



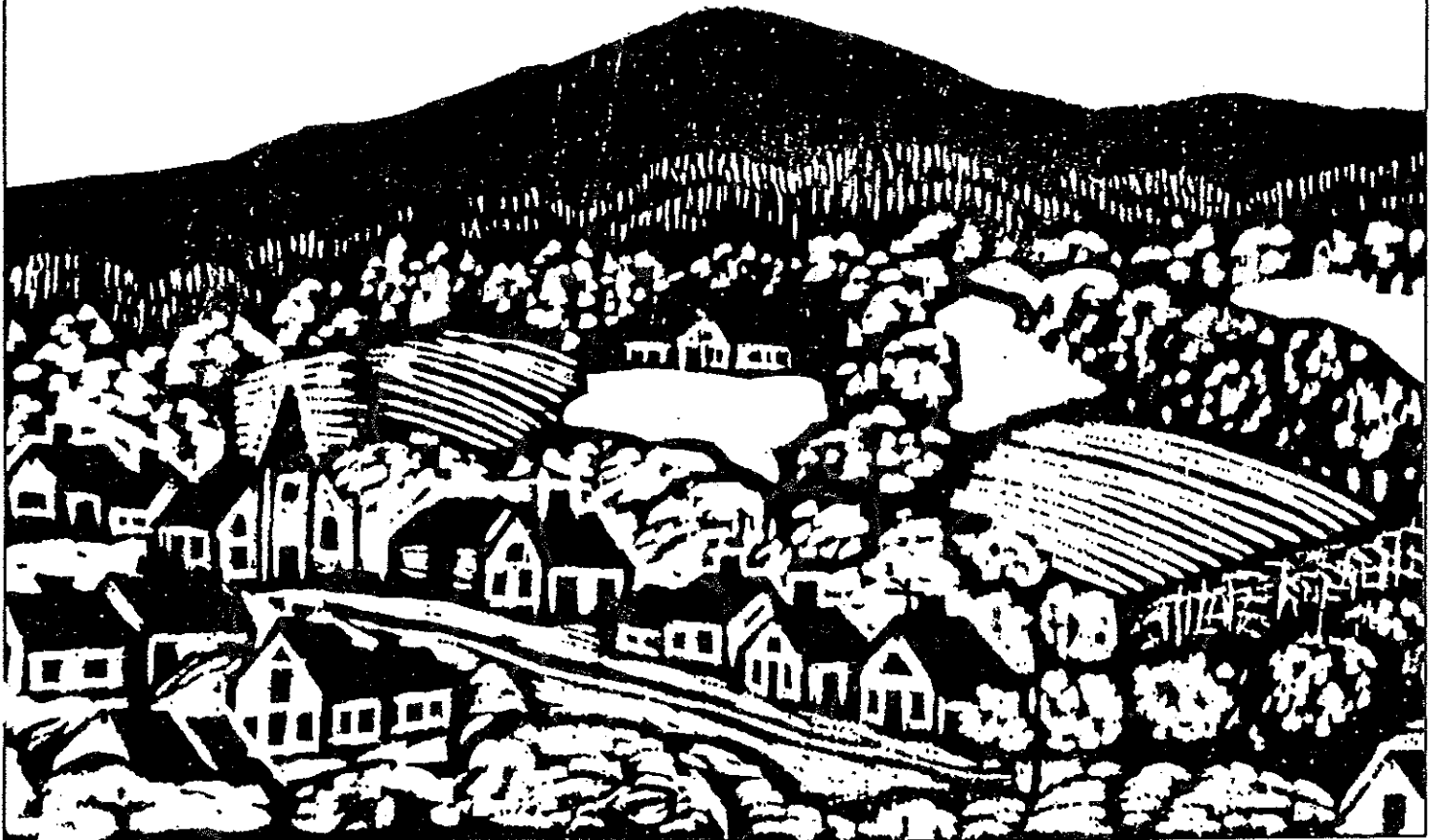
Citizen Action Guide

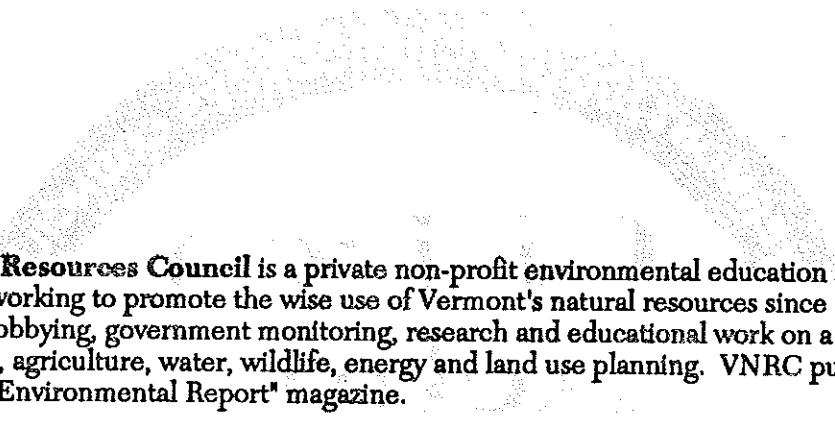


Initiating Environmental

Protection in Your

Community





The **Vermont Natural Resources Council** is a private non-profit environmental education and advocacy organization, working to promote the wise use of Vermont's natural resources since 1963. VNRC does legislative lobbying, government monitoring, research and educational work on a variety of issues including forestry, agriculture, water, wildlife, energy and land use planning. VNRC publishes the quarterly "Vermont Environmental Report" magazine.

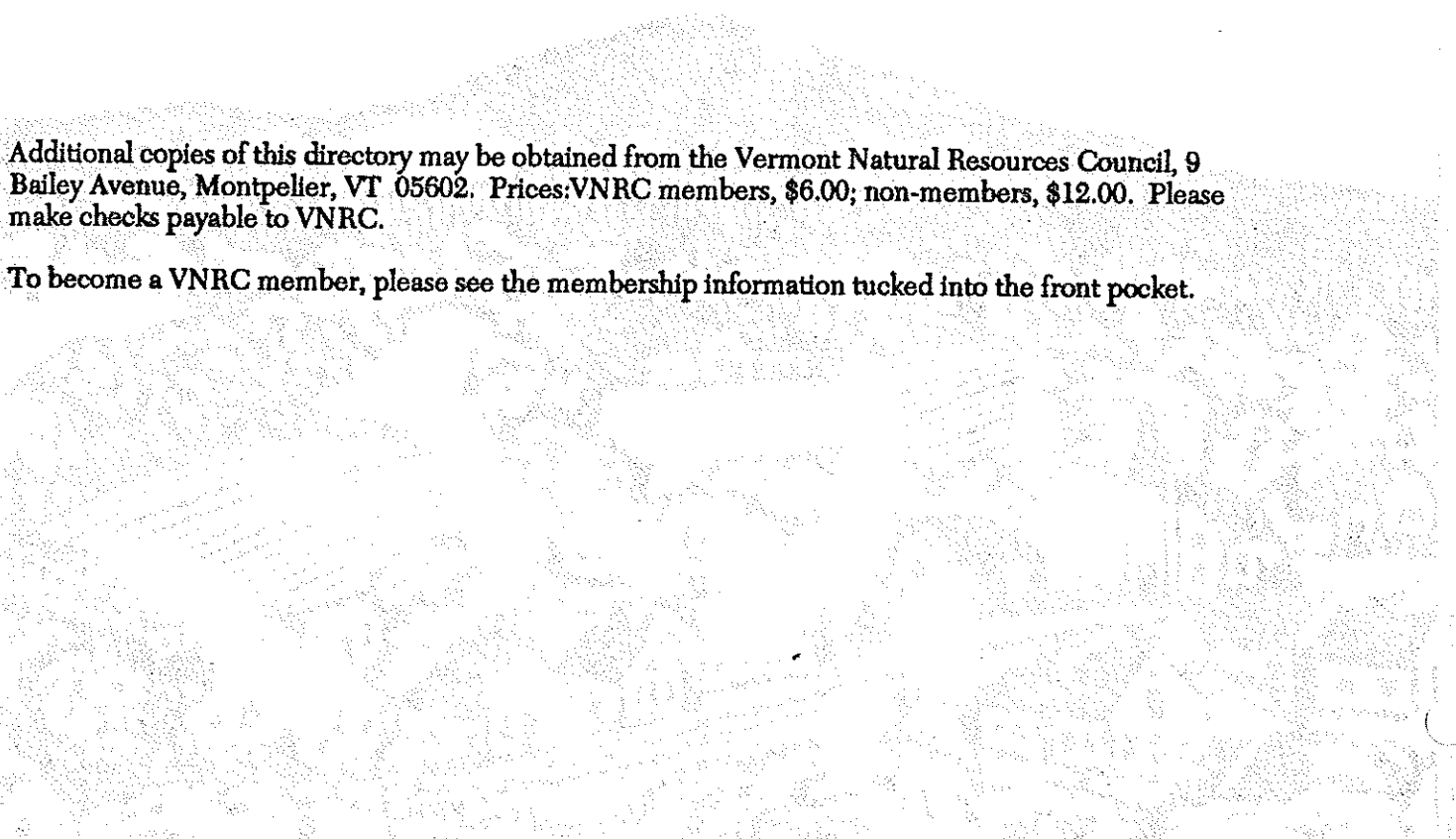
This Guide was supported in part by the funds of the Kellogg Foundation of Michigan working in partnership with the University of Vermont Environmental Studies Program.

The content of this Guide is the product of past and present staff of VNRC, as well as the volunteer assistance of Jennifer Langdon. The cover, logo and format design were produced by Quad Left Graphics of Burlington.

September 1992

Additional copies of this directory may be obtained from the Vermont Natural Resources Council, 9 Bailey Avenue, Montpelier, VT 05602. Prices: VNRC members, \$6.00; non-members, \$12.00. Please make checks payable to VNRC.

To become a VNRC member, please see the membership information tucked into the front pocket.





WELCOME TO VNRC's CITIZEN ACTION GUIDE.

The key to successful implementation of Vermont's environmental and land use laws is active citizen involvement. Vermonters must become more active in planning for the future of our natural resources at all levels of government. To be effective in our protective efforts, we must become well informed and united to make decisions that are right for the people of Vermont as well as the natural attributes that make Vermont a special place.

VNRC has developed this guide to provide a starting base for individual action. Included are contact phone numbers for more comprehensive information and a resource bibliography. The guide format has been designed such that the different pieces can be removed, copied and passed on to others with ease. Please share this information with friends and neighbors so that they can become aware and active in their communities and share the goal of healthy and responsible growth in Vermont.

Below you will find a list of the contents in this guide. It has been divided into four sections: *Enlisting Others*; *Getting Involved in Planning*; *Protective Action Initiatives*; and a *Resources* section. Those sections have been produced in different colors to make finding them easier.

There are several references to the enabling statutes of Vermont, the Vermont Statutes Annotated. Vermont is not a home rule state where towns can decide for themselves what they are legally able to do. Instead, all authority is granted through state legislative action which becomes the law recorded in the statutes. On any questions having to do with public process and decisions, it is helpful and wise to check the language of the law directly. All town clerks offices have a set available for public use, as well as many public libraries. VNRC maintains a set.

If you have any questions or need more information please contact VNRC. The staff of our Action Center welcomes the opportunity to meet with all interested citizens to discuss land use, water, or other environmental issues and how you can take action. Please feel free to call us at our Montpelier office at 223-2328 or our Southern Vermont office at 362-3113.

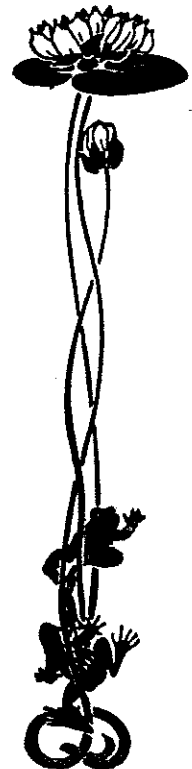
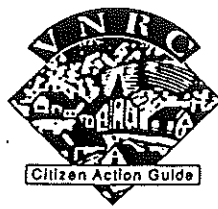


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MOBILIZING PUBLIC PARTICIPATION

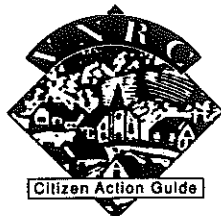
Becoming involved in your community's future can be very rewarding for you and your family for generations to come. The benefits of becoming active in protecting your local natural resources and the character of your town are limitless as are the ways in which you can get involved.

Here are some ways to be a voice and make a difference in your community:

- VNRC maintains a list of other concerned individuals or groups; call them for information.
- Contact groups with shared concerns, such as the Vermont Lung Association on air quality issues or the local Historical Society on issues related to land use.
- Organize a citizens advocacy group (see p. 2 of this guide). Include everyone who is interested.
- Form a conservation commission, (see p. 5 of this guide).
- Enlist professionals for technical and legal advice.
- Participate in the local and regional planning process; their meetings are open to the public and participation is welcome and needed.
- Participate in state and local permitting processes on development applications that concern you.
- Petition for protection of resources of concern, (see, "Community Action to Protect Water Resources").
- Ask a college or high school class to help with surveys or other information gathering.
- Know your public officials and representatives. Get their names, phone numbers and addresses and write or speak to them about your concerns. Get your friends and neighbors to do the same. Vermont legislators have said that receiving 3 or 4 letters on any one issue is an avalanche of public response.
- Request appropriate state enforcement action when laws are not implemented.
- Focus public attention on key issues by calling newspaper reporters with your story, writing frequent letters to the editor and offering to discuss issues on your local radio talk show.
- Set up public informational forums on issues of concern, (i.e. panel discussions). Enlist existing local groups, such as the League of Women Voters or local Audubon chapter, as co-sponsors.
- Testify at public hearings on issues of concern when the opportunity arises. If no hearing is scheduled, request that one be held and gather others to attend.
- Organize community events such as hazardous waste collection days or a river clean up.

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HOW TO FORM A CITIZEN'S ADVOCACY GROUP

In order to address unwise development in many Vermont communities, environmentally concerned citizens are turning to an organizing model that got its baptism by fire ten years ago in the struggle to defeat a large shopping mall proposed for a town in Chittenden County.

The Williston-based Citizens For Responsible Growth -- comprised then of residents with virtually no experience in community organizing -- was instrumental in the defeat of Pyramid Mall a decade ago. More recently, the words "Citizens for Responsible Growth," or CRG, have been incorporated in the title of a number of other groups around Vermont. Rutland-area residents who opposed a regional shopping mall, for example, organized a Rutland-CRG, while Windham County activists have formed a Windham County-CRG to monitor growth pressuring the Brattleboro area.

Obviously, it is not the name that empowers the effort -- there are many active local environmental groups without "CRG" incorporated into their name. Yet an affiliation with other CRGs -- each separate but sharing a common name and mission-- allows the various organizations to share experience and wield greater influence than they might individually.

What Is a Citizens Advocacy Group?

A citizens advocacy group, or Citizens for Responsible Growth group is a community-based organization of citizens formed and dedicated to ensure that development in Vermont is socially and ecologically responsible.

What does a CRG do?

The groups play a role in growth and development issues in a variety of ways. These include: attending planning commission, zoning board and selectmen's meetings; forming conservation commissions; becoming informed about Act 250 and both the local and regional planning processes; compiling resource inventories and making information available to the planning commissions and selectmen for better planning; offering testimony at zoning board hearings; working to designate local rivers "Outstanding Resource Waters"; writing letters to the local news media; and intervening when inappropriate development is proposed. In short, a CRG is a constructive force dedicated to fostering intelligent decisions about development.

How do you get an advocacy group started?

Any individual or group can start a CRG even if you have no experience with planning, zoning, or Act 250. All you need is the desire to be involved in shaping your town's future. There is no set formula for setting up a CRG and there is no set formula for what a CRG has to have for goals. However, experience has demonstrated the following steps make some sense:

1. Get a copy of your local town plan, local zoning ordinance (at your town

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office) and regional plan (from your regional commission). These will either be provided free or for a nominal fee to cover the cost of copying.

2. Call an organizational meeting. This will require some leg work. You will have to spend time on the phone contacting people who share your concerns and pursuing other people whose names you come across as you network.

Having a "closed" policy may tend to alienate people in your community and cause your CRG to be received as isolated or elitist.

3. At your organizational meeting, discuss areas of common interest, possible positions on issues and overall goals your CRG group wishes to accomplish. Although specific issues may serve as initial rallying points, it is important to include a broad ranging discussion about the group's overall philosophy as well as short-term and long-term goals.

4. At your second organizational meeting you may want to plan your organizational structure such as, chairperson, vice-chair, secretary, treasurer. At this meeting you may also want to form different committees, for example: communications, fund raising, membership, networking, issues, project review, planning and zoning.

5. You will need a membership charter. After your CRG has met a couple of times you should draft an organizational charter. Samples are available from other CRGs and you can contact VNRC for a list of contacts.



Frequently Asked Questions

1. Should we have an "open door" policy or should we limit membership to people we believe are like-minded?

Although an "open door" policy may in theory run the risk of encouraging people to join who may in fact be motivated to undermine the goals of the group, our experience is that this is unusual. We believe allowing anybody in your CRG is a good idea. Once you have membership and organizational charters in place, new members will know they are joining an organization with a well articulated set of values and goals.

Having a "closed" policy may tend to alienate people in your community and cause your CRG to be received as isolated or elitist.

2. Should we charge a membership fee?

There are a few reasons why charging a reasonable fee makes sense. A \$10.00 membership fee, for example, gives your CRG credibility -- you can tell the press, a zoning board or a District Environmental Commission, and potential members that your group represents "X" dues-paying members. This provides you with a substantial presence.

The other reason for a membership fee is that you will have some money to get started! As printing, mailing or even legal costs come along, you will at least have some money available. (A sample membership form from CRG- Rutland has been included).

3. Who should handle our funds and do we need a bank account?

Your CRG will need to open a bank account in its name. You will also need to assign a member of your group (your treasurer) to handle your funds and to sign your checks.

4. Tax I.D. Number and Non-Profit Tax Exempt Status -- Is this all necessary?

Yes. In order to establish proof of your CRG's viability as well as encourage contributions and donations, you should register your organization with the Secretary of State (1-800 642-5155) and request a tax i.d. number. The Secretary of State's Office can also supply information on filing with the federal government for 501 (c) (3) non-profit tax exempt status.

5. Should we allow the press to cover our meetings?

Generally speaking it is best to be as open and accessible as possible. Besides, news coverage will help get your message out, enhance your image as a positive force in the community, help to generate new members and foster public support for your efforts.

6. What can the Vermont Natural Resources Council do for us?

Presently there is no formal affiliation between VNRC and CRG's organized around the state; however, we have a very good working relationship with all of them. VNRC started as a small group of citizens concerned with educating and representing Vermonters an environmental issues facing the state. Now twenty-five years and many thousand members later, the organization remains a citizens' group.

VNRC is deeply committed to fostering citizen involvement at all levels of government. We believe both the planning process and the environmental movement in Vermont will be successful only if thousands of Vermonters become involved at the grass-roots level. A network of active CRGs goes a long way towards achieving that goal.

With our long history of involving people at the local level, we are a willing resource and able to provide technical assistance on many of the issues a CRG will confront over the years. We have created an Action Center with staff available to help citizens review and understand town plans and zoning ordinances; to explain how to get involved in the Act 200 planning process or Act 250 permitting process; to educate citizens on how they can protect Vermont's surface and ground water; and to inform citizens about creating a local conservation commission. Additionally, should your CRG decide to oppose a specific development proposal actively, VNRC can put you in touch with our network of lawyers, wetlands specialists, traffic consultants and engineers who can assist your group through the local and Act 250 process at reasonable costs.

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FORMING A MUNICIPAL CONSERVATION COMMISSION

The primary purpose of a municipal conservation commission is to establish community responsibility for local natural resources. The first commission was formed in Ipswich, Massachusetts in 1958 with the purpose of saving a local wetland from development. Vermont has about 30 active conservation commissions today and the number is growing.

Conservation commissions can provide an important communication link between the community and its planning commission. The conservation group can utilize volunteer sources, such as the Vermont Youth Conservation Corps, to take an inventory of the town's natural resources including lands of agricultural, scientific, historic or educational value. This knowledge can then be used as a reference for resident's questions and concerns, for town planning and for decision-making concerning development applications.

The very presence of a conservation commission encourages citizens to speak up about conservation issues and can help ensure that the conservation interests of their community are being met. Planning commissions are often overburdened by their routine responsibilities which can prevent them from devoting time to conservation planning. The conservation commission can step in with a completed natural resource inventory, write a natural resource plan and make recommendations regarding the town plan and development proposals.

How to Form a Commission

A conservation commission can be established at any time by way of municipal or legislative vote. Towns which vote by "Australian Ballot" can get a proposal for a conservation commission on the ballot in two ways. They can obtain approval from the board of selectmen or present the selectmen with a petition containing 5% of the voters on the checklist. One of these two options must be done at least 40 days prior to Town Meeting Day.

In towns where citizens vote at town meeting itself, the proposal to create a conservation commission can be placed on the agenda by following either of the options mentioned above, or any citizen can propose the creation of a conservation commission at the "other business" section of the agenda. In order to get the necessary votes to establish a conservation commission it is very important to raise the proposal and promote the benefits with townspeople prior to the meeting.

Publicity should suggest potential projects, such as promoting a local farmers market or establishing a recycling center. Public awareness should be increased by writing articles in the local newspaper, displaying posters or speaking at different organization's gatherings. Those residents interested in forming a conservation commission can assess the interests and needs of the town residents by taking attitude surveys or noting discussion at a public meeting. This step is very useful since the purpose of the commission is to represent the people's environmental concerns and values.

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While gaining insight on local concerns you can also compile a list of interested people to suggest to the selectboard for consideration when they appoint the three to nine commission members.

Once a commission is formed, the goal of creating a greater focus on natural resource issues can be met. Some commissions will start out slowly, gaining support and recognition in their town, while others will feel the need to get involved quickly in view of an immediate conservation issue. Throughout all projects, town residents, as well as the planning and selectboards, should be kept well informed. Public awareness will strongly effect the success of future endeavors.

Where to Find Funding

Many Vermont commissions gain an annual appropriation in their town's budget for operating expenses by requesting it from their selectboard or planning commission. Usually the range is from \$1,000 to \$2,000 annually. Special projects may entail fundraising activities or solicitation of public and private funds.

The Vermont Association of Conservation Commissions can help direct you to possible resources. Private grants are available from organizations like the Ben and Jerry's foundation, IBM, National Wildlife Federation and others. Federal funding is available from the Land and Water Conservation Fund through the Vermont Department of Forests, Parks and Recreation. State funding can be applied for from the Department of Housing and Community Affairs, Vermont Agricultural Finance Program and the Vermont Housing and Conservation Board.

Vermont's Commission's Accomplishments

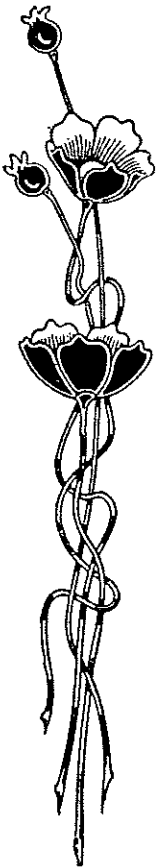
Residents of Norwich established the first conservation commission in 1974 and since then have established an aquifer protection zone, sponsored public forums on land acquisition options and wetlands and developed a slush fund for quick action when needed.

Other commissions throughout the state are busy working on projects such as; developing an open space plan and making recommendations for zoning and subdivision regulations. All of these commissions agree that a new group will benefit greatly from establishing a good working relationship with the townspeople, the planning commission and the Selectboard. In addition, a conservation commission will benefit from a modest budget for operating expenses.

With increasing development in Vermont, local conservation commissions can play a vital role in grassroots conservation. As more commissions are established, they will become increasingly recognized as the focal point for local conservation issues.

For more information see the, "Vermont Environmental Directory" available from VNRC or contact Virginia Scharf, Vermont Association of Conservation Commissions, (223-5527)

The above text was derived from the "Fact Sheet on Municipal Conservation Commissions" written by Virginia and Craig Scharf.



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GUIDING THE FUTURE: VERMONT'S PLANNING AND DEVELOPMENT ACT (TITLE 24; CHAPTER 117)

A common theme heard by the 1987 Governor's Commission on Vermont's Future was the importance of a sense of community. Vermonters see their state as a place where people can make a difference by getting involved with local decision making. This has been advanced in Vermont's Municipal and Regional Planning Law (Chapter 117). The success of planning in Vermont depends on public participation at all levels of government.

Long term planning is important to guide development, preserve shared values, and reduce conflict. When people come together to discuss what kind of environment they want to live in, they can plan for the continued use of agricultural and forest land or development projects while considering the priorities of adjoining landowners and other issues that can affect the character and cohesiveness of a town or region. Unplanned development can diminish the value of private property and cause tension between landowners. Long term planning assures private and public land use that is in accordance with community desires and needs.

Vermont's Planning Law was originally passed by the legislature in 1967 to perpetuate Vermont's tradition of local democracy and involvement in our communities. In 1988, Act 200 was passed to increase the opportunity for citizen control of planning, to mandate planning at the state and regional levels and to provide funding for municipal plans. In 1990, the Legislature clarified the law by condensing thirty-two goals down to the following four process and twelve specific goals:

Planning Goals from Title 24, VSA Chapter 117:

Process Goals: "It is also the intent of the Legislature that municipalities, regional planning commissions and state agencies shall engage in a continuous planning process that will further the following goals:

- (1) To establish a coordinated, comprehensive planning process and policy framework which shall guide decisions by municipalities, regional planning commissions and state agencies.
- (2) To encourage citizen participation at all levels of the planning process and to assure that decisions will be made at the most local level possible commensurate with their impact.
- (3) To consider the use of resources and the consequences of growth and development for the regions and the state, as well as the community in which it takes place.
- (4) To encourage and assist municipalities to work creatively together to develop and implement plans.

Specific goals:

- (1) To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.
 - (A) Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.
 - (B) Economic growth should be encouraged in locally designated growth areas,

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or employed to revitalize existing village and urban centers, or both.

(C) Public investments, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.

- (2) To provide a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities in areas with high unemployment or low per capita incomes.
- (3) To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.
- (4) To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.

(A) Highway, air, rail and other means of transportation should be mutually supportive, balanced and integrated.

- (5) To identify, protect and preserve important natural and historic features of the Vermont landscape, including:

(A) significant natural and fragile areas;

(B) outstanding water resources, including lakes, rivers, aquifers, shorelands and wetlands;

(C) significant scenic roads, waterways and views;

(D) important historic structures, sites or districts, archaeological sites and archaeologically sensitive areas.

- (6) To maintain and improve the quality of air, water, wildlife and land resources.

(A) Vermont's air, water, wildlife, mineral and land resources should be planned for use and development according to the principles set forth in 10 V.S.A. Section 6086(a).

- (7) To encourage the efficient use of energy and the development of renewable energy resources.

- (8) To maintain and enhance recreational opportunities for Vermont residents and visitors.

(A) Growth should not significantly diminish the value and availability of outdoor recreational activities.

(B) Public access to noncommercial outdoor recreational opportunities, such as lakes and hiking trails, should be identified, provided, and protected wherever appropriate.

- (9) To encourage and strengthen agricultural and forest industries.

(A) Strategies to protect long term viability of agricultural and forest lands should be encouraged and should include maintaining low overall density.

(B) The manufacture and marketing of value-added agriculture and forest products should be encouraged.

(C) the use of locally grown food products should be encouraged.

(D) Sound forest and agricultural management practices should be encouraged.

(E) Public investment should be planned so as to minimize development pressure on agricultural and forest land.

- (10) To provide for the wise and efficient use of Vermont's natural resources and to facilitate the appropriate extraction of earth resources and the proper restoration and preservation of the aesthetic qualities of the area.

- (11) To ensure the availability of safe and affordable housing for all Vermonters.

(A) Housing should be encouraged to meet the needs of a diversity of social and income groups in each Vermont community, particularly for those citizens of low and moderate income.

(B) New and rehabilitated housing should be safe, sanitary, located conveniently to employment and commercial centers, and

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- coordinated with the provision of necessary public facilities and utilities.
- (C) Sites for multi-family and manufactured housing should be readily available in locations similar to those generally used for single-family conventional dwellings.
- (12) To plan for, finance and provide an efficient system of public facilities and services to meet future needs.
 - (A) Public facilities and services should include fire and police protection, emergency medical services, schools, water supply and sewage and solid waste disposal.
 - (B) The rate of growth should not exceed the ability of the community and the area to provide facilities and services.

Summary of recent changes to Vermont's planning process (Including Act 200 and 1990 amendments)

As of July, 1 1990, the local planning process is clearly voluntary at the local level. Communities don't have to plan but if they do, the state provides funding as well as status in controlling state agency actions. A municipal plan may conform to state planning goals and be submitted to the Regional Planning Commission for review on compliance with their goals, but does not have to be.

As an alternative to the selectboard appointing members to the local planning commission, towns may now elect their members if this method is agreed upon in a town meeting.

To receive confirmation after January, 1996, a plan must be approved by the regional commission. Confirmation brings the benefits of funding and enables the adoption of impact fee ordinances or bylaws. Regional and state agency plans must be compatible with approved local plans, which provides for greater local control. A town plan which has not been approved will still have legal standing in state regulatory proceedings, such as Act 250.

Regional Planning:

- All towns are automatically members of a Regional Planning Commission
- Regional Planning Commissions must develop plans which conform with the goals by December, 1992, and compatible with any approved local plans. The regional plan must be submitted for review to the Council of Regional Commissions.
- Regional Planning Commissions must provide technical and legal assistance to towns and develop processes for review of any local plans submitted for approval.
- A majority of the member towns can veto the regional plan.

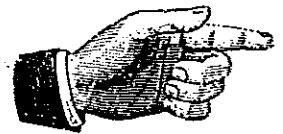
State Planning:

- State agencies with responsibilities that affect land use must develop plans consistent with the goals as well as regional plans and any approved local plans.
- State agency plans must be submitted for review to the Council of Regional Commissions and updated every two years.

How to Get Involved

Major landowners and employers have devoted many hours on their local planning commissions and selectboards. Those who have an interest in initiating development are well aware of the potential for local control

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provided by the planning process and their "volunteer" efforts are driven and well organized. It is imperative that natural resource interests are also well represented. This involvement is more difficult, because the conservationist volunteer is defending values that are in the public, rather than private, interest and are focused on a long term, not a short term, goal. A way to become part of the process is to offer to serve on one of the decision making boards.

The roles of the boards are:

Board of Selectmen or City Council - This board is the budget and infrastructure manager for the town. Its members have the final say on any proposed regulations and the municipal plan. It is also the responsibility of the selectboard to appoint a well balanced planning commission and zoning board of adjustment. Selectboards are elected by town vote at Town Meeting.

Planning Commission - The planning commission directs the citizen participation process, drafts the town plan and formulates the subdivision and zoning regulations. For environmental and planning advocates, the planning commission is the center for creative action to guide future land use. Members of the planning commission are appointed by the board of selectmen.

Zoning Board of Adjustment - The zoning board decides on requests for conditional uses and on appeals for variances in the dimensional requirements of the municipal zoning regulations. These decisions are pivotal in guiding the future character of the landscape in a community. Members are appointed by the board of selectmen.

Regional Planning Commission - Communication from regional to local boards is imperative. Much of what influences future land use in a region transcends municipal boundaries. Leadership in guiding the more difficult land use decisions needs to come from the regional commissions. Communication by the regional planning representative on regional activity to his/her local boards is essential.

You can also actively participate by initiating or getting involved in the following:

Conservation Commission - Fifteen years ago, the legislature passed a law enabling the creation of conservation commissions, but only about 30 towns have them yet. To establish one, you can get the proposal on the ballot for town meeting. (See p. 5 of this Guide)

Planning subcommittee - A subcommittee (on natural resources, for example) can develop resource goals and objectives and provide management recommendations to the planning commissioners during the drafting of a new town plan. This could divide up much of the work and provide a more thorough inventory of the resources in the community and their use. This approach has been taken by many towns including Stowe, Norwich and Jericho.

Citizens for Responsible Growth - This is an advocacy group that provides input and oversight to the planning and development review process from an independent angle. (Refer to p. 2 of this Guide)

For more information:

Contact your local planning commission, regional planning commission or the Department of Housing and Community Affairs (828-3217)

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use in a region
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TRANSPORTATION PLANNING OPPORTUNITIES FOR NEW DIRECTIONS

Why is transportation an environmental issue?

The environmental costs resulting from our dependence on motor vehicles, in terms of energy use, air quality, health and safety, are considerable. The vast majority of pollutants contributing to global warming, for example, can be attributed to car and truck use. Carbon dioxide is the single largest contributor to the greenhouse effect. Among all nations, the U.S. is the largest contributor of carbon dioxide emissions, accounting for nearly one-fourth of total global emissions. Cars and trucks account for more than two-thirds of carbon dioxide emissions within the U.S. In addition, high levels of carbon monoxide, hydrocarbons, nitrogen dioxide and nitric oxide, and total suspended particulates are all linked, more than any other source, to cars and trucks.

The gains we have won in reducing the emission of pollutants from tailpipes (for example, by improving fuel consumption) have been superceded by the rapid growth in use of motor vehicles. Vermont Agency of Transportation statistics show that while Vermont's population increased only 16.5% from 1975-1988, the number of miles we each drove our vehicles in Vermont increased by almost 70%. That statistical trend is reflected nationwide, but Vermont, as a rural state, is even more automobile-dependent than others.

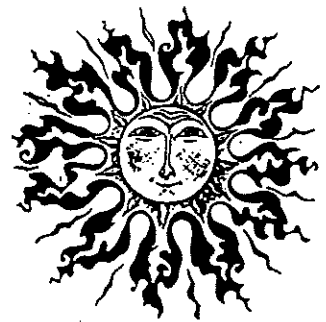
On the energy side of the picture, the 1991 Vermont Comprehensive Energy Plan provided by the Department of Public Service supplied some numbers regarding transportation. To excerpt from page 23 of that document:

"Without the growth in demand for transportation fuels, Vermont would have experienced an overall decline in total energy use over the last 15 years. ... Transportation stands alone as a sector where energy use has grown substantially. During the recent decade and a half it has grown by 22 percent. Most of that growth occurred among commercial and industrial users of the highway network. While transportation fuel use by the residential sector actually declined by 4 percent, commercial fuel use grew by 70 percent and industrial by 63 percent."

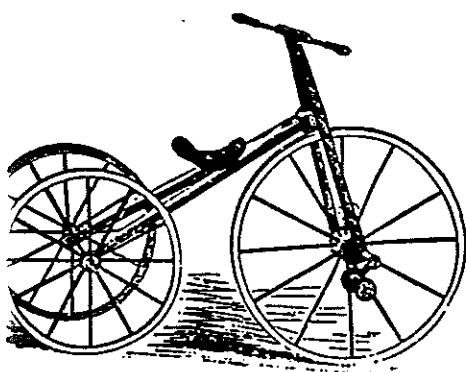
This information partially reflects an unhealthy trend already strongly in motion between the trucking and rail industries. By examining the true environmental and energy costs of transportation, the benefits of rail transportation rise to the forefront both for transporting freight and passengers. Given that the state of Vermont owns half of the existing useable railbed, we owe it to ourselves as taxpayers to increase the viability and use of the rail system.

While alternative fuels, such as electric cars, address a piece of the air quality and energy dilemma, it has become clear that available funds and public support do not exist to address rapidly increasing highway congestion by building new or wider highways. It is clear that Vermont must provide strong incentives to develop and promote practical alternatives to the continued increase in single-occupancy automobile and truck use.

The gains we have
won in reducing the
emissions have been
superceded by the
rapid growth in use of
motor vehicles.



The lack of alternatives to the automobile to meet daily, basic travel needs has become recognized as an expensive (socially and environmentally, as well as in terms of economic stability) trap.



The continued tendency to widen or bypass roads to reduce congestion -- without first taking advantage of the stress caused by the congestion to put in place and market alternatives to single-occupancy automobile use -- diminishes the opportunity for success of those alternatives to some future time when congestion relief is sought again. The policy and action put in place through transportation planning in Vermont should not simply accommodate increasing numbers of trucks and automobiles. Instead we need definitive goals to encourage reduction of individual vehicle miles traveled.

Building highways is not a prescription to gain economic health. Environmental costs are closely connected to economic and social costs which, in planning for the future, demand an intelligent approach to transportation. The fact that the average American family spends more on transportation than on food partially explains the response gained in the public attitude survey conducted for the Vermont Agency of Transportation by Sandage, Inc. in 1991-- so little support for expansion of the highway system and such strong support for public transit.

Transportation officials have justified their continued imbalanced emphasis on highways on Americans' love for their automobiles. The freedom and privacy of the automobile is not likely to be sacrificed completely, but the lack of alternatives to meet daily, basic travel needs has become recognized as an expensive (socially and environmentally, as well as in terms of economic stability) trap. Justifying the use of transportation funds for highway construction to stimulate the creation of jobs is refuted by recent research efforts, such as a report issued in 1991 by the American Public Transit Association titled "Transportation Spending and Economic Growth", which conclude that public transit spending carries more potential to stimulate long run economic growth than does comparable highway spending.

The sprawling land use pattern, that has resulted from our dependence on cars and trucks, not only threatens the beauty of our rural landscape and the future of our natural resources, but it also works against cost-effective provision of services and infrastructure for the long term.

Change on the horizon -- Canby and ISTEA.

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act, popularly termed ISTEA (pronounced ice tea) -- which includes major opportunities to shift away from our past emphasis on highways. The new federal legislation stresses planning that links land use development with transportation, places strong emphasis on broad-based citizen participation, provides for flexibility to fund public transit and other alternative transportation rather than emphasizing new highways, and permits Vermont to develop its own design standards for state and local roads.

The policy statement in the federal ISTEA legislation includes:

"The National Intermodal Transportation System shall consist of all forms of transportation in a unified, interconnected manner, including the transportation systems of the future, to reduce energy consumption and air pollution while promoting economic development ...Social benefits must be considered with particular attention to the external benefits of reduced air

pollution, reduced traffic congestion and other aspects of the quality of life in the United States..."

Vermont had a two year jump on the state transportation planning requirements of the law, because of the state agency planning mandates which were included in Act 200 and the requirements to plan transportation projects more comprehensively in the Canby law -- Vermont's novel transportation legislation passed two years ago.

Vermont's Transportation Planning Initiative.

The Vermont Agency of Transportation, responding to these new mandates, has initiated a new model for transportation decision-making which will place much larger reliance on town and regional planning processes to determine the transportation future for Vermont. Much of the increased federal funds devoted to state transportation planning are being channeled to the regional planning commissions to develop regional transportation plans and priorities with their member towns.

The local city councils or selectboards will continue their strong influence on transportation decisions, since the regional planning process cannot be initiated or implemented without their concurrence. Transportation planning at the local level may also receive state funding by "pass through" from the regional commission to the municipality.

The first step of the regional transportation planning process will be to define the key elements of the region's transportation system, including local roads, and to evaluate their performance and condition. The planning process will analyze the growth anticipated in the region over the next 20 years and assess the impacts on the transportation system. By identifying problems and exploring potential solutions, a key product of the planning process will be a prioritized list of transportation projects to be submitted to the Agency and the legislature for funding.

The citizen role.

Promoting active citizen involvement is a new task for local and regional planning bodies, as well as for the Agency of Transportation. The adoption of this new regional decision-making model will not automatically solve the requirement for citizen involvement. Broad open public process is not easy to achieve and will require patiently calling attention to its requirement by citizens seeking to be involved. Citizens should be able to get involved early and throughout the planning and decision-making process.

There are many ways to become part of the process. Individuals can contact their selectboard and regional planning commission to find out what has happened so far and how they can be involved. In some regions and in some towns, committees have formed to promote and plan bicycle/pedestrian paths. Some towns have groups actively developing solutions to congested or dangerous speeding occurring in residential neighborhoods (the term applied to these kinds of solutions is "traffic calming").

In Chittenden County, a group of environmental activists from the different towns have come together to share the task of actively influencing the content of the regional transportation plan to be developed there. The Vermont Natural Resources Council maintains a list of activists interested in transportation issues, which can serve as a starting point in creating other

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process.**

regional networks.

The active involvement of citizens concerned about Vermont's environment should broaden the process far beyond the historical promotion of favorite construction projects by legislators. Perhaps, with more Vermonters involved, the focus can switch from piecemeal accommodation of the automobile and sprawling development to an energy-efficient transportation system which tries to maximize the our mobility at the lowest possible economic, social and environmental cost by making strong connections between different modes of travel: automobiles, planes, trains, buses, bicycles and feet.

For more information or resources.

For questions about ISTEA or the regional planning process, call the Planning Division of the Agency of Transportation at 828-2629, your regional planning commission, or VNRC.

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CONSERVING COMMUNITY FOREST RESOURCES

"Mysterious, big, complex, diverse, and slow moving, forests are a difficult idea. They are at once cathedrals, commodities, landscapes, and ecosystems, making them hard to think about and harder to manage." – Mollie Beattie, former Vermont Forests, Parks, and Recreation commissioner.

The forest is the foundation of Vermont and its communities' character. Conserving the forest and access to it are important pieces in any town plan or community action. Forests within your community are a resource which provides wildlife habitat, recreational opportunities, clean water and air as well as being a renewable resource which can benefit the local economy.

All encompassing as they may seem, Vermont's forests face continuing pressure from a myriad of sources which can diminish the overall health and quality of the resource, including property taxation, escalating land values, fragmentation, and forest health problems. While ninety percent of Vermont's forests are privately-owned, the forest ignores property and town boundaries making it a community resource. A community which is concerned about the conditions of its forest resources should take a multifaceted conservation and protection approach which recognizes the needs of both the forest ecosystem and the landowner.

Fortunately, Vermont has a variety of programs and resources to help communities address the needs of the forest. These programs provide everything from planning help to management incentives, and protection options. The list below summarizes some of these programs.

FLESA – Forest Land Evaluation and Site Assessment.

This is an interactive tool which can help a community identify and evaluate its forest resources, using a numerical ranking. The FLESA ranks forestland parcels in town based on criteria developed through community meetings. While the FLESA does not tell how a community should conserve its forests it can help the community identify which are important forest resources.

For more information contact:

Steve Sinclair, Urban and Community Forestry
Department of Forests, Parks and Recreation.
103 S. Main Street
Waterbury, Vermont 05676 telephone: 244-8715

Use Value Appraisal Program.

Also known as Current Use, this program provides tax equity for productive forest and farmland. The state of Vermont requires that towns tax land at its highest and best use which in most cases is its development value. Consequently, productive forest land ends up with a tax bill which in many cases exceeds income from sustainably harvesting the trees. Eventually the forest is either overcut, or subdivided and developed.

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Vermont and its
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character.



The current use program allows qualifying forest land owners to pay property taxes based on the forestry use of the property. Since this tax amount is usually lower than the development value assessment, the state pays the difference between the two amounts so the town revenues are not reduced.

In order to qualify for the use value taxation forest land must meet the following criteria:

- the parcel must be 25 acres or more excluding the housesite.
- have an active forest management plan approved by the county forester
- the land owner agrees to pay a use change tax if the property is developed

A community that is

Interested in

conserving forestland

might consider

establishing a tax

stabilization program to

help landowners make

up the underfunding of

the Current Use

Program.

Persons interested in the current use program should contact their county forester. (See list below)

Local Tax Stabilization Programs.

Prior to the creation of the Use Value Appraisal program many towns had their own current use programs in the form of local tax stabilization programs. The statute giving the towns the authority to establish tax abatement contracts is still on the books. Local tax stabilization for open lands is receiving renewed interest given recent state budget shortfalls. A community that is interested in conserving forestland might consider establishing a tax stabilization program to help landowners make up the underfunding of the Current Use Program.

A community vote is required to establish a tax stabilization program. This vote empowers the select board to enter into individual contracts with landowners based on the criteria set out in the vote. For more information on tax stabilization contact:

Sterns Allen
Property Valuation and Review
43 Randell Street
Waterbury, Vermont 05676 telephone: 241-3505

Urban and Community Forestry.

Recognizing the benefits of trees in the urban setting the federal government established the Urban and Community Forestry Program. The program is run by the state using partial federal funds. The emphasis is on promoting tree planting in urban settings so that communities can benefit from the reduced energy cost associated with shade trees and improved air quality to name a few benefits. In Vermont, the aim of the program is to work with communities to promote an understanding of the role trees and forests have in an urban and community setting. For more information, contact:

Steve Sinclair, Urban and Community Forestry
Department of Forests, Parks and Recreation. 244-8715
103 S. Main Street
Waterbury, Vermont 05676

Stewardship Program and Stewardship Incentive Program.

The stewardship program is a state-administered program which uses federal money to encourage management of non-industrial forest land. The program recognizes the multiple resources found in the forest and provides cost-share money through the Stewardship Incentive Program (SIP) for management practices ranging from tree planting, trail building, wildlife habitat improvement, and traditional forest management. To qualify, a landowner must have an approved stewardship plan. For more information contact your local county forester (See list below).

Forest Legacy Program.

The Forest Legacy program was created in the national Farm Bill of 1990. The purpose of the program is to purchase development rights on forest land that is threatened by "conversion to other uses". The program is based on a willing seller/willing buyer concept. It uses federal funds to match private, local or state funds to purchase the rights on land. The land must have an approved stewardship management plan and be within a Forest Legacy area.

For more information on Forest Legacy, contact:

Charles Johnson

Department of Forest, Parks and Recreation

103 South Main Street

Waterbury, Vermont 05676

244-8715

Acceptable Management Practices (AMP's).

The harvesting of trees can sometimes create water quality problems from run-off, erosion, and stream crossing during and after harvesting. To address this problem Vermont has created a set of acceptable management practices to guide loggers during harvesting operations. The program is a self-policing program which depends on forest products representatives contacting the loggers if a water quality violation is suspected and corrective measures are encouraged. For more information on the AMP program or if a violation is suspected, contact your county forester.

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Vermont's County Foresters.

Addison: David Brynn 388-4969

Bennington: Jim White 447-7106

Caledonia/Essex: Steve Slayton 748-8787

Chittenden: Bill Hall 879-6565

Franklin/Grand Isle: James Tessman 524-6501

Lamoille: Paul Frederick 888-5733

Orange: David Paganelli 685-4515

Orleans: George Buzzell 334-7325

Rutland: Jim Philbrook 483-2314

Washington: Russ Barrett 479-3241

Windham: Bill Guenther 257-7967

Windsor: Jon Bouton 457-2664





COMMUNITY ACTION TO PROTECT WATER RESOURCES

Learn about water resources in your community.

Vermont's water resources are in great demand for many uses which often conflict and compete. For example, increased demand for use of rivers for hydropower and water supply conflicts with natural and recreational uses such as fishing and boating. Balancing resource use and conservation is a very complex task. The resulting impacts on water resources know no boundaries. Pollution may migrate from a wetland into groundwater, then into a river, and ultimately into a lake. Likewise, destruction of critical riparian zones and wetlands impacts water quality and habitat throughout watersheds. River protection can only be achieved with the involvement of concerned individuals like yourself.

The ecosystems supported by our water resources are at times overshadowed by human uses such as; a supply of sand and gravel, waste disposal areas, drinking water, water for irrigation, generation of energy and industrial needs. All of these uses impact the natural characteristics of our water resources. Water quality, aquatic habitat and recreational uses all depend on public involvement to insure that a balance between private uses and resource needs is restored and maintained.

Check with the Vermont Agency of Natural Resources (ANR) in Waterbury for information on water resources in your community. Maps and information are available (See list of ANR resources at end).

Rivers and streams

Rivers and streams are dynamic forces that shape our land and host a diverse community of plant and animal life. Our rivers and streams provide numerous recreational opportunities such as fishing and whitewater canoeing. They also assimilate much of our wastewater and provide us with drinking water. These waters are owned by all Vermonters. The scope of our ownership includes the water and the land underneath it as well as the responsibility to care for the wildlife that depends on rivers and streams for survival.

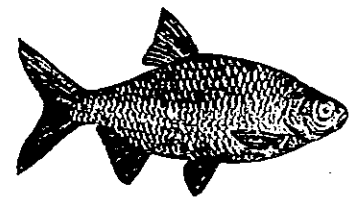
Uses which threaten rivers and streams by altering stream flow or impacting water quality should be limited. Private uses which reduce streamflows and have damaged our rivers in the past include: snowmaking, hydroelectric power generation, municipal use without conservation measures, and industrial use. Reduction in streamflow eliminates critical habitat for aquatic organisms. The most stark examples of flow reductions are river sections which have been completely "de-watered" or dried up.

The quality of our water depends greatly on the way which we use our land. Run-off from parking lots and roads can pollute waterways as can improper treatment of wastewater. By getting involved with planning and conservation efforts, you can promote protection of water quality for both human and natural resource needs.

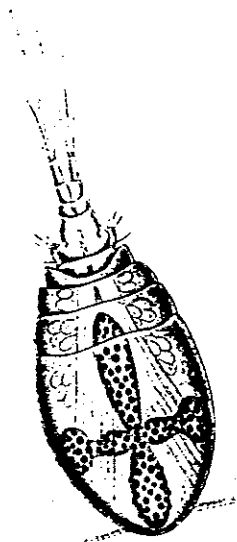
Wetlands

You may know wetlands best as recreational areas used for bird watching,

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ecosystems.**



fishing or trapping, but they have many other functions and values. Vermont's wetlands protect homes, farmlands and cities from flooding. Wetlands recharge and purify our supply of groundwater and act as a filter for water entering lakes and streams, enhancing and protecting water quality. Wetlands are home to many threatened and endangered species and are critical for many wildlife species.

As our population grows, wetlands are being drained, dredged and filled for development and agricultural use. Additionally, pollution has ruined valuable wetland areas. Vermont has already lost an estimated 35% of its wetlands. It is critical that the public gets involved to protect those remaining. In Vermont, wetlands can be protected through zoning, purchase of development rights or easements, and the state regulatory process. For more information on wetlands, contact: the Agency of Natural Resources, Department of Water Quality, wetlands office, Waterbury (244-6951).

Lakes and Ponds

From the expanse of Lake Champlain to quiet wilderness ponds; lakes and ponds dot the Vermont landscape. Our lakes and ponds provide quiet moments of solitude and opportunities for, boating, fishing and other recreational activities. They also give us drinking water and a place to dispose of our wastewater.

Like rivers and streams the uses of our lakes and ponds often conflict. These conflicts are often unresolvable without careful management. Conflicts are resolved through state regulations, zoning to protect shorelines, and purchase of development rights or sensitive land areas. Call the ANR, Lakes and Ponds program at 244-5638 for more information.

Groundwater

Many Vermonters are dependent upon clean groundwater. Community and individual water systems tap into groundwater sources for drinking water. However, threats of contamination exist from a variety of causes. To obtain more information on groundwater or your water supply call the ANR, Water Supply Division at 244-1562 or contact your town office.

Get Involved In Protection of Water Resources!

Improper land use is often the cause of impacts on aquatic ecosystems. You can get involved in the protection of water resources in your community. Local and state processes provide great opportunities for involvement. Push for local by-laws and planning to protect water resources. Advocate water resource protection in state regulatory programs. Support legislative efforts which enhance water resource protection.

Get Background Information:

Background research should include identification of existing and potential river uses and values of water resources in your community. For example, for rivers and streams information may be

gathered by conducting a comprehensive river assessment. The Agency of Natural Resources suggests that a comprehensive river assessment include these categories:

- a. Location of fisheries
- b. Areas used for recreational boating; both white water and touring.
- c. Current Water Quality Classifications and Aquifer Protection Areas.
- d. Geologic and hydrologic features, such as gorges, rapids, waterfalls and unique unions of land and water.
- e. Riparian wildlife habitats.
- f. Natural areas listed on the state's natural and fragile area registers.
- g. River related historic structures, buildings and districts.
- h. Endangered species habitats including plants, mammals, fish, invertebrates and birds.
- i. Known archaeologically sensitive riparian lands.
- j. "Corridor Character" - Urban rivers and undeveloped, free flowing rivers.
- k. Public land and public access points.

The same principles can be applied to other water resources in your community. Enlist the help of others in getting to know your water resources. For example, join together and form a group or enlist the help of a local school in collecting information. Identify potential threats, including erosion problems, storm water runoff, aesthetic impacts from development and streambank stability as well as potential sources of contamination. Sources of contamination to be aware of include underground storage tanks and failed or improperly sited septic systems.

Suggestions for direct action include:

Petitioning For Reclassification of Surface Water to Class A (Title 10, Chapter 47, § 1250-1259 - Vermont Statutes Annotated).

Waters of the state are classified as A or B, according to existing water quality and management objectives to protect existing and potential uses and values.

The Pristine Streams Law of 1986 reclassified all waters above 2500 feet to Class A. Class A waters also include those suitable for public water supply with disinfection and high quality waters which have significant ecological value. Since the passage of the Pristine Streams Law, a number of rivers and streams have been reclassified to Class A.

The Water Resources Board is responsible for reclassifying waters to a higher or lower classification. The Board by rule may reclassify the waters if it finds that reclassification is in the "public interest." A state agency, a municipality or thirty or more persons alleging that they "suffer an injustice or inequity" as a result of the waters' current classification may petition the Board for reclassification. The Board will hold a public hearing locally on the petition.

Establishing the public interest for reclassification to Class A requires proof of conformance with ten criteria and the Vermont water quality standards.

Petitioners must demonstrate that 1) the existing water quality at least meets Class B standards and 2) the water's quality "...makes an important contribution to the propagation or survival of any beneficial species of aquatic biota at any period in their life history..."

Since the passage of
the Pristine Streams
Law, a number of
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Class A.

A river is eligible for Class A designation even if, periodically, its quality falls below Class A standards. For example, during heavy rains, the chemical parameters of rivers commonly are of lower quality than the criteria associated with their classification. Reclassification is not precluded so long as the in-stream quality meets Class A criteria under most conditions. The criteria for reclassification are:

1. Existing and obtainable water qualities.
2. Existing and potential uses of waters for public water supply, recreational, agricultural, industrial and other legitimate purposes.
3. Natural sources of pollution.
4. Public and private pollution sources and the alternative means of abating the same.
5. Need and use of mixing zones.
6. Suitability of waters as habitat for fish, aquatic life and wildlife.
7. Need for and use of minimum stream flow requirements.
8. Requirements for the classification and management of waters.
9. Municipal, regional and state plans.
10. Any other factors relevant to determine the maximum beneficial use and enjoyment of waters.

Petitioning for Outstanding Resource Waters Designation (Title 10, Chapter 49 § 1424a - Vermont Statutes Annotated).

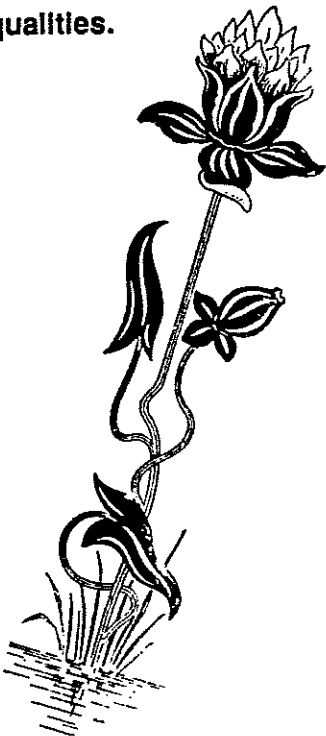
A river designated as an ORW receives special protections to preserve its outstanding qualities.

In 1987, the Vermont Legislature passed Act 67, "An Act Relating to Establishing a Comprehensive State Rivers Policy." The Act provided a process for designation of Vermont rivers as "Outstanding Resource Waters" by the Water Resource Board. By definition, ORWs must have, "exceptional natural, recreational, cultural or scenic values." The Board may act on its own motion, a petition by a state agency, a municipality or 30 or more persons in interest. A contested case hearing is held locally on the petition. A river designated as an ORW receives special protections to preserve its outstanding qualities.

Under ORW designation, specific regulations apply to dam projects. New hydro electric projects are prohibited on ORW designated rivers. The Agency of Natural Resources can approve dams not used to generate electricity if those dams serve the public good and if the values sought to be protected by designation will be preserved or enhanced.

ORW designation is based on the following:

1. Existing water quality and current quality classification.
2. The presence of aquifer protection areas.
3. Value in providing temporary water storage for flood water and storm run off.
4. The waters' value as fish and threatened or endangered species habitat.
5. The waters' value in providing habitat for wildlife including a stopover for migratory birds.
6. The presence of significant geological features, (e.g.: gorges or waterfalls).
7. The presence of, scenic, rare and irreplaceable natural areas.
8. The presence of known archaeological sites.
9. The presence of historic resources.



10. Existing usage for recreational, educational and research purposes.
11. Existing alterations, diversions or impoundments by permit holders under state or federal law.

Petitioning For Wetlands Reclassification or Determination of Wetland Functions. (Title 10, Chapter 37, § 905, and Vermont Wetland Rules)

The Vermont Wetlands Act of 1986 and the Vermont Wetland Rules were enacted to protect the values and functions of significant wetlands. Citizens are given an opportunity to petition the Water Resources Board for:

- 1) Reclassification to a higher classification
- 2) Determination of significant functions
- 3) Recognition of necessary buffer zone distances.

The public is also given an opportunity to comment on ANR decisions to issue Conditional Use Determinations (CUDs). If the ANR issues a CUD which does not meet the requirements of the Wetland Rules, interested citizens may appeal the CUD to the Board. Petitions under the rules must include:

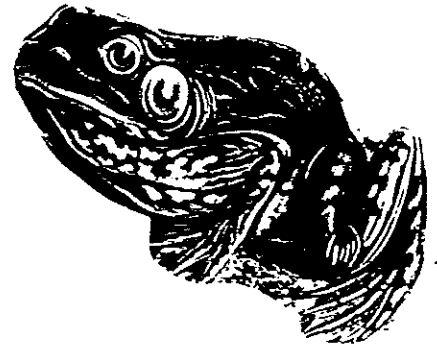
1. A description of the specific location of the subject wetland or buffer zone and the location on a USGS topographic map or the relevant portion of the Vermont State Wetland Inventory Map. This includes a narrative detailing the type of wetland, its size, its watershed, nearby features, relation to other water bodies and other general and important features. Include both an annotated photocopy the Wetland Inventory map and a more detailed site map, showing the following:

- Topographic contours;
- Wetland boundary as presently designated and as proposed, if different
- Buffer zone as presently designated and as proposed, if different;
- Property boundaries with names of owners;
- Vegetation zones within the wetland, (if appropriate in terms of your petition).

2. A description of the specific action(s) sought by the petitioner citing the applicable provisions of the rules and state law. Petitions should describe the requested action, (i.e. Is this a request for reclassification? Buffer zone functions?) Specify the functions served by the wetland and their significance. Cite the sections of the law and rules. For example: "This petition is brought under the authority and guidance of Vermont statutes, Title 10, section 905, and Section Seven of the Vermont wetland rules."

3. A detailed narrative with supporting documentation, outlining why the petitioner believes the action(s) sought by the petition is consistent with the Vermont Wetland Rules. The narrative should include a discussion of each wetland function at issue to be consistent with section 5 of the rules.

4. Copies of all documents upon which the petitioner intends to rely in support of the petition. Exhibits could include documents from state wetland officials, wildlife biologists or independent consultants, and photographs or data sheets. Letters of support from other property owners or municipal officials are also helpful.



5. The names and complete mailing addresses of all persons owning property within or adjacent to the wetland or buffer strip in question. Identify the source(s) of your information (such as town tax records etc).

Other equally important ways to take direct action:

- Becoming a party in Act 250 applications which will impact water resources.
- Encouraging your planning commission to propose amending your town's bylaws to include a river protection ordinance. (Refer to VNRC's *Model River Protection Regulations for Vermont's Rivers and Streams*)
- Monitoring the construction of private ponds. In-stream and off-stream ponds within the 100 year flood hazard area of any stream create significant deterioration of downstream water quality and may cause the introduction of non-native species of fish.
- Promoting the installation of adequately designed and properly sited septic systems.

Resources

Agency of Natural Resources:

244-6951 for Water Quality, Hydro, Wetlands and River Basin Planning;

244-5638 for Lakes, Ponds and Environmental Science

244-8702 for Hazardous Materials

244-5164 for State Geologist

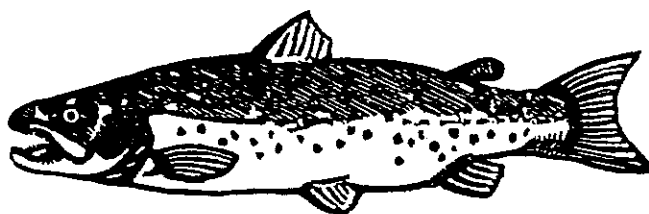
244-7340 for Natural Heritage Program (Endangered Species)

VT Department of Health:

863-7320 for Environmental Services

Riverwatch:

223-3850 for the Director, Jack Byrne





PRIVATE INITIATIVES TO PROTECT OPEN LAND

Numerous methods for conserving farmland and open space exist as options for the landowner in Vermont. The following is an explanatory list of those options which property owners might consider as alternatives to selling land on the open market.

In all cases the beneficiary of the property or the conservation restrictions is described as the Vermont Land Trust, which is not in the business of owning land but is concerned solely with the issue of saving farmland and open space in Vermont. All agreements struck between the Trust and the landowner are in perpetuity (meaning forever) and therefore insure integrity of land use. Local land trusts and conservation commissions can conduct the same initiatives, but we would recommend that they turn to the Vermont Land Trust for advice and assistance.

It is important to understand the language of the Trust. A few commonly used terms are defined below:

Conservation Restrictions: A binding promise attached to the title for a piece of land which spells out permitted and prohibited uses. Though most, if not all, development and subdivision rights are removed for perpetuity, the restrictions may allow for some residential development. The Trust's approval is required for all activities on the property.

Permitted uses: These are activities that are allowed on land bearing conservation restrictions. These uses generally include agricultural practices, forestry, sugaring, recreation, education and open space.

Prohibited uses: Activities disallowed on land bearing conservation restrictions may include residential, industrial and commercial development, mining activities, waste/rubbish storage, establishment of rights of way and any other disturbances of the land surface.

Fair market value: The dollar value placed on a piece of land based on appraisal, on the open market and without restrictions. The difference in the unrestricted and restricted values of a piece of land represents the value of the conservation restrictions.

Land conservation methods

Sale of land: Though not a common practice the Trust will occasionally purchase a piece of land which has outstanding value to either the local community or the region and which is at risk of being sold or developed. The Trust would subsequently transfer the land while retaining conservation restrictions or other agreements pertaining to the land and involving conservation. This transfer may occur between the Trust and a public agency, such as the Green Mountain National Forest or the Appalachian Trail Club, or an individual.

Advantage: The landowner is entitled to a tax deduction equivalent to the

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fair market value of the land.

Sale of development rights: This is the equivalent to placing a conservation easement on the property thereby restricting the use of the land to agricultural and conservation uses only. The value of development rights is determined by finding the difference between the land's fair market value for development and its value as agricultural or conservation land.

Advantage: In this case the landowner retains the title to the land but the right to develop the land, in whole or in part, at a future time, is removed.

Bargain sale: This option involves the sale of land to the Trust at less than fair market value. The landowner also has the option of selling the parcel's development rights to the Trust, while retaining ownership of the land, at a bargain price.

Advantage: A bargain-sale will result in cash proceeds for the landowner as well as tax benefits. The difference between the sale price of the property (or the development rights) and the fair market value is treated as a charitable contribution by the Internal Revenue Service and is therefore tax exempt. This type of transfer benefits the Trust because the organization has a greater assurance of recovering its investment through resale while maintaining restrictions.

Gift in fee simple (donations of land): In this case the land is given outright to the Trust. This can occur as a single transaction or may be spread out over a number of years. The Trust may then sell the property while retaining conservation restrictions or may retain ownership and lease the land (conservation restrictions still apply) to a private party (i.e., a farmer). This type of arrangement may be discussed prior to the transfer of the title.

Advantage: The donor is entitled to deduct the full fair market value of the property for income and estate tax purposes.

Gift of conservation restrictions: In this case the landowner maintains ownership and use of the land in question. The landowner and the Trust work together to delineate specific prohibited and permitted uses of the property. These restrictions may apply to the entire parcel or only a section of the property.

Advantage: A gift of the conservation restrictions on a parcel of land to the Trust will result in an income tax reduction.

Other options for landowners, not involving the sale or outright gift of their land to the Trust, involve partial donations or other varied agreements.

Donations of undivided interest: In this instance the landowner creates a shared tenancy of the land with the Trust by donating an undivided percentage of interest in the property. At some later point the landowner and the Trust will negotiate a separation of their interests into distinct ownership and conservation restrictions.

Gifts of a remainder of interest: This is similar to the



aforementioned Gift of Conservation Restrictions with the exception being that the donor retains a life estate for themselves, their families and sometimes their farm employees. Under this agreement the donor is entitled to a significant tax reduction.

Agreement of trust: Under this agreement the landowner is entitled to the option of changing his or her mind about the transfer at a later date. Though this agreement is flexible, the protection and transfer of the land is assured for the future. In this case a trustee would be appointed and directed by the owner to take certain action(s) after his/her death.

Option or right of refusal: This option is reserved for those landowners not ready to do anything permanent with their land or who cannot afford to make a gift to the Trust. By granting an option or a right of first refusal to the Trust the opportunity for future protection of the land is provided. This option does little more than establish a price at which the Trust could purchase the land any time during the specified period of years. The right of first refusal is a guarantee allowing the Trust the opportunity to purchase the land for a price equal to a bona fide offer from another outside party.

Land that is bequeathed to the Vermont Land Trust is protected in perpetuity through the above land conservation methods. In order to ensure proper monitoring of activities on these lands a Stewardship Endowment Fund is usually established. This Fund is necessary for the enforcement of conservation restrictions and to cover any liabilities the Trust may incur.

Successful private initiatives to protect open land generally involve a lot of work: careful planning, patient communication and education, and difficult decisions. The deep satisfaction of permanently protecting the value of important resource lands, however, makes all that hard work worthwhile.

The above information was taken from various publications of the Vermont Land Trust. More information on land conservation methods and options for the landowner, or answers to specific questions, can be obtained by contacting one of the Trust's five offices.

NORTHERN VERMONT, 8 Bailey Ave., Montpelier, VT, 05602
telephone: 223-5234

CENTRAL VERMONT, The King Farm, 5 Thomas Hill, Woodstock, VT
05091 telephone: 457-2369

SOUTHERN VERMONT, RD 5 Box 452, Brattleboro, VT 05031
telephone: 257-0233

CHAMPLAIN VALLEY, 716 Williston Rd., PO Box 924, Williston, VT
05495 telephone: 879-7343

METTOWEE VALLEY, PO Box 215, Pawlet, VT 05761
telephone: 325-3701

The deep satisfaction
of permanently
protecting the value
of important resource
lands makes all the
hard work
worthwhile.





WHAT TO DO WHEN AN UNDESIRABLE DEVELOPMENT PROPOSAL COMES TO YOUR TOWN

People in many parts of Vermont are concerned that the pace and character of Vermont is changing. They see farms converted to poorly planned second home developments. They see local businesses replaced by out-of-state chain stores and they see strip development and the resulting traffic snarls beginning to dominate what were, until recently, rural country roads.

People who are concerned often feel helpless in the face of these rapid changes. Concerned citizens who don't fully understand the permit maze may be frustrated in dealing with government regulations as well as with the developer. But with a little homework and perseverance, it is possible for any one of us to play an important role in the regulatory process as specific development projects are reviewed.

Getting Organized

First, see the "Checklist for Evaluating the Environmental Impact of a Development Proposal" which follows in this guide. This will help you determine the magnitude of concern you may have about the project. If you decide you want to get involved in responding to the proposal, the following steps will help you get organized:

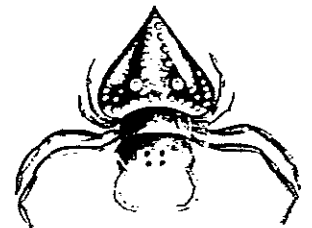
1. Go to your town office and pick up copies of: a) your town plan, b) your zoning ordinance (most towns in Vermont have a zoning ordinance, but not all), c) subdivision and/or health regulations (even fewer towns have these regulations), and, d) a copy of the developer's permit application. These materials may be free or there may be a nominal copying fee.

The first step for a developer is to get through the local permitting process. It is critical for citizens affected, concerned or just interested in the development proposal to get involved on the local level. The town review of a development proposal is much less technical than either the state permitting process or Act 250. It is therefore the least formal and most accessible place for you to articulate your specific questions or concerns about the proposed development.

2. Organize a meeting of your friends and neighbors who you believe share your sentiments about the project in question. You can simply meet at somebody's home for an hour or two some evening to think through your specific objections and the ways you might want to organize a response.

Before the meeting, one or two people should spend some time comparing the developer's application to the requirements of the town plan and ordinances. Make a checklist of areas you feel the proposed project does not conform with either document. And again, use the "Checklist for Evaluating..." in this guide to help you establish your environmental concerns with the proposal.

With a little
homework and
perseverance, it is
possible for any one
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specific development
projects are reviewed.



3. You and your neighbors should organize comprehensive testimony about the ways in which the project fails to conform to your town plan and/or regulations.

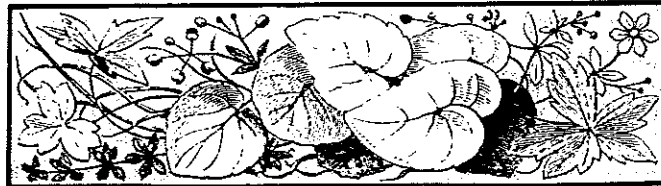
Then you should plan on attending all of the local hearings on the project. You should use these meetings to ask questions of the developer and to explain to the planning commission and the zoning board your objections to the project. Your questions and presentations should be as thoughtful and well-organized as possible.

It is also helpful to have different people speak out. As a rule, the more people who attend the hearings the better, and the more of those who speak the better.

**The more people who
attend the hearings the
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better.**

4. Writing letters to your local paper and creating publicity in general is a crucial element of any effort to take on a developer. This is a great way for you to mobilize local opinion. The goal is to write letters that educate people about the effects the project will have on your community.

It is not necessary for you to hire an attorney to participate in the decision-making process at the local level. If you are willing to get organized and prepare your case well, a handful of motivated citizens can often do just fine on their own. But the further away you get from the local arena (and depending on the scale of the project and the expertise lined up by the developer), the more seriously you will need to consider raising some money and hiring an attorney.





CHECKLIST FOR EVALUATING THE ENVIRONMENTAL IMPACT OF A DEVELOPMENT PROPOSAL

This checklist is designed to help you evaluate the possible impacts that a development may have on the physical environment. It provides general guidance to identify areas of concern. If concerns are identified, more detailed technical information and assistance should be sought. An ideal source to help you in seeking that assistance is the Field Guide to the Agency of Natural Resources, which is available free from the Agency located at 103 S. Main St., Waterbury, VT. (Also see: "What to do When an Unwanted Development Proposal comes to your Town" in this guide)

You will find that in order to make any effective judgement on the level and type of impact, you will need a copy of a detailed site plan which illustrates the development in relation to topographic and surface water features. If that basic information has not been provided for public review, you should insist that it is necessary in order to form a decision on the project.

Definitions of technical terms and other clarifications are in italics.

Surface Water Protection

Terms to know:

Aquifer - a water-saturated geologic system (sand, gravel or bedrock) that yields a useful quantity of water to wells or springs.

Surface water - includes the obvious, such as lakes, ponds, rivers, streams, as well as the less obvious seasonal drainageways.

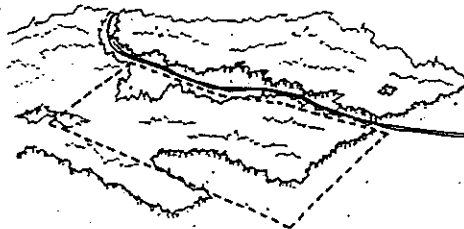
Soil erosion - the wearing, washing, or carrying away of soil by wind and water.

Wellhead protection area - the surface or subsurface area surrounding a water well(s) for a public water system through which contaminants are likely to move toward and reach the well(s).

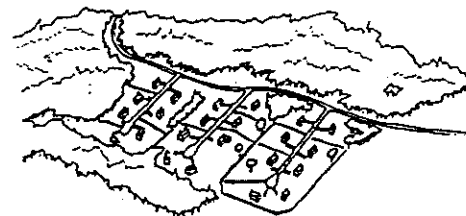
Wetlands - an area, such as a marsh, swamp, bog or fen, that has saturated soils for long enough periods of time to support water-tolerant vegetation.

- Does the site plan indicate the location of surface water drainage and wetlands?
- Does the development plan avoid changes in the natural drainage systems of the area? Dredging, re-routing, channelling or filling in or around streams, shorelines or wetlands can create significant environmental impact.
- Does the plan preserve existing topography and vegetation where possible?
- Does the plan prevent erosion and runoff to surface waters through soil conservation techniques?
 - Does the plan respect the contours of the land during construction and in the completed development?

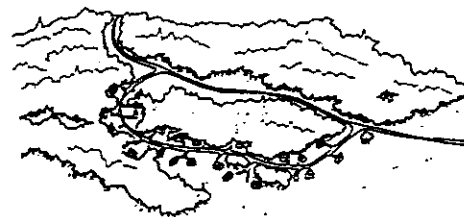
Does the plan
preserve existing
topography and
vegetation where
possible?



Existing Conditions -
dotted line indicates land to
be developed along a road



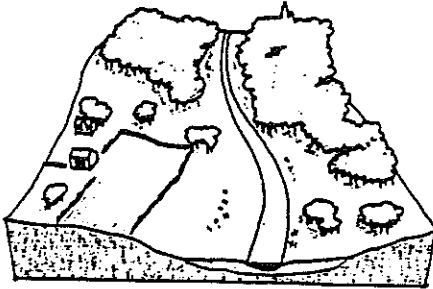
Unfavorable Development -
Roads do not follow the lay
of the land, but cut across it.
Also significant loss of
vegetation



Appropriate Layout - Road
follows contours and open
space and vegetation is
maintained

- Are roads aligned with the natural terrain and contours?
- Is an erosion control plan included in the proposal? (see under #5, topography)

e. Does the plan provide a buffer (50-100 feet or more, depending on the size and significance of the surface water or wetland affected) of undisturbed vegetation between the limits of construction and the edge of a wetland or the top of the bank above a shoreline? (see under #7, special resources and sensitive areas)



Normal River

f. Will the increase in water runoff from impervious surfaces, such as pavement, compacted gravel, or buildings, be controlled with natural (grass-lined) drainage ditches, sediment traps or basins or retention ponds?

- Is stormwater runoff to be treated by the above and/or filtered by overland flow through vegetation? Draining directly into any existing surface water or wetland can be a pollution hazard.
- Are roadside ditches with slopes greater than 5% stone-lined to reduce erosion?

g. Will the new drainage systems affect any aquifer or wellhead protection area?

h. Does the site include any 100-year floodplain (as delineated on maps produced by the U.S. Dept. of Housing and Urban Development and available at the town or city clerk's office)? If so:

- Is the floodway (meaning that area subject to moving water as opposed to floodplain area subject only to inundation) left undisturbed and unused?
- Are any uses or disturbances of the floodplain unsuitable for inundation by flood waters?

i. How will non-point discharge of contaminants (meaning: any pollutant that is not discharged directly from the end of a pipe) such as pesticides or herbicides for lawns and landscaping be minimized?

Groundwater Use And Protection

a. Is there sufficient water available for the development? Will an existing supply be unreasonably burdened if utilized for the proposed development?

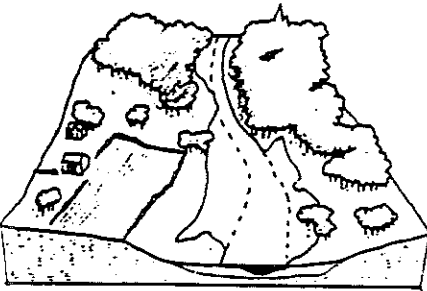
- Have hydrological studies been completed to confirm this?

b. Are there any wellhead protection areas (see section 1 for meaning) involved in the development area?

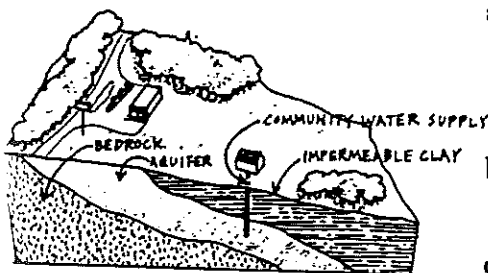
c. Are there any individual water supplies within 500 feet of the development's construction area or on-site sewage disposal system? (For shallow wells located downhill of a contamination source, the safe isolation distance could be even greater depending on the subsurface characteristics of the area.)

d. Is any blasting planned as part of the construction? If so:

- prior to the blasting, will the water supplies in the area be



Flood Conditions. The floodway is indicated by the dashed line.



Wellhead Protection Area. Development that involves the use of hazardous materials and could result in contamination should be avoided

surveyed for possible hydrologic impacts?

Air Quality

- a. Will automobile traffic (and resultant emissions) increase significantly in the area?
 - If so, what provisions or incentives have been included to minimize traffic?
 - If parking for 1000 or more cars is needed for the project, an air pollution control permit may be required from the VT Department of Environmental Conservation.
- b. How will dust be controlled during construction of the development project?
- c. If the project is a mining or rock-crushing operation, how will dust be controlled? (An air pollution control permit may be required from the state for this type of operation.)

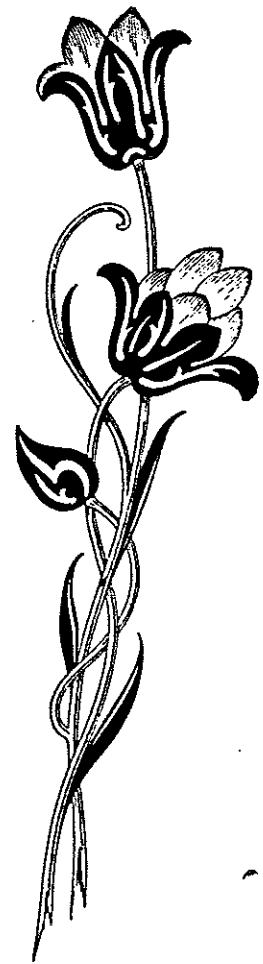
Waste Disposal

Domestic sewage disposal:

- a. Is a local or state permit for domestic sewage disposal required, which will determine that the soil and subsoil are able to support on-site septage disposal? (*Permits may be required from the VT Department of Environmental Conservation - about the only exempt developments are single-family houses on lots more than 10 acres in size*)
- b. Has soil testing, including 7 foot deep test holes by backhoe(*or to "refusal", meaning to bedrock or soil that is so densely compacted it responds like rock to the shovel*), been done to determine the capacity of the soil?
 - Has the depth to seasonal groundwater or bedrock been determined?
 - Is the percolation rate(*a measure of the ability of the soil to transmit water*) of the soil adequate?
 - Has the slope of the land been considered in the design of the septic system?
- c. Will the domestic waste disposal system(s) affect any water supplies, groundwater or surface water?
- d. If a community sewage treatment plant is included, is the storm water drainage system linked to the sewer drains such that major storms could result in combined sewer overflows? If there is a point of discharge to a body of water, is the sewer outfall designed so that it will not fail during periods of high water?

Hazardous waste:

- a. Does the project collect, use or generate hazardous wastes, and, if so, has a management plan been included which meets the approval of the Hazardous Wastes Management Section of the VT Department of Environmental Conservation?
- b. Is there a known hazardous waste dump site within unacceptable proximity of development? Check with the VT Department of Environmental Conservation for assistance.



Solid Waste:

- a. Do sufficient services exist in the community and region for disposal of solid waste from the proposed development?
- b. If the project proposed would be a significant producer of solid waste (such as a fast food restaurant) is reduction/recycling of solid wastes provided for?

Topography (*the lay of the land*)

- a. Does the site have a rolling or steep terrain?
- b. Does the plan respect and utilize existing site topography and contours?
 - Do the plans avoid major changes in the contour of the land to prevent erosion and to preserve the character of the landscape?
 - Do the plans preserve existing topography and vegetation in order to prevent drainage and stormwater difficulties?
 - Does the site layout economize on the use of roads, utilities and land usage?
 - Has the developer avoided disturbing areas with excessive slopes (25% grade or steeper) or floodplain areas?
- c. Is an erosion control plan included? If so:
 - Is the work planned in phases so as to minimize the amount of disturbed area open at any one time?
 - Has the erosion control plan determined whether the soils have a low or high potential for erodibility?
 - Does the plan preserve or replace vegetation that acts as a soil stabilizer and sediment filter?
 - Is a temporary crop such as wheat or rye used to stabilize disturbed soil until permanent landscaping is completed?
 - Will earth disturbance be completed before November and avoided between November and May?



Erosion: Removal of all vegetation between the development and the stream results in serious gully erosion and water quality impacts.



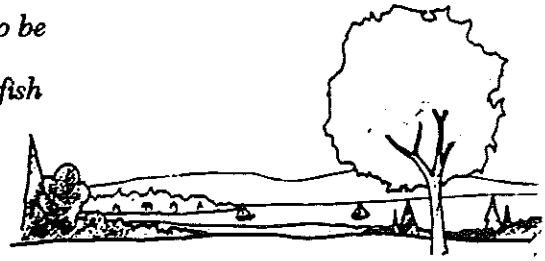
Vegetation should be maintained in a buffer strip to prevent erosion of the streambank.

Scenic Resources

- a. How visible is the project?
 - Is the project located along or visible from a designated scenic road or scenic transportation corridor?
 - Has the design of the project incorporated landscaping, signage and design style to decrease or increase that visibility?
- b. Does the project "fit" into the context of its surroundings?
 - What are the existing uses, topography, vegetation, structures?
 - Is the project's design (*layout, architectural style, colors, materials*), scale, and mass compatible with those surroundings?
- c. Is the site particularly sensitive to aesthetic changes?
 - Is the site located on a shoreline, steep slopes, floodplain, or close to a unique historic or natural resource?
- d. Is the project designed to maintain open spaces in the area or will it contribute to a loss of open space?
 - Has the preservation, use or maintenance of any open space in the project been addressed?

Special Resources And Sensitive Areas

- a. Is there protection of areas of critical environmental concern such as:
- wetlands, aquifers, or shorelines (cross-reference #1)
 - endangered plant or animal habitat (Check with the Heritage Program in the VT Department of Fish and Wildlife for assistance)
 - necessary wildlife habitat (*meaning: habitat professionally judged to be necessary to sustain a wildlife population at its present numbers; eg: deer wintering areas, bear production areas or corridors, important fish spawning areas*)
- b. Are special resources addressed and provided for such as:
- historical or archeological sites - (Check with the VT Division of Historic Preservation for assistance in determining historical significance of the site and evaluating the impact of the proposed project)
 - unique natural areas, such as gorges and waterfalls
 - prime agricultural land (Check with the VT Dept of Agriculture for assistance)
 - designated outstanding resource waters (Check with the Water Quality Division of the VT Dept of Environmental Conservation)
 - public recreation resources, such as popular hiking, fishing, hunting and shoreline access areas



Development of open land along the shoreline of a lake presents special design challenges to avoid adverse aesthetic impacts.



Special thanks go to Brook Muller for providing the illustrations for this checklist



ABOUT ACT 250

For the citizen organizing to protect an area from development, Act 250 offers both opportunity and potential confusion. But the basic idea behind the law is straightforward. To get an Act 250 permit, a developer must prove to a district environmental commission-- a quasi-judicial board appointed by the governor -- that his/her project will meet basic environmental standards.

The Ten Act 250 Criteria:

1. **Air and water pollution.** The development must not cause undue air or water pollution; it must conform with Vermont health, water, floodplain and air quality regulations; it must employ water conservation methods, protect headwaters, surface water, streambanks, shorelines and wetlands.
2. **Water supply.** The project must have sufficient water available for its foreseeable needs.
3. **Burden on existing water supply.** The development cannot cause an unreasonable burden on an existing water supply.
4. **Soil.** The project is not allowed to cause unreasonable soil erosion or reduce the capacity of the soil to hold water.
5. **Transportation.** The project must not cause unreasonable traffic congestion or unsafe conditions.
6. **Educational services.** The developer must show that the project will not unreasonably strain the municipality's ability to provide educational services.
7. **Other municipal services.** The development cannot cause an unreasonable burden on the town to provide other services, such as road maintenance.
8. **Aesthetics and wildlife.** The developer must show that the proposal will not have an undue adverse impact on the scenic or natural beauty of the area, aesthetics, historic sites, or rare or irreplaceable natural areas. The project also cannot destroy or significantly imperil necessary wildlife habitat or endangered species habitat. (see the "Checklist for Evaluating the Environmental Impact..." in this guide for definitions)
9. **Land capability and growth.** A developer must show that the project will meet numerous requirements dealing with the impact of growth and the protection of land resources, including agricultural, forest and mineral soils. If the proposal involves mining, the site must be reclaimed and the operation must be done in such a way as to not unduly harm the environment. The use of the best available energy conservation practises is also covered under this criterion.

To get an Act 250

permit, a developer

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her project will meet

basic environmental

standards.

Since 1970, Act 250
has been continually
strengthened, both by
the force of precedent
and by amendment by
the Legislature.



10. Conformance with plans. The project must conform with any duly adopted local or regional plan or capital program.

This list of criteria is not all inclusive. For the actual list of criteria reviewed under Act 250, refer to 10 VSA 151 section 6086. For answers to questions or further interpretation, contact the state district environmental office in your area.

Act 250 was first implemented in 1970, after a wave of unchecked development aroused the concern of the Legislature and then Gov. Dean Davis. Since then the law has been strengthened, both by the force of precedent and by amendments by the Legislature.

The ten criteria in the original law in actuality now amount to some 28 separate concerns for the natural and built environment. The burden of proof for addressing those concerns also changes depending on the criteria. Essentially, it is up to the applicant (developer) to prove that the project meets the standards covering air, water, soils. Opponents of the projects have the burden of showing that the development will negatively affect schools, roads, municipal services, scenic areas, historic sites and wildlife.

Act 250 covers virtually all projects larger than 10 acres. It also covers commercial or industrial construction on more than one acre in a town which does not have both permanent zoning and subdivision by-laws. Also included under Act 250 are housing projects of 10 or more units or lots; other subdivisions of raw land involving construction of roads; any construction occurring at an elevation above 2,500 feet; and a "substantial change" to any development that existed before 1970.

If a person wants to know if a project requires an Act 250 permit, he or she can file a request for an advisory opinion with the district environmental coordinator -- who is the commission's full time professional staff person.

The people who make the whole process work are the nine district environmental commissions and their staffs. Although the commissions are sometimes now chaired by a lawyer, the members as a rule are lay people serving in the tradition of Vermont citizen government. The three members of each commission are appointed by the governor.

Act 250 hearings are legal proceedings and have some of the formality of the courtroom. Witnesses are sworn in and evidence is presented on each of the ten criteria. The commission also has the power to compel witnesses to testify and produce evidence.

The district commission at its discretion may allow any person or organization to be a party to an Act 250 review -- if they can show they will be affected or that they can assist the commission. The selectboard and the planning commission of the town in which the development is proposed are automatically parties, as are the regional planning commission and affected state agencies.

Property owners adjoining the proposed development are routinely given "party status." This legal standing before the quasi-judicial panel gives "parties" the chance to offer testimony, question

witnesses, rebut developers' claims and to appeal the decisions made by the commission.

All records, applications and testimony taken by the commission are public documents and can be reviewed during working hours in the district environmental offices.

The Act 250 review process can take a few weeks or last for months, depending on the complexity of the proposal and how thoroughly the applicant has prepared the case. If the commission feels a project has little potential for adverse impact, it can skip the public hearing by ruling the application a "minor" one. Anyone with significant concern about a minor application can request a hearing.

Appeals of district commission decisions can be made to the Environmental Board and from there to the Supreme Court.

The key point to remember is that the district commission will base its decision on the information or the evidence provided, not emotion. Fifty people can turn out against a project and harangue the commission all night and it won't have the slightest effect if what they say is irrelevant or confusing. The commission operates almost like a court.

You don't need to be a lawyer to be effective. But what you say should be clear and should apply to the criteria being considered. Knowledge of how the process works is key to a successful outcome.

• • •

Below is a list of the district environmental offices at which you will find the district environmental coordinator and a wealth of other information resources. D.E.C. is the abbreviation for district environmental commission and A.N.R. means Agency of Natural Resources. This listing is borrowed from the VNRC Vermont Environmental Directory.

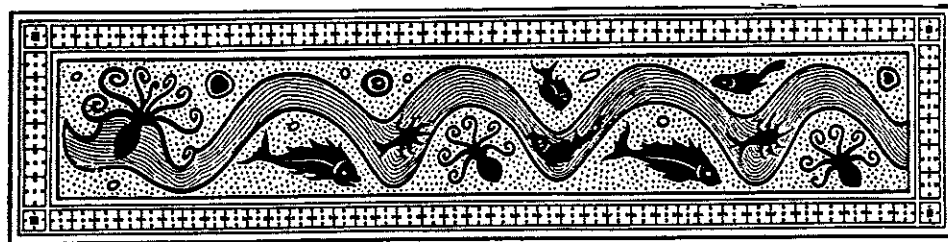
DEC #1 & 8/ANR District II (Bennington and Rutland Counties); RFD 1, West Cottage; Pittsford Police Academy; Pittsford, VT 05763
telephone: 483-2300

DEC #2&3/ANR District I (Windham and Windsor Counties); RR1, PO Box 33; North Springfield, VT 05150 telephone: 886-2215

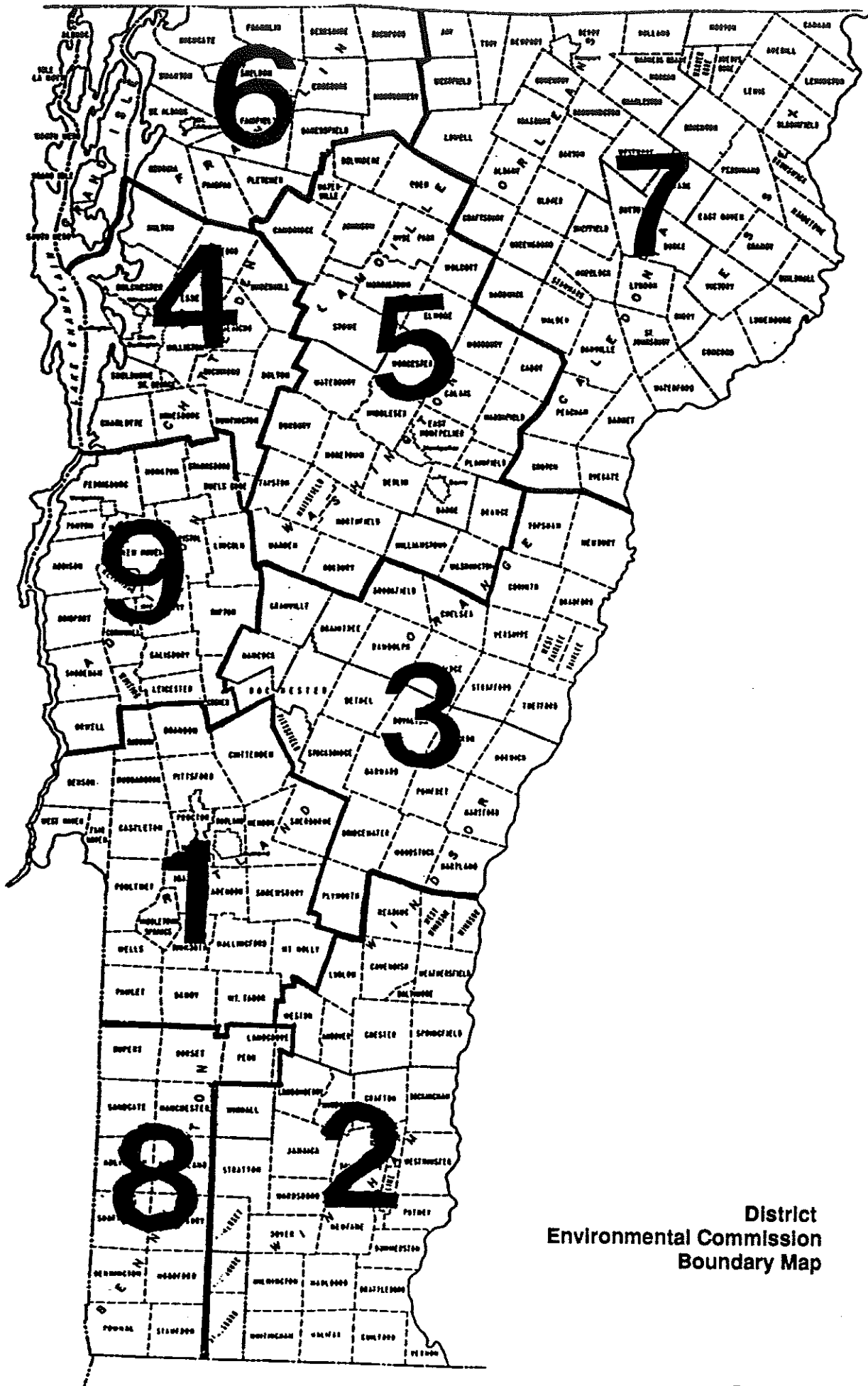
DEC #4,6 & 9/ANR District IV (Addison, Franklin, Chittenden and Grand Isle Counties); 111 West Street; Essex Jct., VT 05452 879-6563

DEC #5/ANR District III (Lamoille, Washington & Orange Counties); 324 N.Main Street; Barre, VT 05641 telephone: 479-3621

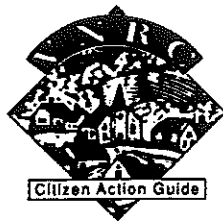
DEC #7/ANR District V (Caledonia, Essex and Orleans Counties); 180 Portland Street; St. Johnsbury, VT 05819 telephone: 748-8787



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or confusing.**



District
Environmental Commission
Boundary Map



HOW TOWN GOVERNMENT WORKS ON NATURAL RESOURCE ISSUES

By virtue of geography and history, local government in Vermont remains strong. When European settlers first made their home in northern New England, they congregated in towns isolated from other communities by the rugged landscape. This isolation, and a strong tradition of participatory democracy, led to a decentralized form of government that made many decisions on a one-person, one-vote basis. To this day registered voters in virtually every Vermont town meet annually on the second Tuesday in March to approve town budgets, elect officers and shape town policy.

The state's 252 towns are the foundation of a political system that gives local officials -- and the people who elect them -- considerable authority over planning and development issues.

The Open Meeting Law requires that the business of the town conducted by its various boards be advertised by posted notice and be open to the public. Notice requirements vary depending on if the board is holding a public hearing or conducting its regular business.

Any major development proposal will be reviewed at the town level, allowing opponents to make their views known to town officials in a variety of forums. Here is how the system works:

Board of Selectmen

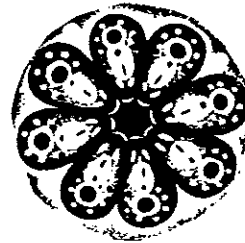
The board of selectmen is the three or five member legislative body of the town; its members are elected at town meeting. The board's major role is to be the budget and infrastructure (roads, water, sewer) manager for the town. Their role in planning and development issues is twofold: selectmen appoint members to the planning commission and to the zoning board of adjustment, both of which can be involved in reviewing developments. And selectmen have the final say on town plans and regulations drafted by the planning commission. This veto power gives the selectmen a substantial role in controlling growth in their town because compliance with the town plan is critical to any development's approval.

Planning Commission

Appointed by the selectmen, the planning commission's overall role is to be the leader of the community on planning matters. To be effective, commissions must work to reconcile the often competing interests in their towns.

The planning commission's responsibilities include writing or revising the town plan and zoning and subdivision by-laws. If the community has zoning by-laws which include a site plan review provision, the commission is responsible for review of the screening, landscaping, signs and traffic impact

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of a proposed non-residential development. Once a town adopts subdivision by-laws, the planning commission is also responsible for administration of those by-laws. During the site plan or subdivision review process, the commission will hold one or more hearings. During these sessions, the commission will solicit comments both from anyone affected by the development as well as members of the community at large. Planning commissions also may participate as a party to review of projects under Act 250, the state's development review law.

Zoning and the Zoning Board of Adjustment

While the town plan is the overall blueprint for the community and its goals, zoning by-laws provide more precise land use regulation. In most rural towns, the voters themselves have the power to approve or reject zoning by-laws. In larger communities, zoning changes may be approved by a majority of the town's "legislative body" --- either a board of selectman, city council, or board of aldermen.

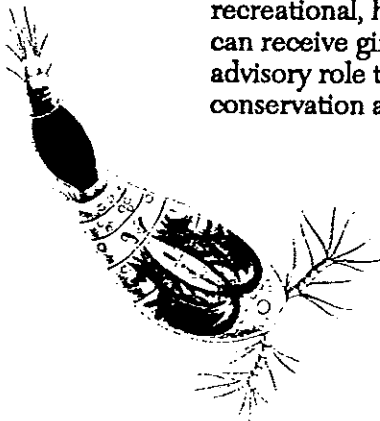
Zoning usually involves dividing the town into districts or "zones," each of which has a different set of standards, densities or uses for development. Zoning by-laws may regulate the number of buildings on a lot, the amount of land (lot size) required to be dedicated to each use, the relationship of the buildings to open areas, the scale and proportion of buildings and the use of signs and landscaping. Zoning or building permits are issued by an administrator appointed by the town.

The zoning board of adjustment hears appeals of permit denials as well as requests for conditional use permits and variances from the dimensional requirements of the zoning by-laws. Appeals of board of adjustment decisions can be made to Superior Court.

Conservation Commission

Enabled by the legislature in 1977, a conservation commission may be created at any time the town votes to create one. The selectmen appoint the members. The legal authority of the commissions is broad and is provided in Title 24, VT Statutes Annotated, Chapter 118.

They may conduct studies and inventories related to natural, scenic, recreational, historic and educational resources in the town. They can receive gifts of land or other property. They can also adopt an advisory role to the other decision-making town boards on conservation and environmental issues.





AN INTRODUCTION TO THE PERMIT PROCESS IN VERMONT

Depending on their scale, developments proposed in Vermont must clear a number of planning and environmental reviews. Most of these reviews offer the public a chance to evaluate the projects; if citizens have concerns with a project these are the points at which they may reduce the environmental impact of the proposal or oppose it outright.

Essentially, projects are reviewed in three arenas: by local planning commissions or zoning boards, by state agencies charged with protecting the environment and public health, and by district environmental commissions which administer Act 250.

Local Permits

If the town where the project is proposed has zoning, the developer will have to obtain a zoning permit (commonly called a building permit). If the project is a conditional, rather than a permitted use, the zoning board will hold a hearing and decide whether a conditional use permit should be granted. If the project does not conform to the dimensional requirements of the town's zoning by-laws, the developer will need a variance from the zoning board of adjustment, which will hold a public hearing on the variance request. The criteria used to review requests for conditional uses and variances is set out in the state law (24 V.S.A. Chapter 117).

Under many zoning regulations, the town planning commission is required to conduct a site plan review for non-agricultural projects larger than a two-unit dwelling. During site plan review (which includes review of the screening, landscaping, signs and traffic impact of the project) the planning commission will hold at least one hearing on the proposal. If the town has subdivision regulations, the planning commission will hold hearings and review the subdivision plan according to the standards outlined in the regulation.

State Permits

A large development proposed in Vermont may need permits from a half-dozen different state departments or divisions. The rigor of the review and the opportunities for public comment vary widely. Each district office of the Agency of Natural Resources has a permit specialist on staff to help the public sort through the regulations. See p.36 for a list of the district offices.

In general, permits are required for projects that would: subdivide land; construct a building that will be open to the public or one that will have employees; cause water or air pollution; alter streams; affect a historic site or require the use of hazardous materials. But that list is far from all-inclusive and it would be wise to check with the permit specialist to see what permits apply to a particular development and what opportunities the public has to intervene.

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Here is a brief sampling of some of the more common state permits required for developments.

Subdivision Permits -The creation of a lot less than 10 acres in size requires a state subdivision permit which is issued by the Regional Engineer in the District Environmental Office. The developer will need to provide detailed information on the site location, number and size of lots, building location and uses, existing and proposed water and sewage systems, and the use of adjacent properties.

Public Building Permits -Required for practically any structure that is not a farmhouse or single-family home, a public building permit is needed for construction of a gas station, factory, school-house, restaurant, store, boarding house or office building, to name a few. The Vermont Department of Environmental Conservation, through its regional engineers, requires a developer to provide specific information describing the project, its size, water supply and sewage disposal methods.

The Vermont Department of Labor and Industry has a separate public building review of the project's electric wiring, fire prevention plans, and any plans to store flammable liquids or explosives.

Discharge Permits - There are several different kinds of discharge permits, issued by the Department of Environmental Conservation, which in general cover a project's impact on water quality. These permits can be challenged before the state's Water Resources Board, a quasi-judicial body that classifies streams and hears appeals on water issues.

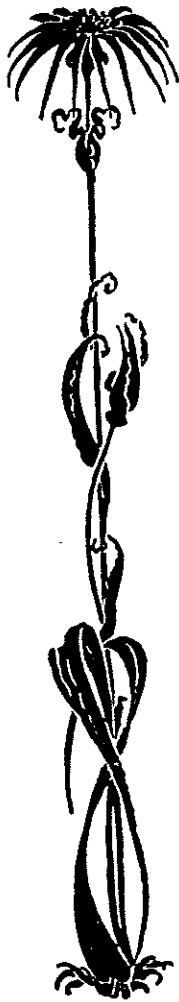
If a development includes a parking lot or roads that would cause stormwater to flow into a nearby pond or stream, a stormwater discharge permit is needed. For projects that would discharge wastewater directly into streams, an industrial or municipal discharge permit is required. Before the permit is granted, the developer must describe the process that is generating the waste water, the kind of pollution it would cause and the treatment process that would be used.

Indirect discharge permits are needed for land-based sewage systems handling more than 6,500 gallons a day, or for land-based disposal of other wastes at any volume.

Air Quality Permits - Larger projects such as shopping malls generally need an air quality permit from the Department of Environmental Conservation because of the traffic they would generate. For example, any project with a parking lot that will hold 1,000 cars or more will need an indirect source air quality permit. A new road with projected traffic volume of 20,000 or more vehicles per day within 10 years also needs an air quality permit.

If the development is industrial in nature, it must comply with federal and state emissions standards. Permits are required for: large scale wood or trash burning projects, all bituminous coal burning equipment and many other fossil fuel burning equipment.

These permits may be appealed to the secretary of the Agency of Natural Resources, or the Vermont Supreme Court. Variances can be granted by the Air Quality Variance Board.





THE PROPERTY TAX/LAND USE CONNECTION

Currently, about the only way a Vermont town can fund its schools, police department, highway work, recreation program and general government is through the property tax. And, if the recent rejection of school budgets is an indication, the property tax is overburdened. Responsible town officials, attempting to offer their citizens a balanced program of services without exorbitant taxes, often strive to increase the tax base by enticing developers to locate within their boundaries. As the theory goes, a larger tax base means the budget is divided among more properties, keeping the tax rate down.

While local officials may be considering the tax consequences of new development, some Vermonters are complaining of ugly strip development and inappropriate land use decisions which they attribute to the quest for tax base.

Each town's situation is different, and the impact of a development on the tax rate depends on many factors. These factors include the type of development, the capacity of the municipal and educational infrastructure in place, the services necessitated by the development, the services desired by the voters and the role of state aid to education.

At one time, many people believed new houses would help the tax rate because they would share the costs of schools, roads and town government. By now, it is fairly well accepted that residences bring more costs to the town than revenues. In fact, it takes about a century of property taxes on the average-value home to pay the town back for the schooling of two children from kindergarten through high school. Although the foundation formula which distributes state aid to education changes the rules by buffering the impact of additional children on the school tax, the general trend is that taxes increase with population.

Towns have been looking instead for growth which does not have children: industrial, commercial, or vacation properties. These childless developments would pay school taxes without increasing school costs. Because school taxes represent, on the average, about two-thirds of the total tax bill, this contribution would be substantial, or so the thinking goes. However, the general trend is: the more commercial and industrial property value in a town, the higher the tax burden. Development affects both school and municipal tax rates.

School Taxes

For Vermont towns receiving state aid to education via the current foundation formula, the amount of school taxes gained from a development will be matched by an opposite and approximately equal reduction in state aid. Only towns which already have a large grand list per pupil and which are not receiving state aid will see a net gain to all the school taxes paid by a development. The state aid formula was not designed to influence land use planning; its purpose is to ensure equal opportunities to a basic education.

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Municipal Taxes

The other costs of development are paid for through the municipal tax. On the average, residents in towns with the most commercial and industrial development will pay the largest municipal tax bills. There are several possible explanations for this. First, industrial development may need extra municipal services such as police protection, new traffic controls, or more frequent road maintenance. Second, commercial and industrial property does not appreciate as rapidly as other types of property so, in relative terms, the tax benefits of commercial and industrial properties decline each year.

The most important reason, however, is that commercial and industrial developments tend to spur growth. They create jobs and, in many cases, people move in to fill at least some of these jobs. It is the combination of the new residents and the job-generating development itself which drives the tax bills up. Finally, as towns become more populated, voters often ask for more services such as sidewalks, police, town managers, etc. However the big-money items commonly associated with population centers in Vermont -- sewers and water systems -- are not paid for through the property tax and are not a factor in explaining the higher tax bills in larger towns.

Although the pattern is that municipal (non-school) tax bills are higher in towns with larger populations and with more commercial and industrial development, there is a great deal of variation. These developments would be most likely to have a positive effect if the town has already invested in the infrastructure needed to accommodate the development, and if the development is not likely to cause residential growth.

Open Space

Land acquisition, as a means of protecting open space, wildlife habitat, forest land and other natural resources available for public use and enjoyment, might be helpful for communities concerned about the possible transitory nature of Plans and Bylaws or the limited resources available for procuring easements and development rights. Not surprisingly, however, the impact of removing land from a town's tax revenue base is the most commonly articulated concern initially.

"The Tax Base and the Tax Bill" workbook, available from VNRC, provides charts for each town in Vermont which includes an analysis of the effect of a million dollar parcel of land being donated to the town. In most cases, the impact on the tax rate is minimal.

What needs to be considered is the costs for town services associated with developed land versus the lack of demand for those services from open land use. Towns with a larger residential, or non-residential, tax base relative to the cost of development, or towns where zoning dictates future land uses with lower associated costs, might be less disposed to actively pursue public ownership from a financial standpoint only. Under public ownership, a community may receive less net revenue annually per acre compared to alternative land uses but will not actually lose money.

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Vacation Homes

Vacation homes break all the rules. In general, towns with a large percentage of their Grand List in the "vacation" category have the lowest tax rates. Vacation home owners generally pay more in taxes than they require in the way of town services. In the 50 towns with the highest ratio of vacation homes to year-round homes, the average tax bill on a house is approximately two-thirds of the state average.

Most of the towns which have a high proportion of vacation homes do not receive foundation aid because they can raise all their school taxes with a relatively low tax rate. These towns will see the full benefit of each additional vacation home. For example, in one of these towns with a tax rate of \$1.25, a \$200,000 vacation home would bring in \$2,500 in taxes.

While vacation homes seem like the perfect development, there are some drawbacks to recognize. First, vacation homes will not bring the same tax benefits to all towns. In towns receiving state aid for education, there would be little benefit to a new development of vacation homes. In general, school taxes which the vacation home paid would be offset by a loss in state aid. To compensate for the loss in state aid due to rising land values, the tax bills would increase.

Summary

If there is a general rule, it is that many common assumptions about the impact of developments on property taxes may be wrong. Each town has its own set of conditions that require investigations for individual towns. "The Tax Base and the Tax Bill" contains worksheets to help residents estimate the likely tax consequences of various land use options and may be helpful to people interested in understanding property tax implications of development proposals.

Much of the above text is excerpted from "The Tax Base and the Tax Bill" available from Vermont Natural Resources Council (VNRC) and Vermont League of Cities and Towns (VLCT) and written by Deb Brighton and Jim Northrup of Ad Hoc Advocates in Salisbury, VT.

**Each town has its own
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SPECULATIVE PROPERTY RIGHTS AND THE TAKINGS ISSUE LUCAS V. SOUTH CAROLINA COASTAL COUNCIL

In June, 1992, the United States Supreme Court decided a case which anti-environment "private property rights" advocates had hoped would substantially change and undermine the ability of federal, state, and local governments to regulate private activities which damage or threaten our environment. The case, Lucas v. South Carolina Coastal Council, dealt with the interface between two important provisions of the U.S. Constitution. The "police power" and the "takings clause." However, the Court's decision does not undermine the ability of the government to pass and implement regulations to protect our environment. Rather, the Court merely clarified what a State must do to justify such regulations. The decision will have little, if any, affect on the validity of Vermont's environmental regulations.

The "police power" is the foundation of the government's ability to pass regulations which protect the public health, safety and welfare from adverse environmental consequences of development activities. The "takings clause" states "... nor shall private property be taken [for public purposes] without just compensation." There is no question that when private property is taken over by the government, as for highway construction, a landowner must be compensated for their loss. The dispute arises when the government does not actually acquire the land, but simply regulates the owner's use of that land.

Both the Vermont Supreme Court and the U.S. Supreme Court have consistently held that a taking does not necessarily occur merely as a result of diminution in property value resulting from regulation -- even where well over 50% of the value of the property is lost. If some reasonable economic use is left to the landowner, a taking will not have occurred.

Far from a victory for compensation advocates, the Lucas decision changes takings analysis very little. The Court did not determine that Mr. Lucas was entitled to compensation and did not overrule any prior precedent regarding takings. Instead, the Court overruled the reasoning of the South Carolina Supreme Court and remanded the decision back to the state court for further consideration.

In Lucas the Court limited its analysis to "total takings" -- those cases where the value of private property is diminished by 100% as a result of government regulation. This is a very rare occurrence. Even in these circumstances, the Court recognized that a state could still justify the regulation if the regulation is based upon "... the restrictions that background principles of the State's law of property and nuisance already place upon land ownership." Moreover, the Court recognized that "... the property owner necessarily expects the uses of his property to be restricted, from time to time, by various measures newly enacted by the State in a legitimate exercise

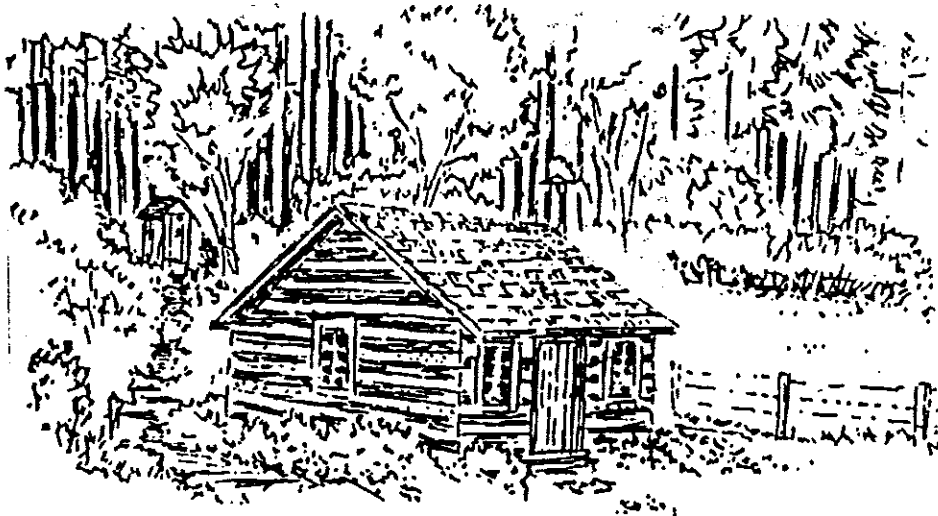
The [Lucas] decision
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of its police powers" Thus, even where a "total taking" has occurred as a result of passage of a law or regulation, a state can justify its passage.

The Court expressly
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The Court made clear that cases which are less than "total takings" are not affected by the Lucas decision. In fact, the Court expressly recognized that under the Lucas analysis a landowner who suffers a 95% diminution in property value will get nothing. As a result, a state may always pass environmental and land use laws and regulations to protect public health, safety and welfare as long as a total taking has not occurred -- and even then, the regulation may still be justified.

The Lucas decision has virtually no effect on Vermont's environmental and land use laws. Under such laws as Act 250, the Planning and Development Act, or Vermont's Wetlands Act, a "total taking" rarely, if ever, occurs. Projects are rarely denied but rather are conditioned in ways which protect environmental values and nearby property. Under wetlands laws for example, a long list of "allowed uses" is included in the rules implementing the law. Arguably, in such a case a total taking may never occur. Vermonters can rest assured that the Lucas decision will not undermine protection of our priceless natural resources.





RESOURCE BIBLIOGRAPHY

Agricultural Management Practices to Minimize Groundwater Contamination. Environmental Resources Center. University of Wisconsin; 216 Ag. Hall, Linden Dr., Madison, WI 53706, n.d.

Agency of Development and Community Affairs Responses to Planning and Zoning Questions. Vermont Department of Development and Community Affairs; 109 State St., Montpelier 05602, (802)828-3217, on-going.

Agency of Natural Resources Bibliography. Publications listing for Vt. Agency of Natural Resources, Planning Division, 103 S. Main St, Waterbury, VT 05676, (802)244-1137. October 1991.

Some useful publications from the Bibliography appear below and are available from:

Vermont Agency of Natural Resources, 103 S. Main St., Bldg. 10S, Waterbury 05676.

Acceptable Management Practices for Maintaining Water Quality On Logging Jobs in Vermont. Department of Forests, Parks and Recreation.

An Ounce of Prevention: A Ground Water Protection Handbook for Local Officials. E.B. Mullikin. Vermont Agency of Environmental Conservation, Groundwater Division. February 1984.

Field Guide to the Agency of Natural Resources. 1988.

Hydropower in Vermont: An Assessment of Environmental Problems and Opportunities. Volume I: Summary of Study and Results. Volume II: Project Site Reports. Department of Environmental Conservation, Water Quality Division. 1991.

Vermont Recreation Plan 1988-1993. Department of Forests, Parks and Recreation, Recreation Division. 1985.

Vermont Streambank Conservation Manual. Vermont Agency of Environmental Conservation. Water Quality Division. 1982.

Vermont's Scenic Landscapes: A Guide for Growth and Protection. April 1991.

Caring for the Land: Environmental Principles for Site Design and Review. Bruce Hendler. American Society of Planning Officials: Chicago, IL. 1977.

Charitable Gifts of Land: A Landowner's Guide to Vermont and Federal Tax Incentives. Vermont Land Trust; 58 East State St., Montpelier 05602, September 1989.

A Citizen's Guide to Conserving Land and Creating Affordable Housing. The Burlington Community Land Trust and The Vermont Land Trust. Burlington Community Land Trust, PO Box 523, Burlington 05402. 1990.

The Citizen's Guide to Planning. Herbert H. Smith. American Planning Association; 1313 E. 60th St., Chicago, IL 60637, (312)955-9100. 1979.

The Citizen's Guide to Zoning. Herbert H. Smith. American Planning Association; 1313 E. 60th St., Chicago, IL 60637, (312)955-9100. 1983.

"Communications--A Planning Tool?" A Communications and Public Relations Handbook for Local Planning Commissions. Department of Development and Community Affairs. State of Vermont; Montpelier. March 1977. *Available in the State Library in Montpelier.*

Community Action Guides: Drinking Water, 1986.

Farmlands, 1987.

Groundwater, 1988.

Pesticides, 1987.

Concern, Inc.; 1794 Columbia Rd. NW, Washington, D.C. 20009.

Community Guide to Open Space and Recreation Planning. Massachusetts Association of Conservation Commissions, Inc.; Lincoln Filene Center, Tufts University, Medford, MA 02155, (617)381-3457. 1988.

The Comparative Economics of Residential Development and Open Space Conservation: A Manual for Municipal Officials and Other Townspeople. Allagash Environmental Institute Center for Research and Advanced Study. University of Maine; Portland-Gorham, ME. 1977.

Conserving the North Woods. Yale School of Forestry and Environmental Studies. New Haven, CT. Bulletin 96, 1989.

The Costs of Sprawl. The Council on Environmental Quality. The Real Estate Research Corporation; U.S. Government Printing Office, Washington, D.C., 1974.

Design With Nature. Ian McHarg. Museum of Natural History Press; New York, N.Y., 1969.

Designating Scenic Roads: a Vermont Fieldguide. Vermont Scenery Preservation Council and Vermont Agency of Transportation, State of Vermont; 133 State St., Montpelier 05602, 1979.

End of the Road: The World Car Crisis and How We Can Solve It. Wolfgang Zuckermann. Chelsea Green Publishing Company. Post Mills, VT. 1991.

The Farmland Issue in Vermont. Findings and Recommendations. Report of the Agricultural Lands Task Force. State of Vermont;

Montpelier, February 1983. *Available in the State Library in Montpelier.*

Flood Hazard Management and Natural Resource Protection. Community Action Guide. Conservation Foundation. Federal Emergency Management Agency; Washington, D.C., 1980.

Groundwater Handbook EPA/625/6-87/016. EPA Center for Environmental Research Information; 26 W. Martin Luther King Blvd., Cincinnati, OH 45268, (513)569-7391.

The Growth Management Catalog: A Compendium of Growth Management Techniques. #GP/87-04. Metropolitan Area Planning Council; 110 Tremont St., Boston, MA 02108, (617)451-2770, 1987.

The Growth Shapers: The Land Use Impacts of Infrastructure Investments. Urban Systems Research & Engineering Inc. Council on Environmental Quality; Government Printing Office, Washington, D.C., 1976.

How to Build a Path in Your Community. A. Lusk. Vermont Department of Forests, Parks and Recreation; 103 S. Main St., Waterbury 05676, 1986.

How to Prepare a Town Conservation/Recreation Plan. Massachusetts Association of Conservation Commissions, Inc.; Lincoln Filene Center, Tufts University, Medford, MA 02155, (617)381-3457. 1988.

Land Use Intensity Index for Lake Watersheds. F.O. Sargent and F.J. Zayac. Research Report 12-3. Vermont Agricultural Experimental Station; University of Vermont, Burlington 05404, 1982.

Local Groundwater Protection. American Planning Association, 1313 E. 60th St., Chicago, IL 60637, (312)955-9100, 1987.

Management of North Central and Northeastern Forests for Nongame Birds. R.M. DeGraaf and Keith E. Evans. U.S. Forest Service, General Technical Report NC-51; Main St., Morrisville 05661, 1979.

Managing Rural Growth: The Vermont Development Review Process. Gail Byers and Leonard Wilson. Environmental Board, State of Vermont; April 1983. *Available in the State Library in Montpelier and also Regional Planning Commission Offices.*

Mapping Farmland in Vermont: A Methodology. Vermont Department of Agriculture. State of Vermont; Montpelier, April 1983. *Available in the State Library in Montpelier.*

National Agricultural Lands Study--The Protection of Farmland: A Reference Guidebook for State and Local Governments. Robert E. Coughlin and John C. Keene. National Agricultural Lands Study; Washington, D.C., undated. *Available in the State Library in Montpelier.*

A New Checklist of the Vascular Plants of Vermont. J. Jenkins and P. Zika. Jerry Jenkins; White Creek, N.Y. 12057, 1985.

Pattern Language. Christopher Alexander



Performance Controls for Sensitive Lands. Charles Thurow, William Turner and Duncan Erley. American Society of Planning Officials, Chicago, IL, 1975.

The Practice of Local Government Planning. International City Management Association.

Preserving Family Lands. A Landowner's Introduction to Tax Issues and Other Considerations. Stephen J. Small, Esq., Powers & Hall Professional Corp., Boston, MA, 1990. Available through the Vermont Land Trust, Bailey Ave, Montpelier, VT 05602.

Planning for the Future Forest. A Supplement to the Planning Manual for Vermont Municipalities. Vermont Department of Forests, Parks and Recreation and University of Vermont Extension Service.

The Regional Energy Plan: Bennington County, Vermont. Bennington County Regional Commission; P.O. Box 342, Arlington 05250, September 1982.

Review of North American Experience of Current and Potential Uses of Geographic Information Systems (GIS). Tomlinson Associates. University of Vermont School of Natural Resources, Burlington, 05404, n.d.

Rivers at Risk: The Concerned Citizen's Guide to Hydropower. John D. Echeverria, Pope Barrow, Richard Roos-Collins. Island Press, Washington, DC.

Saving America's Countryside. A Guide to Rural Conservation. Samuel Stokes with A. Elizabeth Watson. The National Trust for Historic Preservation. The Johns Hopkins University Press. 1989.

Scenery Classification. F.O Sargent. Rep. 18. Vermont Agricultural Experiment Station; University of Vermont, Burlington 05404, 1982.

The Siting Manual for Storing Hazardous Substances. Health Research Inc. Health Education Services Division; P.O. Box 7126, Albany, N.Y. 12224, n.d.

Steering a New Course: Transportation, Energy and the Environment. Union of Concerned Scientists, 26 Church St., Cambridge, MA 02238. 1991.

Subdividing Rural America: Impacts of Recreational Lot and Second Home Development. American Society of Planning Officials, Conservation Foundation, Urban Land Institute, and Richard L. Ragatz. Council on Environmental Quality; Washington, D.C., 1976.

Summary of Municipal Actions for Groundwater Protection in the New England/New York Region. New England Interstate Water Pollution Control Commission; 85 Merrimac St., Boston, MA 02114, June 1988.



The Tax Base and the Tax Bill. Vermont League of Cities and Towns and the Vermont Natural Resources Council. 1990.

Tax Stabilization of Farm, Forest and Open Space Property in Vermont. Robert L. Townsend. Extension Service, University of Vermont; Burlington 05404, 1980.

Town Energy Planning: A Framework for Action. Paul Markowitz. Center for Rural Studies; University of Vermont, Burlington 05404, November 1982.

The University of Vermont List of Publications. UVM Extension Systems, Publications, Morrill Hall, Burlington 05405-0106.

Using Conservation Easements in the Northern Forest Lands: Building Partnerships for Land Protection. A Project for the United States Forest Service. The Trust for Public Land; New England Field Office, 67 Batterymarch St., Boston, MA 02110. (617) 737-0261. August 1989.

The Vermont Backroad. A series by the Ottauquechee Regional Planning and Development Commission, 1974 to 1979. Available from the Vermont Agency of Transportation District Four in White River Junction, Vermont. Includes a slide-tape program.

The Vermont Backroad: A Guide for the Protection, Conservation and Enhancement of Secondary Roads. Northeast Environmental Design. Ottauquechee Regional Planning and Development Commission; Woodstock, March 1974.

The Vermont Backroad: A Maintenance Handbook. The Ottauquechee Regional Planning and Development Commission. Vermont Agency of Environmental Conservation; Woodstock, 1979.

The Vermont Backroad: Erosion Control Handbook. The Ottauquechee Regional Planning and Development Commission. Vermont Agency of Environmental Conservation; Woodstock, 1979.

Vermont Land Capability. Vermont State Planning Office. Montpelier, 1974. Available in the State Library in Montpelier.

Publications available from the Vermont Natural Resources Council
Write to: VNRC, 9 Bailey Ave., Montpelier 05602, or call 223-2328.

Growth Management News. Newspaper outlining Act 200, Vermont's planning law, how the law works and other planning information.

Model River Protection Regulations For Vermont Rivers and Streams. Planning tools for local municipalities and guidelines for establishing a river overlay district. 1990.

Planning for Open Space. Materials from "Planning for Open Space" workshop series, June/July, 1989. Humstone Squires Associates.

The Tax Base and the Tax Bill. Includes a workbook for estimating the financial effects of development on a town's tax base. 1990

Vermont Environmental Directory. Contains listings of Vermont's environmental groups and a guide to environmentally-related state



government, regional and town commissions. 1990

Vermont Environmental Report. A magazine focused on what's happening as it affects the natural world of Vermont. Quarterly report.

Worcester Mountains Project: An Economic Picture of the Forest Industry in the Worcester Range. 1992

Vermont Public Interest Research Group. Offers a variety of publications on consumer health and environmental issues. VPIRG, 43 State St., Montpelier 05602.

Water Conservation in Residential Development: Land Use Techniques. American Planning Association; 1313 E. 60th St., Chicago, IL 60637, (312)955-9100, 1982.

Wetlands Rules & Regulations: What They Mean to your Logging Operation in Vermont. University of Vermont Extension Service. December 1990.

