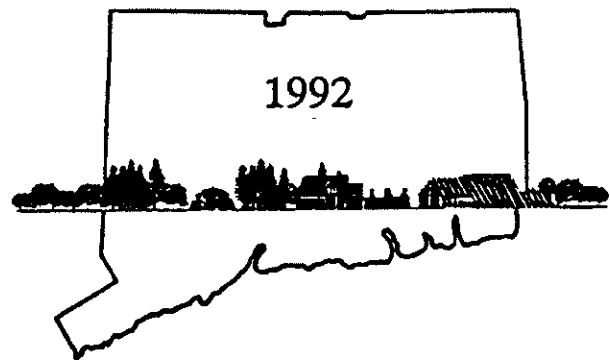


Annual Report of the Council on Environmental Quality



1 THE ENVIRONMENT AND THE ECONOMY

Why Connecticut must invest in environmental protection programs in order to meet state economic goals

19 CONNECTICUT GREENWAYS UPDATE

Forecast: People will be walking and bicycling through the state's first greenway projects by autumn of 1993

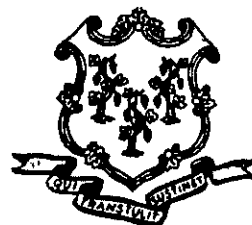
25 ENVIRONMENTAL QUALITY GUIDE

Annual check-up of Connecticut's air, water, land, and wildlife

37 1992 CEQ ACTIVITIES

41 GOVERNOR'S TASK FORCE ON HUNTING & PUBLIC SAFETY

More than 40 recommendations to improve safety outdoors



STATE OF CONNECTICUT

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 board 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 primary functions include:

- 1) Submittal to the Governor of an annual report on the status of Connecticut's environment, including progress toward goals of the "Environment 2000" statewide environmental plan, with recommendations for remedying deficiencies in state programs;
- 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 agency's finding that its project will not cause significant environmental impact.

COUNCIL MEMBERS -- 1992

John A. Millington, Chairman
Washington Depot

Mark R. Kravitz
Guilford

Terry Backer (through 12/92)
Stratford

Donal C. O'Brien, Jr.
New Canaan

David A. Baram (beginning 2/93)
Bloomfield

John D. Pagini
Coventry

Stephen H. Broderick
Brooklyn

Gregory A. Sharp
Northford

Astrid T. Hanzalek (through 2/93)
Suffield

Dana B. Waring
Glastonbury

Karl J. Wagener
Executive Director



STATE OF CONNECTICUT

COUNCIL ON ENVIRONMENTAL QUALITY

April 15, 1993

Lowell P. Weicker, Jr.
Governor of Connecticut
State Capitol
Hartford, Connecticut 06106

Dear Governor Weicker:

I am pleased to present the annual report of the Council on Environmental Quality for 1992. Council members and staff have worked hard during the past year to offer timely and realistic recommendations on matters that will continue to be of great concern to our state during 1993.

In Part One, "The Economy and the Environment," the Council examines essential functions of the Department of Environmental Protection (DEP) in relation to the economic requirements of Connecticut. During 1992, the Department's staff was focused on reducing the sizable backlog of permit applications. As you know from the DEP's quarterly reports, they have knocked the backlog down by more than 25 percent. This effort benefited from a focused commitment of willpower, a marshaling of scarce resources, periodic evaluation, and the assistance of this Council, the General Assembly's Environmental Permitting Task Force, and a consultant. We conclude that this successful effort could serve as a model for improving other broad, cross-program functions of the DEP.

If we can in fact replicate the permitting effort, we can solve the problems that impede progress in private-sector clean-up of contaminated properties, enforcement, parks management, and setting of environmental priorities. For each function, this will mean focusing Connecticut's collective will, resources, and expertise to design the best systems possible and put those systems in place. We should be certain to build in evaluation and accountability measures, so that you and the public can be sure that appropriations are being spent in the best way possible. As the report explains, new appropriations will be needed; re-allocation will cease to be an option.

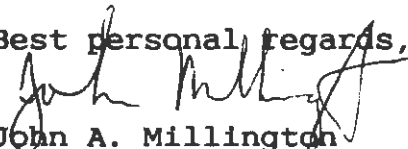
In focusing this year's report on problems affecting the Department of Environmental Protection, the Council is not ignoring the good work being done by that Department, other agencies, municipalities, and private groups to protect and improve this state. Excellent work is being done. But the DEP is at the core of this state's twin priorities of environmental protection and economic development. As such, it should be a shining example of state government in which every resident, from the fly fisherman to the small businessman, can take justifiable pride.

Part Two highlights some of the work already completed on the promising concept of Greenways, the subject of last year's report to you. As a result of the hard work set in motion by Executive Order #8, I believe Connecticut is on the verge of something great. Part Three, a "Guide to the Quality of Connecticut's Environment," summarizes where we stand after more than two decades of environmental progress.

Readers will also find the complete final report of the Governor's Task Force on Hunting and Public Safety in Part Five of this report, which we transmitted to you in March. The Council is pleased that the DEP is already hard at work on a plan to implement most of those recommendations.

The Council hopes this report will be interesting and informative to you, the General Assembly, and the citizens of Connecticut. We look forward to working with you to accomplish the challenging goals we have set forth. If the Council can be of assistance, please do not hesitate to let me know.

Best personal regards,


John A. Millington
Chairman

CONTENTS

PART I	THE ENVIRONMENT AND THE ECONOMY: Environmental Protection Programs and the Economic Requirements of Connecticut	
	Executive Summary	1
	Introduction.....	3
	Where We Stand in 1993.....	3
	Permits	6
	Delays in Clean-up	8
	Enforcement.....	12
	Problems in the Parks	15
	Focus on Legislative Mandates	16
PART II	CONNECTICUT GREENWAYS UPDATE.....	19
PART III	A GUIDE TO THE QUALITY OF CONNECTICUT'S ENVIRONMENT	
	Introduction	25
	Air	26
	Woodlands	27
	Wildlife	28
	Farmland	29
	Public Lands	30
	Wetlands	31
	Rivers, Lakes, and Estuaries	33
	Long Island Sound	34
	The Word from Rio.....	36
PART IV	1992 ACTIVITIES OF THE CEQ.....	37
	Council Members.....	39
PART V	FINAL REPORT OF THE GOVERNOR'S TASK FORCE ON HUNTING AND PUBLIC SAFETY.....	41

PART I

THE ENVIRONMENT AND THE ECONOMY:

Environmental Protection Programs and the Economic Requirements of Connecticut

"The Council shall submit annually to the Governor an environmental quality report, which shall set forth... trends in the... management and utilization of the environment and the effects of such trends on the... economic...requirements of the state."

(C.G.S. Section 22a-12(a))

THE ENVIRONMENT AND THE ECONOMY: Environmental Protection Programs and the Economic Requirements of Connecticut

Executive Summary

The Department of Environmental Protection (DEP) is central to Connecticut's twin goals of environmental quality and economic development. This state requires a predictable, responsive DEP that merges new opportunities with traditional responsibilities. Regrettably, the Council finds that expectations for a clean environment and an efficient DEP are far too high in relation to the resources allocated to the Department. Because General Fund appropriations are too small in relation to Special Funds, the DEP does not have the flexibility needed to plan and implement priorities. Many needs of industry and many statutory mandates are not being met. At least two Special Funds, which together support 90 staff, will be depleted in two to four years. In short, the DEP is not operating on a sound financial foundation.

In 1992, the DEP focused many of its resources on a single function that spans several programs: permit issuance. In January, 1992, the DEP had 3012 permit applications pending, and was receiving more each month than it processed. By year end, the backlog was down to 2329. By marshaling its own resources, and soliciting the advice of this Council, a private consultant, and the Environmental Permitting Task Force, the Department demonstrated an ability to make headway against a serious problem despite a tight budget. It provides an example of what can be accomplished when assiduous action is combined with necessary financial resources. Though other functions of the Department suffered from the re-allocation of resources, the strategy deployed on the permit problem should serve as a model for correcting other broad, cross-program functions of the DEP.

Summary of Recommendations

♦ Use the model established by the DEP's permit backlog-reduction effort to intensively review, improve, and finance the following DEP functions:

- ♦ Approval of private-sector plans for clean-up of contaminated properties.
- ♦ Enforcement.
- ♦ Assessment and selection of priorities.
- ♦ Provision of park and related services.

The model used to re-engineer the permit process includes top-level commitment, clear goals, marshaling of all available resources, regular reporting and evaluation of progress, expert consultant services, and advice from a credible Task Force. It emphasizes clarity in program objectives and communication, efficient decision-making structures, accountability for meeting departmental objectives, commitments to timeliness, and budget planning that relates directly to responsibilities.

◆ The General Assembly should use the staff requirement projections in the March, 1993 "Environmental Permitting Reengineering and Restructuring Plan" to fund the DEP's permit programs at the level necessary to obtain the desired level of services (i.e., a turn-around time on permits that is mutually acceptable to applicants and the interested public). The direct costs of the permit programs should be covered by dedicated permit fees. If the General Assembly determines, as a matter of public policy, that such fees might interfere with other policy objectives such as business expansion, then a deliberate budget decision should be made to *subsidize* the permit process. However, those subsidies should be put in the state's budget as economic development expenditures, and should not be taken from environmental protection functions.

◆ To break the logjam in private-sector clean-up and redevelopment of contaminated urban properties, two things are needed:

- ◆ The DEP must make adoption of a "Clean Standard" a top priority. If such a standard existed, a buyer or lender could determine how much time and money would be needed to clean a site without waiting months or years for the DEP's review.
- ◆ Twenty-three staff are required to operate the Property Transfer program: 12 to implement the basic program at an acceptable response level, and 11 to eliminate the 330-case backlog over five years. Since six of these positions are filled now, a total of 17 new positions are needed. These can be put on staff without burdening the General Fund. (See page 13 for details of the funding plan).

◆ The General Assembly should enact no new environmental laws or mandates without sufficient increases in the DEP's budget. The public is deceived when laws are passed without resources to implement and enforce them.

A. Introduction: The DEP's Role in Economic Growth

The relationship between an efficient DEP and a strong economy is clear, but not widely understood. News accounts tend to focus on high-profile conflicts, such as loggers versus spotted owls in the Pacific northwest. Such conflicts are rare and unimportant in Connecticut. Also, many people assume that job-producing industries head for states with lax emission standards. Careful studies show that pollution standards are a minor factor in business-location decisions. Federal laws have levelled the playing field and, more importantly, pollution-control costs are very small in relation to other factors such as the availability and cost of land, labor, and energy, and tax rates. To compete, Connecticut must have a DEP that is responsive to the types of businesses that find this state an agreeable location for these larger reasons.

Delay and confusion have only negative consequences. Whether the problem is the multi-year approval process for a plan to clean up a contaminated site, or the eight-month delay from the time of an inspection to the issuance of a violation notice, unnecessary delays impede business and environmental improvement. This report examines some of the problems that hinder the DEP's efficiency and effectiveness.

B. Where We Stand in 1993: Environmental Funding vs. Responsibilities

Expectations for a clean environment and an efficient Department of Environmental Protection (DEP) are far too high in relation to the resources allocated to the Department. If current trends continue, many of the state's environmental goals will not be met, and many of the specific requirements or mandates placed on the DEP by the General Assembly will not be fulfilled. (See "Focus on Legislative Mandates" on page 16 for a partial list of laws the DEP is unable to implement.)

Taxpayers are paying next to nothing for the services of the Department of Environmental Protection. A typical taxpayer who pays \$1450 in state income, sales, and miscellaneous taxes will see about \$4.34* of that amount go toward DEP operations. In the last three years, general fund appropriations to the DEP have been reduced to the point where they constitute only 42% of the DEP's budget in the current fiscal year.

* This amount is calculated as follows: From the general fund appropriation to the DEP, subtract the revenue generated by the DEP and returned to the General Fund, to get the net General Fund appropriation to DEP. Multiply that amount by the percentage of the total General Fund that is derived from taxes on individuals (approximately 2/3), and divide that amount by the number of residents.

A major reason the DEP has been able to continue functioning even as General Fund appropriations were reduced is the ongoing "mining" of special funds. The Emergency Spill Response Fund -- established with fees charged to industry as insurance against major spills and other crises -- accumulated a reserve of several million dollars. So many positions (70) are financed from that fund that it will be depleted in two more years. Similarly, the Solid Waste Fund, which now supports 19 positions, will be empty in four years. The Environmental Conservation Fund, which supports many functions and positions in state parks, will run dry in two years at the current rates of income and spending. The Department clearly is in a wobbly, unsustainable financial position.

The Relationship of Budget Structure to Priorities: A Mismatch

Aside from permitting, the DEP is unable to select and act on priorities. The primary reason is the reduction in General Fund appropriations, complicated by a hodgepodge of miscellaneous mandates placed on the Department that cannot be considered priorities in any scientific sense. General Funds can be shifted if need be to meet changing conditions and priorities, but the federal and special funds which support the majority of DEP staff work cannot be so shifted. Federal funds come with strings attached, and often demand a matching state share, further curtailing the DEP's choices. Some special funds are derived from a particular citizenry's willingness to pay for particular services and must be spent accordingly or the revenue will evaporate; money collected from the sale of pheasant tags, for example, is not available for hazardous waste inspections. A related problem is insufficient planning staff: The Department's Strategic Plan for Fiscal Year 1993 (ending June 30, 1993) was still not completed as of March 1, 1993.

Limited flexibility can lead to conditions which must seem perverse to anyone not intimate with fiscal details. For example: A firm that wants to clean up a contaminated property at its own expense and initiative cannot get its clean-up plan reviewed by the DEP. Meanwhile, persons in the same firm can see that DEP personnel are available to inspect unrelated portions of the same facility where no problems are apparent, or to stock pheasants in the field next door. Consequently, win-win situations come and go with the DEP unable to respond.

Some DEP programs are driven by environmental health priorities, some by economic development priorities, and some by still other types of priority. Though not in conflict, these programs compete for scarce financial resources and personnel. But how should priorities be established and funded?

Recommendations for Matching Priorities to Funding

◆ The General Assembly must establish a balance between General Funds and Special Funds.

Special Funds -- primarily dedicated fee revenue -- should be budgeted to cover the direct variable costs of the permits or services rendered to the payer. Fees which are deemed by the General Assembly to be too high -- because, for example, they might put Connecticut at a disadvantage in attracting a particular type of desired business -- should be subsidized as economic development expenses. (Note: Special Funds, as used here, refer primarily to revenue from fees, not from broad-based taxes earmarked for the environment, as has been proposed recently; the latter can be useful, but are more similar in nature to General Fund moneys.)

General Funds should cover all of the basic or core functions of the Department -- those tasks and services which benefit the public at large. General Funds should be spent according to a firm set of priorities.

Under such a balance, Special Funds need not reflect true priorities. They can capture a particular constituency's willingness to pay the cost of specific programs without interfering with the public's true interest. Services provided to hunters, permittees, recipients of plan reviews, wildlife enthusiasts and so forth need not compete with public health concerns *if the latter are sufficiently funded from the General Fund.*

Up until 1990, the absence of dedicated funds prohibited the DEP from paying for programs with fee revenue. With the creation of dedicated fee funds that year, it was anticipated that fee revenue would augment, not supplant, general fund appropriations. Since 1990, however, the pendulum has swung too far toward dedicated Special Funds, impairing the DEP's ability to implement critical programs that do not collect revenue. The pendulum must be pushed back toward the proper balance.

♦ Use the model established by the permit-backlog reduction effort to design a system for assessing, selecting, and implementing priorities across all programs of the Department. Like permit-processing, priority-setting is a management function that can benefit from thorough study, regular evaluation, oversight by a diverse, credible board (perhaps the Environment 2000 Advisory Board), and resources devoted to the process itself. Connecticut could, like many states, set priorities according to a comparative assessment of risks to human health and the environment, or it could devise its own system.

♦ The Council repeats a recommendation it made in vain in 1990: The General Assembly should enact no new environmental laws or mandates without sufficient increases in the DEP's budget. The public continues to be deceived when laws are passed without resources to implement and enforce them.

INCOME TAX CHECKOFF FOR WILDLIFE: Example of Willingness-to-Pay

In 38 of the 40 states with income taxes, citizens can elect to contribute part of their income tax refunds to a wildlife conservation fund. Wildlife is owned and managed by the states in trust for the public; states' unique legal responsibilities for wildlife have led to the proliferation of income tax check-offs. The State of Connecticut has collected money from sportsmen for decades. Now that most wildlife enthusiasts are not hunters, the state needs a mechanism to collect from them to conserve non-hunted wildlife species. With the income tax check-off proposal, the state has its long-sought mechanism. The "Watchable Wildlife" check-off is an excellent example of the way in which the DEP could operate valuable programs that are not the highest priorities by capturing a constituency's willingness to pay to support them.

C. Permits: On the Right Track

In January, 1992 the DEP had 3012 permit applications pending, and was receiving more applications each month than it processed. The Department waged war on the backlog, and by March, 1992 was starting to process more applications than it received. At year's end, the backlog had been reduced by nearly 25% to 2329. Also, a "strike team" was organized to respond to priority applicants.

This reduction came from several efforts, but the largest single bite in the backlog is attributable to the adoption of general permits for minor discharges. Under general permits, dischargers who meet the criteria need not apply for individual permits but can simply register their facilities. General permits are an excellent way of minimizing government involvement in minor pollution matters without abdicating responsibility for protecting the public. However, the dramatic effect of general permits on the permit backlog masks the small net gain in individual permits (approximately 150).

To obtain the relatively small net gain in individual permits issued, the Department diverted resources from other functions, including enforcement and site remediation. Money to support the permit process is being drained from special funds, particularly the Solid Waste Fund and the Emergency Spill Response Fund, at much faster rates than the revenue comes in. Both of those funds were established for specific purposes with the support of the industries that must pay into the funds, but neither were intended to support large numbers of staff. If expenditures from the funds continue at their present rates, both funds will be depleted completely before the permit backlog is eliminated.

Even though the permit backlog reduction effort cannot be sustained on current funding, and its implementation is harming other important state programs, the effort itself can serve as a model for breaking logjams in other programs (if funds are made available). The effort involved six key ingredients that have not been combined to attack so effectively any other single problem in recent years:

- ◆ Commitment and communication from the top that this is a short-term emergency and a long-term priority.

- ◆ Marshaling of resources from every available source.

- ◆ A clear goal that reflects the desired outcome: design of a system that provides timely decisions and protects the environment.

- ◆ A regular evaluation or feedback component. The Department prepares quarterly reports illustrating the condition of the backlog, for review by the Council, the Governor, and others.

- ◆ Money to hire a qualified consultant to complete a thorough review of the Department's 29 permit programs. First, a consultant completed a quick study *pro bono*; then the same consultant won the bid to design a "re-engineered" permit system.

- ◆ Oversight by a diverse and credible Task Force. The Environmental Permitting Task Force was appointed by the General Assembly to bring together the expertise of many interested parties for the purpose of advising the DEP in improving its permitting procedures. While the timing relative to the consultant's concurrent study was not ideal, the effort did surface many worthwhile ideas and shed light on the general acceptability of many individual ideas.

Recommendations for Improving Permit Issuance

- ◆ With the consultant's report as a guide, the General Assembly should fund the DEP at the level necessary to obtain the desired level of service (i.e., a turn-around time on permits that is mutually acceptable to the applicants and the interested public).

- ◆ The direct variable costs of the permit programs should be paid by permittees through dedicated permit fees. If the General Assembly determines, as a matter of public policy, that those fees would be so high that they interfere with other policy objectives such as economic development, then a deliberate budget decision should be made to subsidize the permit process. However, those subsidies should be put in the budget as economic development expenditures, and should not be taken from true environmental protection functions or services such as parks operations.

♦ The strategy employed to attack the permit backlog should serve as a model for breaking the logjam in other broad, cross-program DEP functions (as opposed to specific programs), including enforcement, site remediation, parks and other land management, and setting of long-term priorities.

D. Delays in Clean-up of Contaminated Urban Properties: A Drag on Connecticut's Economy.

The private sector is impeded in its efforts to clean up the environment and create jobs in urban areas at its own initiative and expense, even when fees of up to \$13,000 are paid for DEP oversight. The public interest is clearly in encouraging such private-sector activity, yet hundreds of current and former manufacturing sites in urban areas remain in their contaminated and non-productive state because of the DEP's inability to approve clean-up plans. The problem is severe but soluble.

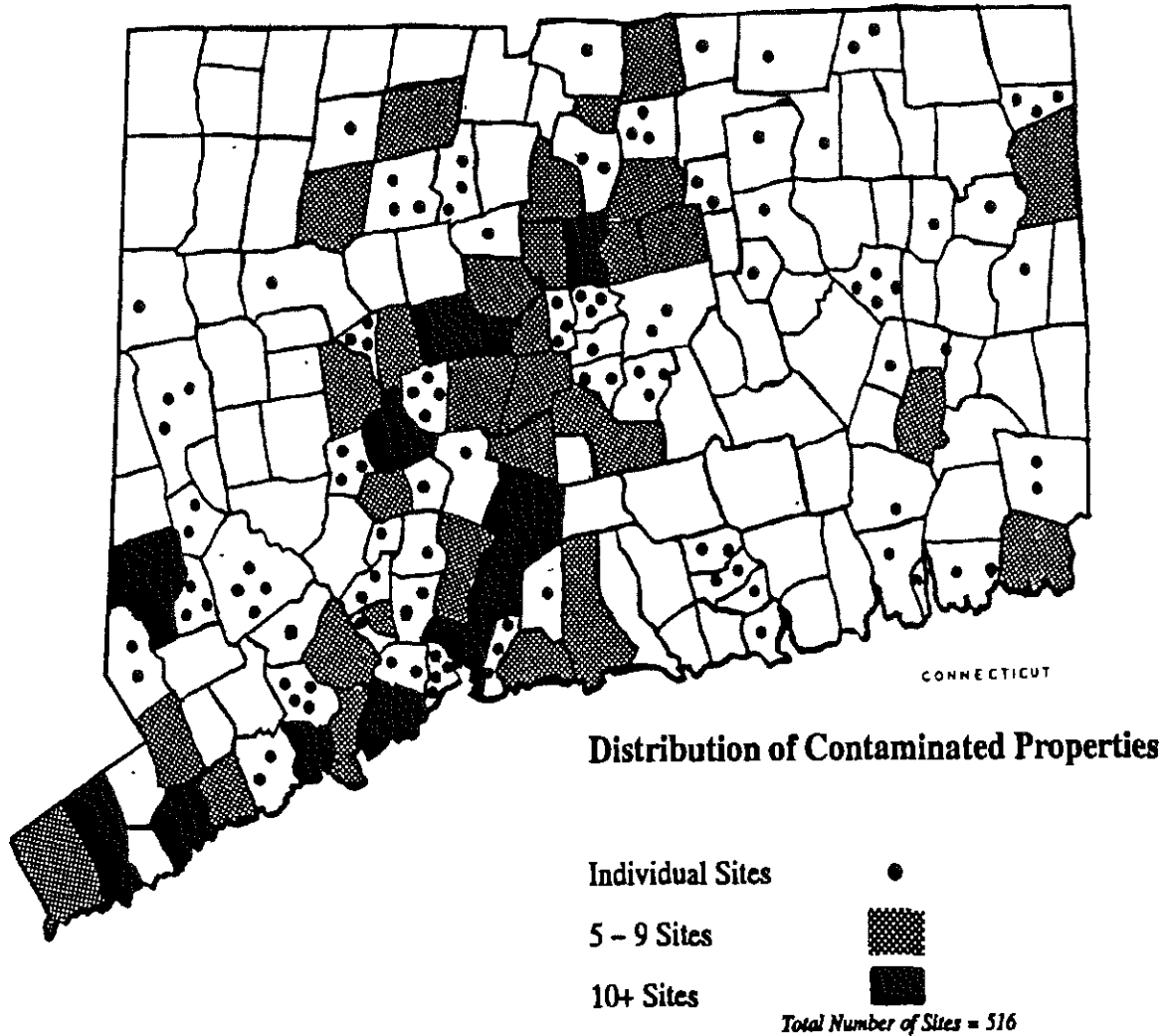
Background

Hundreds of current and former manufacturing sites in Connecticut's urban areas are contaminated by hazardous substances. The Connecticut "Transfer Act" (P.A. 85-568) requires disclosure of contamination to the DEP and acceptance of liability for clean-up prior to transfer of any commercial property. The program was intended to identify contamination in the environment without impeding private-sector transactions, but experience has demonstrated a reluctance by the private sector to consummate real estate transactions without the active involvement and approval of the DEP.

Since late 1985, more than 500 reports of contamination have been submitted to the DEP. (Many thousands of transfers of non-contaminated sites have been reported.) Of these, 22 have been cleaned up. About 120 are somewhere "in the process" of being reviewed and approved for clean-up, and approximately 325 are backlogged. (The remaining 50 or so are duplicate filings of the properties that have been transferred more than once.)

Most lenders will not approve loans until the limits of liability have been approved by the DEP. As a result, private-sector job-creating deals are being held up or effectively squashed by the DEP's inability to respond. When a company wishes to purchase or develop such a property, it must wait months or even years for the DEP to review and approve a clean-up, or remediation, plan. (Legally, under the Transfer Act, the private parties may complete their transaction. Realistically, most firms, and especially their lenders, do not wish to conclude their deals until limits of their liability have been determined.)

Figure 1



Most of the backlogged contaminated properties are in urban areas (see map, Figure 1) and nearly half (47%) are in municipalities characterized as "distressed." The inability to re-develop and re-use idled industrial properties pushes companies to build facilities in new locations, thwarting nearly every one of the state's planning and environmental goals.

Examining the Logjam

Lenders, investors, and buyers ask:

- 1) How clean must the site be to satisfy the DEP?
- 2) How much will it cost to clean up?
- 3) How long will it take to clean up?

Answers to questions #2 and #3 depend on the answer to #1. At present, there is no clear answer to #1 -- how clean must the site be? -- because there is no standard. Companies must wait for the DEP to review each site on a case-by-case basis. With 6 new sites reported each month, and only 2 or 3 addressed, the problem is apparent.

Both predictability and responsiveness are needed in the Transfer Act program.

Predictability can be had by establishing a "Clean Standard." If such a standard existed, a buyer or lender could hire a consultant to determine how much time and money would be needed to clean the site without waiting for the DEP's review. The DEP was required by law (P.A. 89-365) to develop a "Clean Standard" for hazardous waste disposal sites by January 1, 1991; rather than develop separate standards for other types of contaminated sites, the Department intended to apply the same "Clean Standard." A draft is expected, finally, by April 1993.

Responsiveness can be obtained by assigning the appropriate number of personnel to the Property Transfer Program. In 1991, fees ranging from \$4,500 to \$13,000 were established by statute. These fees were intended to fund staff sufficient to handle incoming reports and eliminate the backlog over a period of five years. Fees were collected (in part; see below) but the program has fewer staff now (6) than it did in 1990 (8) before the fees were charged. Companies pay but receive less service.

Recommendations for Breaking the Transfer Act Logjam

1. The Department of Environmental Protection must make the development of a "Clean Standard" a top priority.

2. Twenty-three staff are required to operate the Property Transfer program: 12 to implement the basic program at an acceptable response level, and 11 to eliminate the backlog cases over five years.

Since six of these positions are on staff already, a total of 17 new positions are needed. These can be put on staff without burdening the general fund. They should be funded from the anticipated bond authorization for the Urban Site Initiative.

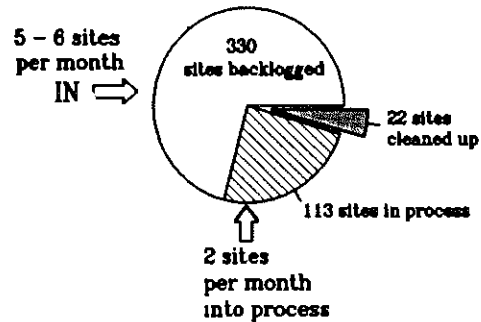
The Property Transfer Act At a Glance

◆ Public Act 85-568 requires disclosure to the DEP of any contamination prior to a transfer of commercial property, and requires the seller's or buyer's acceptance of liability for clean-up.

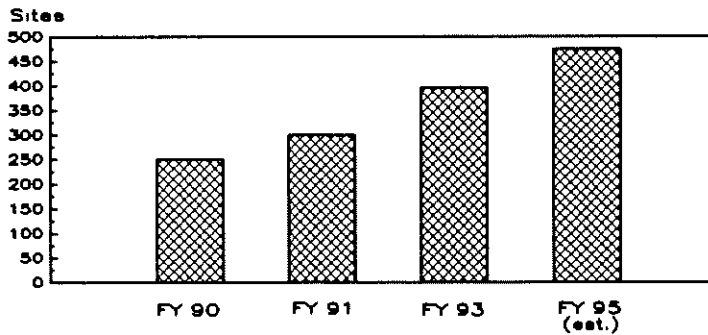
◆ Submittal of a disclosure form and a clean-up plan for DEP review is, in most cases, a prelude to private-sector clean-up and re-use of a contaminated property.

◆ Since October, 1985, 516 contaminated commercial properties have been reported. (Many *thousand* transfers of non-contaminated sites have been reported.) Fifty-one are duplicates (two or more transfers of the same property). As illustrated above, most of the remaining 465 are backlogged, awaiting action.

Figure 2: Status of contaminated property disclosures filed since 1985.



HISTORY OF TRANSFER ACT BACKLOG



Year	FY 90	FY 91	FY 93	FY 95 (est.)
FEE PAID PER FILING (DOLLARS)	0	\$4,500 to \$13,000	\$4,500 to \$13,000	?
STAFF POSITIONS	8	8 filled 10 unfilled	6 filled; 3 filled, but working elsewhere; 10 unfilled, fee funds used elsewhere	67

This can be viewed as a one-time, "pump-priming" expenditure appropriate for bonding, because ten of the 11 positions can be taken off bonding and placed on special funding, with new revenue, after the first year.

New Revenue, Part One: There is an untapped reservoir of more than \$1.5 million in uncollected fees, enough to support five staff for five years. This money is not available until the second through fifth fiscal year out because the fees are not legally collectable until certain actions are performed by the DEP, and those actions require work by the proposed new staff in the first year. The fee-collection provisions are set out in C.G.S. 22a-134e.

New Revenue, Part Two: Another five positions (for a total of ten) can be taken off bonding in the second year if the current fee structure is revised. (Transfer Act fees are scaled to the total expense of the remediation project in question; one idea with merit is to lower the current minimum fee of \$4,500 for projects costing less than \$100,000 to reduce the burden on small companies, and to increase the current maximum fee of \$13,000 on the biggest jobs, those costing more than \$1 million.)

For either of the above financing plans to work, fee revenue must be dedicated to the Transfer Act program. This revenue will not be available for staff in subsequent years if the incoming revenue is not used to support staff in the year it is collected, as collection of each fee for filings prior to July 1, 1990 is phased and is dependent on completion of specific steps by DEP staff.

F. Enforcement: The Keystone of Compliance

Most measures of DEP enforcement activity showed declines during 1992:

◆ In the Bureau of Water Management, inspections were down slightly, and referrals to the Attorney general were down nearly 90% from 1989. Administrative orders were up relative to 1991 levels, but still less than half the number issued in 1989.

◆ In the Bureau of Waste Management, inspections of solid waste facilities -- landfills, resource recovery facilities, illegal dump sites, transfer stations and others -- were about halved, from 1629 inspections in 1990 to 820 in 1992. Pesticide compliance inspections were reduced from 776 in 1990 to 581 in 1992.

Year-to-year changes tell only part of the story. Just as there is a backlog in permit processing, there is a long list of

unresolved enforcement cases. As of September, 1992, there were 520 active orders outstanding in the Permitting, Enforcement, and Remediation Division of the DEP's Bureau of Water Management. Of those 520, zero had been wrapped up through the first three quarters, two had been referred to the Attorney General, and ten had been appealed. In contrast, 42 were completed, 26 were referred, and 54 were appealed in 1990. Even in a "good" year, there are hundreds of outstanding enforcement orders that sit idle, awaiting attention from staff at some future, undetermined date.

The enforcement backlog has tangible negative effects on the natural environment and economic development, as well as on the public's trust in state government:

♦ The DEP is unable to address low-priority contamination problems, even where pollution is evident and the responsible party is in obvious violation of the law and/or a previous enforcement order. Complaints received by this Council from citizens attest to the problem. In one notable case, a violator discharging pollutants to ground water missed the deadlines established in the DEP's order by several years. The penalty has been naught, and the responsible party is likely to ultimately receive a grant from the DEP for remedial action.

♦ The Governor's Task Force on Hunting and Public Safety found that each inland conservation officer, responsible for enforcement of fish, wildlife, off-road vehicle, and boating safety laws, has an average territory of 321 square miles. As a result of a 27% decline in the number of officers over four years, arrests in 1992 were significantly fewer than in previous years despite an upward trend in license-holders. More violations must be going undetected.

♦ It took the initiative of a non-profit citizens' group in 1992 to detect and document widespread non-compliance with erosion and sediment-control requirements at Department of Transportation construction sites. Of 15 randomly-selected projects, 11 had violations. Failure to comply with the requirements leads to destructive siltation of streams and wetlands. This is a chronic problem at DOT sites that was first identified in 1987.

♦ The public loses faith in its state government when complaints are not answered or not answered promptly. Recalcitrant violators take more risks as well. One of the major problems is that enforcement activity is very consumptive of staff time, especially if a case goes to court. DEP program managers thus have an incentive to resolve cases without formal legal action (i.e., by accepting compliance by the violator without formal penalties). Violators who figure this out can violate the law repeatedly with almost no risk of financial penalty; the only risk to the violator is that he might be told to conduct his activity in compliance with the law. The Council

has received complaints about parties who violated DEP regulations numerous times and never paid financial penalties. When such a violator may want to expand his facility, he or she will be opposed strongly by a public who has little faith in the DEP's ability to enforce permit conditions. Everyone loses from weak enforcement in the long run.

Some of the problems shackling the DEP's enforcement programs are the same ones that made the permit programs infamous: Delays, confusion, and inefficiencies caused by staff shortages. Companies express dismay when they receive notices of violation months after an inspection. Delays occur at several levels of decision-making. Shifting priorities cause staff to postpone action on some cases. Different programs have different procedures and flow charts (some more effective than others). Standardization of procedure, commitment to reasonable deadlines, more resources, and better communication are all potential remedies to Department-wide enforcement procedures, just as they are in permit processing.

The permit backlog-reduction effort is an obvious model for remedying deficiencies in enforcement. Also, the Governor's Task Force on Hunting and Public Safety showed how a fast but thorough and comprehensive look at enforcement of one small program area, hunting and wildlife laws, can yield immediate solutions. The Task Force studied intensively the problems in field force, penalties, and prosecution, and recommended practical solutions for all three.

Another program area has demonstrated the benefits of applying more resources and better organization to enforcement. The DEP's enforcement of the state's tidal wetlands law and structures and dredging law has improved since 1988, according to a Council survey of coastal municipal officials. Nearly two-thirds of the coastal communities rated the DEP's enforcement of those laws as good or excellent in 1993, whereas less than half gave the Department a good rating in 1988. The 1988 survey was completed just before the DEP re-assigned responsibility for enforcement to a program that had more staff available to conduct inspections.

Recommendation for Improving Enforcement

◆ Use the model established in the permit backlog-reduction effort to intensively review and improve enforcement in all DEP enforcement programs. Emphasize standard procedures, efficient flow charts for decision-making, communications, accountability, commitments to timeliness, and resources to develop the best methods for gaining compliance, the ultimate goal of enforcement.

G. Problems in the Parks

Parks are important to the satisfaction of state residents as well as to the image of the state. The long-term decline in funding for state parks operation is beyond the Council's ability to explain. Permanent State Park staff has decreased 35 percent since 1972. In 1990, Connecticut ranked almost last among the 50 states in spending on parks operation on both a per-capita and a percent-of-total-state-spending basis. Funding for parks has decreased further since then. In 1989, the Council concluded that the urgent demand for General Fund appropriations in the Environmental Quality Division of the DEP made tax dollars relatively unavailable for parks and forest management, but establishment of new fees to fund the Environmental Quality Division in 1990 failed to solve the problem because General Fund appropriations were reduced instead of being made available for parks.

There are actually two aspects of the decline of Connecticut's State Park system. First, services ranging from trash-removal to environmental education have been reduced or eliminated, and eleven facilities have been closed since 1991. Second, the park infrastructure -- buildings and roads -- continues its decline, along with the aged equipment the Department uses to maintain it. The majority of state park trucks and tractors now exceed their expected useful lifetimes.

Private contributions kept some parks open in 1991, but the Council found that the era of tight budgets was not an auspicious time to solicit corporate contributions for park improvements.

Recommendation for Rescuing the State Park System

◆ Use the model established by the permit backlog-reduction effort to intensively study and determine the optimum system and budget for delivery of park services. After determining that operations are structured to be efficient, this effort should determine the budget needed to maintain the operations at a level of service so good that every citizen will be willing to support it financially.

Permanent Field Maintenance Positions in State Parks, 1971:	209
	1990: 133
Seasonal Employees in State Parks, 1970:	580
	1990: 579
Average Age of Tractors in State Parks:	20 Years

Focus on Legislative Mandates

Environmental laws enacted by the General Assembly frequently require the Commissioner of Environmental Protection to adopt regulations that will specify and implement the details of the new law. Under Section 4-168(b) of the Connecticut General Statutes, the agency has eleven months from the effective date of the Public Act to adopt these regulations (unless another date is specified in the law). In recent years, the DEP has failed to adopt the required regulations for many Public Acts passed by the General Assembly. The following is a partial list of regulations that the DEP has not completed as required by law. (In any Public Act number, the first two digits indicate the year in which the law was passed; i.e., P.A. 88-361 was enacted in 1988).

Subject of Required Regulations and Related Mandates	Public Act	Reason for Failure to Adopt
Aquifer protection. Commissioner shall adopt regulations governing land use and farm management by July 1991.	90-275	Delayed because they would result in substantial resource demand by the DEP
No discharge zones. Commissioner shall adopt regulations regarding the standards and criteria for design and operation of pump-out facilities.	90-173	Insufficient resources
Low-level radioactive waste facilities. Commissioner shall adopt regulations for the siting of low-level radioactive waste facilities.	88-361	Insufficient resources
Contaminated wells. Commissioner shall complete an inventory of contaminated wells and leaking storage tanks and provide regulations for establishing grants for clean-up.	89-365	Referred to a consultant
Reduction of packaging material. Commissioner shall adopt standards reducing volume, enhancing recyclability, and increasing the amount of recycled packaging.	91-65	Work begun; insufficient resources to complete
Mixed municipal solid waste composting facilities. Commissioner shall adopt regulations to promote clean end products and prevent adverse environmental effects.	91-293	Insufficient resources

Clean water act enforcement. Commissioner shall adopt regulations which provide for penalties which are of an amount sufficient to insure compliance.	91-270	Insufficient resources
Household hazardous waste. Commissioner shall, within available appropriations, prepare a plan for disposal of household hazardous wastes.	91-313	Insufficient resources
Biohazard waste disposal. Commissioner may adopt regulations regarding fees required to dispose of human tissue.	92-11	Insufficient resources
Endangered species. Commissioner shall adopt regulations by June, 1991 regarding identification of essential habitat.	89-224	Insufficient resources
Chlorofluorocarbons (CFCs). Commissioner shall adopt regulations regarding the control of emissions of CFCs by January 1991.	89-227	Delayed while DEP awaits federal implementation
Emergency right to know. Commissioner shall adopt regulations to carry out the notification provision.	89-212	Insufficient resources
Emissions offsets. Commissioner shall adopt regulations for calculating the trees or turf grass required to offset carbon dioxide emissions.	90-219	Insufficient resources
Clean Standards. Commissioner shall adopt standards for the clean up of contaminated sites.	89-365	Insufficient resources

PART II

CONNECTICUT GREENWAYS

UPDATE

CONNECTICUT GREENWAYS UPDATE

♦ **GREENWAY:** A Greenway is any corridor of open space that protects natural resources and/or provides recreation. Greenways can be located along a waterway or other defining feature, such as a ridgeline, or along a man-made corridor, such as an abandoned right-of-way, abandoned town road, a woods road, or a barge canal. It can be a greenspace along a highway or around a village. Greenways can provide the vital "missing links" to connect existing protected areas, and to give people convenient access to the outdoors. A greenway can be as wide as a river valley or as narrow as an abandoned rail bed.

Greenways serve many purposes. Rural greenways preserve natural habitats and wildlife migration routes, encourage restoration of environmentally valuable landscapes, and provide opportunities for recreation and education. In the cities and suburbs, greenways can encompass natural or man-made features and can provide resource conservation, recreation, and transportation.

Working definition as used by The Greenways
Committee, 3/93

Perhaps more than any other state, Connecticut is in a position to create long stretches of open spaces that link urban, suburban, and rural areas and give residents convenient access to the outdoors. Because of eighty years of State Park acquisition, municipal park protection, and an extremely hard-working network of land trusts, Connecticut has a rich mosaic of public lands that suggest obvious opportunities for partnership and linkage. The challenge is to take advantage of this existing protected land and our landscape's beautiful linear features to create a web of greenways that extends into every city and town in this state.

In last year's annual report, this Council recommended that Connecticut establish a Greenways Committee to explore and apply the greenways concept in greater detail. Governor Lowell P. Weicker, Jr. agreed, and on May 20, 1992 issued Executive Order #8 creating The Greenways Committee. A hard-working committee of business and conservation executives, state and municipal officials, and citizen activists, The Greenways Committee has accomplished much and is on the verge of helping to create something great.

Highlights of The Greenways Committee's work in the past few months include:

♦ Co-sponsorship of the first statewide greenways conference in March 1993, attended by greenways "entrepreneurs" from across the state.

♦ Completion of a catalog of known greenways projects in the state. This list of 50+ projects include some completed projects, many projects underway, and some still in the dream stage.

♦ A manual to help people find financial resources for creating greenways in their communities. The Greenways Committee received a grant in February, 1993 from The Conservation Fund (funded by the DuPont Corporation) to edit and print the manual, which was prepared by Committee members donating their time and expertise.

♦ By disseminating and exchanging information, the Committee is helping several projects find state, federal, and private assistance.

All of this work is in addition to the Committee's official charge: to prepare a detailed report for The Governor by October, 1993 outlining the ideal future course of a Greenways program in Connecticut.

Projects Underway

More important than The Greenway Committee's planning and report-related efforts is the impressive list of greenway projects that will be partially completed before the report is even done. When the Committee's report is submitted to Governor Weicker in October, at least twelve projects will be well underway. Urban, suburban, and rural residents will be walking, riding bicycles, rolling in wheelchairs, and enjoying nature on this state's first greenways.

The Greenways Committee will not claim credit for the projects profiled below. In fact, one of the startling lessons learned by the Committee and the Council on Environmental Quality during 1992 was the number of greenway projects that had been started already by enterprising towns, groups, and individuals. The Greenways Committee has been proud to help some of these projects along, but the real credit goes to the vision and hard work of the "entrepreneurs" (some of whom serve on The Greenways Committee).

As anticipated, 1992 saw a confluence of good fortune that made it an auspicious year to launch a greenways effort. Although greenways are an attempt to use public-private partnerships to build greenways at minimal cost, some dollars are needed. For the first time, federal transportation dollars were available specifically for certain types of pedestrian and

bicycling paths (namely, those which fulfill some transportation, as opposed to purely recreational, objective). Some of the projects that received money in the first round of grants are among those profiled below. Also, modest federal sums will be available in 1993 for trail work. The National Park Service was able to provide technical assistance to several local groups, and the aforementioned DuPont grants administered by The Conservation Fund, a national non-profit conservation organization, were awarded for the first time; three such grants went to projects in Connecticut. Money isn't everything where greenways are concerned, but the availability of money and the capability to apply it to high-caliber projects yielded a great windfall for Connecticut greenway enthusiasts.

What follows is a profile of some of the projects that The Greenways Committee believes have great promise. Readers are encouraged to watch for more information from The Greenways Committee later in 1993. The Council on Environmental Quality is staffing The Greenways Committee, and is always pleased to answer questions about the progress of the committee.

FARMINGTON CANAL: Partnership and persistence have been the keys to this project. In the 1980s, The Towns of Cheshire and Hamden, in partnership with the state, bought their portions of the abandoned railway, which follows the path of a previously-abandoned canal. In 1992, both towns received federal transportation funds to develop the corridor into a multi-use trail. All along, the non-profit Farmington Canal Rails-to-Trails Association has brought all the parties together and has itself raised considerable funds. Ultimately, this greenway could link New Haven to Massachusetts, with parks, residential and commercial areas, historic sites, and other features along the way. Advocates in towns north of Plainville are already planning conversion of portions of the rail bed in their communities.

HOCKANUM RIVER LINEAR PARK: Volunteer committees in Vernon, Manchester, and East Hartford have been working for years to develop a trail system linking the historic and natural features along this urban river. With a special state bonding authorization, the towns were able to hire a landscape architect to design boardwalks, bridges, and other features of the trail. Parts of the trail are open for public use. Interestingly, one of the factors delaying progress on this project has been the long wait for state permits. This greenway will intersect the Hartford Regional Trail System and Riverfront Recapture's project, both profiled below.

HARTFORD REGIONAL TRAIL SYSTEM: Working with the DOT, advocates of this multi-use trail system have already put in place a small network. Eventually, a person will be able to walk or ride a bike or wheelchair for miles on this system, and gain access to other greenways as well.

RIVERFRONT RECAPTURE: With federal, state, city, corporate, and personal contributions, this Hartford-based non-profit organization is working on a river walk to link Hartford and East Hartford, and possibly Windsor and Wethersfield. Parts are in use already, and more is under construction.

COGINCHAUG RIVER: Volunteers in four towns along this river have been working on a plan that will protect the important natural resources while offering recreation in appropriate urban and rural stretches. The National Park Service is assisting this hard-working group in devising a plan that will consider everyone's goals.

QUINEBAUG AND SHETUCKET RIVERS: Working with the National Park Service, an Advisory Board of watershed residents has worked to develop an exciting greenway vision for these connected river corridors. Three local projects are receiving direct assistance: In Norwich, residents working with the Chamber of Commerce have teamed to produce an outstanding plan for a greenway linking the Yantic Falls area with downtown. The Town of Killingly is working with the Connecticut Department of Transportation to develop a park where the Fivemile River joins the Quinebaug. And in Mansfield, a park will be developed on the Willimantic River. Greenway enthusiasts envision a day when these three distant projects are linked, creating a Heritage Corridor that highlights and nourishes the rivers' natural and historic features while creating economic opportunities.

EIGHTMILE RIVER: The Connecticut Chapter of The Nature Conservancy and the Department of Environmental Protection have been working in tandem to protect properties along this rural river upstream and downstream of Devil's Hopyard State Park. The East Haddam Land Trust has also been a partner in this long-term effort.

AIR LINE STATE PARK TRAIL: Running from East Hampton through Thompson (with some short interruptions) this abandoned rail bed is owned by the State of Connecticut. Federal transportation dollars might be available in 1993 to begin rehabilitating the corridor, which suffered substantial damage to bridges in the 1950s. The Air Line is one of several abandoned rail beds in state ownership; these scenic corridors are greatly under-utilized and represent a huge recreation and tourism resource that could be developed with modest investments.

LARKIN STATE PARK TRAIL: This abandoned rail bed, running westward from Naugatuck, was given to the State and developed for equestrian and other uses. In its present form, it does not really link any key parcels or destinations, but it serves as an example of successful rail-to-trail conversion.

PEQUONNOCK VALLEY/HOUSATONIC RAILROAD: Another abandoned rail bed with great potential could carry pedestrians and cyclists from Newtown to Bridgeport (with some detours and meanderings

along the way), passing through state and municipal parks en route. Citizens in Monroe received a DuPont grant in early 1993 for preliminary work.

HOUSATONIC RIVER: It is difficult to plan and put in place a greenway along a river section that was industrialized decades ago, but the Housatonic Valley Association is working with towns at the southern end of that river to do just that. This project has enormous potential because of the large number of people who live in proximity.

PROSPECT RIDGE: The non-profit Trust for Public Land has been working for several years with the DEP and the Town of Cheshire to assemble and protect the land along this natural trap rock ridge. Existing parks nearly link this project to the proposed Farmington canal project.

This is only a partial list of projects. The Greenways Committee is working with the Connecticut Forest and Park Association to involve the Blue-blazed trails, with the Regional Plan Association to study the potential of the unused Merritt Parkway right-of-way (which received a Dupont grant in early 1993 for preliminary work), and hopes to work with equestrian groups and all other organizations and individuals interested in protecting and improving access to the outdoors in 1993. The Council is pleased to note that the Committee also plans to continue its productive relationship with The Conservation Fund, a national non-profit group able to provide advice and assistance.

PART III

A GUIDE TO THE QUALITY OF CONNECTICUT'S ENVIRONMENT

A GUIDE TO THE QUALITY OF CONNECTICUT'S ENVIRONMENT

INTRODUCTION

The Council is often asked how Connecticut compares in environmental quality to the rest of the nation. Unfortunately, there is no comparative survey that provides an accurate answer. Instead of comparing actual environmental conditions, national surveys usually measure states' intentions and efforts, such as strong laws (for which Connecticut ranks consistently near the top), per-capita environmental expenditures (which puts Connecticut near the bottom), or reported pollution emissions (in which Connecticut's rank varies depending on the pollutant in question).

In 1992, one national magazine (*City and State*) ranked Connecticut fourth in the nation in environmental protection (just behind New Jersey, California, and Oregon), far ahead of states with more public lands, better air quality, and fewer people. But that comparative survey happened to emphasize three policies in which Connecticut is an acknowledged leader:

- ◆ Solid waste recycling; Connecticut recycles nearly 20 percent of its garbage and puts less of it into landfills than any other state.
- ◆ Wetlands conservation; Connecticut led the way in arresting destruction of tidal wetlands and slowing ruination of inland wetlands, while some other states still do not have any protective laws.
- ◆ Sewage treatment; Connecticut's 1967 Clean Water Act and 1986 Clean Water Fund were vanguards and continue to be national models.

Because it really is impossible to compare Connecticut's overall environment to another state's, it is best to look at what you have right here, to look at your air, water, land and life and decide how closely their conditions match your own hopes and goals. In the following pages, we use the best data available to evaluate trends in our environment and assess what progress we have made toward our shared goals.

\$4.34

This year, a typical Connecticut resident might pay \$1450 in taxes to the state's General Fund. Of this, \$4.34 will be used to fund programs of the Department of Environmental Protection. This amount is spread over more than 200 programs; some general categories include radiation control and air management (42¢); pesticide regulation and hazardous and solid waste management (17¢); monitoring of water supplies and water quality; management of statewide resource data and preparation of maps; management of wetlands and waterways (63¢); management of wildlife, forests, and fisheries (41¢); and enforcement of boating laws.

AIR

◆ Most recent violation of the health-based air quality standard for the following pollutants in Connecticut:

for nitrogen dioxide: 1976
for sulfur dioxide: 1976
for lead: 1980
for particulates: 1987
for ozone and carbon monoxide: 1992

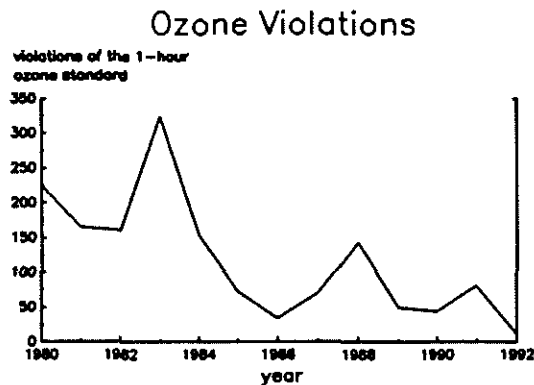
KEY TRENDS

◆ Effective pollution controls, energy conservation, and reliance on nuclear energy have eliminated most of Connecticut's statewide air quality problems. Even so, because of a lingering ground-level ozone problem in the summer months, Connecticut is still regarded as having one of the most severe air quality problems in the nation, and must take many aggressive actions to comply with new federal Clean Air Act requirements. The persistence of ground-level ozone violations can be attributed to a single factor: an unending rise in automobile traffic, caused primarily by dispersed land development patterns that necessitate automobile travel. (Please refer to Connecticut Environment Review 1990 for more information on this subject).

◆ *Ground-level ozone* is formed when volatile organic compounds (VOCs) and nitrogen oxides react in sunlight. About 70% of VOCs are from automobile emissions. Ground-level ozone spreads over the entire northeast region on hot, sunny days. Carbon monoxide (CO) also comes largely from automobiles, but is local in nature; various controls have reduced CO violations to near zero.

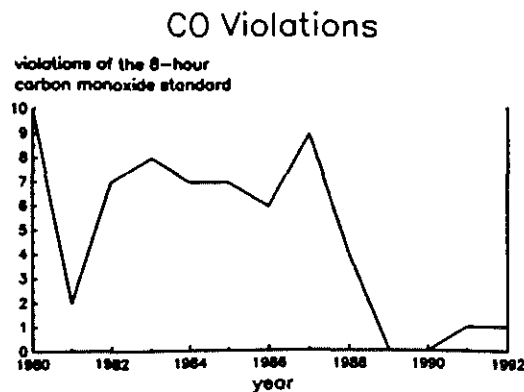
FORECAST FOR 1993

◆ The 1990 Clean Air Act Amendments are the most powerful set of federal environmental laws to be enacted in years. The ozone pollution reduction requirement will exert a heavy influence on the future of development in Connecticut. The laws will require reductions in emissions from automobiles, probably through efforts to help residents drive less. Several large employers are



Highest levels of ground-level ozone recorded in Connecticut in 1992:

1. .145 ppm, Danbury, May 23
 2. .142 ppm, Stratford, June 29
 3. .133 ppm, Middletown, June 13
- (Current standard = .120 ppm)



participating voluntarily in those efforts by restructuring parking policies and transit subsidies. On the other hand, the State of Connecticut, instead of being a leader, continues to provide free parking for its employees. The Act will also require many new industrial permits, which will be an administrative burden unless the DEP is given full support in its efforts to institute innovative, fee-funded permitting programs.

WOODLANDS

- ◆ Percentage of Connecticut covered by forests: 59
- ◆ Average age of owners of forest lands larger than 25 acres: 61
- ◆ Dollar value of fossil fuels replaced by Connecticut fuelwood harvests: 100,000,000/yr

KEY TREND

◆ Connecticut's humid climate is ideal for growing trees. With 60% of its land (and 80% of its productive land) forested, the potential for commercial forestry and forest-dwelling wildlife might seem great. However, most woodland parcels (77%) are smaller than ten acres. Small woodland parcels -- including even wooded subdivisions, which are part of the 59% figure above -- are usually not managed and yield few commercial forest products, uncertain public recreation benefits, and diminished wildlife habitats. Property fragmentation is the most problematic trend facing forests today, and most owners of small wooded parcels do not know how to maximize forest and wildlife benefits; it is a challenge of the DEP and Cooperative Extension Service foresters to help educate the growing number of woodland owners.

Top tree species in Connecticut's forests (by cubic foot volume):		
1. red oaks	2. red maple	3. hemlock

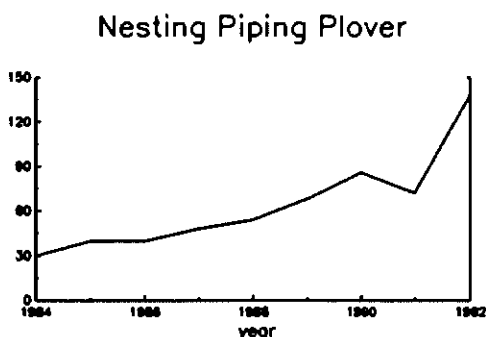
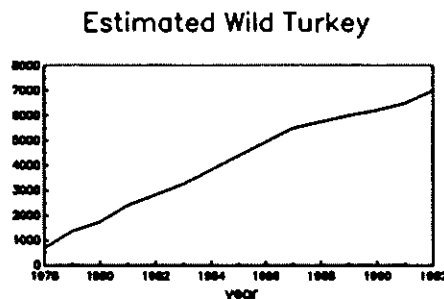
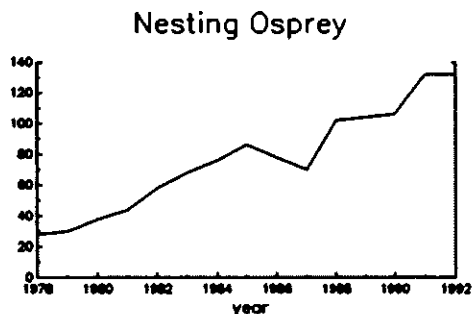
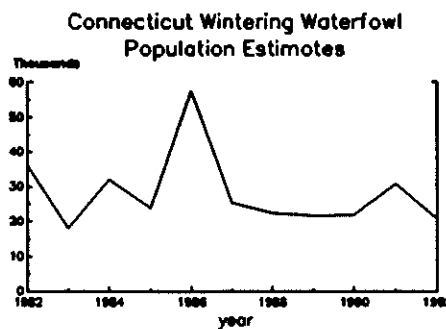
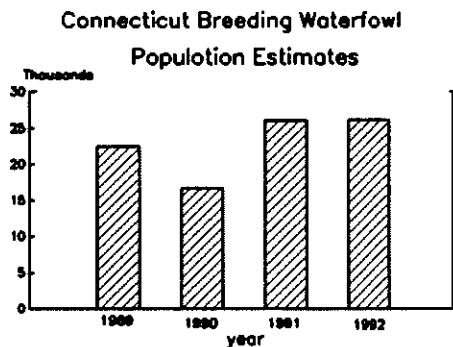
FORECAST

- ◆ Because the average age of owners of forested lands larger than 25 acres is now greater than 60, estate settlements will rank only slightly behind development pressure as a cause of further forest fragmentation.
- ◆ As woodland parcels become smaller, the number of woodland owners increases, and investments in technical assistance and education must increase in order to reach these new landowners.
- ◆ The hemlock woolly adelgid, a particularly destructive introduced pest first identified in Connecticut in 1985, threatens more than 60,000 acres of hemlocks.

WILDLIFE

- ◆ Percentage of Connecticut's wildlife species classified as endangered under state law: 5
- ◆ Percentage of Connecticut's plant species classified as endangered under state law: 6

KEY TRENDS



Reasons why all of the species at left are birds:

1. Most game species are birds.
2. Most endangered and threatened animal species are birds.
3. If a species is not hunted, endangered, or threatened, no one counts it.

◆ One pair of bald eagles nested in northwestern Connecticut in 1992. This triumphant return of a species that was absent for more than thirty years is the product of successful pesticide regulation and eagle restoration efforts in the northeast.

◆ All of the wildlife species charted above are endangered (bald eagle), threatened (piping plover), "of special concern" (osprey), or game (turkey, waterfowl). Because of such status, they all benefit from targeted management efforts of the state and private groups. The actual

condition of most of Connecticut's wildlife species is not known. In general, human-tolerant species -- deer, crows, chickadees -- continue to thrive, while species requiring specialized habitats -- whip-poor-wills, ovenbirds -- will continue to decline in the face of land clearing and development.

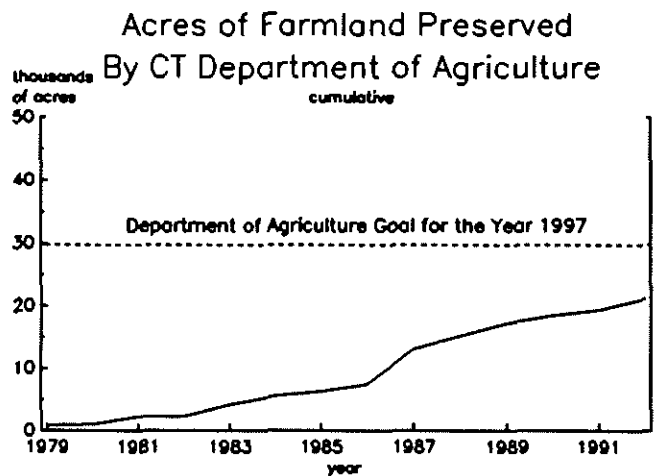
FARMLAND

◆ Percentage of Connecticut covered by cropland and pasture: 7

KEY TRENDS

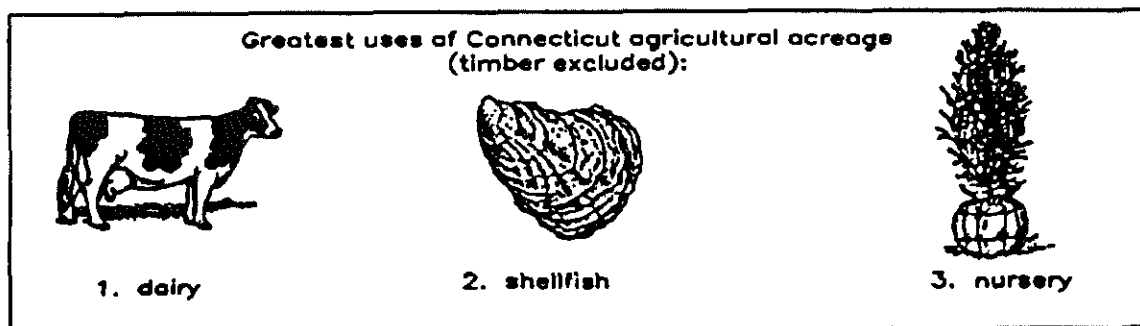
◆ Connecticut's farms continue to exhibit unusual characteristics relative to the rest of the nation: they are among the highest in per-acre land value, in per-acre crop yield, and dollar-value of yield per acre. They use lower-than-average amounts of herbicides, and have less-than-average erosion.

◆ The Department of Agriculture has lowered its goal for its Purchase of Development Rights Program, but the program continues to preserve significant acreage (see graph at right).



FORECAST FOR 1993

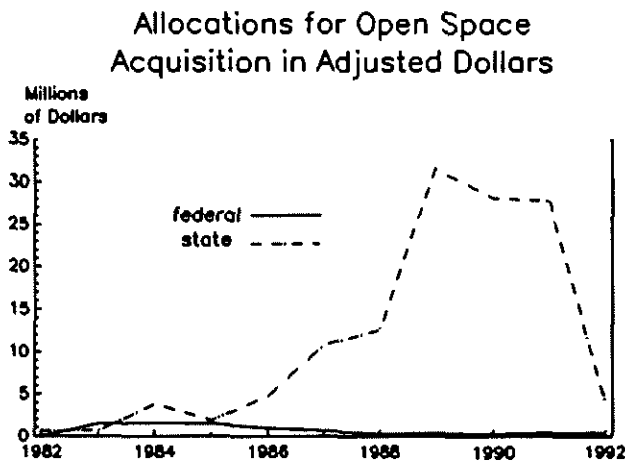
◆ Real estate values are not projected to increase much, if at all, in 1993, which continues to make the present an excellent time to purchase development rights. Continued state investment now will help ensure agricultural land remains arable in the future.



PUBLIC LANDS

- ◆ Acres of state forests and parks per 1000 residents in 1950: 72 in 1992: 50
- ◆ Percentage of Connecticut's trail mileage maintained by volunteers: 68
- ◆ Acres protected in calendar year 1992 by the State of Connecticut: 3, 291

KEY TRENDS



◆ The outlook for access to the outdoors is improving (see Forecast below), while the progress toward protecting additional acreage continues at a slow pace. The state goal adopted in the 1980's of protecting an additional 100,000 acres -- a figure which would still put Connecticut well below the northeast average in public lands per capita -- has been virtually surrendered. The bright note is that the Recreational and Natural Heritage Trust Fund, which was adopted tentatively in 1986 with a structure that invited financial participation by municipalities and private organizations, has proven to be an efficient

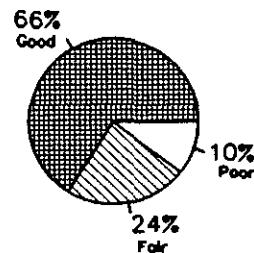
program for land protection. It has led to state acquisition of 6, 942 acres at 73% of market value.

◆ The special problems of trails: Ironically, many of this state's most travelled recreation areas -- its trails -- are on private land. The 500 miles of Blue-Blazed trails, maintained by volunteers under the auspices of the Connecticut Forest and Parks Association, will need to be made part of the state's effort to create a network of Greenways (see Section 3 of this report).

The most popular uses of CT's trails:

1. hiking
2. cross-country skiing
3. snowmobiling

Conditions of Connecticut's Trails
(Total miles = 1280)



Source: National Park Service and Appalachian Mountain Club

FORECAST FOR 1993

◆ A rare opportunity is upon Connecticut which must not be ignored. Three very positive developments are converging which together have potential to create a golden era of land protection and public access to the outdoors; the era could be sustained or could be brief. These developments are:

1. Vigorous activity by land trusts, larger private conservation organizations, and new local greenways committees, organized and operated by dedicated volunteers.

2. Federal transportation funds earmarked specifically for trails and transportation "enhancement" projects which can include rails-to-trails and similar projects.

3. Greater assistance from federal agencies including the National Park Service's River and Trail Conservation Assistance Program which is working with the state, municipalities, private organizations, and several regional greenways committees to protect rivers and other resources.

With so much private, municipal, regional, and federal land conservation activity, the state's partnership role becomes even more important. Financial commitment is critical to the modest, partnership-oriented Recreation and Natural Heritage Trust Fund, as well as to Heritage Parks and the Governor-appointed Greenways Committee.

WETLANDS

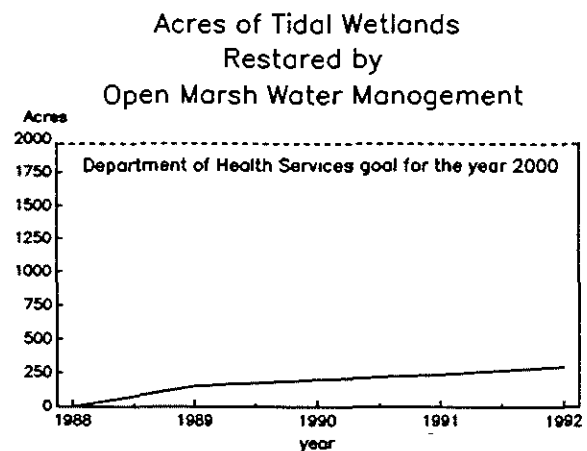
◆ Acres of inland wetlands and watercourse disturbance permitted in 1991: 865
in 1990: 1,012

◆ Of 15 randomly selected Connecticut Department of Transportation (DOT) construction sites, the number found by a non-profit citizens' organization to have wetland permit violations in 1992: 11 (see page 13)

KEY TRENDS

◆ *Tidal wetlands* (found primarily on the coast) and *inland wetlands* are regulated under separate laws, and have met with different levels of conservation success.

◆ Connecticut's *tidal wetlands* program is one of this state's shining regulatory successes. After losing half of its tidal wetlands to development, Connecticut arrested those losses almost completely by adopting the Tidal Wetlands Act in 1969. The trend now is toward a net *gain* in functioning tidal wetlands, through Open Marsh Water Management and other restoration programs.



◆ *Inland wetlands* have been protected, primarily through municipal commissions, since 1972, but accurate records of regulated activities have been kept only since 1990. Approximately 1000 acres were disturbed in each of the past two years of lackluster real estate development. Surprisingly, an estimate of disturbance in the boom years of 1986-87 was 1200 acres per year; either protection has not improved much since then, or those earlier estimates were too low. In any event, Connecticut is regarded as a leader in inland wetlands protection.

Most common causes of inland wetland disturbance:

1. new residential development (single-family units)
2. residential improvement by homeowners
3. commercial/industrial uses



FORECAST FOR 1993

◆ Additional gains in tidal wetlands acreage and function can be achieved through continued funding of the Department of Health Services' (DOHS) Open Marsh Water Management, which improves marshes previously harmed by mosquito ditching while reducing mosquito populations and the need for pesticides. Other restoration projects may also yield net gains; Amtrak and the DOT may have funds available to restore some wetlands and coves harmed by the railroad and Route 1, respectively.

◆ The change in federal leadership should lay to rest the 1991 controversy over re-defining wetlands under federal jurisdiction.

◆ The DOHS' new practice of using herbicides to control *Phragmites*, a pestiferous grass that crowds out desirable vegetation and wildlife, needs to be evaluated before it is practiced widely in the state. (Thirty acres were treated in 1992.)

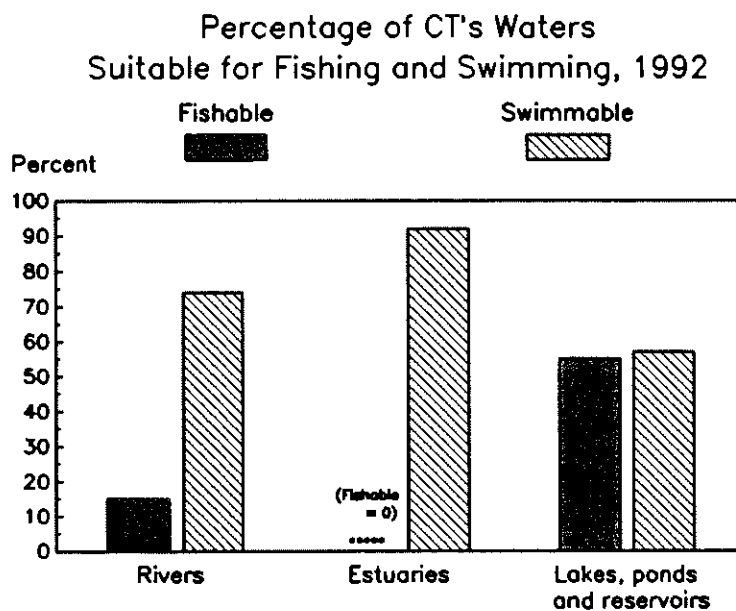
◆ Enforcement of the tidal wetlands law and the inland wetlands law has some weak points. More enforcement resources at the state level and stronger enforcement tools at the municipal level are needed.

◆ Using its new inland wetlands data collection system, DEP can focus on the areas where inland wetlands are most threatened.

RIVERS, LAKES, AND ESTUARIES

- ◆ Number of lakes, ponds, and reservoirs in Connecticut: 3286
- ◆ Rank of CT among the 50 states in minimizing water consumption per capita: 2
- ◆ Pounds of pesticides withheld from application in 1992 by farmers practicing Integrated Pest Management in the Scantic and Housatonic River watersheds: 9,345

KEY TRENDS



◆ Progress toward the goal of waters clean enough for fishing and swimming was rapid in the 1970's, barely perceptible in the early 1980's, and positive again in the late 1980's after the state established its own Clean Water Fund. However, recent changes to the federal definition of "fishable" make comparisons of past and present data impossible. The chart at left shows that no estuaries and few rivers are considered "fishable", despite the good fishing in those waters. Reason: Several species of migratory fish

contain chemical contaminants and are the subject of health advisories; because those species enter Connecticut's estuaries and rivers, those waters cannot be deemed "fishable" under the new federal definition.

FORECAST

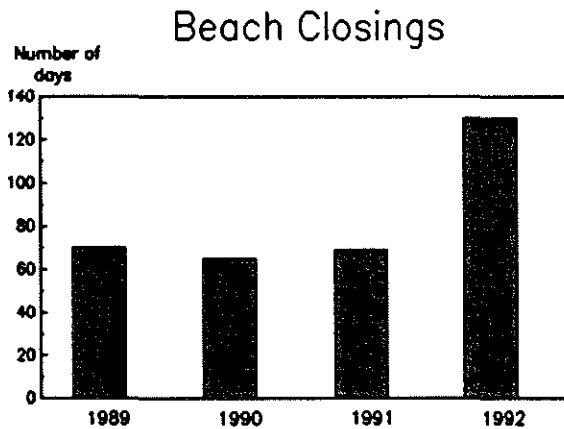
◆ Lakes and reservoirs now affected or jeopardized by non-point pollution sources will improve permanently only when pollution sources are eliminated and, in many cases, when money is invested in restoration. Lakes of high quality can be protected from most pollutants by proper land-use planning and management.

◆ For improving the major rivers, there is no practical substitute for large capital investments in improved treatment facilities and in separation of combined storm/sanitary sewers. Connecticut's innovative Clean Water Fund loans money to municipalities; if funded annually through 2000, it will be largely self-sustaining thereafter. Reducing the impacts of industrial discharges will require a combination of improved treatments and pollution prevention. Better land-use planning and storm-water management will keep non-point pollution from getting worse.

LONG ISLAND SOUND

◆ Estimated annual expenditure of state and federal funds in Connecticut needed to meet water quality goals in Long Island Sound in 20 years: 47 and 70 million, respectively.

KEY TRENDS



◆ **BEACH CLOSINGS:** Copious rainfall in the summer months led to the higher-than-normal number of beach closings in 1992. Some coastal towns issue "administrative closings" as precautionary measures when local rainfall amounts exceed one inch; these closings do not necessarily indicate poor water quality. The Long Island Sound Study has set a goal to eliminate all bathing beach closures by controlling the major sources of pathogens: combined sewer and stormwater overflows. (Data for 1992 are incomplete. Numbers were unavailable from one town, and one extended 90-day closing of a very small private beach was not included.)

Most numerous items collected in CT beach clean-ups:

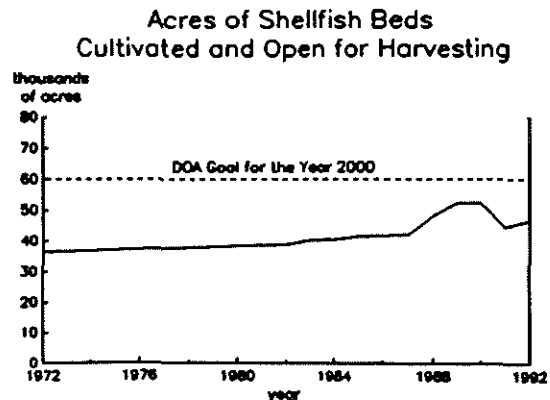
1. cigarette butts
2. glass pieces
3. plastic pieces



Most unusual items collected in CT beach clean-ups:

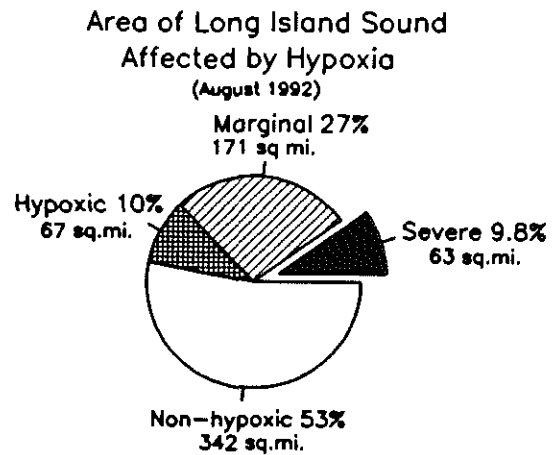
1. sock containing 400 crack vials
2. machete
3. wading pool

◆ **SHELLFISH BEDS:** The Connecticut oyster harvests reached a record high in 1992: \$45 million. This economic growth is the dividend of state and private investments in preparing suitable oyster habitat. Since 1987, \$4.8 million of state funds have been spent to spread culch over 3000 acres. The private sector provides boats and personnel, and pays special taxes on oyster sales. Recent loss of harvestable acreage was due to economic, not environmental factors.



◆ **HYPOXIA:** A large portion of the Sound, primarily in the western end, is without oxygen in the summer months. This condition is known as hypoxia, and arises when aquatic vegetation, stimulated by nitrogen in pollution, dies and is decomposed by oxygen-consuming bacteria.

◆ Readers are directed to the Long Island Sound Study Comprehensive Conservation and Management Plan for an excellent compilation of the problems and solutions facing the Sound.



FORECAST

◆ The public's resolve to clean the Sound and establish long-lasting protective measures will be tested when comments are received on the Comprehensive Conservation and Management Plan. While many measures can be taken to minimize further degradation, actual improvement will depend on one factor: the public's willingness to invest substantial financial resources in the future of the Sound.

The Word From Rio: Opportunity

Traditionally in this space the Council highlights several "Emerging Issues" that will confront Connecticut in the coming year. This year, the Council focuses on just one -- Environmental Industry -- as it will be the dominant environmental and economic issue of this decade.

Agreement by 170 of the world's nations to integrate environmental protection with economic growth was one of the notable events of 1992. In June, at the United Nations "Earth Summit" Conference on Environment and Development, countries agreed to the goals of "Agenda 21," often referred to as a blueprint for sustainable development. This agenda recognizes the necessity of developing the world's resources in a way that does not preclude future growth and prosperity. Instead of something to be tacked on the tail end of development plans, environmental protection is intended to become an important element of design and engineering. But what does it mean for Connecticut?

In the long run, so-called "sustainable development" will mean a pattern of economic activity that is not overly wasteful of natural resources, which cannot be said to characterize the majority of current human activity, here or elsewhere. In the short-term, however, sustainable development worldwide will mean *major economic development opportunities* for someone. That "someone" could be anyone from Japan to Germany to Massachusetts to Connecticut.

Integrating environmental protection with economic development is projected to create a demand for new waste management and pollution prevention technologies, pollution control devices, pollution monitoring equipment, technology for the production and use of alternative fuels, and expert consulting services. These and other "Environmental Industries" have grown annually in the United States at a rate of 20 percent since 1985 and continue to expand at an annual rate of 35 percent, according to the Council of State Governments, even without the effects of Agenda 21. Environmental products and services are expected to be in demand internationally, and other countries and states are gearing up to meet that demand.

"State policies will play a major role in determining the ultimate success of environmental development," according to R. Steven Brown, Director of the Centers for Health and Environment at The Council of State Governments. Aware of this and the efforts that certain other states are making to corner a share of the market demand for Environmental Industries, the Connecticut Department of Environmental Protection has been exploring the options available to this state. Working with the Department of Economic Development, the DEP has proposed creation of an "Environmental Entrepreneurial Center" to provide modest advice and assistance to embryonic environmental industries. It recently published a directory of Connecticut firms offering environmental products and services.

Forward-thinking Connecticut companies have already invested considerably with an eye toward the international environmental market, and some have sold many millions of dollars of products and services. Using these as models, Connecticut has a one-shot opportunity to help create long-term jobs in environmental industries to replace those lost in defense industries. The Connecticut Environment Roundtable -- a non-profit organization established to foster cooperative environmental policy making -- was the sponsor of a recent conference entitled, "Green Industry: Can the Environment Put Connecticut to Work?" The environment will put people to work somewhere in the world, and we should all labor to see that those people are in Connecticut.

PART IV

1992 ACTIVITIES

OF THE COUNCIL ON

ENVIRONMENTAL QUALITY

1992 ACTIVITIES OF THE CEQ

The Council on Environmental Quality helped to steer the State of Connecticut in some new directions, particularly with regard to protection and enjoyment of open spaces, while working hard to fulfill its tri-partite statutory mission. With broad responsibilities and modest resources, the Council is charged with: 1) monitoring all state environmental trends, with in-depth evaluation of problems and programs of greatest importance; 2) reviewing state-agency construction projects, and 3) investigating citizen complaints. Council members donated their expertise and hundreds of hours of their time to help improve environmental programs of this state. Highlights of Council activity in 1992 follow:

◆ In its annual report to Governor Lowell P. Weicker, Jr., released in April, 1992, the Council recommended that Connecticut embark on an ambitious Greenways project to enhance open space and provide residents with convenient access to the outdoors. Governor Weicker agreed, and with Executive Order #8 created The Greenways Committee. Two Council members serve on the Committee, and Council staff coordinates Committee activity. (Part II of this report summarizes Committee accomplishments to date.)

◆ Members and staff worked with many other parties to help improve the efficiency of the DEP's Permit programs. In addition to serving on the General Assembly's Environmental Permitting Task Force, members continued to monitor the consultant's study of DEP permit issuance begun with Council help in 1991.

◆ The Council was asked to help assemble an expert and balanced panel to evaluate Connecticut's Hunting Safety laws and programs. The Governor's Task Force on Hunting and Public Safety was subsequently chartered to report to the Council, which reviewed the Task Force's report and forwarded it to Governor Weicker in March, 1993. (That report is included as Part V of this document.) Council member Donal C. O'Brien, Jr. chaired the Task Force, and Council staff coordinated its activities.

◆ As a follow-up to the Council's 1990 annual report which recommended changes to the way in which land-use is planned, especially in its relation to transportation systems, Council staff continued to serve on the General Assembly's State, Regional, and Local Land-Use Planning Task Force. That Task Force completed its report and recommended legislation in 1993.

◆ A Council Subcommittee investigated the backlog in the DEP's Property Transfer Act, and recommended a comprehensive solution for alleviating that backlog. The long delays in gaining approval for clean-up of contaminated sites is impeding economic development in the cities. The Council was prompted to investigate after it received several complaints and comments

about the backlog from the private sector. (See Part III of this report for the Council's recommended solution.)

♦ The Council did preliminary work on two issues which will require more study in 1993:

- 1) Members and staff discussed with DOT officials the potential for using state transportation funds to help towns improve land-use planning, in order to minimize the burden placed on state roads by poor land-use planning. One Council member participated in a multi-session roundtable discussion of a related case study in Eastern Connecticut, sponsored by the University of Connecticut's Institute of Public Service.
- 2) Council staff outlined some initiatives which could improve environmental programs' abilities to assist economic development and environmental quality in Connecticut's cities.

♦ Council staff served in two ongoing public-private partnership initiatives: as Connecticut's only representative on the New England Pollution Prevention Council, and on the Board of Directors of the Connecticut Environment Roundtable. Both of these organizations are dedicated to collaborative approaches to improving the environment in the way that most makes sense.

♦ The Council reviewed Environmental Impact Evaluations and Findings of No Significant Impact prepared by state agencies. Early in 1992, especially, the Council gave extra attention to the proposed projects' conformance with the State Plan of Conservation and Development as required by Public Act 91-395.

♦ The Council received and investigated some unusually difficult citizen complaints, several of which involved the activities of other state agencies. The Council succeeded in getting attention and assistance for the complainants. Some of the complaints received in 1992 involved lingering problems that have persisted for years, a fact which helped alert the Council to the backlogs and under-staffing in DEP enforcement programs.

♦ Pursuant to the Council's responsibility to report on the state's progress toward the goals of the Environment 2000 plan, the Council renewed its efforts to standardize year-to-year reporting by developing useful environmental indicators. Council staff attended a national conference (at no state expense) to improve the way in which environmental progress is measured and reported. Significant advancements are anticipated in 1993.

The Council looks forward to maintaining productive relationships with Governor Weicker, the General Assembly, the Departments of Environmental Protection and Transportation and other state agencies, and all citizens in working toward our common goal of environmental quality in Connecticut.

CEQ MEMBERS

John A. Millington, Chairman. Resident of Washington Depot. Vice-president for Planning and Development, Council on Foreign Relations. Former member, Board of Directors, Ruffed Grouse Society. Former President and Publisher, Ball Publications and Atlas World Press Review. Former Publisher, Time-Life Books International.

David A. Baram. Resident of Bloomfield. Partner in the law firm of Clayman, Markowitz, Pinney & Baram. Former Mayor of Bloomfield (1982-1989). Former Chairman, Capitol Region Council of Governments (1987-1989). President, Beth Hillel Synagogue. President, Federation Homes, Inc. Board of Directors, Bloomfield Chamber of Commerce. Board of Directors, Jewish Federations Community Relations Council. Board of Directors, Schechter Day School. Board of Directors, Hillel House of UConn. Member, Connecticut-Israel Exchange Commission.

Stephen H. Broderick. Resident of Brooklyn. Extension Forester, University of Connecticut Cooperative Extension System. Chairman, Brooklyn Conservation Commission. Past Chair, Connecticut State Tree Farm Committee. Chair, Northeast Forest Resources Extension Council. Co-founder and director, Eastern Connecticut Forest Landowners Association. Board of Directors, Maple Syrup Producers Association of Connecticut. Former member, Board of Directors, Southern New England Chapter, Society of American Foresters. Former member, Brooklyn Inland Wetlands Commission.

Mark R. Kravitz. Resident of Guilford. Partner in the law firm of Wiggin & Dana. Member, Environmental Permitting Task Force (1992). Member, Board of Directors, Guilford Free Library. Member, Board of Directors, Friends of Yale Pediatrics. Former Director and Chairman, The Connecticut Food Bank (1980-1986, 1984-1986). Member, Task Force on Recommendations of National Commission on Children, Connecticut Commission on Children. Board of Directors, Connecticut Foundation for Open Government. Former member, Board of Directors, The Children's Center of Hamden, Connecticut (1976-1986).

Donal C. O'Brien, Jr. Resident of New Canaan. Partner in the law firm of Milbank, Tweed, Hadley & McCloy. Former member, Connecticut Council on Environmental Quality (1971-1976). Former member, Connecticut Fish and Game Commission (1971-1972). Former Chairman, Board of Directors, National Audubon Society. Former Vice-chairman, Board of Governors, The Nature Conservancy. Board of Directors, North American Wildlife Foundation. Chairman, executive committee, Atlantic Salmon Federation. President, International Council for Bird Preservation.

John D. Pagini. Resident of Coventry. Director of Planning and Community Development, Town of Enfield. Former Senior Land Use Analyst, Robinson & Cole. Former Environmental Planner, Town of Glastonbury. Former member (1979-1981) and Chairman (1980-1981), Coventry Planning and Zoning Commission and Inland Wetlands Agency. Recipient, Professional Conservationist Award, Connecticut Association of Soil and Water Conservation Districts (1980). Member, American Planning Association, American Institute of Certified Planners, and American Society of Public Administrators.

Gregory A. Sharp. Resident of Northford. Partner in the law firm of Murtha, Cullina, Richter, and Pinney. Adjunct lecturer in environmental law, University of Connecticut School of Law. Member of Executive Committee and former chairman, Conservation and Environmental Quality Section of the Connecticut Bar Association. Member, Department of Health Services' Scientific Advisory Panel. Secretary, Injured and Orphaned Wildlife, Inc. Former member, Steering Committee, Earth Day 20. Former member, DEP Environment 2000 Advisory Committee. Former member, Boards of Directors, Connecticut Audubon Society and Connecticut Fund for the Environment. Former member, Governor's Pesticides Task Force. Former member, Solid Waste Management Advisory Council. Former Director of Information and Education, Connecticut Department of Environmental Protection.

Dana B. Waring. Resident of Glastonbury. Vice-chairman, Glastonbury Conservation and Inland Wetlands Commission. Former Chairman, Glastonbury Beautification Committee. Member, Advisory Board, Connecticut Land Trust Service Bureau. President and founder, Kongsgut Land Trust. Former trustee, Connecticut Chapter of The Nature Conservancy. Former member, Board of Directors, Connecticut Environmental Mediation Center. Former Vice-president, Natural Resources Council of Connecticut. Former engineering manager, Pratt and Whitney Aircraft Corp., and consultant to United Technologies Corporation. Licensed professional engineer.

PART V

FINAL REPORT OF THE GOVERNOR'S TASK FORCE ON HUNTING AND PUBLIC SAFETY



STATE OF CONNECTICUT

COUNCIL ON ENVIRONMENTAL QUALITY

March 18, 1993

Lowell P. Weicker, Jr.
Governor of Connecticut
State Capitol
Hartford, CT 06106

Dear Governor Weicker:

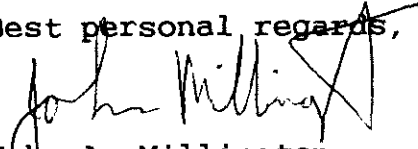
I am pleased to forward to you the Report of the Governor's Task Force on Hunting and Public Safety. After considerable review and discussion, the Council on Environmental Quality accepted this report at its meeting this morning.

By all accounts, the Task Force did an outstanding job. Members donated many, many hours. Don O'Brien, as Chairman, put in a Herculean effort to make certain this report was finished in just ten weeks. Don marshaled the resources of members and meager staff to see that all aspects of hunting safety were considered thoroughly and objectively. The Council is particularly pleased with the way the Task Force considered carefully the comments of the hundreds of citizens who spoke at the January 12 public hearing or took the time to write letters.

The Council notes that many of the Task Force's most important recommendations will cost money, money that is not in the proposed FY94 budget. In view of the Task Force's conclusion that Connecticut's hunting laws are not being enforced adequately, the urgency of these recommendations is apparent. There appears to be a range of funding options available, from General Fund appropriations to increases in special fees. The Council suggests that the Department of Environmental Protection is charged to work with the Office of Policy and Management and the General Assembly to develop a plan for funding these critical measures. Some recommendations, such as increasing the DEP's field force by 26 officers, could be phased in over two or three years for reasons of practicality as well as lessening the immediate fiscal burden. In any event, resources must accompany any new responsibilities legislated or assigned to the DEP; otherwise, the public will see a lot of words but no action.

Hunting safety, with all of its implications for the public's safety and security, is a very complex matter. It is the Council's belief that the Task Force has discharged its responsibilities with extreme care and concern. Please let me know if the Council can be of assistance in getting these recommended improvements into place.

Best personal regards,



John A. Millington
Chairman

cc: Timothy R. E. Keeney, DEP Commissioner
George Avitabile, DEP Deputy Commissioner
Thomas Dudchik, Deputy Chief of Staff

Report and Recommendations of The Governor's Task Force
on Hunting and Public Safety

TO: Council on Environmental Quality: John A. Millington,
Chairman; Stephen H. Broderick; David Baram; Mark R.
Kravits; Donal C. O'Brien, Jr.; John D. Pagini; Gregory
Sharp; Dana Waring
Department of Environmental Protection: Commissioner
Timothy R.E. Keeney

FROM: The Governor's Task Force on Hunting and Public Safety:
Donal C. O'Brien, Jr., Chairman; Arnold F. Baer;
Russell Brenneman; Teresalee Bertinuson; Starling
Childs; William Healy; John Hibbard; Toini Jaffe; James
Jones; Douglas Painter; Jean C. Porter; Deborah Flagg
Scott; Colin Tait; Gary Tanner; John Julian, Counsel

DATE: March 15, 1993

Introduction. The members of the Governor's Task Force on Hunting and Public Safety were appointed by Governor Lowell P. Weicker Jr., the Connecticut Council on Environmental Quality and the Connecticut Department of Environmental Protection (DEP).

The responsibility of the Task Force was to review hunting and public safety in Connecticut in the wake of the tragic hunting accident which took the life of Kevin Elliot this past November. Elliot was jogging on a dirt road in Morris, an area popular for hunting, when he was apparently mistaken for a deer and shot to death. The hunters were about 300 feet away from the road on which Elliot was running. Elliot was pronounced dead at the scene.¹

Prior to examining hunting and public safety in Connecticut, the Task Force held a public hearing in the State Capitol on January 12, 1993. More than 300 people were in attendance, and testimony was taken from 70 citizens. In addition, the Task Force invited public views and opinions by letter and received comment through the mail from 230 citizens. The public was also invited to attend meetings of the Task Force on January 7, February 9, and March 2 and 10.

Early in its deliberations, the Task Force identified five major issues involved in hunting and public safety and formed five subcommittees to address these specific issues: Law Enforcement - Russell Brenneman (Chair), Jim Jones, Jean Porter, Colin Tait; Hunting in Densely Populated Areas - Russell Brenneman (Chair), Starling Childs, Debbie Scott, Doug Painter, Terry Bertinuson; Hunting Practices - Debbie Scott (Co-Chair), Starling Childs (Co-Chair), Bill Healy, Terry Bertinuson, Gary Tanner; Hunter Education and Public Awareness - Doug Painter (Chair), Toini Jaffe, John Hibbard, Arnold Baer; Financial Considerations - Terry Bertinuson (Chair), Colin Tait, Russ Brenneman, John Julian, Counsel.

The Task Force was extremely impressed by the dedication and professionalism of the staff of the Department of Environmental Protection and recognized early in its deliberations that the State's DEP has done an outstanding job for the citizens of Connecticut.

The Hunter Education Program is rated among the best in the nation. This is a tribute not only to DEP but to the hundreds of citizens who voluntarily donate their services as hunter instructors.

The Task Force was also very impressed by DEP's Law Enforcement Division, but at the same time was deeply concerned by what the Task Force concluded was a force too small to do the job with which it is charged. If a single area were to be selected for priority attention, it would be the Law Enforcement Division and the need to increase the force to a size where it is adequate to detect and apprehend violators and respond to citizen complaints.

The high quality of those who serve in DEP has resulted in Connecticut having an outstanding record of hunting and public safety. In fact, the State's record with respect to public safety ranks among the highest in the nation.² Nevertheless, the tragic death of Kevin Elliot last November could have been avoided. Thus, no matter how exemplary its record, Connecticut must continue to seek ways to ensure that hunting and public safety are compatible.

This is especially true as the population in Connecticut increases in size. The State has quickly moved from being a rural, agricultural state into one of the most densely populated states in the nation. Connecticut now has approximately 3,300,000 residents inhabiting about 3,000,000 acres. This makes Connecticut the fourth most densely populated state in the nation. Furthermore, Connecticut's population is widely spread throughout the State. There are relatively few wilderness areas remaining in Connecticut.

Concurrent with the increase in human population has been a substantial increase in the State's deer herd and wild turkey population. This has resulted in changes in hunting seasons and the hours in which hunting occurs, as well as changes in hunting practices, the areas in which hunting takes place and the usage of firearms and ammunition. Some of the State's densest deer herd exists in those portions of the State with the greatest human populations.

As Connecticut's population has increased in size, there has also been a dramatic increase in the use of its open spaces by all citizens of the State. Outdoor recreation has become a major pastime throughout the nation, and Connecticut is no exception. Today, the hunter in Connecticut shares the State's open spaces, both public and private alike, with hikers, joggers, bicycle riders, equestrians, birdwatchers, fishermen, canoers, and those

who simply wish to get out in the fresh air for a picnic or a casual stroll.

The Task Force specifically notes that much of Connecticut's open space has been preserved by entities other than the State. These groups include municipalities, more than 100 land trusts and many private sanctuaries and preserves created and operated by organizations such as the Audubon Society, The Nature Conservancy and similar groups. At this very point in time, efforts are under way to launch a "Greenways" program which has the strong endorsement of the Governor and which the Task Force believes will also be supported by the legislature. The Task Force believes that these municipal and private initiatives should be encouraged and that under the State's leadership and direction all of Connecticut's citizens should be able to use its open spaces in a safe and enjoyable manner. This means that hunter education and public awareness must continue to be stressed, improved and developed, that hunter behavior and activity must be carefully regulated, that the State's conservation laws must be strictly enforced and that those breaking the laws must be prosecuted and appropriately penalized.

Although the Task Force strongly believes that the State should continue to have the primary responsibility for wildlife and remain the sole authority regulating hunting, the majority of the Task Force concluded that the State's existing laws and regulations could and should be improved with a view to creating a process whereby public safety can best be assured, especially in densely populated areas where the mere application of existing limitations on hunter activity might be inadequate. Thus, the majority of the Task Force thought it important for the Commissioner of DEP to have the responsibility to identify such areas and, if appropriate, to establish special regulations to address special needs and situations. The majority of the Task Force also thought that it was important for municipalities within the State to have a process through which citizen concerns about hunting and its impact on public safety can effectively be expressed and addressed.

The Task Force recognizes that such a process may prove difficult to administer, and that it will place an additional burden on the Commissioner and his staff. Nevertheless, the majority of the Task Force believes that a process of this kind will prove to be the wisest way to bring good judgment to bear on how best to regulate hunting in densely populated areas. It will involve the Commissioner and concerned municipalities in direct discussions of hunting and public safety, which should be the only issue under consideration at any such public hearings, and it will leave the Commissioner with the final decision as to whether or not hunting activities within those municipalities should be restricted and restrained. The majority of the Task Force believes that if such a process is not created, the most likely alternative may be a variety of legislative initiatives to apply blanket restrictions on hunting practices, including the abolition of hunting, in densely populated areas.

The Task Force made every effort to focus on the issue of hunting and public safety. While we realize that there are strongly held views on all hunting issues, our responsibility was only to those regarding public safety. As mentioned earlier in the introduction, we recognize that Connecticut's safety record is outstanding and believe that most Connecticut hunters are safe and law abiding. We credit the safe hunters of this State as well as the DEP, the CE/FS course and the many citizen volunteers who donated their time to hunter instruction for Connecticut's impressive safety record. Our hope is that this Report has important benefits to both hunters and non-hunters alike.

With this introduction, the Task Force submits its Report.

LAW ENFORCEMENT

Introduction. Connecticut has many laws that regulate hunting and the behavior of hunters. Enacting laws, however wise and comprehensive they may be, is insufficient if the laws are not enforced. To be effective in deterring law-breaking behavior, an enforcement system must minimally include (1) a field force sufficient to detect and apprehend violations and adequate to respond to citizen complaints, (2) sanctions or penalties that are severe and certain enough to cause potential violators to wish to avoid them by changing their behavior, and (3) timely prosecution by an authority empowered to impose the penalties.

We conclude that Connecticut's hunting laws are not being adequately enforced at present because of shortcomings in all three categories. The field force is inadequate. Sanctions and penalties are too lenient. Prosecution by the courts is either inadequate or, in some judicial districts, virtually non-existent. The determined law violator can "get away with" behavior that threatens the safety and well-being of the public and, in some cases, law abiding hunters themselves. Misbehavior by some is bringing criticism of the entire hunting community and, in the eyes of some commentators, hunting itself.

Offenses Related to Substance Abuse. We are surprised to note that while it is explicitly illegal to drive a motor vehicle while under the influence of alcohol or a controlled substance, there is at present no Connecticut law making it explicitly illegal to hunt while under the influence of alcohol or a controlled substance.

Recommendation 1a: Enact a statute making it a crime to engage in hunting while consuming any alcohol or any controlled substance or to have in one's possession any alcohol or controlled substance while engaged in hunting. Penalty: fine and suspension of license.

Recommendation lb: Enact a statute making it a crime to engage in hunting while under the influence of alcohol or any controlled substance, a person engaged in hunting being deemed to have given his consent to chemical analysis of body fluids. Penalty: fine, suspension of license, and forfeiture of any devices used in hunting to the Commissioner of Environmental Protection.

Increase effectiveness of enforcement force.

Recommendation lc: As an administrative action, the Commissioner should consider reassignment of duties so that most non-enforcement duties are removed from the responsibilities of conservation officers.

Recommendation ld: Release conservation officers from present restrictions on compensation for overtime so that officers can use overtime to expand and extend coverages and respond to crimes in progress.

Recommendation le: Insure that designated conservation officers are available for enforcement activities year-round. While great attention is properly given to enforcement during the Fall hunting season, in fact, much hunting occurs throughout the year. There is no "off" season for enforcement of hunting laws.

Increase size of enforcement force. We believe that the most effective deterrent to unwanted behavior is an effective enforcement force in the field. The present force is manifestly too small. An expansion of the number of qualified, adequately trained and effectively supervised officers is required. We believe also that there is a need for supplementary part-time fish and game enforcement officers. Because these laws are also enforceable by State and municipal police officers, we recommend augmentation of the training of such officers in this aspect of their enforcement responsibilities.

Recommendation lf: At a bare minimum, in order to protect the safety of the public, increase the DEP conservation officer force by 24 officers and 2 supervisors. Considering the increase in hunting licenses and other regulated activities noted above, the increase in uses of the outdoors that compete with hunting, the outspreading of habitations and the fact that the field force has actually declined by 27% in the past five years, increasing the size of the professional field force of DEP by at least these numbers is a modest proposal. If the State retains the exclusive authority to regulate hunting, as in our view it should, it has a responsibility to provide for the enforcement of the regulations through DEP. An increase of 24 officers and two supervisors is estimated to carry an annual cost of about \$2,000,000. To the extent this recommendation is not fully implemented, there will be a reduction in the enforcement of

Connecticut's hunting laws, and as a result, the public will be less safe.

Recommendation lg: In addition to increasing the size of the DEP conservation officer force as recommended in lf, establish field force of part-time fish and wildlife enforcement officers. The DEP conservation officer force should be augmented by part-time deputy fish and wildlife enforcement officers. It will be necessary to train these officers for the duties to be performed by them (but not, we believe, for all duties of law enforcement officers). They should work under the direct supervision of DEP conservation officers at all times. Costs would include the expense of training, the items of equipment (such as uniforms) and per diem compensation. It is possible that some volunteer officers who already are certified might be available. There is an additional cost of administration and supervision. Effective programs of this nature are in place in Pennsylvania, Vermont and, perhaps, other states.³

Recommendation lh: Include in the training provided to Police Academy recruits not less than six and one-half hours of training in Wildlife Law Enforcement.

Prosecution. We recommend positive consideration of both of these recommendations. We stress particularly the need to establish administrative procedures within DEP that would place a "prosecutorial" function within that agency.

Recommendation li: Educate prosecutors concerning the enforcement of these laws through a formal educational program. Violations of hunting safety laws are serious matters. People and property are put at significant risk. If one role of prosecutors is reduction of dangerous behavior, this fits within that agenda.

Recommendation lj: Establish within DEP processes to assess civil penalties as an agency procedure, similar to the practice in the case of other violations within the Department, being careful to assure that the process stays within constitutional boundary lines and constitutional appeal rights are available. The effect would be to impose an administrative economic penalty on the wrongdoer adequate to compensate the State for its losses (for example, the cost of enforcement, damage to State property, loss of wildlife) and to remove from the wrongdoer any economic benefit from noncompliance and delay. C.G.S. Section 22a-6b could be amended to provide such a vehicle.

License suspension. There are constitutional barriers to suspending a license on arrest. The prudent course to follow is to track the court-tested procedures for the suspension of motor vehicle licenses.

Recommendation 1k: Authorize the arresting officer to seize the hunting license of an offender arrested for the violation of a hunting law involving public safety and to issue such an offender a temporary license valid until the offender's court date. If found guilty, the court would suspend his license permanently; if found not guilty, his license would be returned. Although the violator would be allowed to hunt pending his trial, a hunter with only a temporary license pending a trial would probably be a very careful hunter, perhaps more so than a hunter with a permanent license who is not under threat of trial. DEP might consider the establishment of a point system similar to the MV Department to be used for the suspension of licenses.

Recommendation 1l: In addition to the forfeiture of a motor vehicle used in the violation of a hunting law involving public safety recommended below, the violator's vehicle operator's license should be suspended. C.G.S. Section 26-85 currently provides that the operator's license of a person convicted of jacklighting a deer "shall be suspended by the Commissioner of Motor Vehicles for a period of one year." We recommend that such a suspension be extended to cover all violations of a hunting law involving public safety in which a motor vehicle is used.

Forfeiture. Forfeiture of guns and equipment used in the commission of hunting violations seems an appropriate sanction. Three state statutes are relevant to the forfeiture of hunting equipment. One is the general forfeiture statute applicable to all criminal violations. The other two are applicable to hunting violations.

Section 53-33g(C) provides for forfeiture if the court finds that the "property has been or is intended to be used, with intent to violate or in violation of any of the criminal laws of this state," with the exception of the drug laws, which have their own forfeiture provisions. This is the statute that was held not to authorize seizure of cars owned by the customers of prostitutes unless the car was actually used for sex.

Guns and equipment used in violating game laws would seem forfeitable under this statute. The statute would not cover cars used to get to and from hunting areas, but it would seem to cover motor vehicles that are actually used in the violation of game laws such as (1) shooting from a car, (2) jacklighting from a car, and (3) transporting illegal game (out of season, over bag limits, etc.)

Section 26-85 makes jacklighting of deer illegal, and provides for the forfeiture of "any firearm, shell, cartridge, and any other weapon and portable lights, batteries and any other device used, or intended to be used by," and found to be in the possession of any person charged under the section. Motor vehicles would not seem to be covered by this statute because

they are not portable lights and batteries, and the term "device" would not seem broad enough to encompass cars.

Section 26-90(a) makes false statements in connection with licenses or reports of deer kills illegal. Subsection (b) provides that anyone who violates subsection (a), or section 26-82 (killing of quadrupeds) or section 26-82a (game management of deer) shall forfeit "any firearm, shell, cartridge and any other weapon and any other device used, or intended to be used" in violation of the listed statutes. Again, motor vehicles would not seem included in that list.

Recommendation lm: Although the general state forfeiture statute is probably broad enough to cover all hunting violations, as a matter of emphasis for prosecutors and judges it would seem advisable to provide for one comprehensive forfeiture statute for hunting violations to replace the two limited ones discussed above. Such a statute should authorize the court to require the forfeiture of any equipment, including a motor vehicle, that is used in the violation of any hunting law that endangers public safety, such as: shooting across roads, carrying loaded weapons in a motor vehicle, shooting too close to a building, unlawful discharge, hunting from motor vehicle, etc.

Training. Under certain circumstances, violators should be required to attend and participate in a hunter education class conducted by the DEP Division of Wildlife. Because of the high quality of Connecticut's hunter education program, we believe that this would have a lasting effect on the violator. Funding and lead time must be provided to the Division of Wildlife to prepare and institute this additional workload.

Recommendation ln: Require a violator whose license has been suspended to take the class (whether or not he or she has previously taken it) and require the violator to pay a fee for doing so.

Recommendation lo: If a "warning" or "mail-in" action is taken for a safety violation, the violator should be required to take the class (whether or not he or she has previously taken it) and to pay a fee for doing so.

"Mail-in" Program. We strongly recommend substantial utilization and expansion of the "mail-in" program allowed under Section 26-61 e). However, the program should be available only for relatively minor offenses. Such a program frees officers from time-consuming court-related activities and encourages greater levels of enforcement activity for minor infractions. Such infractions now may simply result in warnings, without any real penalty.

Recommendation lp: Amend appropriate laws so as to permit greater utilization of the "mail-in" program.

Reciprocity. We strongly recommend that Connecticut participate in reciprocal agreements with other states so that a person who violates the law in one state will have his licenses suspended in all states which are parties to the agreement.

Recommendation lg: Appropriate Connecticut officials should be authorized to enter into the "Interstate Compact for License Suspension" by the enactment of prompt legislation.

Civil liability. Where harm to person has occurred as a result of a violation of law, the discharge of a firearm or the release of an arrow, it should not be difficult for the harmed person to recover damages from the perpetrator.

Recommendation lr: The standard of liability in such cases shall be "strict"; that is, it should not be necessary for the plaintiff to establish intent or negligence. Proof of the harm and its cause should be sufficient to establish liability.

The Task Force considered the desirability of requiring all hunters to have liability insurance for hunting-related claims and decided that this is not necessary.

Complaints and record keeping. DEP should review procedures to make sure that adequate records are maintained of every complaint it receives and its disposition. Good records exist for arrests and certain other formal actions. It is not clear whether records are kept for all warnings and reports of violations. We believe that there could be some improvement that would assure records are kept of all relevant complaints. This additional information would provide support for whatever changes may be needed in the enforcement system as time goes on. Local police departments and the State Police should keep records of hunting-related complaints and actions taken on them.

Fines. We believe that the penalties for violations of certain hunting-related laws are too modest to provide a significant deterrent.

Recommendation ls: Increase fines and other sanctions for violations relating to public safety.

HUNTING IN DENSELY POPULATED AREAS

Introduction. Hunting regulations should be reviewed and, if need be, revised to insure that hunting is not carried on in places that are inappropriate or in a manner that is inappropriate. In this review and revision, emphasis should be placed on the protection of people as the primary goal; public safety should in all cases have primacy over wildlife management and other regulatory objectives. We believe that there should be a well-defined process whereby any municipality believing that existing regulations do not adequately protect its residents can

initiate a formal proceeding leading to a determination by the Commissioner on the adequacy of the regulations applying to that municipality and their revision, if appropriate.

We affirm the principle that the State has the primary responsibility for wildlife and should remain the sole authority regulating hunting. However, our affirmation is based upon the assumption that a process can be established that effectively protects public safety under regulations that recognize the special circumstances of particular areas of the State, including appropriate enforcement personnel and authorities.

We conclude that section 26-67c, Connecticut General Statutes, offers a sensible starting point if it is amended, and other actions are taken, in accordance with the following recommendations:⁴

Recommendation 2a: Broaden the requirement regarding reports and record keeping with respect to hunting incidents that endanger public safety. The present language of Section 26-67c requires the Commissioner to maintain records of written complaints about "violations." We believe that appropriate records should be kept of all reports of incidents that endanger public safety, not just those that involve violations of particular regulations. A computer data base should be established. This data base should, if feasible, include all credible complaints concerning similar matters that are made to the State Police or to local police.

Recommendation 2b: Direct the Commissioner to identify geographical areas of the State where special rules governing hunting are appropriate by reason of population density, patterns of development, conflicting uses or other local conditions, and, after hearing, adopt regulations to insure that hunting is conducted in such a way as to best protect the public safety, bearing in mind population density, the configuration and size of land holdings, competing non-hunting recreational uses, protected habitats, the effect of hunting on adjoining land and all other relevant factors. The Commissioner should be required to report on his review, recommendations and actions to the Environment Committee of the General Assembly beginning February 1, 1994 and annually thereafter. In acting under this regulation, the Commissioner should exercise his discretion to close certain areas to hunting entirely where that is appropriate to insure the public safety.

Recommendation 2c: Require the Commissioner to conduct a public hearing whenever requested to do so by a duly authorized resolution from any municipality to consider the appropriateness of regulations regarding hunting and public safety that apply to the petitioning municipality. After hearing, the Commissioner may amend or adopt regulations in accordance with the standards set forth in paragraph 2b.

Recommendation 2d: Continue to require the Commissioner to hold a public hearing at least annually, as in the present Section 26-67c, but authorize amendment or revision of the regulations for any reason associated with insuring the public safety from hunting-related activities, and not solely for the reasons now set forth in that section. Make clear that the rule-making authority of the Commissioner allowed by this section is in addition to, and not in derogation of, his other rule-making powers.

Recommendation 2e: Insure that in each area of the State there is an adequate enforcement capability. As may be appropriate, authorize increased DEP enforcement manpower and the use of deputized municipal enforcement officers.

Recommendation 2f: In order to provide for an ongoing process to review and advise the Commissioner concerning the issues considered by the Governor's Task Force on Hunting and Public Safety, the Commissioner should consider establishing a permanent advisory committee that is broadly representative of all interests concerned with hunting and public safety issues. The Connecticut Council on Environmental Quality should continue its surveillance of these issues, and citizens having concerns should be encouraged to make them known to the CEQ.

Recommendation 2g: Require the Commissioner to notify each municipality of the provisions of Section 26-67c.

HUNTING PRACTICES

The Task Force also considered hunting practices in Connecticut other than those occurring in densely populated areas. Of particular concern were the approximately 50% of hunters who have not taken the CE/FS firearms courses, the general public's lack of knowledge of hunting seasons, safety procedures and existing laws, and the difficulties of enforcement for a Department that has undergone and continues to endure cuts in personnel and funding.

Length of Hunting Season. In consideration of the general impact that the length of season has on the other uses now made of public and private lands, the Task Force endorses the following DEP recommendations on season reduction:

Recommendation 3a: Eliminate hunting on public and private lands for the six month period March 1 - August 31 except for the Spring turkey season. Provisions will be made for hunting nuisance species on agricultural lands with the landowners' permission during this period.

Recommendation 3b: Phase out the current antlerless deer season.

Distances from Dwellings and Property Lines. Except in special situations which might arise from hunting in "densely populated" areas, it was generally accepted that the distance of 500 feet from a dwelling should not be changed, especially given that the existing regulations covering direction of fire were unambiguous and clear, and that line of fire would be emphasized more in training and pamphlets. The Task Force carefully considered placing the 500 foot or other restrictions on other boundaries such as roadways, trails, property lines, and land trusts' lands, but it was agreed that this setback was either too restrictive for those boundaries or too difficult to regulate and enforce. The Task Force does urge, however, that through training and literature, great emphasis be placed on the hunter knowing what is beyond the target before firing.

Recommendation 3c: Extend the prohibition of hunting or shooting from or across the traveled portion of any public roadway or from motor vehicles to hunting or shooting from or across any railroad track.

Consent for Hunting on Private Land. Task Force Counsel has advised that entry onto private land without consent constitutes trespass, but that most trespass violations will not be prosecuted, especially if passive and occurring on land that is not posted.⁵ Current DEP regulations require written consent for firearms deer hunting, turkey hunting, bow hunting for deer, and trapping. DEP provides consent forms for turkey and firearms deer hunters.

Recommendation 3d: Require verbal consent for all other forms of hunting on private properties.

Recommendation 3e: Eliminate the past requirement that completed consent forms be submitted for stamping by DEP at the time that deer and turkey permits are purchased.

Firearms: Rifles v. Shotguns. The Task Force was advised by DEP that the reason for the prohibition of rifles on public land was to reduce the temptation to kill deer illegally. There was some opposition among Task Force members to the use of rifles in small acreages, such as 10-acre sections, particularly in areas near family homes or recreation areas. The same configuration in more rural areas was seen as less of a problem. The Task Force was not prepared to recommend specific changes concerning the restriction or elimination of the use of rifles in certain areas. However, the Task Force recommends that the Commissioner be charged with reviewing and evaluating hunting practices in "densely populated" areas, including the use of both rifles and shotguns.

Bow Hunting. The Task Force believes that bow hunting, as a method of taking large and small game, may have different safety features which distinguish it from hunting with firearms. All of the same basic rules apply regarding direction of fire, range, and knowledge of what lies beyond the target. Because of the

short effective range of bows and their silence in release of arrows, archery might be considered as an alternative management technique rather than closing off hunting on lands within "densely populated" areas altogether.

The regulations regarding archery practices -- both bow and crossbow hunting -- need to be reviewed and evaluated for the benefit of the hunting and non-hunting public alike.

HUNTER EDUCATION AND PUBLIC AWARENESS

The Task Force is in agreement that there are a number of opportunities in the areas of hunter education and public awareness that can lead to programs and activities that can have a positive impact on hunter and public safety. The primary areas of opportunity examined by the Task Force were Connecticut's Hunter Education Program, Continuing Safety Education and Increased Public Awareness of Hunting Activities.

Connecticut's Hunter Education Program. Connecticut's Conservation Education/Firearms Safety program provides a minimum of 12 hours of classroom instruction in a wide variety of hunting and hunting safety related topics. The program is mandatory for all first time hunters and those who have not held a resident firearms license from any other state or county within the past five years. Since the program was implemented in 1982, 40,000 hunters have completed the course. It should be noted that 340 hunters in the State generously volunteer their services as instructors in this program, annually donating 16,000 hours to educate program students.

Recommendation 4a: The Task Force recommends that DEP review those areas of CE/FS curriculum that pertain to the safety of non-hunters, with an eye towards upgrading and/or expanding this curriculum area. Among those specific topics that should be reviewed are:

1. Shoot/don't shoot situations: The importance of clearly and fully identifying a target and knowing what lies beyond that target. The importance of good judgment and maintaining control in shooting situations. The danger of being over-anxious as a hunter. An understanding of the "early blur" phenomena. An understanding of range and danger distances of rifle cartridges and shotgun shells.
2. The importance of being familiar with hunting areas, especially with respect to property boundaries and safety zones within or adjacent to a hunting area. Compass and map skills should be part of this effort.
3. Attitudes and values: The importance of recognizing rights and sensitivities of non-hunters and the

courtesies and considerations that should be extended to non-hunters and property owners.

4. Waterfowl hunting: Waterfowl identification, gun handling safety in blinds and boats, and other safety issues related to the use of boats in open water, especially Long Island Sound.

Recommendation 4b: The Task Force recommends that DEP review available teaching aids that may increase the effectiveness of instruction in this area of hunting safety. Special attention should be given to materials that not only impart knowledge but also instill values of responsible sportsmanship.

Recommendation 4c: The Task Force recommends that DEP give special attention to hunting safety in their volunteer instructor training programs. Discussion of the above curriculum and teaching aids suggestions should be included in scheduled volunteer workshops. Additionally, this information should be included and emphasized in the periodic newsletters to volunteer instructors.

Recommendation 4d: The Task Force recommends that DEP change its policy regarding non-resident hunters by requiring non-Connecticut residents who are applying for a Connecticut hunting license to show proof of having successfully completed an equivalent Hunter Education course in their resident state as a requirement for obtaining a Connecticut license.

Recommendation 4e: The Task Force recommends that DEP adopt a policy that requires game law violators (who, as a result of their violations, have had their hunting license privilege revoked for a certain time period) to take, and successfully complete, the CE/FS course prior to being able to receive a new hunting license.

Recommendation 4f: The Task Force recommends that DEP support the recommendation of the National Hunter Education Association to make live firing a part of all hunter education courses. The Task Force understands that this recommendation must be considered in the light of such practical considerations as the availability of qualified instructors and the accessibility and availability of shooting ranges where such live firing could be conducted.

Recommendation 4g: The Task Force recommends that additional funds and personnel be earmarked for the CE/FS program to expand the capabilities of the program to train all those hunters who have not taken the current CE/FS program by the year 2000.

Continuing Safety Education. The Task Force believes that efforts should be made to expose hunters as well as non-hunters

to key safety messages on a regular and timely basis. Safety reminders for hunters are, of course, particularly appropriate just prior to the hunting season. Currently, no broad base effort is being made to emphasize key hunting safety precautions to Connecticut hunters on a continuing basis. We realize that most hunters are familiar with and observe safe hunting practices. Safety, however, can never be over-emphasized.

Recommendation 4h: The Task Force recommends that DEP develop safety information that pertains to the safety of non-hunters (as described in the Hunter Education section of this report) and that this information be prominently included in future editions of the DEP compendium of hunting regulations. It is also recommended that an appropriate safety logo and slogan be developed (for use on the cover of this compendium) to highlight the importance of this safety information. This compendium already is given to all hunting license purchasers. The Task Force believes that further distribution of this information would provide a good means of reinforcing these safety issues among the entire hunting community on an annual basis.

Recommendation 4i: The Task Force recommends that the DEP encourage volunteer hunter education instructors and other qualified hunters to conduct seminars on safety issues as part of the regular meetings of sportsmen's clubs throughout the State.

Increasing Public Awareness of Hunting Activities. Hunting in Connecticut occurs in locations that are becoming more densely populated and in locations that may also be used by non-hunting outdoor recreationists. This situation creates the need for the non-hunting public to be more aware and have a better understanding of where, and when, hunting takes place throughout the State.

The Task Force considered and rejected recommending that blaze orange clothing be required for non-hunters during the hunting season.

The Task Force also considered the issues of posting and "reverse" posting. Because trespass on private property is illegal in Connecticut, the Task Force makes no recommendations on these issues, believing that citizens should be aware of the law and that the law should govern.

Recommendation 4j: The Task Force recommends that DEP develop a broad-based public information program with the goal of making the public more aware of hunting areas, season dates, hunting hours and hunting practices.

1. The Task Force recommends that DEP investigate the possibilities of public service air time on Connecticut television and radio stations, to better educate the non-hunting public about hunting activity in the State.

2. The Task Force recommends that DEP investigate the best means of making this type of information available to local newspapers and other local publications. The Task Force believes that this can be an especially effective part of the program, since information could be tailored to local areas with respect to various hunting areas and season dates. DEP has proposed the development of a brochure on public awareness issues for general distribution, and the Task Force supports this recommendation.
3. The Task Force recommends that DEP encourage the use of blaze orange clothing for non-hunters using public and private lands that are open to hunting.
4. The Task Force recommends that DEP place appropriately informative signage at access sites (parking lots, trail heads, etc.) of public lands that are open to hunting. These signs would include the recommendation of wearing blaze orange.
5. The Task Force recommends that all Connecticut hunters be required to wear a large license tag pinned to their backs. This would help the public as well as enforcement officials more easily identify individuals as legal, licensed hunters.

Recommendation 4k: The Task Force recommends that DEP review New Jersey's "Good Neighbor" program with a view towards adapting this or a similar type of effort for Connecticut. The Task Force believes that this type of program can be helpful both in the public awareness and public safety areas.

The "Good Neighbor" program provides a structured system that enables DEP officials and local sportsmen's clubs to meet with local residents to discuss concerns about hunting activity in specific local areas. The Task Force recommends that the sportsmen's review group that currently meets with DEP officials should focus attention on this issue. Additionally, the Task Force recommends that this group be expanded to include non-hunting participants. The success of a "Good Neighbor" program will depend in good measure on the availability of a DEP staff member who can devote time and attention to the planning and coordination of such a program. We recommend that DEP appoint such an individual to this area of responsibility.

The "Good Neighbor" program includes the setting up of perimeter "safety zones" to provide a clear visual reference and alert hunters that they are approaching a "no shoot" zone. The signs inform hunters that shooting into a "safety zone" or carrying a loaded firearm in a "safety zone" is unlawful. The use of "blaze" paint markers on trees to delineate safety zones should also be considered.

Additional posting information for "densely populated" and multiple use areas is currently available through DEP. DEP should make a special effort to inform the managers of multiple-use lands of the availability of this material.

FINANCIAL CONSIDERATIONS

The Task Force considered Financial Considerations based on the present budget for the State's wildlife program as it applies to hunting, in an effort to understand the complicated structure for applying revenues from several sources to the cost of the program. Cost estimates were provided by DEP. The Task Force hopes that the recommendations listed below will receive strong support for funding, as the Task Force feels these are the most important recommendations for insuring public safety.

The Task Force has made the following recommendations that would require significant funding. The recommendations are listed in order of importance, except that B and C are considered of equal importance.

A. Increased Size of Enforcement Force (Recommendations 1f-g).

DEP believes that effective enforcement would require that inland coverage not exceed 100 square miles per officer. To achieve this goal would require the addition of 24 officers and two supervisors, for a total cost, including support and operational funds, of approximately \$1,682,000.

In addition, establishing a field force of 50 part-time fish and wildlife enforcement officers would cost approximately \$563,000.

The Task Force strongly recommends both of these increases in enforcement capacity.

It should be noted that these costs would cover the total cost of enforcement, including hunting, fishing, boating, shellfish and wildlife management.

B. Amending Statute 26-67c (recommendations 2a, 2c).

The Task Force recommends establishing a computer data base for recording all reports of incidents that endanger public safety. Such a program would require two full-time dispatchers and one clerical position and would carry an annual cost of about \$106,000.

The Task Force has also recommended that the Commissioner be required to conduct public hearings on hunting and public safety when requested by a municipality to do so, and that he also be required to conduct an annual public hearing on hunting and public safety. It is estimated that the cost of such a public

hearing would be approximately \$5,000 and that there might be as many as 20 public hearings during the course of a year, bringing the total costs to approximately \$110,000 per annum. Costs would include a hearing officer, reporter, transcription, hearing site, and staff to draft and analyze responses.

C. Hunter Education and Certification of All Hunters.

The Task Force has recommended that all hunters be required to take the CE/FS program by the year 2000. To certify the 40,000 hunters who have not completed the CE/FS course, phased in over a seven year period, would cost approximately double the current budget. Connecticut now operates its CE/FS program on an annual federally funded budget of \$300,000. The State match of 25% is met by using the value of services provided by volunteer instructors.

Phasing in the uncertified 40,000 hunters would require two additional full-time coordinators to recruit and train some 200 extra volunteers. Also needed would be two full-time secretaries, possibly a new facility to handle records and assist volunteers, and funds for additional ranges for training the added students. DEP estimates a need for an additional \$275,000, which would have to be appropriated annually from the General Fund. In addition, start-up costs would be about \$75,000.

D. Creation of a Program Similar to the "Good Neighbor" Program (Recommendation 4k).

The Task Force has recommended the creation of a "Good Neighbor" program. The success of such an effort would require a full-time DEP staff member to devote time to coordinating the program. "Safety Zone" signs and paint markers on trees would also be an integral part of the program. Implementation of the program (including the cost of signage and staff member) is estimated at \$62,000.

E. Increasing Non-Hunter Public Awareness.

The Task Force has recommended increasing non-hunter public awareness. The cost of a program for public awareness activities would obviously depend on the scope of these activities. Some could probably be handled within the present budget, but any significant broadening of these efforts could be costly. For instance, to place signage at public access sites of public lands that are open to hunting, as suggested in Recommendation 4j, would cost approximately \$25,000 annually.

Funding Sources.

On the recommendation of the Commissioner, the Task Force has specifically avoided identifying funding sources. This responsibility should be carried out by the Governor and the legislature in the exercise of their powers.

CLOSING COMMENTS

The members of the Governor's Task Force on Hunting and Public Safety express their great appreciation to all the citizens who provided information for us in testimony at the January Public Hearing and in letters and memoranda. We are grateful to the senior staff of the Department of Environmental Protection for their assistance. We especially thank former Deputy Commissioner Thomas Dudchik; John Spencer, Chief of the Bureau of Natural Resources; George Brys, Acting Director, Wildlife Division; George Barone, Capt. Law Enforcement Division; Mark Ellingwood, Wildlife Biologist, Deer Management; Dale May, Supervising Wildlife Biologist; Robert Kalinowski, CE/FS Coordinator; Peter Bogue, Assistant Director, Wildlife Division; Peter Good, Supervising Wildlife Biologist and David Kybas, CE/FS Coordinator.

The members of the Task Force also express their great appreciation for the support which they received from the staff of the Council of Environmental Quality: Karl Wagener, Melissa Ryan and Robert Krebs.

Lastly, we express our gratitude to Governor Lowell P. Weicker, Jr., John A. Millington, Chairman of the Council on Environmental Quality and Timothy R.E. Keeney, Commissioner of the Department of Environmental Protection for the privilege they afforded us to serve the citizens of Connecticut on an issue as important as hunting and public safety.

RECOMMENDATIONS

ACTION REQUIRED

Law Enforcement

1a	legislation
1b	"
1c	policy change
1d	"
1e	"
1f	legislation
1g	"
1h	"
1i	policy change
1j	legislation
1k	"
1l	"
1m	"
1n	"
1o	"
1p	"
1q	"
1r	"
1s	"

Hunting in Densely
Populated Areas

2a	legislation
2b	"
2c	"
2d	"
2e	legislation/policy change
2f	legislation
2g	"

Hunting Practices

3a	regulation change
3b	"
3c	"
3d	"
3e	"

Hunter Education and
Public Awareness

4a	policy change
4b	"
4c	"

RECOMMENDATIONS

4c
4e
4f
4g
4h
4i
4j
4k

ACTION REQUIRED

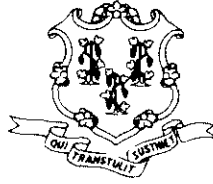
legislation
"
policy change
legislation
policy change
"
"
legislation/
regulation change

ENDNOTES

1. Hartford Courant, 11/12/92.
2. International Hunter Education Association, Annual Report of Hunting and Hunting Related Accidents, 1991.
3. The Task Force considered another method of enlarging the enforcement field force: Encouraging municipalities to exercise the authority granted under Section 26-6a, Connecticut General Statutes. Each municipal chief executive is empowered to appoint "constables for fish and game" to enforce fish and game laws within the municipality. These officers by statute must serve without compensation. An exemplary program of this type has been operating in the Town of Enfield for more than twenty years. Other towns, such as Easton, have programs of this type. While municipalities are free to act as they wish under the general authority of the statute, and while we applaud the Enfield effort, we do not look upon this option as a comprehensive solution to the field force problem. Finding appropriate volunteers in the requisite numbers may be a problem in many communities. We believe that under present law municipal fish and game constables would be subject to the training requirements established by the Municipal Police Training Council for all police officers. While we know of no particular problems in the past, if a number of Connecticut municipalities sought to create a constable enforcement capacity, assuring "quality control" by DEP could, we think, be difficult. Because such officers might, in all likelihood, be armed, their presence might increase, rather than diminish, the number of lethal weapons in the field; and partially trained and inexperienced officers might themselves constitute a threat to public safety.
4. The motion to accept the recommendations regarding "densely populated" areas passed by a vote of 11-3. The major objection of the dissenters, two of whom are not residents of Connecticut, was over requiring the Commissioner to identify areas of the State where special rules governing hunting should apply, and a concern that the right to request public hearings by municipalities on issues of hunting and public safety might be abused by residents of municipalities who are opposed to hunting. The dissenters believed that the present procedures under Section 26-67c are sufficient in providing municipalities a means to seek the amendment of hunting regulations within their limits to protect public safety.
5. See memoranda attached hereto.

Connecticut General Assembly

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OFFICE OF LEGISLATIVE RESEARCH

January 26, 1993

93-R-0205

FROM: Sandra Norman-Eady, Senior Attorney

RE: Trespass

You wanted to know the definition of "trespass" as it applies to laws governing hunting and fishing.

A person is guilty of third degree criminal trespass when he, knowing that he is not licensed or privileged to do so, (1) enters property that is posted, fenced, or otherwise enclosed in a manner designed to exclude intruders; or (2) enters or remains on premises to hunt, trap, or fish (CGS Sec. 53a-109). The law does not require a property owner to post a notice on or fence a piece of property as a prerequisite to the state charging a hunter or fisher with trespassing upon private land. In fact, the law's construction clearly shows that uninvited entrances on any private property, posted or not, for the purpose of hunting, trapping, or fishing is trespassing.

Joseph Healy, head of the Department of Environmental Protection (DEP) Law Enforcement Division, said that DEP suggests that landowners post their property if they do not want hunters, fishers, or trappers on it. According to Healy, these sportsmen cannot always "know" when they are on private land (e.g., open field with no home) unless it is posted or fenced.

By law, a person may be guilty of trespassing if he "knows" that he is not licensed or privileged when he enters private property. The law does not require a person to "know" that he is trespassing before an arrest may be made. But an affirmative defense to the crime exists if an actor reasonably believes that he has a license to enter or remain on the premises (CGS Sec. 53a-110). Thus, a hunter, trapper, or fisher who trespasses on a privately owned unposted open

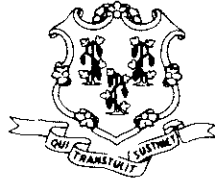
field located next to public land may be successful in arguing that he believed that he had a license to enter the land. The rationale being that he did not know when he left public property and entered private property. This affirmative defense is not a bar to arrest or prosecution; it is a legal justification for an action that must be borne out by the evidence (State v. Fuller, 199 Conn. 273 (1986)).

According to Healy, if a property owner contacted DEP to arrest someone the owner observed hunting, fishing, or trapping on his property, DEP would not arrest the person unless he refused to leave after being asked. Such action by DEP appears to be inconsistent with the law.

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Connecticut General Assembly

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OFFICE OF LEGISLATIVE RESEARCH

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93-R-0336

FROM: Sandra Norman-Eady, Senior Attorney

RE: Trespassing

You wanted to know the meaning of the phrase "licensed or privileged" as it is used in the law prohibiting trespassing while hunting, fishing, or trapping. This report is a follow-up to OLR Report 93-R-0205.

The office of legislative research is not a authorized to issue legal opinions and this memorandum should not be considered as one.

As you know, the law prohibits anyone from entering or remaining on property unless licensed or privileged to do so (CGS Sec. 53a-109). The statute does not define "licensed or privileged." But a review of the legislative history of the trespass law suggests that the phrase means having permission. On May 17, 1983 Representative Tulisano, speaking as a proponent of the bill during a House debate, said the law applies "when you purposely go into a place when you know you're not supposed to be there."

Additionally, the New York Penal Code, upon which much of our penal code is based, does not define "license or privilege" but does define "enter or remain unlawfully" as it is used in criminal trespass and burglary statutes. A person "enters or remains unlawfully" on premises when he is not licensed or privileged to be there (NY Penal Law Sec. 140.00(5)). Examples of privilege and license are included within this definition. The example that sheds the best light on your specific question is as follows:

A person who enters or remains upon unimproved and apparently unused land, which is neither fenced nor otherwise enclosed in a manner designed to exclude intruders, does so with license and privilege unless notice against trespass is personally communicated to him by the property owner...or unless such notice is given by posting in a conspicuous manner.

This example seems to suggest that a person who enters vacant, unfenced land for the purpose of hunting, fishing, or trapping has a license or privilege to do so. But this example is probably not applicable to hunters, trappers, or fishers who enter such land in Connecticut.

The phrase "enters or remains unlawfully" is defined in the Connecticut penal code in much the same way as it is in New York, except for the examples. The major difference in the two, however, is the fact that the New York definition applies to criminal trespass and burglary statutes while the Connecticut definition only applies to burglary. Thus, it appears as though the legislature purposefully intended to exclude the New York definition and its application to Connecticut laws prohibiting trespass.

Lastly, the Connecticut Appellate Court has had an occasion to decide the meaning of "licensed or privileged." In State v. Grant, 6 Conn. App. 24, 29,30 (1986), the court held that the two terms, when used in the context of an entry on land or premises, do not have mutually exclusive meanings--their meanings blend together. "A license in real property is defined as a personal, revocable, and unassignable privilege, conferred either by writing or parol, to do one or more acts on land without possessing any interest therein." Generally, a license to enter premises is revocable at any time by the licensor. It is exercisable only within the scope of the consent given. The term "privilege," is more general. It is "a right or immunity granted as a peculiar benefit, advantage, or favor; special enjoyment of a good or exemption from an evil or burden; a peculiar or personal advantage or right esp. when enjoyed in derogation of common right; prerogative."

According to the court, a license or privilege to enter premises may derive from a transaction between the possessor and the actor, or may arise irrespective of any such transaction. Examples of those that arise from such a transaction involve situations in which there is a present consent, or there was a past consent, creating a license to enter. Examples of those that arise irrespective of previous

transactions between the parties involve situations in which the possessor acted tortiously toward the actor, or when public policy creates the license or privilege (see 1 Restatement (Second), Torts, p. 307-308 (chapter 8 scope note)).

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The "Word from Rio" (p. 33) was inspired in part by Trevor Davis, Jr., a resident of Haddam Neck who attended the Earth Summit as a representative to the United Nations from the United Church of Christ. The Council thanks Mr. Davis for the valuable information he shared from his attendance at that historic conference.

