Protecting Connecticut's Groundwater

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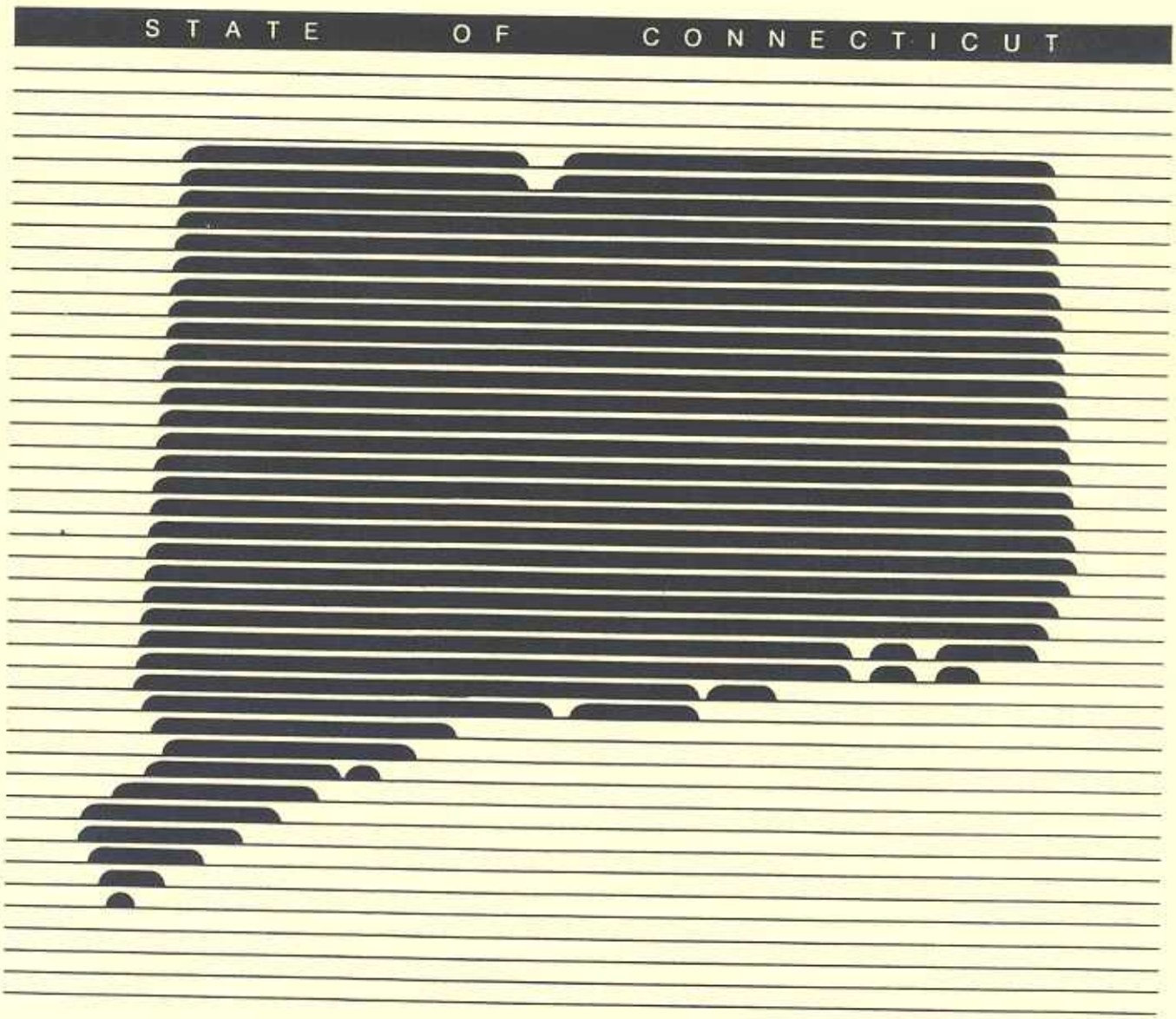
A Guide to Groundwater Protection for Local Officials

CT Department of Environmental Protection



Recommendations for Developing Local Programs

This guide will help your community to identify the issues involved in local groundwater protection. In order to be effective, a program must suit the needs of each community, address the protection issues for whatever groundwater resources are available, and be compatible with the town's long-range planning goals. Thus, it is impossible to give step-by-step instructions which would be uniformly applicable to every community. The discussion which follows should, however, provide the framework necessary for the development of a successful local groundwater protection program in most towns throughout the State.

The first step in developing a local groundwater protection program should be an assessment of groundwater resources and future water supply needs. This should include identification of known or potential high-yield stratified drift aquifers. These can be identified using existing maps, and assistance is available from the Natural Resources Center of DEP and from the Hartford office of the U.S. Geological Survey.

Not all stratified drift aquifers need to be protected. Some have minimal capability to yield water, and would thus not be suitable for supplying large quantities. Even if the yield is high, some aquifers are in heavily developed areas where groundwater protection is an unachievable goal, perhaps even where contamination has already occurred. (The Water Quality Standards Classification will be useful to know, since it is DEP's best assessment of both yield and water quality.) Other aquifers may simply not be needed for present or future water supply, particularly if surface water reservoirs are well-protected, will meet future demand, and are the principal water supply source for the community.

Areas served by individual on-site wells, usually drilled into bedrock, should also be inventoried. If there is no long-term plan for public water service in such an area, then that bedrock aquifer is one warranting local protection. A map showing the location of all community and public wells, as well as general areas served by private wells, is an important planning tool. Providing such a map to DEP would also assist in the periodic revisions to the Water Quality Standards maps.

Each town will have its own unique combination of groundwater resources, demands brought by existing and planned land uses, and political and economic constraints. Different towns have different water supply needs, and thus different groundwater protection needs. No one approach would successfully protect groundwater across Connecticut. This section does not, therefore, present a "cook-book" approach on how to protect groundwater; rather, it describes the information which should be consulted and the logical steps which might be followed by a community in adopting and implementing an effective local groundwater protection program.

Inventory Existing Local Programs

There are a surprising number of local programs and personnel which should be involved in community groundwater protection. Compiling a list and description of all of the local programs and people should be the first step in initiating a municipal groundwater protection effort. Enlisting the support of key people, or at least keeping them informed regarding the formulation of new groundwater protection measures, should help to ease the adoption of these programs at the local level.

The following is a list of likely local actors and a brief statement about the function that each serves.

Chief Elected Official. Leads town government. Recommends funding for local programs.

Local Legislative Body. Power to enact ordinances and health regulations. Establishes local program funding if not done by separate Finance Board.

Planning / Zoning Commission. Power to enact plan of development, zoning map, zoning and subdivision regulations, conduct site plan review, and grant and deny permits.

Health Department/Sanitarian. Regulates septic systems (less than 1,000 gallons per day of sewage), approves private wells, may sample wells on the basis of legitimate complaints or suspicion of pollution, provides guidance on health issues in case of a contamination problem, and issues orders for violations of Health Code.

Water Pollution Control Authority. Where created by municipal ordinance, prepares water pollution control plans for municipality, including sewerage and abatement of community pollution problems.

Conservation Commission. Advises on conservation issues, of which groundwater protection is one.

Inland Wetland Agency. Regulates use of wetlands and watercourses.

Fire Marshall. Regulates storage of flammable liquids, including underground fuel storage and transmission lines.

Building Inspector. Enforces building code. May also be Town Zoning Enforcement Officer.

Town Engineer or Consulting Engineer. May be involved with site plan review.

Town Planner. Advises on planning and development.

Water Utility. Sells or provides drinking water. The utility should be heavily involved and, depending upon its size, may provide technical input or staff for inspections.

Citizens/Consumers. Local groups (League of Women Voters, environmental organizations, rotary and garden clubs, Chambers of Commerce) as well as individual citizens can provide useful input, and may be important in promoting adoption of local groundwater protection programs and in public education.

Land Trust. Seeks and protects land for conservation purposes.

Inventory Present and Future Groundwater Resources, Land Use, and Water Supply Demand

Before deciding on what measures are needed to improve local groundwater protection, an understanding must be gained of the local groundwater resources, the need for and use of groundwater locally, and the patterns of existing and planned land uses in town.

A number of sources of information exist to help with this inventory. A trip to the Natural Resources Center of DEP is a good place to start. All available natural resource information is collected together and can be examined. Towns are recommended to purchase copies of relevant maps and reports when possible.

Among the useful tools are:

Aerial photographs
Geologic and soil maps
Drainage basin maps
Draft maps of significant stratified drift aquifers
Maps showing DEP Water Quality Classifications and major discharge sources
Maps of water utility service areas
Water Use Data by town
Water resource bulletins
Census projections
State Plan of Conservation and Development

Also available is a library of assorted aquifer protectio ordinances and zoning regulations adopted by some towns (Contact Jim Murphy of DEP's Water Compliance Unit, 566-2588 for further information.) Other sources of assistance might b the Regional Planning Agency in your area, or any area rive association or conservation group involved with local wate resources. Certainly, the municipal plan of development shou be consulted, as well as any local sewerage facilities plans a water supply projections and plans.

The goal of such an inventory is to determine which areas require groundwater protection and what tools will be most effective. Answers to the following questions will be helpful:

- Where is groundwater presently being used for public or private wells? (Providing a map to DEP showing the location of community wells and areas served by private wells would be very helpful for future DEP groundwater regulatory efforts.)

- What is the area served by on-site wells now? (Or, if applicable, what is the public water supply service area?) What will it be in 10 years? In 30 years? What is its relationship to the zoning map and future development patterns as well as future water utility plans?

- Where are significant stratified drift aquifers which might be suited for large-scale water supply development, if any? Can these areas be developed at a reasonable cost, and are they near water supply lines? (In order to determine the answer to these questions, consult available DEP maps, which identify areas thought to be underlain by coarse-grained stratified drift having greater than forty feet of saturated thickness. These maps are available for inspection at the Natural Resources Center of DEP. They may not, however, have sufficient detail for your community's planning purposes, and thus professional hydrogeological assistance may be necessary.)

- What is the likely future local population growth and water demand, and what are possible sources of this needed water?

- What is the existing groundwater quality? DEP Water Quality Classification and Waste Sources maps identify areas known or presumed by DEP to have degraded groundwater quality. Any additional local information regarding groundwater quality (which might be available from the local Health Department) should be sent to the Water Compliance Unit of DEP for incorporation into future editions of these maps.

- Where are existing land uses, including waste disposal areas, which are potential groundwater quality risks? (Consult the Land Use Hierarchy in

Appendix 2 for a ranking of risks.) In general, commercial and industrial areas, garages and cottage industries are more likely to impact groundwater than are residential areas.

- What areas are zoned for land uses which are potential groundwater quality risks?

- Are there in-ground fuel tanks and transmission lines (including residential)? If so, where are they now? Where are they likely to be in the future?

- Are neighboring towns likely to significantly affect groundwater quality in your town? Consult a drainage basin map to determine any potential impacts.

- Are activities in your town likely to significantly affect groundwater quality in any neighboring towns? Again, consult a drainage basin map.

Gathering Aquifer Information

Often little is known about the actual capacity of an aquifer or even about the extent of critical areas surrounding an active public water supply well. When pumping, a well exerts an influence on the aquifer, causing a "cone of depression" around the well within which the water table is depressed, with water flowing towards the well. This drawdown area varies in extent, depending on aquifer and pumping characteristics. In Connecticut, it may extend less than 100 feet from the well in the case of some private bedrock wells, to over a mile in the case of public wells in stratified drift.

Determining the potential yield of an aquifer may be a necessary ingredient in a rational aquifer protection program. Subsurface hydrogeologic investigation techniques are often the only option for obtaining this information. Some communities have municipally financed an investigation performed by an independent professional hydrogeologic or engineering consultant. Where clearly-mapped data are available, such studies may not be necessary, but for most communities it is the only course of action available. The Natural Resources Center of DEP (566-3540) can give information on available data and potential mapping options.

Identify Inadequacies of Present Programs

Having conducted an inventory of groundwater resources, of threats to groundwater quality, and of existing local protection programs, the next step is to identify the significant threats to groundwater quality which are not adequately addressed by current state and local programs. Typically, the following are most likely to need further local action:

1. Hazardous material use and storage at businesses and small industries (see Table 1 on page 9A).
2. Residential fuel storage and transmission.
3. Evaluation of salt storage and application procedures. Evaluation of Town Garage procedures to determine conformity with existing standards issued by DEP.
4. Revision of local Plan of Development to recognize groundwater protection goals.
5. Rezoning of areas to prevent inappropriate development. Notification when a commercial use changes which might impact groundwater resources.
6. Water quality monitoring in areas where groundwater quality may be impaired.
7. Education of businesses, industries, and citizens.
8. Aquisition of land.

Choose and Draft Protection Mechanisms

Appropriate measures to protect groundwater quality are likely to include a mix of regulatory and non-regulatory techniques. Regulatory measures include planning and zoning controls, which are particularly effective in restricting incompatible new development in specified aquifer protection zones.

However, existing uses and structures are difficult to control through new zoning regulations. Some communities are now requiring zoning permits for reoccupancy of an existing

building by a new use, thus giving an opportunity to review changes for potential impact on groundwater. Without such a procedure, a building in a commercial zone presently used in a manner not threatening groundwater, such as a retail store, might change hands and become a dry cleaner without ever coming before the Planning and Zoning Commission.

Ordinances to protect groundwater, enacted by the local legislative body, can complement zoning approaches. Ordinances have the advantage of being applicable to even existing structures and uses. They can be made to apply town-wide, or only to specified areas. A town-wide ordinance regulating the storage of hazardous materials or underground storage of fuel could require that all new and existing facilities which store hazardous materials come into compliance. Health regulations are another town-wide method of control.

Effective enforcement is an important part of any regulatory approach. Unlike zoning, where permit requirements and zoning enforcement are already in place, an enforcement strategy must be part of any new ordinance. Will registration or a permit be required? Who will be responsible for enforcement? What are the penalties for violations? And, since education about any new ordinance is an important step in both public acceptance and in assuring compliance, who will be responsible for the educational efforts?

Control over the siting of new wells by the local health department is an important tool. Groundwater quality protection becomes a concern in any area where a well is allowed. Since no routine testing is done once a new private well has been approved, subsequent pollution may go undetected. This is not the case, however, with public water supplies -- routine monitoring of each source is required by law.

Non-regulatory programs to protect groundwater quality also need to be considered. Education of citizens and businesses about groundwater protection in general, about local resources and threats to them, and about personal responsibilities for groundwater protection are vital. Not even the best-drafted regulations can control thoughtless dumping or careless handling of small quantities of hazardous materials. People must be made aware of the dangers and of their responsibility to handle such materials with care. The town should consider programs such as recycling waste oil, and the periodic pick-up of unwanted household hazardous wastes (to minimize improper or careless disposal into backyard woods, storm drains, or areas other than approved landfills.)

Monitoring programs to test wells in areas where significant groundwater threats exist should be considered, and acquisition of critical areas may be sought.

The following sections describe the various regulatory and non-regulatory groundwater protection mechanisms in greater detail.

Regulatory Programs

Planning and Zoning

Earlier, information should have been gathered which identified the areas where groundwater protection was desirable. At this stage, an assessment is needed of the compatibility of existing zoning with groundwater protection goals. The DEP Water Quality Classification maps should be consulted, since they depict state groundwater quality goals. Among the questions which should be addressed are:

* How will your town provide for waste disposal in a manner consistent with water quality goals?

* Is industrial or commercial development planned in an area where the goal is to protect groundwater quality (GAA or GA on DEP maps)?

* Are there areas in town where such uses might better be accomodated (GB or GC on DEP maps)?

* If not, where would industries or businesses located in GA or GAA areas dispose of wastewaters? What site controls should be required to minimize possible contamination?

* What sources caused the State to presume that groundwater quality has been degraded in areas of your town shown as GB on DEP maps?

* Do you agree with DEP's assessment of the need to upgrade these areas (GB/GA) or to let them remain degraded (GB)?

* Are there other areas where groundwater is known or suspected to be contaminated?

* What should be done to identify and monitor any well users within such areas?

* Are your local plans for water supply reflected in appropriate classifications (GAA or GA)?

Once these questions and issues have been explored, the Planning and Zoning Board may need to revise the Plan of Development, the zoning regulations and map, and local subdivision regulations. Typically, the Plan of Development and a community's zoning define the town's long-term development and conservation goals, including identifying service needs such as sewers and public water supply. A discussion of local groundwater resources and the need for their conservation due to present and projected future use should be incorporated into the Plan.

Revisions to the zoning regulations for the purposes of groundwater protection generally involve the exclusion of certain high-risk uses from defined aquifer protection zones. The first step, then, is the identification of the area or areas within which groundwater protection is needed and feasible, as discussed on page 24.

Once identified, the area might be rezoned to a low-risk use such as low-density residential, or might become an aquifer protection overlay zone in which present zoning uses are or may be permitted to occur subject to a special permit review by the Board. Use restrictions or performance standards for such things as hazardous material storage at new facilities could be addressed as permit conditions.Zoning regulations pertaining to aquifer protection would be enforced in the same way as any other zoning regulation.

If aquifer protection necessitates the elimination of certain industrial and commercial uses from aquifer areas, consideration should be given as to what areas in town might accommodate those uses without threatening needed groundwater resources, or downstream and neighboring users.

The State Legislature and the courts have made it clear that any revisions to zoning for the purposes of groundwater protection are indeed valid, provided the approach is a rational one and consistent with the comprehensive plan. Re-zoning a parcel of land from industrial to residential will not be considered a "taking" so long as the Board has revised its regulations (including the statement of purpose), and the zoning map, on a rational basis. The first step should be the review and amendment of the local plan of development prior to any zoning revisions or ordinance adoption.

Ordinances

Planning and Zoning controls can effectively prevent new facilities that pose a high-risk to groundwater quality from being sited over aquifer protection zones. Other techniques, however, are needed to deal with existing facilities and uses that threaten groundwater quality. In addition, there may be certain activities which a town chooses to regulate town-wide and not just in a specified groundwater protection area, particularly if a large portion of the town is getting its water from bedrock wells. Ordinances, enacted by the local legislative body, are an effective means of accomplishing these goals. Ordinances can be either town-wide or directed to cover a specific portion of town.

Any ordinance should state the purpose, specify the prohibitions, requirements and/or performance standards, and include penalties for violation. The means of enforcing the ordinance must be considered. What town department will be responsible for inspections, approvals and follow-up on violations? Will there be sufficient local resources to enforce the ordinance once it is adopted? The Fire Marshal should be consulted regarding any ordinance dealing with flammable liquids, such as gasoline or fuel oil.

The two primary activities which a town might control through ordinances are:

1. The storage, use, and disposal of hazardous materials; and

2. The underground storage and transmission of fuel at residential facilities.

Hazardous Materials

A local hazardous material ordinance should be a component of nearly every local groundwater protection program. Present State and Federal regulations do not control the storage or handling of hazardous materials as virgin products, and controls over low-volume generators of hazardous wastes are minimal. Due to the sheer number of facilities utilizing hazardous materials, performance standards embodied in local regulations may be feasible -- whereas state agency regulation is probably not. Thus, local programs may be the only form of protection in the near future.

A hazardous materials ordinance might be town-wide or might be restricted to specific aquifer areas. It should include a definition of what the hazardous materials are that are being regulated. (Federal and State definitions of hazardous wastes may serve as the basis for this definition -- see Appendix 1). Spill containment measures should be required. These can be adopted as **performance standards** (such as requiring a system capable of preventing ground and surface water contamination by providing for the containment and recovery of any spills or leaks). The ordinance may specify the installation of a spill containment system for hazardous materials which meets State and Federal hazardous waste storage standards. These requirements should be a straight-forward approach of paving, berming, and roofing above-ground storage areas. A community should also have the Water Compliance Unit of DEP review a proposed ordinance before it is officially adopted.

Enforcement mechanisms may include a registration requirement and the submission of "as-built" plans. An education program and an inspection program to monitor compliance are **essential** components of successful regulation by a hazardous material storage ordinance.

The underground storage of hazardous materials is more difficult to regulate than above-ground storage. Spill containment at above-ground fill areas should be required. A program requiring monitoring and replacement of buried facilities similar to the State underground fuel regulations might be considered. A registration requirement could at least provide the town with an inventory of the type of materials, where they are buried, and the types and ages of tanks. Thus, it might be a first step in considering further regulation. A sample hazardous material ordinance will be included in this document as Appendix 3.

Underground Fuel Storage

By mid-1985, DEP will adopt regulations governing the underground storage and transmission of fuel at non-residential facilities. Documented groundwater contamination problems, however, have also resulted from leaks at residential underground facilities, including buried home heating oil tanks. Particularly troublesome have been fuel transmission lines buried in the basement floor, running from an above-ground storage tank to a furnace. Cement is very corrosive, and small leaks which develop below the basement floor may go undetected for many years.

Present legislation does not authorize DEP to regulate residential fuel storage and transmission. Thought is being given to seeking revision to the State Building Code to prohibit or further regulate burial of fuel tanks and lines. Since at best this will be a lengthy process, local regulation or prohibition may be more desirable.

Consideration should be given to banning the burial of any portion of residential fuel systems, at least in areas of town relying on groundwater, or near an existing or potential public wellfield. Short of prohibition, regulation in the form of inventory, registration, periodic tightness-testing, and use of non-corrosive materials for underground facilities could be considered. Certainly, the Fire Marshal should be involved in any modification of fuel storage requirements.

The regulations adopted by DEP pertaining to underground fuel storage at non-residential facilities might be consulted for guidance, although the tightness-testing requirements in those regulations might pose too great a cost for homeowners.

Revisions to existing local health regulations may also be desirable. This might include broad and general powers enabling the health director to issue orders to abate health risks due to groundwater pollution, particularly for small commercial or industrial activities where DEP is unable to fully inspect or enforce orders. In addition, authority might be given to the local health director to require testing or even periodic monitoring of new wells for more than the routine sewage-related contaminants prior to their approval for use, or for the testing of old as well as new wells in questionable areas.

Non-Regulatory Programs

Acquisition

A town which depends on well water for a public water supply or which contains an aquifer which will be needed for future supply should consider purchasing the land most critical to protection of that aquifer. The State of Massachusetts has established a sizable fund for aquifer land acquisition. Connecticut DEP is considering proposing a comparable program. However, other federal funds for open space acquisition and recreation may be available through the DEP for aquifer

purchase. In the absence of these, local community or water utility funding are presently the only options.

When outright purchase is not feasible, other techniques such as the donation of land or use of conservation restrictions may be pursued. Land Trusts have effectively protected land through such techniques -- the reward to the landowner being tax benefits and open space preservation. The tax schedule for aquifer areas could be revised to encourage preservation in a manner similar to farm and forest lands (Public Act 490).

Transfer of development rights is another technique. Under such a program, rights to develop critical lands are transferred to other non-critical properties, where an increased density of development is then permitted.

Groundwater Monitoring

The research performed in earlier stages of local groundwater protection planning is likely to have uncovered areas of town within which groundwater quality is known or suspected of being already contaminated. If groundwater wells are in use in such areas, the local health department should consider a testing program to determine whether water quality is acceptable. The State Health Laboratory is capable of analyzing samples taken by the local health department; however, any large sampling program must be coordinated with the Water Supplies and Laboratory divisions of the State Department of Health Services (566-1253). In addition, advice is available from the Water Compliance Unit of DEP (566-3654) regarding suggested test parameters and sampling techniques.

Where the town does not have the capability to do such monitoring, consideration should be given to informing residents about what is known and suggesting that samples might be taken to a private health lab for analysis if the well user so desires. A list of certified labs is available from the Department of Health Services.

Focus on Critical Areas

Areas within which groundwater protection is critical will have been identified through the inventory process outlined earlier. A town may choose to focus the efforts of local

officials on these areas. The zoning enforcement officer, health official, and fire marshall could concentrate their inspection, oversight, education, and enforcement efforts on such areas. Targetting critical areas will be particularly valuable when town-wide ordinances aimed at groundwater protection have been enacted.

Time, energy, and funding will not usually allow for vigorous town-wide enforcement; consequently the town may need to concentrate on specific areas as a necessary part of an effective program.

Education

Many groundwater pollution problems result from ignorance. People are not generally aware that even very small quantities of certain chemicals (including many commonly used synthetic organic chemicals) can cause significant groundwater pollution. Education of residents, workers, school children, and business leaders will go a long way in eliminating careless disposal and handling of potential pollutants.

Media coverage of aquifer protection efforts and groundwater pollution problems will help to raise local interest. Literature provided through the school is another useful tool. New residents can be reached through Welcome Wagon.

The enactment of any new local aquifer protection measures, especially any regulatory ordinances, will require an educational effort to inform those regulated about new requirements. Further education about existing requirements is also needed. How many homeowners know that it is illegal to have water softener brine backwash discharging to a septic system because of the salt pollution that it can cause? These are the type of issues which must be outlined and discussed with the public. Local civic groups such as the League of Women Voters, Rotary, Women's or Garden Club may be willing to sponsor meetings or other forms of educational programs.

Household Hazardous Materials

The problem of the storage, use and disposal of hazardous materials around the home is a difficult one. Many activities from car-care to laundry, from furniture finishing to lawns, involve use of hazardous materials. If mismanaged, waste oil,

gasoline, pesticides, fertilizers, paint strippers and thinners, and household cleaning agents can contaminate groundwater. Unfortunately, labelling of products is very incomplete, and consumers may be unaware of the hazards associated with products they buy. Consumers should be urged to avoid hazardous products when possible, to follow use instructions carefully, and to avoid disposal of unwanted products or wastes into a septic system or by dumping it "out back".

Where should household hazardous wastes go? Ideally, as with industrial wastes, they should be hauled by a licensed waste hauler to a recycling or disposal facility. One Connecticut town has begun an annual collection program for household hazardous wastes by contracting with a licensed hauler. Guidelines to aid municipalities in establishing such a program are being prepared by DEP and will soon be available from the Information and Education Unit (566-3489).

Towns could consider recycling programs, which would be an excellent way to remove hazardous materials from being carelessly and improperly disposed of. Such programs could deal with household hazardous wastes, crankcase oil, etc.

In the absence of such a program, several alternatives exist. First, the unused product should be given to a user experienced in the proper handling of the product. If properly used, the substance should not cause any adverse environmental impact, and thus this is the preferred alternative. If no user is readily available, then the second option is to have household wastes carefully packaged and put out with the trash. Better by far to have such wastes in a known area, where landfilling has already impacted groundwater, than have small quantities in random back yards where unsuspecting well users may be drinking contaminated water.

The DEP Information and Education Unit (566-3489) i preparing a publication on household hazardous wastes which wil be useful for general education as well as for establishing municipal collection program.

Salt Storage and Use

Municipal salt storage and use represent a significant a largely controllable source of groundwater pollution. T implementation of Best Management Practices can go a long w towards preventing problems. Information on these practices h been gathered by the Northwest Regional Planning Agency under 208 grant, and the published report is available through the D Water Compliance Unit (566-2588).

TECHNICAL ASSISTANCE OFFERED BY DEP TO TOWNS

DEP is engaged in a number of projects and programs designed to provide technical assistance to towns for the support of local groundwater protection efforts. Some of these programs are listed below.

Technical Guidelines

DEP Water Compliance Staff has prepared short, clearly-written summaries which describe the operations, typical pollutants, and items requiring inspection for each major category of commercial business or industry with potential groundwater quality impacts. These can be used as a checklist by municipal officials and water utilities to assist in site inspections, whether the inspections are being performed under DEP delegation or in response to a local hazardous materials ordinance. Examples of the types of facilities for which these guidelines exist are dry cleaners, gas stations, photo processors, and furniture strippers. Legislation would be needed to change these informal guidelines into statewide performance standards, but they can certainly be used now as a checklist for local officials under a local ordinance. Copies of those prepared to date are available as Appendix 4.

Information on the Best Management Practices (BMP's) for handling salt, agricultural by-products, septic system sewage, and septage disposal are also available through DEP, as well as guidelines for small quantity generators of hazardous waste.

Workshops

Staff from DEP are available to work with towns on the development of local groundwater protection programs. A series of workshops designed to help a town follow the procedures outlined in this manual can be arranged upon request. Contact Jim Murphy in the DEP Water Compliance Unit (566-2588) for further information.

In addition, a five-week series on natural resources in land-use decision-making runs every Spring in a different county of the State. A seminar is devoted exclusively to adverse impacts, one of which is groundwater pollution. Information on these workshops and where they will be held each year can be obtained from the Natural Resources Center (566-3540).

SUMMARY

While no governmental programs will totally prevent groundwater pollution, much progress has been made in the past several years. Federal programs to control hazardous waste disposal, and state programs to classify and regulate Connecticut's groundwater, are an important start.

The sheer number of potential sources of pollution, however, necessitates the involvement of local governments. A town which follows the procedures outlined in this guide, and which adopts and implements local groundwater protection measures, will have done its part in fostering an effective partnership to curb groundwater pollution.