percentage of CT's Major Rivers and Streams Classified as Fishable and Swimmable, 1972-1988



- Creation of the Clean Water Fund in 1986 began the largest long-term financial commitment to environmental quality ever made by the State of Connecticut. When implemented, it will renew progress toward making the state's major streams and rivers "fishable and swimmable". Progress toward that goal had come to a standstill following the federal government's sharp reductions in grants for municipal sewage treatment plants after 1980 (see graph). Fulfillment of the Clean Water Fund will require state commitments of $40 to 45 million annually for 20 years, after which a revolving loan fund will be self-sustaining.

3-YEAR PERIOD	FEDERAL CONSTRUCTION GRANTS FOR WASTEWATER TREATMENT PLANTS IN CT.
1974 - 1976	$275 MILLION
1977 - 1979	108
1980 - 1982	89
1983 - 1985	90
1986 - ??	VETOED BY PRESIDENT

KEY ISSUES

- Regulation of water diversions will play a dramatically more important role in safeguarding river water quality. Example: Several diversions (primarily ground water withdrawals). proposed in 1986 in the Quinnipiac River watershed would leave too little water in the river to maintain acceptable water quality, according to the DEP. Environmental impact analysis of the proposed diversions required months, and a satisfactory solution is still being sought. The DEP Water Resources Unit is not staffed sufficiently to develop diversion regulations and analyze permit applications pursuant to the 1982 Connecticut Water Diversion Policy Act.

- The majority of Connecticut's lakes of significant size suffer from eutrophication, in many cases serious. Septic systems, fertilizers, and other sources of nutrients cause aquatic weeds to flourish. Chemical herbicides are used hundreds of times annually in the state to combat excessive weed growth, even when alternative control methods are available. A coordinated lakes management program is required to address the man-made causes of eutrophication. A Task Force to study the lakes management problem was created by the General Assembly in 1986; its recommendations should be given priority consideration.

- Substantial staff additions to the DEP's Water Compliance Unit in 1986 helped to alleviate a serious personnel shortage which was hindering the department's permit and inspection programs. New regulations were also adopted which should clarify the permit process.

GROUND WATER

KEY ISSUES

- Progress continued to be made in 1986 toward providing potable water supplies for people whose wells have been contaminated. Completion of arrangements for extending water lines to Naugatuck residents near Laurel Park landfill was a landmark.

- The difficult issue of farmers' liability where pesticides have contaminated wells must be resolved so that money can be made available immediately and continuously to help the victims. Many authorities expect discovery of additional cases of contamination. A solution must be found which does not impose additional financial burdens on the state.

Number of wells contaminated, 1978 to August, 1986, by major types of contaminants:

- ▶ Pesticides: 437
- ▶ Landfills: 110
- ▶ Solvents: 273
- ▶ Road salt: 107
- ▶ Gasoline and oil: 141
- ▶ Nitrates and other: 61

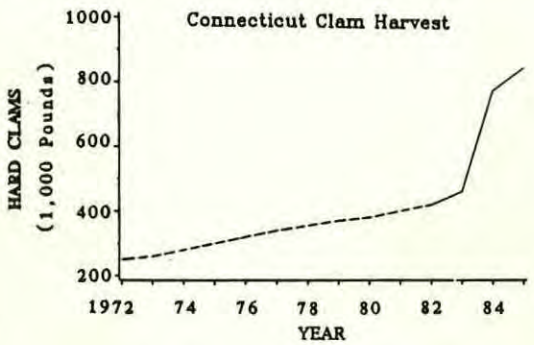
- As existing drinking water needs are met, municipalities must direct more effort to preventing additional contamination. Despite a 1985 mandate to consider ground water in planning and zoning (P.A. 85-279), most municipalities fail to do so. A state-local partnership is needed, whereby the state would provide technical assistance to towns planning aquifer protection measures.

LONG ISLAND SOUND

KEY ISSUES

- The Connecticut Coastal Fisherman's Association announced in September their intent to sue Bridgeport, Milford, and Norwalk because the sewage treatment plants of those communities exceeded limits of their discharge permits more than 5,000 times in five years. (Most of these violations did not cause serious pollution problems, but some did). Many millions of dollars will be needed to upgrade those treatment plants so that the harbors, beaches, and shellfish beds will no longer be contaminated by raw sewage.

- The Long Island Sound Water Quality Study, initiated and funded by the federal government in 1986, will identify the Sound's most serious pollution problems. More interstate monitoring of water quality will hopefully result. Until a Sound-wide monitoring program is established, it will not be possible to assess trends.

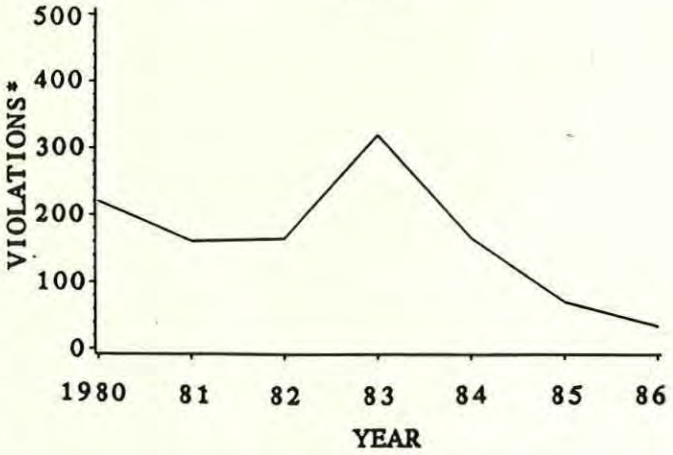


- By authorizing $200,000 in 1986 for An Act Concerning Protection of Estuarine Embayments, and a DEP staff position to implement it, the Governor and General Assembly made the first commitment toward a systematic statewide plan for restoring degraded coves and estuaries. If demand for assistance from coastal towns is strong, more funds will be needed. In addition, 19 estuaries have water quality problems which must be corrected through improved sewage disposal or, in the case of eight coves, better septic systems.

AIR QUALITY

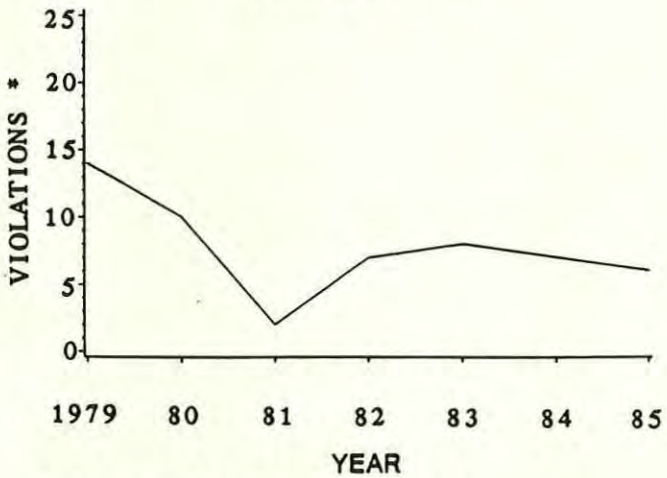
LONG TERM TRENDS

OZONE



* No. of Violations of 1-hour ozone standard

CARBON MONOXIDE



* No. of Violations of 8-hr carbon monoxide standard

Ozone is produced when hydrocarbon emissions react with nitrogen oxides in the presence of sunlight. Ozone is injurious to human health and to vegetation. Favorable weather conditions and several hydrocarbon control programs have reduced the number of violations of the ozone standard in recent years.

Carbon monoxide (CO) is the other air pollutant for which the federal standard is violated several times annually in Connecticut. Automobiles are the major source of CO.

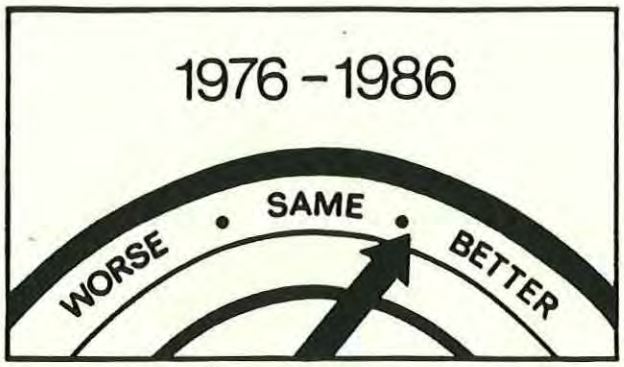
KEY ISSUES

- Regulations for the control of 850 hazardous air pollutants were adopted in 1986. Actual standards for many of these substances have yet to be developed; the DEP and the Department of Health Services must have adequate staff resources to develop those standards. The most controversial of all those pollutants are dioxins, believed to be emitted from waste-to-energy plants. Dioxins were the subject of special legislation in 1986, and the state should continue to spend the money needed to regulate and monitor dioxin emissions. (For more information, consult the CEQ's March, 1986 Special Report on dioxin regulation).

- Ozone is best reduced by controlling hydrocarbon emissions. Numerous industrial hydrocarbon-control programs and the automobile emissions inspection program have reduced the number of violations of the health-based ozone standard in Connecticut, but additional controls will be necessary. Evaporation of gasoline is the largest remaining source of hydrocarbons that can be controlled readily. There has been serious discussion at the federal level about tightening the ozone standard, based on new scientific information.

WILDLIFE

Ten wildlife experts were asked to identify trends in the status of Connecticut's wildlife populations. Responses are summarized on this page. The experts included three university professors, three state officials, and four representatives of conservation organizations.



HIGHLIGHTS

- Acquisition of Milford Point by The Nature Conservancy, and its subsequent lease to the U.S. Fish and Wildlife Service, completed the four-parcel Connecticut Coastal National Wildlife Refuge, this state's first significant national refuge. Milford Point provides nesting habitat for the piping plover, designated as a Threatened Species by the federal government in 1986.

- Appropriation by the General Assembly of $50,000 in 1986 for a program to conserve "non-harvested" or nongame wildlife was an important step, marking the first deliberate appropriation by the legislature for wildlife other than game species.

- A bald eagle observation station was established last winter by the DEP, working with Northeast Utilities and private conservation groups. Nearly 5000 people visited the station to observe the eagles that habitually feed and rest below the Shepaug Dam in Southbury. The number of bald eagles wintering in Connecticut increased again to approximately 60, mostly on the major rivers.

- Several large and conspicuous species appear to have expanded their range into or within Connecticut, including coyotes, otters, beavers, porcupines, fishers, and, gaining more media attention than any other, black bears. Most game populations, other than some migratory species, appear to be growing.

KEY ISSUES

- Nongame wildlife species in Connecticut outnumber game species ten-to-one, yet most wildlife funds go toward game management. The DEP will need significantly more dollars to protect nongame wildlife and to serve the broad public interested in wildlife.

- Connecticut's migratory songbirds go to specific tropical regions to spend the winter. It is not the overall loss of tropical forests that most affects Connecticut birds; it is deforestation in those specific areas where Connecticut birds spend the winter. The DEP must begin to investigate what can be done to conserve the winter habitat of Connecticut's birds.

- Increases in large, conspicuous wildlife species (coyotes, bears, etc., see above) have masked the decline of many lesser-known species. Connecticut's bobcat populations may be in serious decline. Certain songbirds, especially forest-nesting species, are declining throughout the northeast. The overall trend is for human-tolerant species, which adjust to changing habitat types, to benefit at the expense of human-intolerant species which require large tracts of specific habitat types. Curent trends will soon lead to the loss of species in Connecticut. State wildlife policy must address the need of species requiring specific habitats, especially those requiring large unbroken tracts of woodland.

WOODLANDS, WETLANDS and WILDLANDS

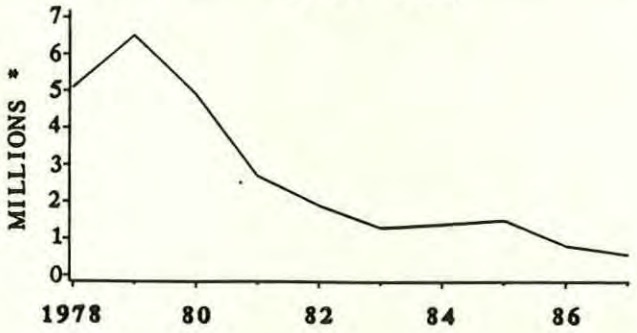
KEY ISSUES

- Water utilities own and manage approximately 130,000 acres of forested land, an area equal to the land area in state forests. Need for capital to construct filtration plants is prompting some water utilities to attempt selling thousands of acres. Some entrepreneurs are hoping to profit substantially from such sales. Statutes adopted in the 1970s aimed at controlling the sale and development of important watershed lands are inadequate. Acquired by companies having powers of condemnation decades ago when land was inexpensive, many of these lands are now too valuable for municipalities or land trusts to buy at market prices. Some of these parcels are among the state's best potential natural areas and recreation lands. The General Assembly should adopt a definitive policy aimed at the conservation of water utility lands for the public good; another year's delay will probbably result in the loss of significant lands. The rate at which lands are sold will depend in part on decisions of the DPUC (regarding the extent to which shareholders may benefit from proceeds) and the Department of Health Services (regarding need to maintain reservoirs for future water supply).

- In 1985 it was reported that development is affecting up to 17,000 acres annually in Connecticut. That number may be even larger in 1986. The environmental impact of that development is in the hands of local commissions. As land-use planning and regulation increases in quantity and technical complexity, many municipalities need technical assistance.

- There are no data available to evaluate the rate at which inland wetlands are being destroyed. Hundreds of acres are lost annually as development pressures reach all-time highs. Numerous problems associated with the state Inland Wetlands and Watercourses Act must be corrected. (See Part III of this CEQ Annual Report).

Federal Allocations to the State of Connecticut for Open Space Acquisition and Park Development, 1978 – 1987



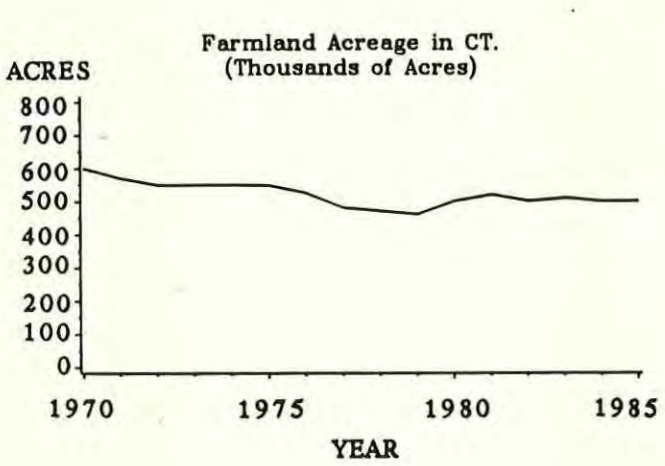
* MILLIONS OF DOLLARS

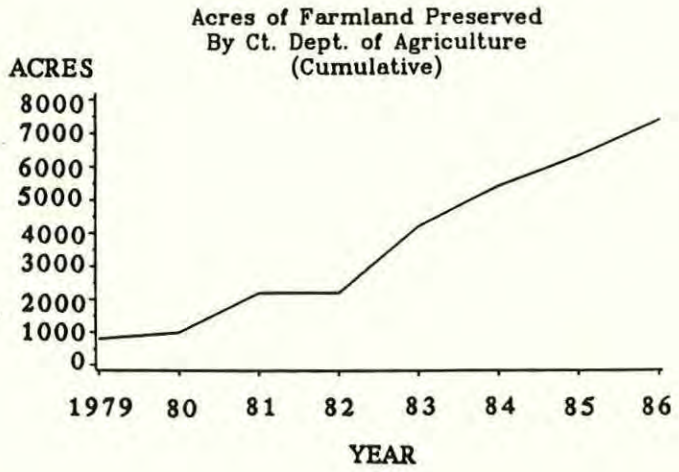
- Enactment of the Recreation and Natural Heritage Trust Fund in 1986 was the start of what could prove to be an enormously significant trend in Connecticut land protection: Combined state and private commitment to make up for the near-total loss of federal open space dollars. (see graph). Innovations of the Fund include a requirement for private contributions to state land acquisitions, and provisions for a permanent management fund to minimize future financial burdens related to land maintenance. The amount authorized -- two million dollars, plus one million from the private sector -- could be spent in an instant on a small number of the state's priority needs. At least five million dollars should be authorized annually. The ideal land acquisition program would be backed by a permanent funding source, such as an earmarked portion of the real estate conveyance tax (an approach adopted in 1985 by Tennessee).

- The Natural Area Preserves Advisory Committee continues to make progress following its 1982 resurrection. In 1985, Governor William O'Neill designated 400 acres of Hammonassett State Park as a Natural Area Preserve. In 1986, research and public hearings were completed in anticipation of designation of two uncommon ecosystems known as sand plains in parts of Wharton Brook and Hopewell Pond State Parks.

FARMLAND

LONG TERM TRENDS





KEY ISSUES

- Several hundred acres were preserved in each of the last three years through the state's agricultural land preservation program. The creation in 1985 of new permanent staff positions for that program has yielded a faster rate of preservation which should continue, if the General Assembly continues to make funds available at a rate that keeps pace with the rising cost of farmland.

- More than 50 Connecticut dairy farmers particpated in the federal government's whole-herd buyout program. Those farmers will either convert to another type of farming or sell their land for development. Faced with this unprecedented potential abandonment of farms, the Department of Agriculture must be equipped with the financial resources necessary to simultaneously purchase development rights to some farms, aid in the conversion to other types of farming, aid the entry of new farmers into farming, and promote Connecticut-grown fruits and vegetables to stimulate demand.

- Pesticide contamination of ground water is a potential burden to the finances and morale of many farmers. The best long-term strategy for avoiding future problems is to reduce pesticide use through Integrated Pest Management (IPM). Pilot IPM programs at UConn and other states have demonstrated reductions in pesticide use of up to 50% on some crops. In the short-term, the farmers' liability issue must be settled.

- Numerous state, local, and private projects resulted in the permanent conversion of prime agricultural land to non-agricultural use in 1986. No precise acreage data are available, but the acreage lost surely exceeds the amount of land preserved. Farmland conversion that results from state-sponsored projects is the easiest to control; non-agricultural development of prime acreage can be minimized through better project planning.

PART III

CONNECTICUT'S INLAND WETLANDS PROGRAM

Summary

The 1972 Inland Wetlands and Watercourses Act is generally regarded as having slowed the rate of destruction of inland wetlands in Connecticut. The delegation of regulatory authority to all but 14 municipalities has resulted in a significant amount of wetlands protection at minimal state expense. Volunteer commissioners have devoted more than one million hours toward implementation of Connecticut's landmark wetlands statute, which at the time of its adoption was one of the most stringent wetlands-protection measures in the country.

Wetlands destruction continues, however, and the job of regulation is becoming more difficult. The Council on Environmental Quality's review of the inland wetlands issue reveals the following central facts:

1. No data exist which could yield a reliable estimate of the rate of wetlands destruction in Connecticut. DEP officials involved with inland wetlands regulation guess that 1200 to 1500 acres are lost annually. Though most municipalities do not record the acreage of wetlands filled, a CEQ review of a few towns' records resulted in a similar estimate. The most recent calculation of total inland wetlands acreage in Connecticut is some 435,000 acres, or about 15 percent of the state's land area.

2. Enforcement of the Inland Wetlands and Watercourses Act is difficult to achieve, and was the problem most commonly cited by local wetlands agency chairmen (52%) in response to a CEQ survey. The state has never collected a fine for an inland wetlands violation. Few towns have collected fines either, for reasons that include reluctance of town attorneys to pursue punitive measures and the expense of going to court to collect fines. As land values increase, the incentive to ignore the law increases.

3. Despite a statutory requirement that towns furnish the DEP with copies of inland wetlands permits issued or denied within ten days of their decisions, most towns do not. Those submitted to DEP usually do not include acreage figures, and are screened by the DEP for procedural compliance only. As a result, the DEP has very little oversight of municipal regulatory activity.

4. Development activity and land values are escalating throughout Connecticut. Annual housing starts have increased 160% since 1980; from 1984 to 1985 alone the increase was 38%. Wetlands permit activity has increased proportionately. Routine permit applications for the 14 DEP-regulated towns now require a minimum of seven months to process because of understaffing. The backlog of applications, enforcement actions, and citizen complaints is worsening. Three particularly active towns account for half of the total permit activity of the 14 DEP-regulated towns, and are a major reason the DEP has had to reduce services to other towns.

5. Nearly 90% of municipal inland wetlands commission chairmen desire more training and technical assistance from the DEP. The DEP is unable to provide such assistance because of the aforementioned workload. The DEP has found it necessary to discontinue its wetlands newsletter, its main communication link to commissions.

6. The statutory relationship of inland wetlands decisions to planning and zoning decisions is not clear enough. Planning or zoning decisions are made in some towns without input from the inland wetlands agency, and developers can end up with incompatible approvals from the town commissions.

7. There is no evidence to support the notion that direct regulation of all inland wetlands activity by the DEP, as an alternative to the present system of regulation by municipal commissions in 155 towns, would result in more effective protection of inland wetlands. The DEP staff, in regulating wetlands activity in the 14 DEP-regulated towns, is more stringent than some municipal commissions, less stringent than others, and appears to approximate the average municipal inland wetlands agency. Switching to a system of regulation by the state would cost at least $3.5 million annually for no certain additional statewide benefits. Furthermore, regulation by local commissions is advantageous where commission members have first-hand knowledge of a town's wetlands and where commission members or town staff make frequent checks of work in progress.

8. The trend toward wetlands mitigation -- the creation or enhancement of wetlands to compensate for wetlands destroyed -- is accelerating, without benefit of adequate scientific assessment of the functions of man-made wetlands.

Summary of Recommendations

MANAGING THE WORKLOAD

1. Require the 14 DEP-regulated towns to establish their own inland wetlands commissions. Any town that fails to establish its own commission should be charged for the DEP's services (and the revenue used to fund the full cost of resulting DEP regulatory work).

2. Fund at least six additional staff positions for the Inland Wetlands Section of the DEP Water Resources Unit. At least two of the positions should be attorneys, who would advise the Unit and municipalities on legal issues. Other staff would have technical expertise suited to technical assistance, education and training of local officials, and monitoring of municipal actions. Provide funds for educational materials for training and updating municipal inland wetlands commissions.

ENFORCEMENT AND DEP OVERSIGHT

3. Amend the penalties section of the Inland Wetlands and Watercourses Act to specify both civil penalties and criminal penalties. Specify a deadline for DEP to develop regulations needed to implement administrative civil penalties. Give municipal inland wetlands commissions the power to impose civil penalties administratively. Require the DEP to provide model civil penalty regulations for municipalities.

4. Amend statutes to allow the Commissioner to take charge in specific local cases where the local commission fails to enforce the inland wetlands act and regulations.

5. Amend statutes to 1) give the DEP Commissioner clear authority to temporarily revoke a town's delegated authority to administer the Inland Wetlands and Watercourses Act, and 2) require the Commissioner to define more specifically, through regulations, the circumstances under which he may revoke a town's authority.

6. Amend statutes to require the Commissioner to provide uniform reporting forms to municipal commissions, and to require the DEP to monitor and maintain a data base of inland wetlands activity statewide, and authorize the Commissioner to enforce existing reporting requirements.

7. Amend statutes to require municipal inland wetlands commissions to notify the DEP prior to approving any regulated activity in a wetland of "critical statewide significance." Require the Commissioner to define wetlands of critical statewide significance, and to notify municipalities of their location. Require municipalities

to consider the DEP's advice in cases affecting these wetlands, with the provision that the DEP's role is advisory. (Critically significant wetlands would include wetlands over a certain size, uncommon types of wetlands such as bogs, wetlands that contain rare species, wetlands that are important to a region's water supply, wetlands that straddle town boundaries, and other criteria to be determined by the Commissioner through regulation).

EDUCATION AND TRAINING

8. Require newly-appointed municipal inland wetlands commission members to attend at least two DEP-approved training sessions in their first year of service. The DEP must offer considerably more workshops.

9. Improve education of commissioners through periodic newsletters and bulletins (no legislation required). With in-house legal staff (two of the six staff positions to be added), advise local commissions on legal issues.

OTHER RECOMMENDATIONS

10. Amend statutes to clarify agricultural exemptions so that such exemptions do not include excavation, earth-moving operations, peat removal, filling of farm ponds or wetlands or any other activity that alters the natural character of the land.

11. Amend statutes to establish a date after which previously-approved subdivisions lots are no longer exempt from the Inland Wetlands and Watercourses Act.

12. Amend statutes to establish a clear, non-overlapping sequence for planning and zoning and wetlands decisions. Require all applications that go to a planning and zoning commission be referred to the inland wetlands agency for comments or permits (where applicable), and back to the planning and zoning commission. The timeclock for the planning and zoning commisison should stop when the matter is referred to wetlands, and should resume when it is returned.

Also, Section 8-2 of the General Statutes should state clearly that zoning commissions may adopt zoning regulations that take into account the protection of wetlands.

13. The DEP, working with universities and other agencies, should establish a research program to evaluate the functional value of man-made wetlands in Connecticut. In addition, development proposals involving wetland creation should not be accepted unless a plan for monitoring the success of the created wetland is included. Wetland mitigation should not be accepted as compensation for destruction of natural wetlands except in those rare instances where no alternative to the destruction exists.

Introduction

The past decade has provided dramatic proof that Connecticut can be a national leader both in economic prosperity and in the protection of its natural resources. Connecticut has several environmental laws and standards that are among the most stringent in the country, and the state is among the leaders in per-capita income, employment, and new construction activity. The conventional wisdom that environmental regulation constricts economic growth is simplistic, as many regional factors other than regulation -- energy supply, climate, type of industry, water availability, education level of the labor supply -- evidently can overshadow the effects of environmental regulation. Current economic forecasts are for continued growth and low unemployment in Connecticut.

In adopting the Inland Wetlands and Watercourses Act of 1972, Connecticut was among the nation's leaders. In fact, many states are still developing wetlands laws and are looking at Connecticut's for guidance. There is no evidence that our law has hampered growth. However, the economic prosperity of Connecticut, and the elevated real estate values it brings, increase the pressure to build in inland wetlands. As new construction activity grows in the Nutmeg State at twice the national rate, the economic incentives increase for squeezing every last acre of buildable land from a community. The state wetlands law does not absolutely prohibit building in wetlands, but regulates it according to a vague system of weighing societal costs and benefits. The job of the regulators is becoming increasingly demanding. Volunteer municipal wetlands commission members routinely find themselves deliberating the permanent disposition of wetland parcels from which applicants hope to profit financially.

Many of the reasons for preserving wetlands are economic, and state law seeks to preserve the many benefits that wetlands provide for free to the public. A wetland may store flood waters, provide a harmless pathway for rising flood waters, filter polluted runoff, and/or provide habitat for bears, orchids, turtles, or numerous birds which are dependent on wetlands during part or all of their lives. Even the scenic value of some wetlands has great economic value, as manifested in tourism. Allowing an individual to destroy one or more of these functions results in increased costs for everyone for man-made flood control, runoff detention, flood damage relief, or water filtration.

Some natural functions of wetlands could never be replaced. Many wetlands-dependent organisms are very particular in their habitat needs. While intensive wildlife management on remaining land might, at great cost, be able to maintain some wildlife populations, the loss of wetlands would in reality result in the extirpation of many species.

On the other hand, some parcels of land which meet the legal soil-type definition of wetlands appear to serve no wetlands functions. Wetlands regulators must identify the values of particular wetlands, weigh them against the benefits of a proposed project, and properly grant or deny a permit to the applicant. At the state level, this work is performed by engineers and scientists. At the local level, it is done by concerned lay commission members. For the state to entrust the permanent fate of wetlands to local panels of volunteers in the face of high-stakes, expanding real estate development is risky, unless the state is prepared to aid those volunteers and to exercise some oversight.

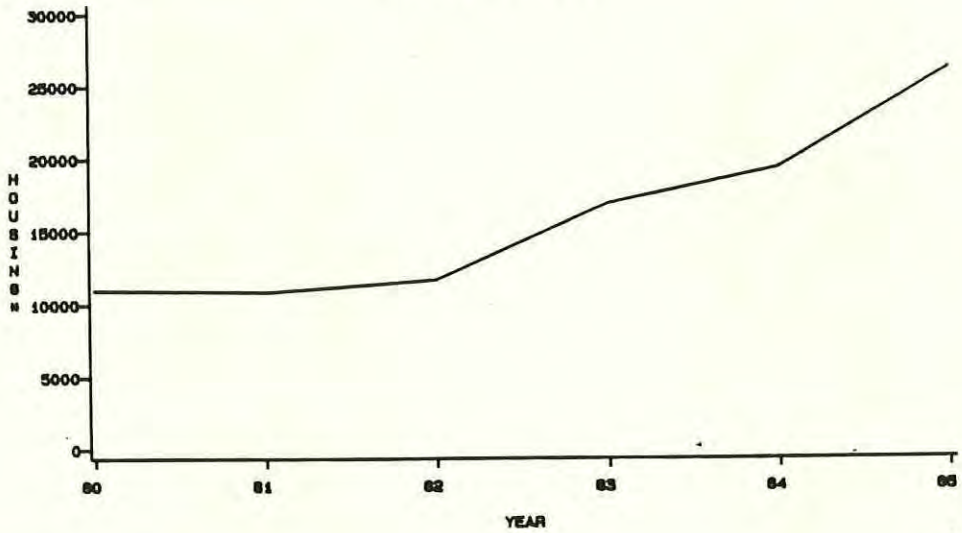
INVOLVEMENT OF THE CEQ

The 1987 session of Connecticut General Assembly will mark the fifteenth anniversary of the Inland Wetlands and Watercourses Act. Fifteen years, encompassing several swings in the economy, provide enough experience for a realistic evaluation of the law's effectiveness. The Council selected inland wetlands as one of its primary foci this year because of a consensus that many factors are causing problems not foreseen in 1972. Many of the citizen complaints received by the Council pertained to wetlands, and every Council member was familiar with at least one apparent breakdown in the wetlands regulatory system.

In its research, the Council gathered information from the files of the Department of Environmental Protection, the U.S. Environmental Protection Agency, and many municipalities. Several land-use attorneys were invited to comment in writing or present testimony to the Council. More than half of the municipal inland wetlands agency chairmen responded to a questionnaire. Chairmen with significant comments were contacted for further discussion by telephone or in person. The president of the Connecticut Association of Conservation and Inland Wetlands Commissions is a member of the Council, and was able to contribute her knowledge of municipal wetlands regulation across the state. Connecticut's record was compared with other states. Despite a paucity of record-keeping by the DEP and other agencies, the Council believes it has obtained an accurate account of the problems and trends associated with implementation of the Inland Wetlands and Watercourses Act.

Key Trends Affecting Wetlands Regulation

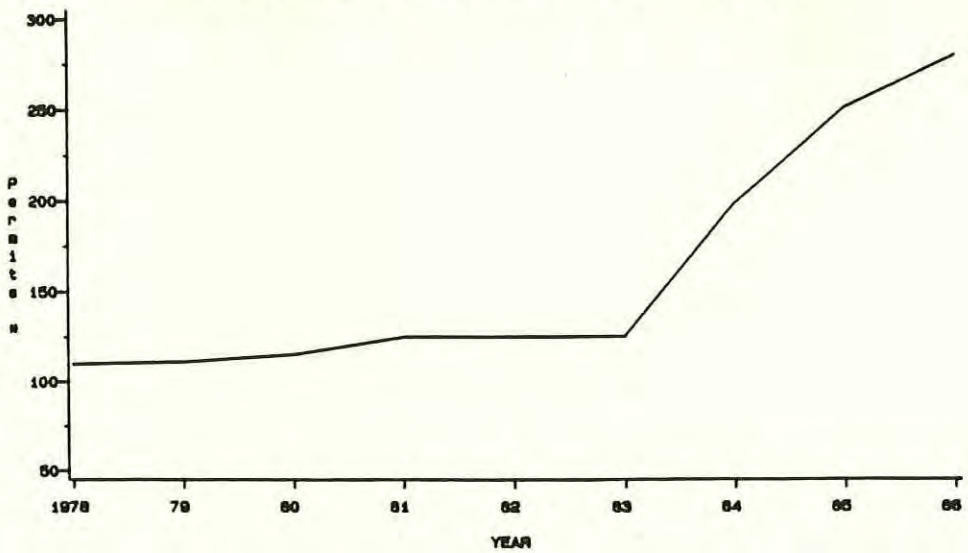
Authorized Housing Starts In Connecticut, 1980–1985



N Housing starts (thousands)

Demand for new housing is likely to remain high. Modest increases in population are projected through the end of this century. Much more importantly, the average household size is projected to continue its downward trend. In western Connecticut, housing demand is forecasted to increase 45% by the year 2000, while the population of that region will be increasing by only 10%.

Inland Wetlands Permit Applications Received by DEP, 1978 – 1986



N No. of Permits

I. Analysis of the DEP's Role in Protecting Inland Wetlands

Introduction

The Inland Wetlands and Watercourses Act requires the DEP to:

1. Regulate activities affecting wetlands in towns without locally-authorized commissions;

2. "Exercise all incidental powers necessary to enforce rules and carry out the purposes of (the act)," and

3. "Exercise general supervision of the administration and enforcement" of the act.

Duties commanding most of the Department's attention have been the regulation of the towns without local wetlands commissions (currently numbering 14), providing technical assistance to local agencies, regulation of state agency projects affecting wetlands, and investigation of citizen complaints.

Of ten professional staff positions in the DEP's Water Resources Unit, approximately two and one-half are assigned to inland wetlands work.

Towns Without Commissions

A serious and worsening backlog exists in the DEP's Water Resources Unit. An application to perform work affecting inland wetlands in one of the fourteen state-regulated municipalities takes an average of seven months to process. The workload is excessive for current staffing. Obligations related to the fourteen towns include 280 inland wetlands permit applications each year, 150 citizen complaints requiring investigation, and an average of 17 violation actions arising from those complaints. This work is in addition to the review of highways and other state projects, as well as provision of technical aid to municipalities, that must be performed by the same 2½ persons.

Three rapidly-growing communities account for one half of the permit applications submitted from the fourteen state-regulated towns: Monroe, New Milford, and Wallingford. The need to process the growing number of applications from these towns has caused three deleterious effects: 1) Review of the applications is rushed, sometimes done without a site visit, and the quality of regulation necessarily suffers, 2) Staff has inadequate time to research and prepare cases for enforcement actions, and 3) Many of the 155 towns that have their own wetlands commissions are denied the technical information and assistance they require or request. This last effect is perhaps the most serious, and the Council questions the wisdom of permitting a handful of towns to avoid the expense and trouble of regulating inland wetlands activity when this avoidance comes at the expense of 155 towns which do regulate their wetlands but which need occasional assistance from the DEP.

One hundred and fifty-five towns have assumed the responsibility of inland wetlands regulation in the 14 years since creation of the wetlands law. The Council recommends that the General Assembly establish a date by which the other 14 towns would be required to assume authority. To insure against towns ignoring such a mandate, the statute should also specify that the towns be charged for the DEP's inland wetlands regulatory services if the towns are not performing the regulation themselves. The fees for any town should be based on the DEP's actual costs of servicing that town. As any town could probably perform the work less expensively than the state, the towns would have financial incentives to seek delegation of regulatory duties. The major risk of pressing all towns to assume responsibility for wetlands regulation would be that a town might perform its regulatory duties in a half-hearted or lackadaisical manner, but with greater DEP monitoring of municipal commission activity (see other sections of this report), that problem can be avoided.

As a final note on this subject, the Council's recommendations regarding staffing levels for the DEP's inland wetlands office assume a transition to self-regulation by all 169 cities and towns.

DEP Authority to Revoke Commission Power

On four occasions, the DEP has revoked the regulatory authority of a town where the locally-authorized commission failed to perform. In 1984, for example, it was determined that the commission in one town had failed to hold regular meetings, so the Commissioner assumed jurisdiction over its wetlands activities. There exists, however, considerable confusion concerning the circumstances under which this revocation of authority can and should legally occur.

The CEQ recommends that Section 22a-42 of the General Statutes be amended to authorize the Commissioner to revoke the authority of any municipal inland wetlands agency not fulfilling the intent of the statute, and that the DEP be given clear statutory authority to define the circumstances under which it may revoke a town's authority. It is anticipated that these circumstances would include failure of a municipal commission to meet regularly, repeated failure to carry out procedural requirements or act within statutory time constraints, repeated failure to regulate all regulated activities, and repeated failure to take enforcement action against illegal activities.

Supervision of Local Commissions

The CEQ finds that the original structure of the Inland Wetlands and Watercourses Act is sound; that is, the law is most effectively implemented by local commissions. There is no evidence that direct regulation of all 169 towns by the DEP would result in more effective protection of inland wetlands; on average, regulation by DEP staff appears to approximate the work of the average municipal inland wetlands agency. Switching to a system of regulation by the state would cost at least $3.5 million annually for no certain statewide benefits. Furthermore, local regulation provides more opportunity for site inspection and monitoring of construction by local officials. Maintaining local discretion does, however, leave open the possibility that natural resources of importance to the state may be unnessarily harmed because of strong local development interests, ineffective commissions, or lack of local committment to conservation. In 1986, the DEP determined that at least two local wetlands agencies were not functioning properly, and that wetlands had been filled unnecessarily. While political influences or commission ineffectiveness may be temporary and local, the resultant destruction to wetlands will be permanent and can affect other communities. The Wetlands Act intended that the state, at the very least, monitor wetlands activity in locally-regulated towns.

Case Study

During 1986 the first selectman of a Connecticut town, acting as chairman of its Inland Wetlands Commission, repeatedly approved wetlands commission business without holding meetings of the Commission. He failed to fill three vacancies on the Commission, which he is charged to appoint, and at least two meetings were cancelled for lack of a quorum. In one case, this selectman approved a subdivision owned in part by one of his business associates. On another occasion, he asked another commission member to approve an application for a proposal submitted by relatives. In neither case was a meeting held to hear or vote on the application, as required by regulations.

This situation raises several concerns. At the very least, it would seem that regular review by the DEP of permit applications and local commission activity (or the lack thereof) would have alerted the DEP to the need for some type of corrective action. This case illustrates the need for greater DEP record-keeping and monitoring of wetlands activity statewide.

Section 22a-42d requires that local commissions send a copy of any permit granted or denied to the Commissioner within ten days of such action. During a 4-month period in 1986, only 47 communities out of 154 reported to the DEP. The reports received are not retained by the DEP nor reviewed for content in a systematic fashion. No record-keeping is done. DEP staff looks for procedural compliance only.

The CEQ recommends that:

1. DEP enforce the reporting requirement and keep records of activity affecting wetlands.

2. Uniform applications or reporting forms be provided to all towns. These forms should include space for (at least) the reasons for approval or denial of the permit, and acreage and type of wetlands affected.

3. Local commissions also be required to send to the DEP copies of declaratory rulings regarding exempt activities.

4. DEP be required to report annually on statewide implementation of the inland wetlands act.

Additional DEP staffing will be required to review town activities and keep statewide records. Without this review and record-keeping, the DEP is unable to determine where the act is being complied with or where chronic problems of wetlands-loss might be occurring. Improved monitoring is critical to the successful implementation of other recommendations in this report.

DEP Authority in Locally-Regulated Munipalities

The DEP's Water Resources Unit has taken action in a few specific cases in locally-regulated towns, but there is confusion as to its jurisdiction in this regard. While again asserting the importance of local autonomy, the CEQ finds that the DEP should have clearly stated power to take corrective action where violations recur or remain uncorrected in a community.

The CEQ recommends that Section 22a-39 of the General Statute be amended to require the Commissioner to develop guidelines or regulations that specify the circumstances under which he could take action in a locally-regulated town.

The CEQ does not advocate state override of local inland wetlands agency decisions.

Wetlands of Critical Statewide Significance

While most wetlands are locally important, a small percentage are also important on a statewide scale. Destruction of these latter wetlands would interfere with attainment of important goals of the state relating to protection of water supplies and rare ecological resources. Even with good reports, the DEP is likely to learn of an important wetland's demise only after the issuance of a permit by a local commission. In many instances, a local commission would not issue such a permit if it had knowledge of the wetland's statewide significance.

Without giving the DEP additional regulatory authority, it would be beneficial for the DEP to know of pending applications pertaining to these extraordinarily valuable wetlands so that the Department could advise local commissions in their handling of the applications.

The Council recommends amending the General Statutes to incorporate the following scheme:

1. The Commissioner would be required to define "critical statewide significance," and to identify the wetlands that meet this definition. It is recommended that the criteria include (but not necessarily be limited to): wetlands over a certain size (to be determined); unusual wetland types such as black spruce bogs; wetlands that contain rare or endangered species as determined by the DEP's Natural Diversity Data Base; wetlands that straddle town boundaries; and wetlands which are important to the drinking water supply of one or more towns.

2. The Commissioner would be required to notify all municipal inland wetlands agencies of any "wetlands of critical statewide significance" under their jurisdiction. To safeguard the identity of rare species, the exact reason for a wetland's classification would not be disclosed (at this step).

3. If an application for a permit to conduct a regulated activity affecting one of the designated critical wetlands is submitted to a local agency, the agency would be required to notify the DEP. The agency would be prohibited from taking final action until it receives comments and/or advice from the DEP. (It is at this time that the DEP could be more specific about the significance of the wetland). The DEP would be required to submit comments within 30 days of receipt of the local agency's notice.

II. Enforcement

The Inland Wetlands and Watercourses Act calls for fines of up to $1000 for each violation and the same amount per day for continuing violations. It is not clear from the statutory text whether the "fine" is a civil penalty or a criminal sanction. In any event, the State of Connecticut has never, in the fourteen years since passage of the act, collected a fine for an inland wetlands violation. Although the Inland Wetlands and Watercourses Act itself does not provide for administrative civil penalties, section 22-6(b) of the General Statutes empowers the DEP to develop the regulations necessary to impose administrative civil penalties, but such regulations have never been developed.

Case Study

The following situation, which was corrected in September 1986, was first noted as a violation in May, 1977. It was believed to be cleared up at that time until new complaints surfaced three years later. In May, 1980, the Water Resources Unit of DEP requested that the Attorney General force the property owner to remove fill placed within the stream channel encroachment lines of a major state river. (About 270 miles of major flood-prone rivers are protected under the 1963 Stream Channel Encroachment Act (Connecticut General Statutes 22a-342 through 22a-349). All streams and rivers are protected under the Inland Wetlands and Watercourses Act, but, in general when a violation involves areas also covered by S.C.E.L. regulations, the Water Resources Unit pursues enforcement actions under that statute). DEP Wetlands staff had met on several occasions with the owner, who remained unwilling to remove the fill or provide engineering data to support a change in encroachment lines. In August 1981, the superior court entered a stipulated judgement ordering the owner to remove the fill. After this failed to correct the violation, another stipulated judgement was issued, calling for penalties of $2000 plus $100 a day after June 1, 1985 until all fill was removed. As of July 1st, some of the fill had been withdrawn, but most remained. On July 31st, the Water Resources Unit again requested that the attorney general secure compliance with the judgement. A March 1986 letter from the attorney general to the owner's law firm confirmed a new deadline of June 1, 1986 for compliance. A September 1986 field inspection by DEP confirmed that the violation had finally been corrected, after six years and a significant amount of DEP staff time. As of this writing, no penalties had been collected.

Case Study

A landowner was sent a letter in January, 1976 stating that further filling of wetlands on his property would require a permit from the DEP. In March 1979, a neighbor notified the DEP of filling again occurring in the wetlands. A meeting in May between the owner and representatives of the DEP resulted in the submission of general plans for the construction of a pond. As of January 1980, the state had not received requested permit applications, and further observed that additional filling had occurred in the wetlands, for a total of 1¼ acres lost through filling.

In February 1981, a hearing officer for the DEP recommended that the applicant be allowed to maintain the original 1¼ acre of illegal fill and be permitted to fill an additional 3/10 acres for construction of a retail building and parking lot. The DEP issued a permit in accordance with the hearing officer's recommendation.

By ignoring the DEP, the violator was able to enhance the value of his land, at the expense of wetlands. There was no penalty for ignoring the regulatory agency.

Of 104 inland wetlands enforcement actions initiated by the Water Resources Unit since the beginning of 1981, 17 have been referred to the Attorney General (and none have been referred to the Chief State's Attorney for criminal actions). In 8 of the 14 which have been resolved, the violator was forced to submit an application for the illegal activity. In some cases wetlands were restored. A penalty has never been levied.

The CEQ finds that too little is done to discourage those who would willfully destroy inland wetlands, especially those who would have significant financial incentives for doing so. Although the state would rather seek compliance than financial penalties, according to staff members in the DEP and Attorney General's office, most environmental experts see a deterrent value in penalties. It is clear that the legislature intended to see violators of the wetlands act penalized. It specified that all costs as well as reasonable attorney's fees be assessed as damages against the violator and that these monies be awarded to the Commissioner, municipality, district, or person which brought the action to court. (Penalties and other monies collected by the Commissioner were to be used for wetlands restoration).

The present system for assessing penalties is cumbersome, antiquated, and ineffective. The DEP must develop regulations for imposing administrative civil penalties as authorized by Section 22a-6 (b) of the General Statutes. Other programs within DEP have adopted administrative civil penalty regulations and they appear to be a helpful tool to effect compliance. The fairness of civil penalties lies in the ability of the Commissioner to impose penalties commensurate with financial advantage gained by the violator in ignoring the law. The Massachusetts legislature recently found court-imposed penalties an ineffective means of enforcing the wetlands act; administrative penalties were implemented in September, 1986.

Municipalities have had only a little more success than the state in collecting fines. In response to an open-ended question on the CEQ's 1986 survey of municipal inland wetlands agencies, difficulty of enforcement was the problem most commonly cited by local commission chairmen. Many towns desire the authority to impose fines without going to court. Attorneys have submitted information to the CEQ indicating that the judicial process is a slow and ineffective means of stopping and penalizing illegal activities in fragile wetlands where the damage is done while the case awaits trial.

The CEQ recommends that:

1. Section 22a-44 of the General Statutes be amended to make clear provisions for both civil and criminal penalties to give the state a choice of enforcement tools, as currently provided in other environmental laws.

2. The authority to impose administrative civil penalties, which the DEP has under Section 22a-6b, be extended to municipal inland wetlands agencies. Appeals from locally-imposed penalties, like those from the DEP, would be heard by the DEP's Adjudications Unit.

3. The Commissioner develop regulations for the implementation of administrative civil penalties.

4. The Commissioner be required to develop model regulations for locally-imposed civil penalties, and to train towns in their use.

5. A deadline be established for the promulgation of all regulations needed to implement the above.

Case Study

In November, 1978 a property owner in a state-regulated town was sent a letter ordering him to cease activities which had already filled ½ acre of wetlands without a permit. After meeting with his attorney and a representative of the DEP on the property, the owner agreed to file an application. Nine months later, no application had been filed, and more filling had occurred. In October, 1979, a different attorney responded to a DEP letter, and stated he would be in touch for discussion. Three months later, the case was given to the Attorney General's office. In August 1982, the owner was granted a permit to maintain the original ¼ acre of fill and ordered to remove an additional ¼ acre by October 16. On November 19th, he was sent a letter by the DEP, complaining that the ordered removal had still not taken place. In December, it was verified that the fill had been removed.

Four years after the original notification of violation, the property owner was allowed to maintain the original violation, after repeatedly ignoring agreements with DEP. He was not penalized, other than being required to remove fill that was placed after he was told he was in violation.

By ignoring the DEP, the violator ultimately was able to enhance the value of his land, at the expense of wetlands.

Legal Staff

At the time of the Inland Wetlands and Watercourses Act's enactment, the Water Resources Unit enjoyed its own legal staff. That staff was disbanded in 1976. As designed by the legislature, the Wetlands Unit must play a legal and regulatory role as well as an environmental one. At present, scientifically-trained staff must make daily judgements about legal matters, even seemingly minor decisions as to when to refer cases to the Attorney General. While the staff displays a commendable knowledge of the statutes, other areas of expertise and knowledge are needed to be effective in court proceedings and administrative hearings. Presently, the staff must seek advice and assistance from the Attorney General's office, a different agency with other responsibilities, which is physically and functionally removed from the Wetlands Unit. In many administrative hearings, the DEP's technical staff present cases against attorneys retained by its adversaries. The CEQ recommends that the Water Resources Unit again be provided with its own legal staff of two attorneys.

An important function of the in-house attorneys would be provision of legal advice to municipal inland wetlands commissions which may have routine questions about current points of the law, or may be facing complicated enforcement cases. (See also the sections on technical assistance to municipalities and dependence on town attorneys).

The job descriptions for the legal staff should be sufficiently clear to preclude any confusion or overlap with the duties of the Attorney General's office.

III. Technical Assistance and Training for Local Commissions

The most effective use of DEP staff time, in terms of protecting inland wetlands, is in helping municipal wetlands commissions do their job effectively. Unfortunately, other duties -- especially the demand of regulating 14 towns directly -- prevent the DEP from providing the necessary technical assistance and training to local commissions.

The job of regulating wetlands activity is technically and legally complex. Prior to being appointed to a local wetlands agency, few people, regardless of their background and education, have in-depth knowledge of wetlands ecology and the Inland Wetlands and Watercourses Act. The essential knowledge is not intuitve, and training is necessary for a commission member to be effective. For most commission members, training is on-the-job. Even an experienced commissioner is hard pressed to keep current with new scientific and legal knowledge. The Connecticut Association of Conservation and Inland Wetlands Commissions, a small non-profit organization with part-time staff, distributes a newsletter and co-sponsors some workshops, but these do not fill the entire need.

Fewer than 10 percent of Connecticut towns have full-time staff for wetlands work. Many more towns, 25 percent, report having no staff at all for wetlands. Where part-time staff is present, often it is clerical. Conclusion: The great bulk of inland wetlands regulatory work is performed by volunteers.

Technical assistance is needed in complicated or very important cases, when the local commission simply does not have the expertise to make expert judgments about a wetland or a proposed activity. A commission can require detailed information from the applicant's consultant, but evaluating that information requires considerable experience. A commission should be able to obtain needed advice from the DEP. In recent months, the DEP has had to reject some requests for assistance because of its workload.

According to the CEQ survey, approximately 80% of local commissions have asked for technical assistance from the DEP at least once in the last three years. Ninety percent of them regarded the DEP's services as helpful. Among the negative comments were complaints about delays. The CEQ recommends that the DEP's capabilities to provide technical assistance be expanded.

In addition to case-specific technical assistance, there is a need that cannot be overstated for general training of local commissioners. Ninety percent of inland wetlands commission chairmen wish to see more training available. A significant minority, 33%, favor mandatory training of local commissioners.

Mandatory training is a controversial idea. Clearly, some assurance of knowledge is necessary, but mandatory training could impose a further hardship on volunteers already committing much time to their communities. In some cases, it would make it difficult for towns to attract and retain commission members. Recognizing this, the CEQ nonetheless recommends that some form of training be required. Commissions are charged with an increasingly important and complex task, and have extensive authority.

The CEQ recommends specifically that Section 22a-42 of the General Statutes be amended to require any person appointed to a municipal inland wetlands agency (after a certain date) to attend a minimum of two DEP-approved workshops in his or her first year of service.

In order to make the attendance requirement reasonable, as well as to disseminate up-to-date information thoroughly, the DEP must offer considerably more training sessions at convenient times and places. Two of the staff members that the CEQ recommends be added to the DEP Water Resource Unit should be assigned to training of local commissions. Training should also be available for town wetlands staff.

Connecticut reaps the benefits of millions of dollars worth of volunteer local commissioners' time. The state can bolster the effectiveness, and increase the return, with minimal additional investments in commission training.

The DEP must also be provided with the funds needed to develop handbooks and other instructional materials for volunteer commissioners.

IV. Legal Problems Encountered by Local Commissions

Dependence on Town Attorneys

Wetlands commissioners frequently lament their dependence on town attorneys who may not have experience in wetlands litigation. Some commissions have observed reluctance of town attorneys to pursue legal action or remain firm in the face of potential lawsuits. In some cases, the violator or opposing party may be the town itself. In still other cases, the attorney and or the elected officials for whom he works might not view wetlands-related enforcement action as being a priority.

A few towns have solved this problem by hiring separate attorneys for wetlands-related work. The Ansonia Inland Wetlands Agency, for example, insists on interviewing the town counsel; if he or she has insufficient experience in wetlands matters, the commission selects and hires another attorney. The problem, of course, is that some town governments will not agree to this added expense.

The failure of some town attorneys or officials to provide adequate legal services to their towns' inland wetlands commissions is a serious problem that can undermine wetlands conservation efforts. The CEQ considered recommending an amendment to the statutes that would guarantee each commission an attorney satisfactory to it. This idea was rejected as being "over-corrective", as it could affect many towns where attorney problems do not exist. Instead, the Council considered how the three legal needs of local commissions -- advice, enforcement action,and defense against appeals -- could best be satisfied.

Providing the DEP's Water Resources Unit with at least two in-house attorneys, who would have among their duties the offering of advice to municipal commissions, would meet the information needs of most local commissions. Also, the DEP attorneys could provide advice regarding enforcement actions (how to correctly issue and follow up a cease-and-desist order, how to conduct a show-cause hearing, etc.), although enforcement would still be left to the towns. (If a town consistently failed to follow through with enforcement against violators, the DEP could revoke the town's delegated authority to administer the inland wetlands law).

The third major legal need of local commissions -- defense against appeals -- must be the responsibility of the town attorney. For an adequate defense, most commissions can rely on the professionalism and fundamental incentive their attorneys have to win cases.

Protection of Commission Members from Lawsuits

On occasion, individual commission members have been sued by parties unhappy with a commission's decision. Commission members regard such lawsuits as harassment. While suits against the commission itself are a normal part of the appeals procedure, suits against specific members (usually, the members who voted against a particular application) discourage qualified citizens from serving on commissions. In at least one case, the plaintiff was successful in having liens placed on the commission members' houses pending outcome of the case.

No state action could prevent suits under the federal Civil Rights Act, under which the suits against wetlands commissioners have been brought. However, the state can require municipalities to indemnify volunteer commission members for official actions. In fact, current law does appear to require municipalites to defend and indemnify commission members (except cases involving willful or wanton disregard of civil rights). The Council recommends that statutory protection of volunteer commission members be continued.

Previously Approved Subdivisions

According to land-use attorneys and several wetlands commission chairmen, a significant number of undeveloped lots still exist in subdivisions that were approved prior to the adoption of the Inland Wetlands and Watercourses Act. Owners of these lots-of-record are entitled by statute to build houses on them, regardless of the condition of the property. Some municipal inland wetlands agencies allow no more filling than what is required to build a small house and a driveway, but other towns do not regulate activities on these lots at all. Twelve years have elapsed since these lots were granted exemptions. It makes little sense to require inland wetlands commissions to continue to watch passively as construction on these lots causes detriment to their towns. Filling and construction on a previously-approved subdivision lot can cause as much off-site damage, in terms of flooding and water supply, as construction on a new lot.

The Council on Environmental Quality recommends the establishment of a deadline after which owners of these lots would be subject to all requirements of the Inland Wetlands and Watercourses Act.

Agricultural Exemptions

Many municipal commissions have expressed uncertainty about the extent to which agricultural activities are exempt, and the question has attracted controversy. No one questions the exemptions granted for tilling, grazing, or fruit-growing. However, the following activites have all been pursued as non-regulatory "uses-of-right" under Section 22a-40 of the General Statutes:

- Filling of a swamp or pond to increase cropland acreage.
- Earthmoving and filling of wetlands for a tree farm.
- Excavation of gravel for use in a nursery business.
- Dredging of a watercourse to install irrigation equipment.
- Excavation of peat.
- Construction of logging roads and trails across streams and wetlands.

The danger of allowing uncontrolled filling, excavation, or earth-moving in the name of agriculture is in the opportunity it provides to prepare land for anticipated development. Wetlands that a local commission would never permit to be filled for development could be filled as a "permitted use as-of-right" in the waning days of a farm, used one year for crops, and then sold as developable land. It is hoped that wetlands conversion for legitimate agriculture will be slowed or stopped as a result of the Food Security Act of 1985 (the "Farm Bill"), which contains a "Swampbuster" provision which makes newly-converted wetlands ineligible for certain federal agricultural assistance programs. It is the conversion of wetlands for anticipated development in the name of agriculture, along with the destruction of wetlands on farms for non-agricultural purposes, that needs to be corrected at the state level.

According to a 1982 issue of the Wetland Adviser (the newsletter formerly issued by the DEP inland wetlands office), the DEP staff does not believe that the provisions in the statute regarding permitted uses as-of-right should preclude limitations or qualifications. The CEQ agrees, and recommends the addition of clarifying language to Section 22a-40 of the General Statutes to state that only agricultural activities which do not involve earth-moving, excavation, deposition of fill, the potential to cause sedimentation or erosion, or any alteration of the natural character of the land, would be permitted as of right.

Local Enforcement

Current statutes make meaningful enforcement, including penalty assessment, difficult-to-impossible for local inland wetlands commissions, according to some attorneys who testified before the Council. The lack of adequate enforcement statutes was also the problem most commonly cited by the wetlands commissions responding to the CEQ survey. The most potent enforcement weapon -- the threat of financial penalties -- is so difficult to impose that it hardly exists. Some attorneys and commission members cite this as the most severe problem for commissions.

The CEQ recommends a two-step process for giving municipal wetlands commissions authority to impose civil penalties administratively: 1) amend the statutes to allow municipalities to develop regulations for the administrative imposition of civil penalties for wetlands violations, and 2) Require the DEP to develop model regulations and to instruct municipal commissions in their adoption and use.

Case Study

A commercial property owner was issued a cease and desist order in August 1985 to restrain filling which had already consumed one half acre of wetlands in the Connecticut River Floodplain. The local Inland Wetlands Commission also ordered the area restored to its original contours.

The owner claimed that the wetlands were filled without his knowledge, and suggested that the person formerly leasing the property might be responsible. Several witnesses, however, including truck drivers who had deposited fill at the site, testified that the owner had been present during filling operations, and had directed such efforts. Referring to a part of the state statute which holds a property owner responsible for wetlands destruction regardless of his level of direct involvement, the wetlands commission, in November, requested that the town's attorney pursue fines against the owner in superior court. The property owner requested an opportunity to meet with the commission, and court action was postponed, pending that discussion. After failing to attend the Commission's January meeting, he agreed at February's to do the necessary restoration work.

As of mid-summer 1986, corrective action had not begun. The town attorney expressed reluctance to pursue court action because the owner had agreed to restore the area and kept promising to do so. In August, the owner's attorney once again tried to claim that the contractor who performed the work should be held responsible, and even misquoted DEP officials to this effect. This created further reluctance on the part of the town attorney to prosecute the owner.

As of October, 1986 the fill remained, enhancing the potential commercial value of the property, at the expense of floodplain wetlands.

Coordination with Planning and Zoning

The failure of some towns to develop clear relationships between their inland wetlands agencies and planning and zoning commissions has hindered land-use regulation in those towns, according to attorneys, commission members, and others who submitted comments to the CEQ.

Subdivision plans that involve wetlands must be submitted to a town's inland wetlands agency within ten days of their submission to its planning commission, according to state statute. The planning commission must consider the comments, if there are any,of the inland wetlands agency. In many cases, however, comments are not received before the planning commission acts. In the case of activity in one of the 14 DEP-regulated towns, wetlands comments might not arrive until several months after the planning commission's decision.

An inland wetlands agency has authority to attach conditions to an application, conditions which could require significant alterations for a subdivision plan. If, however, the plan has already been approved by the town's planning commission, much of the flexibility to design streets, lots, etc. is lost. The developer may be subjected to costly, but necessary, revisions or may even be faced with beginning the process anew. No one is served well by this situation, as one likely consequence is higher housing costs.

Some towns have taken steps to make certain that wetlands commission input is received by their planning and zoning commissions before the latter act. Usually, planning and zoning commissions require the applicant to secure wetlands permits (or recommendations, if wetlands are not affected) before they act.

A number of towns have given planning, zoning, and inland wetlands authority to a single board. The criticism of a one-commission approach is the fundamental difference between the planning and zoning functions and inland wetlands regulation. The former are attempts to translate the community's collective will regarding a town's character and developement intensity into patterns of land use. Wetlands regulation, on the other hand, is not intended to be a political or social decision; it is a process for evaluating wetlands as natural resources to determine what activity could be permitted while preserving the natural functions of those wetlands. It is unrealistic to expect one commission to make both types of decisions about a particular parcel. Some wetlands commission chairmen and others have recommended that there be a prohibition against planning and zoning commissions serving as inland wetlands commissions. The CEQ,

however, finds that some towns can be served well by one joint commission. Nevertheless, most towns should be encouraged to form separate commissions, and the DEP should monitor the effectiveness of any remaining joint commissions.

The Council on Environmental Quality recommends amending Chapters 124-126 of the Connecticut General Statutes to define a clear, non-overlapping sequence for planning, zoning, and wetlands decisions. Specifically, the statute should require that all planning and zoning applications (not just subdivision applications) first be referred to the inland wetlands agency for review and, if applicable, final action. This would give the planning and/or zoning commission the knowledge as to whether a plan can be accommodated by the wetland-related resources of the parcel.

At the time an application is referred to the wetlands agency, the time-clock that governs the planning and/or zoning commission's actions would stop, and would resume when the matter is returned from the inland wetlands agency.

A related zoning issue came to light during the CEQ's review of the issue: Some towns have implemented zoning regulations that take into account the protection of wetlands. Section 8-2 of the General Statutes should contain clear authority for municipalities to do so. Such zoning regulations should, by outlining the types of land unsuitable for certain activities, further minimize conflicting actions by the local zoning and inland wetlands commissions.

V. Department of Transportation Projects

The Department of Transportation is the entity having the largest single effect on inland wetlands in Connecticut. Although exact figures are unobtainable, it is estimated that major highway projects in the last six years have eliminated 145 wetland acres. An estimated 200 more acres are to be lost for roadways being planned now. Although this number is far less than what is lost annually through piecemeal encroachment across the state, it is accorded more public and media attention because of the visible nature of highway projects.

The controversies surrounding highways exemplify situations in which wetlands concerns and regulations are debated along with much broader concerns about land-use and development. In some cases, wetlands regulation is one of the most tangible legal mechanisms for delaying or stopping a project which may be questioned for any number of reasons.

These controversies suggest the need for other legal and public forums for broad land-use debates, a subject beyond the scope of this report. Of concern here is the manner in which they hinder the process of wetlands regulation. The benefits or detriments of particular highway projects can and should be debated formally by citizens and public officials; the effects on wetlands must be determined and regulated by the DEP Water Resources Unit.

The DEP must decide when excessive destruction of wetlands is simply a prohibitive factor for a given project. When wetlands must be disturbed, DEP must help in the planning process in order to keep this disturbance to an absolute minimum. These duties are hampered by the shortage of staff in the Water Resources Unit, resulting in delayed and incomplete regulation.

The CEQ also finds cause for concern in two procedural aspects of DEP's regulation of highway projects. Contrary to principles of good environmental planning, the DEP accepts inland wetlands applications for short segments of proposed highway projects. Issuing permits for each segment, rather than the whole proposed project, makes meaningful consideration of alternatives -- a key component of permit evaluation -- impossible. Secondly, in cases where the DEP publishes its intent to waive public hearings for wetlands applications, it fails to publish information on the comment period and the legal means by which citizens can petition for a public hearing; this omission is not in the spirit of public participation, and the DEP might fail to learn valuable knowledge about the subject wetlands.

VI. Wetlands Mitigation

"Wetlands Mitigation" is a term used to describe the human creation or enhancement of wetlands. It is being used increasingly in attempts to offset wetlands losses, and has been the focus of several recent conferences, including the 1986 National Wetlands Symposium and the fourth Wetlands Conference at the University of Connecticut.

The Connecticut Department of Transportation, one of the leading practitioners of mitigation in the Northeast, created its first wetlands literally by accident. Several have been created since then, the largest area being five wetlands totalling twenty acres, made in Newington as part of the Central Connecticut Expressway. There being very little in the way of precedent or reference, the DOT has relied largely on trial and error methods to guide its mitigation efforts. Recently, private developers have made increasing use of this novel practice.

As indicated by the aforementioned conferences, mitigation is currently the subject of much study and attention. It seems likely that the near future will bring considerably more knowledge about both the advisability of mitigation and methods for improving it where it is recommended. At present, however, there is too little known about wetlands creation to allow its extensive use as a substitute for natural wetlands. Undoubtedly, there are situations in which human-created wetlands can serve vital natural functions. Nature, however, has been creating Connecticut's current ecosystem, including its wetlands, for thousands of years. Knowledge about these wetlands has changed drastically in the past twenty years, and may well continue to change.

Should mitigation prove eventually to be a wise course of action, present restraint in its use will not hinder its employment in the future. Wetlands not filled and compensated for now, could always be so used at a later date. However, if mitigation wetlands which appear healthy after five years prove to not be functioning after fifteen, serious and irreversible damage will have been done.

CEQ recommends that the DEP and DOT arrange to have a comprehensive study made of wetlands mitigation, including a scientific evaluation of the wetlands created artifically in the last few years. Criteria should be drafted to ensure that developers or soil scientists proposing to use mitigation be qualified to ensure its success. Provisions must also be made to enforce mitigation conditions imposed on these projects, to provide for periodic monitoring of the created wetlands, and to ensure that follow-up inspections and improvements take place.

The Council emphasizes the need for caution in using mitigation. It should be used only to gain a public benefit to compensate for an unavoidable loss. It should never be used as a substitute for permit denials; in other words, no regulatory agency should accept a proposal for mitigation from an applicant who wants to fill wetlands, and create new ones simply to avoid less profitable alternatives. Mitigation should be used only where the application for wetland activity has been determined to be acceptable, and the mitigation should be imposed to restore some of the public's benefits.

1986 Survey of Municipal Inland Wetlands Agency Chairmen

A short questionnaire was sent to all local inland wetlands agency chairmen in the state. More than half (81 of 154) of the agencies responded. (An additional 12 towns were contacted by telephone, and some commission chairmen were interviewed in person, bringing the percentage of commissions providing information to 60%). The Council on Environmental Quality owes its thanks to all of the busy commission chairmen and others who took time to help in this review. (Extra time is one commodity inland wetland commissioners do not have a lot of).

Responses to the questions requiring numerical or yes/no answers are summarized on the following page. These answers helped to guide the Council in formulating its recommendations. For example, most commissions have found the DEP's assistance to be helpful, and the overwhelming majority wish to see more training available. This helped the Council to conclude that if the DEP had more staff to devote to technical assistance and training, many municipal commissions could benefit.

The questionnaire also included open-ended questions concerning problems encountered in regulating inland wetlands activities. As discussed elsewhere in this report, the fact that difficulties associated with enforcement were mentioned by approximately one-third of the respondents (including more than 50% of those who answered that question) led to the CEQ's recommendations for an overhaul of the penalties statute. Abuse of the permitted-as-of-right clause was another problem commonly cited, and the CEQ has made recommendations to correct it. Several other problems were identified by more than one commission and they are discussed briefly here:

Need for "Stronger" or "Tighter" Statutes. Mentioned by 13 commission chairmen. This comment appears to reflect commissions' frustration in not being able to deny carefully-engineered plans. Often (as the Council staff learned through interviews) an applicant will present consultants' reports showing that a proposed activity will not harm water quality, lead to increased flooding, or harm any uncommon wildlife species. Though uneasy about approving the permit, the commission will have on the record no clear reason for denying the permit, and will reluctantly issue the permit.

The Council considered recommending a re-working of the statute, to instruct local commissions to deny permits except whre applicants could prove no unreasonable impact. However, some attorneys have advised the Council that the existing statute gives full discretion to approve or deny applications for valid reasons. Indeed, many commissions said the statute works just fine, and evidently feel comfortable denying permits where the applicant fails to demonstrate no impact. In other words, the existing statute enables a town to do what has been recommended: to deny permits except where the applicant can prove no significant impact.

Survey Results

1. NUMBER OF MEMBERS ON COMMISSION

2 Commissions have 3-4 members
23 " " 5-6 "
40 " " 7 "
14 " " 9 "
2 " " 11 "

NUMBER OF ALTERNATE MEMBERS

32 Commissions have 0 alternates
39 " " 1-4 "

HOW ARE MEMBERS SELECTED?

43 Commissions are appointed elected Town Board, Council or Committee
10 are appointed by top elected official
14 are appointed but did not specify by whom
6 are elected

TOWN STAFF ASSIGNED TO WETLANDS

FULL TIME staff assigned to 7 Commissions
PART TIME " " " 50 "
NO " " " 19 "

---

2. AVERAGE NUMBER OF APPLICATIONS RECEIVED PER MONTH

1 or less reported by 14 Commissions
2 applications " " 19 "
3 " " " 13 "
4 " " " 11 "
5 " " " 8 "
6-7 " " " 5 "
8-10 " " " 5 "
11-15 " " " 3 "
Over 15 " " 2 "

DOES DATA INDICATE ACREAGE FILLED ?

YES 14 NO 37

NO, BUT COULD BE GATHERED 27

WHAT PERCENTAGE ARE DENIED?

0% reported denied by 12 Commissions
1-2% " " " 14 "
3-5% " " " 14 "
10% " " " 16 "
15-25% " " " 12 "
50% " " " 2 "
100% (?) " " 1 "

DO APPLICANTS CONSULT WITH THE COMMISSION BEFORE APPLYING?

YES 75 NO 2

---

3. HAVE YOU REQUESTED D.E.P. ASSISTANCE WITHIN PAST THREE YEARS?

YES 62 NO 16

HAVE THEY BEEN HELPFUL?

YES 55 NO 7

WOULD YOU LIKE TO SEE MORE TRAINING AVAILABLE?

YES 66 NO 10

WOULD YOU LIKE TO SEE MANDATORY TRAINING?

YES 24 NO 44

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4. DO YOU REPORT PERMIT ACTIVITY TO D.E.P.?

YES 32 NO 39

SOMETIMES 9

TO THE ARMY CORPS OF ENGINEERS ?

YES 8 NO 56

SOMETIMES 11

The existing statute does not give local commissions much guidance in weighing the relative benefits and impacts of a proposal. Nor does it give much advice for documenting denials or in challenging consultant's assertions. That guidance and training is the job of the DEP, the capabilities of which need to be bolstered.

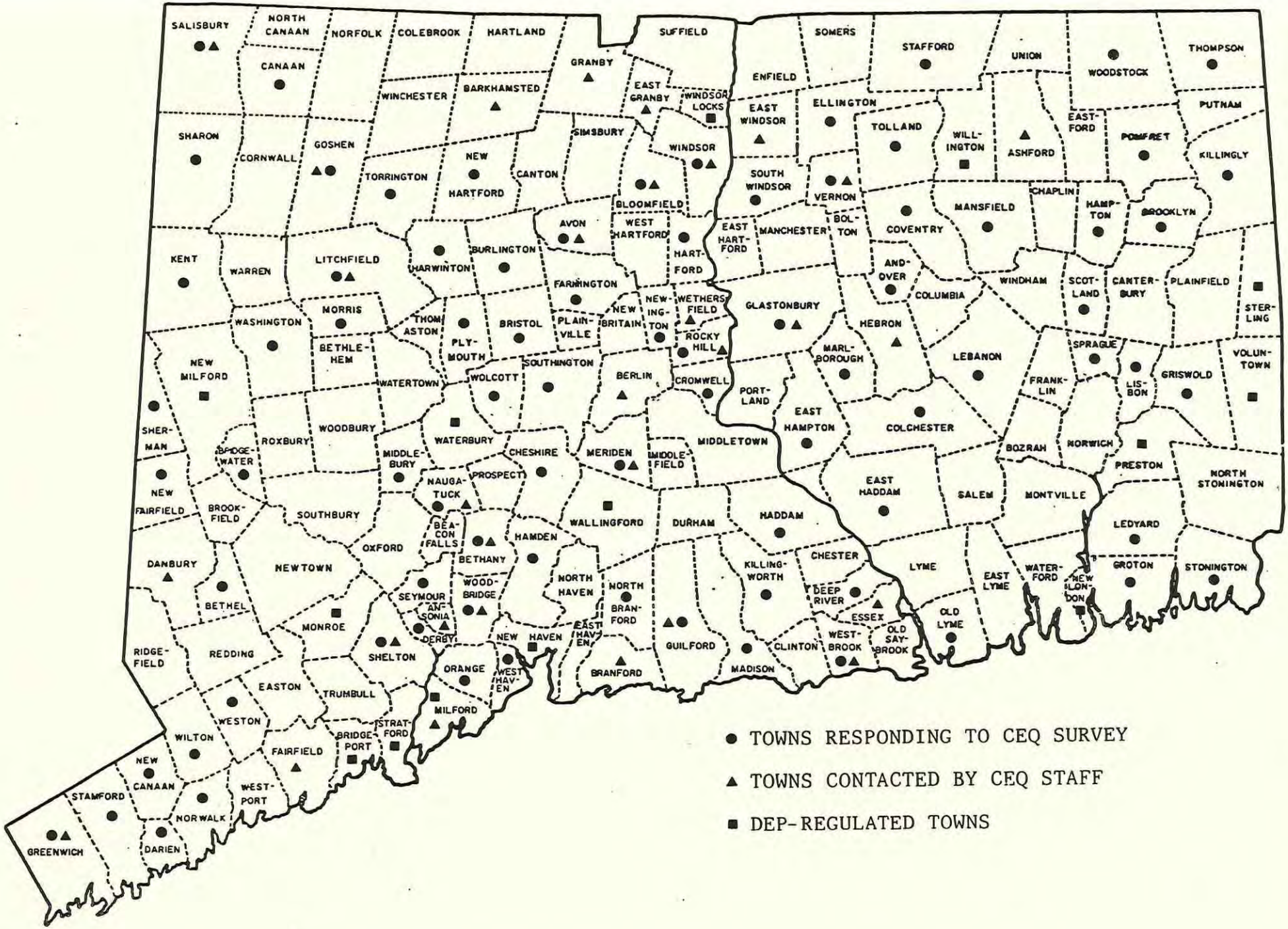
Need for setbacks. Mentioned by at least 6 commission chairmen. Setbacks or buffer zones are important in protecting wetlands and watercourses from siltation and pollution, and in providing habitat for wildlife that depends on both uplands and wetlands.

No legislation is needed to enable local commissions to regulate activities outside wetland boundaries. Court decisions have established the authority of commissions to regulate any activity where a threat to the wetlands can be demonstrated. The DEP should instruct local commissions in the regulation of activities outside wetlands that will affect wetlands.

Need to Distinguish Among Wetlands Types. The term "wetlands" encompasses many very diverse land types. As this report goes to press, the DEP is preparing to issue a manual for the evaluation of inland wetlands, which is intended to help commissions evaluate the relative importance of any wetland in terms of 13 wetland functions.

It is imperative that the DEP inform all commissions as to the proper uses of the new evaluation system, or commissions will likely find it being used by applicants in attempts to demonstrate the unimportance of"low-scoring" wetlands!

Other problems mentioned more than once include unclear jurisdiction of the U.S. Army Corps of Engineers, the lack of resources to do the job properly at the local level, and the need to integrate wetlands regulation with ground water protection, non-point water pollution, and other water resource issues. These can all be handled through DEP educational efforts.


SALISBURY
NORTH CANAAN
NORFOLK
COLEBROOK
HARTLAND
SUFFIELD
SOMERS
STAFFORD
UNION
WOODSTOCK
THOMPSON
CANAAN
GRANBY
ENFIELD
EAST GRANBY
WINDSOR LOCKS
EAST WINDSOR
ELLINGTON
TOLLAND
WILL-INGTON
ASHFORD
EAST-FORD
POMFRET
PUTNAM
KILLINGLY
WINCHESTER
BARKHAMSTED
SHARON
CORNWALL
GOSHEN
TORRINGTON
NEW HARTFORD
CANTON
SIMSBURY
WINDSOR
SOUTH WINDSOR
VERNON
CHAPLIN
HAMP-TON
BROOKLYN
BLOOMFIELD
AVON
WEST HARTFORD
EAST HART-FORD
MANCHESTER
BOL-TON
COVENTRY
MANSFIELD
KENT
WARREN
LITCHFIELD
HARWINTON
BURLINGTON
HART-FORD
AND-OVER
WINDHAM
SCOT-LAND
CANTER-BURY
PLAINFIELD
STER-LING
FARMINGTON
NEW-ING-TON
WETHERS-FIELD
GLASTONBURY
COLUMBIA
HEBRON
WASHINGTON
MORRIS
THOM-ASTON
PLY-MOUTH
BRISTOL
PLAIN-VILLE
NEW BRITAIN
ROCKY HILL
BETHLE-HEM
SOUTHINGTON
MARL-BOROUGH
LEBANON
SPRAGUE
LISBON
GRISWOLD
VOLUN-TOWN
NEW MILFORD
WATERTOWN
WOLCOTT
BERLIN
CROMWELL
PORT-LAND
FRANK-LIN
SHER-MAN
WOODBURY
WATERBURY
MIDDLE-BURY
CHESHIRE
MERIDEN
MIDDLE-FIELD
MIDDLETOWN
EAST HAMPTON
COLCHESTER
BOZRAH
NORWICH
PRESTON
NORTH STONINGTON
ROXBURY
BRIDGE-WATER
NAUGA-TUCK
PROSPECT
NEW FAIRFIELD
BROOK-FIELD
SOUTHBURY
OXFORD
BEA-CON FALLS
HAMDEN
WALLINGFORD
DURHAM
HADDAM
EAST HADDAM
SALEM
MONTVILLE
LEDYARD
DANBURY
NEWTOWN
BETHANY
CHESTER
LYME
EAST LYME
WATER-FORD
NEW LON-DON
GROTON
STONINGTON
BETHEL
SEYMOUR
WOOD-BRIDGE
NORTH HAVEN
NORTH BRAN-FORD
KILLING-WORTH
DEEP RIVER
ESSEX
MONROE
AN-SONIA
DERBY
NEW HAVEN
EAST HAV-EN
GUILFORD
CLINTON
WEST-BROOK
OLD SAY-BROOK
OLD LYME
RIDGE-FIELD
REDDING
SHELTON
ORANGE
WEST HAV-EN
BRANFORD
MADISON
EASTON
TRUMBULL
MILFORD
WESTON
STRAT-FORD
WILTON
BRIDGE-PORT
FAIRFIELD
NEW CANAAN
STAMFORD
WEST-PORT
NORWALK
GREENWICH
DARIEN
● TOWNS RESPONDING TO CEQ SURVEY
▲ TOWNS CONTACTED BY CEQ STAFF
■ DEP-REGULATED TOWNS

PART IV

1987: YEAR OF DECISION FOR SOLID WASTE

Summary

Among the Council on Environmental Quality's important findings are the following:

1. Different analyses result in differing predictions regarding the date at which Connecticut's landfill capacity will be exhausted. The most optimistic projections are for complete exhaustion in 1994.

2. All analyses project a need for developement of new landfills, even with the expected transition to resource recovery. Resource recovery will not be implemented soon enough on a statewide basis to avoid the need for new landfills in the foreseeable future.

3. The best opportunity for Connecticut to extend existing landfill life a significant number of years, and to minimize the number of new landfills that will be needed, is the immediate implementation of recycling of municipal solid waste. Achievement of twenty percent recycling, if implemented in conjunction with resource recovery, would extend the useful life of existing landfills by decades (but only by two years if implemented without resource recovery).

4. Illegal dumping has been reported to be on the increase in some areas of the state. Illegal dumping and improper landfill management can be expected to increase as legal disposal costs increase.

Summary of Recommendations

1. As the Department of Environmental Protection develops a statewide solid waste plan in 1987 (based in part on plans submitted by municipalities), it should utilize every means available to promote recycling and minimize future landfill needs. Any new landfills proposed should be available only to towns that meet waste-reduction goals through recycling.

2. The General Assembly should adopt a mandatory recycling statute. Under the recommended scheme, each town would be given a waste-reduction goal, which it could achieve through a recycling program of its choosing. A town that failed to meet its goal by a deadline, however, would be required to implement mandatory source-separation.

3. The General Assembly should continue to make funds available for household hazardous waste collection days, both for their environmental benefits and their outstanding educational value.

4. A statute should be adopted to require a designated agency to report to the General Assembly periodically on what actions Connecticut could take to reduce solid waste generation by controlling unnecessary packaging.

5. At least four positions should be added to the DEP's Solid Waste Managment Unit, to enable that Unit to keep pace with increasing inspection, enforcement, and planning burdens.

Introduction

Three important events of 1986 created the closest thing possible to excitement in the solid waste issue: 1) Thirteen million dollars were made available for recycling projects (ten by special action of the General Assembly, three from Connecticut's share of the Petroleum Overcharge Settlement Funds), 2) The Municipal Solid Waste Recycling Task Force took a serious look at the potential for recycling in Connecticut, and 3) Most municipalities worked to develop 20-year solid waste management plans by December 31, 1986 for the DEP's review and approval.

Solid waste will be at the center of much activity throughout 1987, as the Connecticut Department of Environmental Protection develops a statewide solid waste plan based on each town's own plan, combined with DEP-developed plans for any towns that fail to submit their own. Recommendations for recycling will probably be given serious consideration by the General Assembly. More landfills will close, and rising disposal costs may result in more widespread illegal dumping. Landfill operators will have greater incentives to forego proper landfill management to accommodate more solid waste.

The Council on Environmental Quality has reviewed the status of Connecticut's Solid Waste disposal capacity, and offers several recommendations in this report for actions aimed at minimizing the need to establish new landfills, and to reduce the environmental impacts of existing ones. (The environmental safety of resource recovery plants was addressed in a CEQ Special Report in April, 1986, and is not re-examined in this report. It is assumed that all plants, if built, will be operated in compliance with all air pollution standards and regulations, including those established pursuant to Public Act 86-332, An Act Establishing a Program for Monitoring Dioxin Emissions from Resource Recovery Facilities).

I. Landfills

The Department of Environmental Protection predicts the exhaustion of existing landfill capacity before 1990. A report issued in late 1986 by the Connecticut Audubon Society puts the depletion date at 1994. That same study indicates that a generous 25% average expansion in landfill capacity would extend landfill life only two more years. While it would be useful for Connecticut's landfills to last until 1994 or 1996, the exact date is unimportant. The key point is that all analyses point to a need for new landfills, even with the anticipated transition to resource recovery (also referred to as "waste-to-energy" or "trash-to-energy").

Regardless of the exact year in which the state will watch its landfills fill to their collective brim, many individual towns will find their own landfills closed before that time. Some communities will certainly be without landfill space well before the start-up of a resource recovery plant in their region. The thirty Connecticut towns having more than ten years of landfill capacity remaining will see that capacity coveted by neighboring (and perhaps distant) municipalities. If the towns without landfills are permitted to use the remaining landfills, those landfills will fill up much faster. Continuation on the present course -- that is, landfilling all solid waste until resource recovery plants are on line, and landfilling the residue from those -- will inevitably result in the need to establish new solid waste landfills.

Solid waste landfills are definite threats to ground water quality, and are always LULUs (Locally Undesirable Land-Uses). Assuming the DEP holds fast to its policy of permitting new landfills only in those areas where the ground water is classified as "GC" (the lowest classification), potential landfill sites are severly limited. "GC" areas constitute 0.3 percent of Connecticut's land area and only some are large enough to be suitable for landfills. Local opposition to any landfill large enough to accept waste from several towns can be expected to be substantial. The engineering studies and permitting procedures alone can take years to complete. Even if the state does have until as late as 1994 before landfills are absolutely full, efforts to site new landfills would need to begin this year.

After reviewing each municipality's 20-year solid waste plan, required to be submitted by the end of 1986, the DEP can determine what arrangements the landfill-less towns have been able to make for disposal of their garbage. Towns having landfill space remaining will probably not be enthusiastic about receiving other communities' wastes, except perhaps at premium tipping fees. Some towns will probably be unable to submit acceptable 20-year plans, leaving the DEP to chart their garbage destinies.

The DEP will be faced with two options when developing plans for municipalities without acceptable plans of their own: 1) If the statutes permit, the DEP could order towns with landfills to accept other towns' garbage, or 2) The DEP can encourage the creation of new regional landfills to accept waste from the planless towns. This landfill space will be needed in some areas, even with the implementation of waste-to-energy plants. (The real benefit of resource recovery will be realized in the extended life expectancy of new landfills; except in a few cases, it is being implemented too late to extend significantly the useful lives of existing landfills).

The CEQ views the first option as a stop-gap measure that only postpones the inevitable creation of new landfills, and uses up valuable space that could be better used to accept waste-to-energy residue for a longer period. It penalizes towns that have planned for the future by designating enough landfill space to last several years.

If the DEP pursues the option of new landfills, it can use that opportunity to impose restrictions on towns that use them, restrictions aimed at minimizing the landfills' number and size and maximizing their life expectancy.

The Council on Environmental Quality recommends the developement of a revised State Solid Waste Plan that makes new landfill space available only to towns that meet waste-reduction goals through recycling (see below). Such a provision could be enforced through permit conditions that prohibit a landfill from accepting waste from which the recyclables have not been removed.

II. Recycling

Potential

Advocates of recycling have sometimes seen their cause belittled for being an inadequate alternative to waste-to-energy plants. The plants, it is generally reasoned, reduce the waste stream by 70 to 90 percent, while recycling rarely removes more than 15 to 20 percent. Indeed, the aforementioned Connecticut Audubon Society report estimates that immediate attainment of 20% recycling statewide would extend landfill life by only two years.

The true potential of recycling is in its potential to extend existing landfill life when implemented in conjunction with waste-to-energy plants. According to the Connecticut Audubon Society, 20% recycling could extend landfill life two years. Waste-to-energy plants (as planned, with no major setbacks) by themselves could extend landfill life seventeen years, but a combination of recycling and waste-to-energy could extend landfill life by more than 50 years.

The many virtues of recycling -- ranging from energy efficiency to national security benefits derived from the conservation of imported metals -- have long been extolled, but none are so compelling locally as the extension of landfill life. A combined strategy of waste-to-energy and recycling is the one opportunity that Connecticut has to avert the need for the establishment of several new landfills. (Because of uncertainties in landfill data, it is not possible to determine whether a small number of new landfills would still be needed, but the need will definitely be less).

Recycling Policy

Thirteen million dollars were made available for recycling in 1986 -- three from Connecticut's share of the Petroleum Overcharge Settlement Funds and ten from an authorization by the General Assembly. the legislature also created a Municipal Recycling Task Force to determine how best to allocate the funds, which probably will go toward equipment and supplies for regional recycling programs.

CEQ staff has observed some of the Task Force's deliberations, and reports that the panel is giving thorough consideration to key issues, such as whether recycling should be mandatory or voluntary, and whether it should be municipal or regional. Serious efforts were made to solicit public opinion and expert input. The Council urges the General Assembly to give the Task Force's report priority attention.

Moreover, the Council on Environmental Quality recommends adoption of a mandatory recycling statute. Each town should be given a specific waste-reduction goal, which it could attain through a recycling program of its choosing (i.e., mandatory, voluntary, municipal, private, etc). A town that failed to achieve its goal by 1989, however, would automatically be required to implement mandatory source-separation. As a means of enforcing this law, the DEP should be required to tie all other solid waste policies to recycling. New landfills, if needed, should be available only to towns achieving their recycling goals. No town should receive long-term approval to use another's landfill unless meeting the recycling goal.

The Connecticut Resource Recovery Authority's involvement complicates the picture. At the least, the CRRA should not be permitted to enforce any "put-or-pay" contracts if they conflict with recycling efforts. The Municipal Solid Waste Task Force, as well as CRRA, will be investigating ways in which CRRA's waste-to-energy projects can be modified to encourage, rather than discourage, recycling by municipalities.

Mandatory recycling has been discussed for many years at the State Capitol, usually without much visible support. The need for recycling has never been more compelling than in 1987, however, and conditions(available money, clear public benefits) have never been more favorable. The economics favor recycling, because of the tipping fees associated with waste-to-energy plants (up to $40/ton) or new landfills (up to $70/ton). Whether burned or landfilled, solid waste is a source of pollution generated by everyone. The Council finds no compelling reason why the public should not be required to separate recyclables from their household waste, in much the same manner that carbonated beverage containers are removed from household waste now. The Council strongly warns against continuing on a path that will lead to the creation of more new landfills than would be necessary if recycling were implemented statewide.

III. Related Issues

Inspection and Enforcement

Proper operation of landfills is critical for minimizing their environmental impact. Without daily cover, for example, an operator increases the opportunities for contaminated runoff, rodent infestation, and fire-by-arson. A fire set to a landfill that had not been covered properly in October 1986 resulted in the evacuation of hundreds of nearby residents.

Due to an excessive workload, the DEP's Solid Waste Management Unit is unable to inspect all landfills frequently and at the same time pursue enforcement actions, review permit applications, / conduct statewide planning, and review submitted data. Consequently, some responsibilities are not fulfilled. As one example, a 1985 statute requires regional landfill operators to submit annual topographic surveys, but this law is not enforced by the DEP. As a result, its data-gathering suffers. Without reliable data, accurate projections about a landfill's life are not possible.

Inspection of landfills, along with enforcement against violators, is one aspect of solid waste management that should not be permitted to slide. High tipping fees and a spreading scarcity of bulky waste sites are reportedly resulting in more frequent illegal dumping. The CEQ recommends the addition of at least four staff members to the DEP Solid Waste Managment Unit for increased inspection.

Household Hazardous Wastes

Few environmental concerns have expanded as quickly in the citizenry's consciousness as the issue of household hazardous wastes. Three years ago, discarded household cleaners, solvents, paints, pesticides, and other toxic chemicals received no special treatment. Since 1984, 74 Connecticut towns have participated in 35 household hazardous waste collection days at an average cost of approximately $12,000 to $15,000.

The tangible benefits of "Collection Days" are reductions in the amount of toxic chemicals being discharged into groundwater by being poured down household drains, dumped in the back yard, disposed of down storm drains, or placed in the garbage and hauled to the local landfill. No data exist to measure these benefits.

The intangible benefits of household hazardous waste "Collection Day" efforts are those associated with the educational lessons which accompany each collection. Due to the publicity

involved, almost every household in the participating municipality is made aware of groundwater pollution, drinking water supplies, solid waste disposal, recycling, toxic chemicals, household safety, and the need to be careful and concerned consumers. In fact, the direct contact with people bringing household hazardous wastes to "Collection Days" and the media coverage of such events are probably the most powerful educational tools at the DEP's disposal.

In addition, most "Collection Day" efforts have included delivering educational packets to the schools and presenting workshops for teachers on ground water protection and toxic substances.

Because most of the benefits obtained from the household hazardous wastes "Collection Day" programs are educational and broad, the CEQ recommends that the state continue to make matching grants available to municipalities for "Collection Days" until the mandated Advisory Committee can finalize plans for the future of these programs.

Source Reduction

Despite the societal problems posed by garbage, the trend is toward greater, not less, per-capita garbage generation. In 1960, daily per-capita generation was 2.9 pounds. It is now about 5 pounds. Packaging -- often described as "excess packaging" -- is generally regarded as one of the primary reasons for each person's growing contribution to the solid waste problem. New types of packaging -- plastic soup cans, or the plastic-and-metal can being researched by a major beverage company -- which cannot be readily recycled point toward a worsening of the solid waste disposal burden.

Connecticut has taken one notable step in the direction of waste-reduction, the bottle law. Even that noteworthy legislation, however, is more a form of forced recycling than it is true waste reduction, since most bottles and cans are recycled, not re-used. Genuine waste reduction would involve reduction in the amount of material used to package goods.

The history of states' efforts to reduce packaging is not stellar. Minnesota attempted to lead the way in 1973 with its "Excess Packaging Act". The state's first move was to ban plastic milk containers. With legal costs totalling $250,000, the state successfully defended its law all the way through the U.S Supreme Court. In the face of in-state industry lobbying, however, the state never implemented the milk carton ban or the law.

The packaging issue could best be addressed at the federal level, but is not. The Federal Resource Conservation and Recovery Act, known commonly for its hazardous waste regulation provisions, required the U.S. EPA to report regularly to Congress on the status of waste reduction, with recommendations. None have been implemented.

In the absence of federal action, the CEQ recommends the adoption of a statute to require a designated agency (perhaps the DEP or the Solid Waste Managment Advisory Council) to report to the General Assembly periodically on what Connecticut could do to reduce unnessary packaging. More direct action would be preferable, but the issue needs more research.

Short-term Dilemmas

By the beginning of 1987, municipalities will have submitted acceptable 20-year solid waste management plans to the DEP or will have forfeited their planning role to that same agency. Later in 1987, the DEP will devise a new Solid Waste Plan, incorporating towns' plans and DEP's own plans for towns without their own. Following public hearings and associated administrative procedures, the Plan will at last be adopted. After adoption of the Plan, the DEP will have clear authority to deny any solid waste disposal scheme inconsistent with the Plan.

In the interim, it is not clear that the DEP could disapprove of any particular town's efforts to ship its solid waste dozens of miles to a destination inconsistent with the State Plan when that town finds itself suddenly without landfill space. However, even in the absence of clear authority, the CEQ recommends that the DEP hold to a policy of strongly discouraging obviously inconsistent solid waste disposal schemes by warning municipalities that no such efforts should be initiated because they will be prohibited when the Plan is adopted.

PART V

1986 ACTIVITIES OF THE C.E.Q.

1986 ACTIVITIES OF THE COUNCIL ON ENVIRONMENTAL QUALITY

The Council continued on the course it charted in 1985: In-depth evaluations of selected state environmental programs, careful review of state agency construction projects, and active investigation of citizen complaints. Highlights of 1986 CEQ activity include the following:

- The Council received phone calls, letters -- even a video -- from citizens concerned about emissions from resource recovery plants, both existing (Windham Energy Recovery Facility) and proposed. The Council held three hearings, receiving testimony from citizens, conservation organizations, legislators, and officials of the Department of Environmental Protection and Department of Health Services. The CEQ recommended that the state pay to have scrubbers installed on the Windham facility, and that the General Assembly adopt a dioxin-control bill. (Governor William O'Neill made funds available for the scrubbers, and a dioxin bill was passed by the legislature). The CEQ's findings and recommendations were issued in a Special Report in April.

- Sixteen Environmental Impact Evaluations (or in some cases, Findings of No Significant Impact) issued by Connecticut state agencies were reviewed carefully. Comments were submitted regarding 10. One was viewed by the Council as being so inadequate that a complete revision was recommended. CEQ staff met with appropriate agency staff and consultants, and the requirements for an acceptable evaluation were outlined. A new evaluation was conducted, and changes were made in the project plan that reduced environmental impact.

- Nearly 40 citizen complaints were received that required action by the Council. (This does not include simple referrals to other agencies). The CEQ made several recommendations to other state agencies in attempts to resolve the problems that led to the complaints.

- In conducting its evaluation of the state's inland wetlands program, the Council heard from conservationists and land-use attorneys, and more than half of the municipal inland wetlands agency chairmen in Connecticut responded to a CEQ survey. See Section III of this report for further details.

The Council on Environmental Quality looks forward to working with Governor William O'Neill, the General Assembly, the Department of Environmental Protection, other state and local agencies, citizen groups and individual citizens toward implementation of this report.

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