



VNRC

# Vermont

## Environmental Report

Published  
by the  
Vermont  
Natural  
Resources  
Council, Inc.

WHO'S LOOKING OUT  
FOR YOUR RIVER?

Winter  
2001

# Car Lover's Gift Shop & Old-Fashioned Full-Service Sunoco Filling Station



Stop in and view the ever-changing selection of Hemmings vehicles on display or our extensive automobilia collection, take a tour of Hemmings, or shop for automotive gifts of all kinds: car books and calendars, automotive collectibles, truck banks, HMN wearables, children's toys, die-cast tractors and cars, model kits, Foxfire Farm figurines, HMN publications, unusual Vermont products, wearables, maple syrup and much more! Gift certificates available.

## Hemmings Motor News

216 Main Street, Bennington, Vermont

*1/4 mile east of the Bennington Museum*

**Open 7 am - 10 pm Every Day But Christmas**

Visit us at [www.hemmings.com](http://www.hemmings.com)

## We're Partners in Your Gardening Success...



*Helping you grow gorgeous flowers and  
healthy vegetables in harmony with nature!*



# GARDENERS

SUPPLY COMPANY

128 Intervale Road, Burlington, Vermont • [www.gardeners.com](http://www.gardeners.com)  
802.660.3505 • Mon-Fri 9-6 | Sat-Sun 9-5

## Vermont Law School

and its Environmental Law Center

## Summer Session 2002

May 28 - August 1

4 terms with a total of 30 courses  
open to law and non-law students  
for law and graduate school,  
and CLE credit

our course listing includes

### Biodiversity Protection

with Wm. Robert Irvin, Director  
U.S. Ecoregional Conservation  
World Wildlife Fund

### Clean Water Act

with Randolph L. Hill  
Assistant General Counsel,  
Water Law Office  
Office of General Counsel, U.S. EPA

### Strategic Planning for Sustainability

with Lea E. Swanson, Executive Director  
International Institute for  
Energy Conservation

For a complete course listing please  
contact us at (800) 227-1395 x2201,  
[elcinfo@vermontlaw.edu](mailto:elcinfo@vermontlaw.edu), or check us  
out on the web at [www.vermontlaw.edu](http://www.vermontlaw.edu).



## VNRC BOARD OF DIRECTORS

Mark Naud, *Chair*  
Susan Clark, *Vice-Chair*  
Bill Amberg, *Treasurer*  
Dale Guldbrandsen, *Secretary*

Stark Biddle  
Mary Ann Carlson  
Terry Ehrich  
Matthew Huntington  
Dick Munro  
John Nutting  
Will Rapp  
Virginia Rasch  
Mark Schroeder  
Elizabeth Skarie  
Ellen Taggart  
Seward Weber  
Len Wilson

## VNRC STAFF

Elizabeth Courtney, *Executive Director*  
Patrick Berry, *Communications Director*  
Matteo Burani, *Outreach Coordinator*  
Deb Daniels, *Financial and Membership Coordinator*  
Jimmy Fordham, *Office Manager & Administrative Assistant*  
Stephen Holmes, *Sustainable Communities Program Director*  
Kim Kendall, *Staff Scientist*  
Kelly Lowry, *Water Program Director General Counsel*  
Stephanie Mueller, *Development Director*

## PUBLICATIONS

Stephanie Mueller, *Editor*  
Tim Newcomb, *Design*

The Vermont Natural Resources Council, Inc., is a nonprofit environmental organization founded in 1963 to protect Vermont's natural resources and environment through research, education, and advocacy.

VNRC is the Vermont affiliate of the National Wildlife Federation.

VNRC membership includes a subscription to the *Bulletin* and the *Vermont Environmental Report* magazine (both published twice annually). Join VNRC in protecting Vermont with your membership of \$35.

Copyright © November 2001, VNRC

# Vermont Environmental Report

Published by the Vermont Natural Resources Council, Inc.

Winter 2001

## TABLE OF CONTENTS

### THE INSIDE WORD

**The Gift of Ourselves to the Work at Hand**, by Elizabeth Courtney . . . . . Page 2

### OPINION

**Basin Planning: Finally a Real Win-Win Proposition**, by David Kelley . . . Page 3

### VERMONT PERSPECTIVE

VNRC Files Tinmouth Channel Petition; Peterson Negotiations Continue; Another Look at the Nulhegan; Small Dam Removal Update; Energy Efficiency Initiatives; West Mountain Update; Coalition Addresses Sprawl, Energy and Water Quality; New Septic Rules — Pros and Cons . . . . . Page 4

### FEATURE ARTICLES

**From the Ground Up: Vermont's Basin-Planning Initiative Courts Citizen Leadership**, by Will Lindner . . . . . Page 8

**Basin 'Partners' Marching to Their Own Drum**, by Will Lindner . . . . . Page 14

### VNRC LOCAL REPORTS

**The Land Use-Property Tax Connection: What's the Latest Since Act 60?**, by Deb Brighton and Steve Holmes . . . . . Page 18

**Burlington Takes Lead in Climate Action Campaign**, by Mary Sullivan . . Page 19

### VNRC NEWS & NOTES

Welcome Jay!; Check out VNRC's Improved Website; Alex Stays On!; Farewell Job; Join the Earth Charter On Town Meeting Day; NOFA Conference Announcement; Matteo Burani Joins VNRC; VNRC Comments Posted; New VNRC Board Members Elected . . . . . Page 33

**Credits:** Cover photograph, Pages 5, 8, 11 and 12: Blake Gardner; Page 2: Patrick Berry; Page 4: Kim Kendall; Pages 14, 16, 17 (tree planting picture): Friends of the Winooski; Pages 15, 17 (CVU student): Lewis Creek Association; Back Cover: Kelly Lowry.

The opinions expressed in the *Vermont Environmental Report* are not necessarily those of VNRC. VNRC reserves the right to refuse advertising that is not in keeping with the objectives of the organization.

# THE GIFT OF OURSELVES TO THE WORK AT HAND

BY ELIZABETH COURTNEY, Executive Director

It was well over two months ago when we began putting this edition of the *Vermont Environmental Report* together. I intended to take the opportunity with my opinion piece to write about individual Vermonters' participation in the local basin planning process. I wanted to stress that basin planning is important because it can connect friends and neighbors in a community to the issue of water quality. I wanted to stress that at its best, political pressure comes from ordinary citizens. I wanted to say that with your full participation, we can make a significant difference in water quality, land use decisions and wildlife habitat across Vermont.

But it is hard to comprehend the extent to which our frame of reference has changed since September 11, 2001. Bill Moyers, a renowned public television journalist, spoke to a group of environmental grantmakers just a month after the attacks in New York and Washington. He reminded his audience that after September 11, we are not unlike the survivors of other acts of violence. "We're survivors, you and I. We will be defined not so much by the lives we led before the 11th of September, but by the lives we will lead from now on. And when all is said and done, the most important contribution we'll ever make is the gift of ourself to the work at hand."

It seems the work at hand has taken on new meaning. Somehow, when we take our blessings for granted, we may not be inclined to invest ourselves in protecting them. We may be lulled into believing that they'll just be there forever. It's easy to see how we could take water and air quality for granted in a state with the reputation of Vermont. If there is a silver lining resulting from the events of September 11, it may well be that Vermonters are recommitting themselves to the protection of



*Elizabeth and her daughter Hannah at VNRC's Earth Day 2000 celebration.*

many of the values we thought were a given in this beautiful, safe state. Perhaps, after coming face to face in such a shocking manner with our vulnerabilities, we will find a more compelling urgency to conserve our precious natural resources. We may find that we are moved to action for the sake of our personal and national security, if not for the more distant needs of generations to come.

Even more heartening is that this vision may no longer be limited to environmentalists. With security on everyone's mind, solutions to water, air quality, and

energy conservation are now being touted by some who have been traditionally far from eco-friendly. The ability of the Vermont environmental community to regroup and regain momentum around the issues of environmental quality at the community level, mobilizing fast to share thoughts with the public, is impressive. What is significant is that what has been exclusively environmentalists' policy is now embraced by many conservatives as well.

What is clear to me and to many of us here at VNRC is that we have a very special role to play in the wake of this tragedy. We have a unique and precious corner of the world to protect. We have a valuable role to play as thoughtful responsible guardians of Vermont's resources for ourselves and for our children. And yes, we are survivors, we are changed, but we are not alone.

On September 13th we celebrated my daughter Hannah's 14th birthday. It was a beautiful, clear, deep-blue-sky-day. We paddled ourselves out to the far side of the Chittenden Reservoir. We visited the cascades of waterfalls and pools engineered by an industrious beaver. We searched for the illusive loon family, which had a hatch of chicks on the reservoir the year before. We watched the great blue heron pass overhead. We sat in awe of the majesty of the forested mountain tops that hold this vast body of pristine water.

The experience was as much a relief from the news of the day as it was an affirmation of our responsibility to protect this wild and precious Vermont.

We hope that you and your family and friends are safe. We pray that we will come through this tragedy with a renewed sense of commitment to our natural resources and to the sustainability of our environment for our children and for future generations.

# BASIN PLANNING: FINALLY A REAL WIN-WIN PROPOSITION

BY DAVE KELLEY

In any Land Use Planning and Review course at any law school in the country, young lawyers are taught that a community lays out its vision for the future in a planning process. The plan, in effect, becomes a blueprint. The community then reviews specific project proposals in a permit process. If the planning process has been done properly, the permit process is simple. Essentially, a proposed development is held up to the blueprint to ask if the project fits on the blueprint or not. When the blueprint is little more than a sketch, key issues get battled out over and over again in the permit process, often times with contradictory results that don't always account for real community interest because the community isn't always at the table.

Land Use Planning and Review in Vermont, unfortunately, has been a case study in the enormous distance between textbooks and reality. I am proud of the enormous time and investment Vermont's ski areas have devoted to long range planning. However this planning, more often than not, has done little to simplify the permit process because it has lacked the regulatory framework to give it real meaning in the permit process. For over three decades we Vermonters have battled our way into the future one permit at a time and we have done so with a permit process that only reviews a third of the growth in Vermont. In a small, but very significant way, we all have an opportunity to help correct a piece of this failure.

Despite looming budget deficits and enormous pressure on the Agency of



Natural Resources (ANR) as a result of the emerging Stormwater Program, ANR has embarked on an ambitious new Basin Planning Process. Planning programs in the White River, Lamoille, and Metawee basins are already well underway with the

remaining fourteen major Vermont river basins scheduled to be tackled in the next few years. Canute Dalmasse, the Deputy Secretary at ANR, has committed his Agency to a grassroots, bottom-up process of planning that would actively engage and listen to all interested parties in every community.

The process of basin planning offers a unique opportunity for the business community and the environmental community to take some of the unnecessarily expensive conflict, controversy, and confrontation out of the Vermont permit process. While both the environmental community and the business community pay homage to protecting our precious natural resources, Vermont has continually lacked the political will to undertake planning that was sufficiently meaningful to help ease the enormous and sometimes unrealistic burdens on our permit process. There have been no real incentives to do long range planning.

The Basin Planning Process will not be without flashpoints or controversy. For example, one of the responsibilities of basin planners will be designating river and stream segments as new B-1 Water Management Type, which will be short-hand for substantial new restrictions above and beyond traditional Type B Water

Quality. Basin planners are also expected to find solutions for correcting or remedying any stream segments that are designated as impaired. As Vermont has recently seen in a spate of cases before the Water Resources Board of late, that challenge certainly cannot be met without controversy.

What is important however is that this new Basin Planning process offers all of us a seat at the table and an opportunity to come together as a community and talk about where we expect our community to grow and how we expect to develop and use our water resources. We have an opportunity with respect to our water resources to finally create a piece of the blueprint that can help eliminate some of the needless repetition, expense, and confrontation that has cast a shadow on our permit process for far too long.

Only about a third of Vermont's actual growth is even reviewed by Act 250 but for the minority of Vermont projects that are required to get an Act 250 permit, the water quality criteria can be a quagmire. Likewise, Vermont's impaired waters will continue to pose enormous conflicts and difficulties for local government and local permits. Basin Planning is a real chance to address those problems rationally in the planning process, before they get to the permit and review process. Basin Planning certainly won't end the controversy that inevitably surrounds change or growth, but if we measure real success in millimeters and not in miles, basin planning can be a very big step in the right direction for all of us. Developers and environmentalists alike should embrace this opportunity to enhance water quality protection and to reduce some of the wastefulness and inefficiencies of our permit process.

*David Kelley is the General Counsel for the Vermont Ski Areas Association.*

## VNRC FILES TINMOUTH CHANNEL PETITION

On August 21, 2001, VNRC filed a petition with the Water Resources Board to reclassify the entire Tinmouth Channel Wetland Complex (TCWC) from Class Two to Class One. In addition, VNRC requested establishment of a buffer zone of three hundred feet around the northern portion. If granted, this would be a major victory for wetland protection in Vermont.

Wetlands are some of the richest and most diverse ecosystems on earth, hosting vast communities of plants and animals. Wetlands also provide critical water quality benefits, functioning as filters to remove a variety of water borne pollutants. However, we are losing our wetlands at a frightening rate. In Vermont, 35 percent of our historic wetlands were destroyed by 1988.

Since the passage of the Vermont Wetland Rules in 1990, only two wetlands have been designated Class One — a special classification for wetlands deemed exceptional or irreplaceable wetlands based upon their functions and values. The second designation occurred in September of 2000 when the Board reclassified as Class One the Northshore Wetland in Burlington on a petition filed by VNRC. The TCWC would be the third such wetland, and VNRC hopes that more will follow.

*Why did VNRC choose the TCWC?* The TCWC is one of the most significant wetland resources in Vermont. Including the buffer, the protected parcel covers over 1,470 acres. It provides



*Tinmouth Channel*

excellent habitat for a variety of game and non-game fish and wildlife. The upland area within the buffer zone of the northern portion contains one of the largest deer yards in Vermont, and supports a healthy population of black bear, moose, otter, and mink, just to name a few. The area also supports a broad range of amphibians and reptiles, including highly-valued uncommon species like the Jefferson salamander, yellow-spotted salamander, and northern dusky salamander. The TCWC also harbors two plant species on the Vermont Endangered Species list, eight rare and uncommon species, and twelve distinct natural communities, including one of only four intermediate fens in the state to receive an "A" ranking in a report produced for the United States Environmental Protection Agency (EPA) and the Vermont Agency of Natural Resources. Finally, the open

space and aesthetics of this resource are quite unique. The complex rests in a glorious valley between mostly undeveloped mountains. One only needs to plop a canoe into the Tinmouth Stream and float in the midst of the channel for a while to understand why it inspired such protection efforts.

*How did this come about?* VNRC heard concern from some members in the Tinmouth and Danby communities that the channel should be protected. VNRC filed the petition, and thanks to our significant local outreach, we have received overwhelming public support. The Tinmouth Select Board, Tinmouth Planning Commission, and the local land trust filed letters of support with the Board. VNRC is grateful for the support of the local community in Tinmouth. Our task would be far more daunting without their help.

*If the Board grants the*

*petition, what would that mean for the TCWC?* It would mean enhanced protection for this high quality wetland complex, both through the expanded buffer zone and the limitation on inappropriate uses in the buffer and the wetland itself. In essence, it would place a blue ribbon squarely on the complex, and recognize it for the resource that it is.

## PETERSON NEGOTIATIONS CONTINUE

VNRC continues its involvement in selected Federal Energy Regulatory Commission (FERC) relicensing projects, including projects on the Clyde River, Lamoille River, and Little River (Waterbury Reservoir). Foremost among these is the relicensing of the four hydroelectric facilities on the lower Lamoille River.

These four facilities, known collectively as the Lamoille River Hydroelectric Project, have been in various stages of relicensing for almost 14 years now. VNRC's involvement spans over seven years, and the forecast indicates that it will continue for at least one or two more years. VNRC's goal for this project is to ensure that the relicensing process restores as much as possible the lower Lamoille River while instituting an aggressive strategy for energy efficiency in Chittenden County, replacing lost power (if necessary) with clean renewable sources.

With the aid of a mediator having special expertise in FERC matters, we are currently involved in intense negotiations involving the fate of this project. VNRC has

consistently maintained that the only way to meet our interests in compliance with the Vermont's Water Quality Standards is to restore the habitat in the lower reach of the river. The purpose of the negotiations, now in their second year, is to determine whether and how this can be achieved cooperatively. VNRC remains hopeful that an agreement will be reached.

## ANOTHER LOOK AT THE NULHEGAN

On October 27, 1998, VNRC filed a petition with the Water Resources Board to have the entire Nulhegan watershed designated as Outstanding Resource Waters under Vermont standards and as Outstanding National Resource Waters under federal standards.

On September 14, 1999, VNRC withdrew the petition with a Memorandum of Agreement between VNRC and the Agency of Natural Resources requiring the ANR to conduct water quality assessment of the Nulhegan Waters during the Summer and Fall of 2001.

In the time since our withdrawal of the petition, ANR completed and we have received the water quality assessment data from the Nulhegan basin and the adjacent Dennis Pond and Paul Stream basins. These fantastic waters lie in the sub-watershed immediately south of Nulhegan. Our staff review of the data confirms VNRC's original position that the waters are of exceptional ecological significance. VNRC staff has incorporated the Agency's new data from the Nulhegan basin into the



*Moose Bog in the Nulhegan basin*

petition, and has supplemented the original petition to include the waters in the Dennis Pond and Paul Stream watersheds.

The waters included in our revised petition are some of the most ecologically significant in the state. The entirety of the systems are unencumbered by impoundments and remain free flowing. In addition, they are surrounded by some of the most ecologically significant lands in the state, most of which are working forests devoid of development. These are perfect candidates for ORW protection under the anti-degradation policy in the state and federal standards. Such a designation provides assurance that the existing high quality of the waters will not be diminished. Indeed, such an assurance guarantees that the traditional uses such as hunting, fishing, and trapping that currently take place will continue to take place with a well-balanced and healthy aquatic ecosystem. It also is

consistent with the sustainable logging practices now guaranteed on the Essex Timber Company lands in the Nulhegan basin. ORW designation is a victory for everyone.

## SMALL DAM REMOVAL UPDATE

VNRC continues to work cooperatively with the Hardwick Electric Department and the Town of Hardwick to remove the Jackson Dam on the Lamoille River. This dam is almost 100 years old, no longer serves an economic purpose, and will require major repairs in the future at significant cost to ratepayers of the Electric Department.

Jackson Dam removal would improve fish habitat and water quality in the river, and it would create 180 acres of new land as a scenic resource for the town as well as an opportunity for a river front park in Hardwick.

In this case, dam removal

can create a win-win situation for the Electric Department, the town, and the environment. Removal of the dam would be significantly cheaper, and it would not cost the Electric Department or the Town any money.

Organizations interested in river restoration have funded the removal of "deadbeat" dams across the country.

Despite the overwhelming economic and environmental benefits of dam removal, opposition to the project has developed in Hardwick. Some people in town feel nostalgic about the dam and the impoundment behind the dam. The most difficult barrier in removing old dams that don't make sense anymore is the cultural and social attachment that people have toward dams and their impoundments.

The community of Hardwick through a town vote will likely make the ultimate decision of whether or not to remove the dam. VNRC will continue to

provide community members with reliable information about dam removal.

## ENERGY EFFICIENCY INITIATIVES

VNRC is working on several initiatives to promote energy efficiency in Vermont. One goal is for greener government buildings. The States of Maryland, Oregon, Pennsylvania, and the City of Boston have recently taken the lead in setting standards for greener state and municipal buildings. In these places, new construction or renovation of government buildings must meet LEED (Leaders in Energy and Environmental Design) standards for green buildings.

The LEED Green Building Rating System is a comprehensive method to "evaluate environmental performance from a whole building perspective over a building's life cycle, providing a definitive standard for what constitutes a green building," according to the U.S. Green Building Council. Their members, representing all segments of the building industry, developed the system. Criteria of the LEED system address water and energy efficiency, indoor environmental quality and the materials and resources that go into the building.

Energy efficient green buildings decrease energy bills and other building costs over the long term life cycle of a building. They also have better indoor air quality, contribute to a more positive working environment for employees, and do not necessarily cost more up-front. VNRC will work this year in

the legislature to adopt LEED standards in Vermont for new construction and renovation of government buildings.

VNRC is also working with Vermont Businesses for Social Responsibility and Efficiency Vermont, our state's own energy efficiency utility, to develop a way for businesses to provide energy efficiency benefits to their employees. Potential benefits that employers could offer include home energy audits, energy efficiency courses, home energy ratings, or energy efficient home appliances. The idea is that investing in energy efficiency in the home offers a return on investment in monthly energy bill savings.

## WEST MOUNTAIN UPDATE

If you live in Vermont, you are part owner of a 22,000 acre parcel of land in the Northeast Kingdom. It's the West Mountain Wildlife Management Area (WMWMA), given as a gift to the state for the purposes of ecological protection.

On October 9, after soliciting public input for over a year, the state of Vermont has issued a draft management plan for WMWMA, wherein protection of rare, threatened, and endangered species and natural areas, guaranteed in the easements attached to WMWMA, falls far short. Over 4,000 acres of identified natural heritage sites have been left unprotected.

WMWMA is part of the 133,000 acres of former Champion International timber land that was purchased by public and private interests to allow for sustainable timber harvest, public access for recre-

ational use, and protection of natural resources. While all 133,000 acres is open for recreational use and 84,000 acres has been set aside for timber harvest, less than 10%, or 12,500 acres of land on WMWMA, has been set aside as a Special Treatment Area (STA) to protect natural resources.

While the creation of this STA is a solid first step towards setting a precedent of protecting ecologically diverse areas on state property, the remaining WMWMA land is slated for heavy-handed management — including over 4,000 acres of critical ecological resources.

WMWMA is a unique hotspot of biodiversity. This boreal-like landscape provides habitat and recreational experiences unmatched in Vermont. 74 rare and uncommon species find refuge on WMWMA. Unlike anywhere else in the state, WMWMA provides the opportunity to protect an unfragmented system of lowlands and uplands that will leave a rich biological legacy to future generations.

VNRC has taken the lead to guarantee that protections are in place for all appropriate resources, and also in assuaging concerns that traditional uses are being threatened, a topic that has dominated the public input process around the state. VNRC is currently engaged in a solution focussed effort to ensure that ecological protection meets the standards of the easement language and that the concerns of hunting and fishing community are addressed.

The final plan will be issued on January 1, 2002, and Vermonters are encouraged to submit written comments before that date to the

Vermont Department of Forests, Parks, and Recreation. For more detailed information, please visit our website at [www.vnrc.org/westmt.htm](http://www.vnrc.org/westmt.htm)

## COALITION ADDRESSES SPRAWL, ENERGY AND WATER QUALITY

VNRC and its partners in the Vermont Fair Tax Coalition are focusing their efforts on changes in state policy which will help curb urban sprawl, promote energy efficiency, and improve water quality.

The Coalition, which also includes Vermont Businesses for Social Responsibility, Vermont Public Interest Research Group and Friends of the Earth and over 40 other businesses and organizations, was formed in 1998 to help Vermont design a tax system which strengthens the economy, cleans up the environment, and is fairer for low-income wage earners.

The Coalition believes that tax shifting — reducing taxes on activities that Vermont wants to encourage, like high quality jobs, and placing taxes on activities we want to discourage, like pollution and waste — is a tool that deserves serious consideration in Vermont.

### Sprawl

In an effort to counter sprawl, the Coalition is working with several other groups interested in strengthening incentives for downtown development. Among these are two tax provisions in pending legislative bills that merit consideration: enabling authority for a land value tax

and exemption from the land gains tax in downtowns.

The land value tax could help spur downtown development by reducing or eliminating taxes on downtown buildings and/or improvements while increasing taxes on vacant downtown land.

The land gains tax was enacted several years ago to discourage speculative land development, primarily in the countryside. Exempting downtown development from the tax could act as a catalyst for development where it is more desirable.

## Energy

Several important renewable energy and efficiency proposals are before the legislature. The list includes:

- *Renewable energy investment tax credit* — Provides a tax credit equal to 60 percent of the total investment in renewable energy systems for five years and a smaller percentage for five additional years.
- *Renewable energy production tax credit* — Offers a tax credit of \$0.02 per kilowatt-hour for energy generated by renewable energy sources.
- *Renewable energy sales tax exemption* — Expands the existing sales tax exemption for materials which are purchased for use in developing off the grid electric systems or solar hot water heater systems to materials for on the grid system projects as well.

- *Comprehensive tax benefits for renewables and efficiency* — Provides a tax credit for investment in renewable energy systems used by farmers, and provides exemptions from: sales tax for certain energy efficient and renewable energy appliances; motor vehicle purchase and use tax; annual registration fees for alternative fuel vehicles.

The Coalition is also interested in advancing a more revenue-neutral energy efficiency proposal called the "clean car incentive". Essentially "gas guzzlers" pay a higher fee associated with the motor vehicle purchase and use tax while "fuel-sippers" receive a rebate. Certain vehicles including those for small business and farm use could be exempted.

## Water Quality

To help improve water quality, the Coalition is recommending the elimination of the sales tax exemption on non-agricultural pesticides and fertilizers. In Vermont, no sales tax is paid on fertilizers and agricultural chemicals, including pesticides, herbicides, and fungicides. Originally designed to provide a subsidy to aid farmers, the exemption extends benefits to commercial lawn applicators, golf courses, ski areas, and industrial interests, as well as to homeowners buying these products off the shelf.

## NEW SEPTIC RULES —PROS AND CONS

The Vermont Agency of Natural Resources (ANR) has proposed two rules that will control onsite septic wastewater disposal systems in the

future. The administration has the authority to promulgate new rules for on-site septic without legislation, and was given the incentive to do when the septic bill, S.27, stalled in House Natural Resources Committee last session. Some of the new administrative changes could have the most far-reaching implications of any land use issue in Vermont.

There are two new rules. The first rule, supported by VNRC, closes the 10+ acre lot exemption in state subdivision regulations by September 1, 2002. State subdivision regulations now allow development on lots of 10 acres or larger with no septic system review. This loophole promotes large-lot, scattered development which eats up land, promotes sprawl, and can create public health hazards when systems fail. These unregulated developments have led to high septic system failure rates and caused ground and surface water pollution.

The second rule calls for a full rewrite of existing regulations. With the exception of closing the 10-acre loophole, also included in Rule 2, VNRC opposes the rewrite as drafted. VNRC agrees with experts who have compared the potential land use impact of these rule changes to the building of the interstate system in Vermont. Vermonters could see the face of the Vermont landscape change drastically by increasing the amount of developable land in Vermont by 50%.

If the administration were to adopt Rule 2, other possible outcomes include:

Vermonters could see the use of alternative septic systems exploited by unleashing several alternative technologies for either general use or for

pilot or experimental use. This use would be based only on the manufacturer's or designer's level of experience with the new product or design, leaving slimmer margins of error in site condition standards, and a scarcity of appropriate oversight.

Vermonters could find themselves facing increased pollution of groundwater and surface water. Rule 2 proposes to lessen site condition requirements when taking into account geological factors. Vermonters could watch sprawl creep its way up mountain-sides. Maximum ground slopes for building (currently limited to 20%) could be increased to 30% or even higher.

Finally, Vermonters could see alternative septic standards used as a primary zoning and planning tool. The planning component in Rule 2 is far too weak to insure that development does not spout up in completely inappropriate places.

As a solution, VNRC believes that any corresponding changes in site conditions be allowed only as pilot projects in designated growth centers and that alternative systems be used only to correct a failed septic system or to allow construction on a previously subdivided lot. After 10 years the results of the pilot should be evaluated to see if wider application of alternative technologies is appropriate.

The Legislative Committee on Administrative Rules (LCAR) will be reviewing the rules in January. If you would like to testify, contact the Legislative Council at 828-2231. For more information, please visit our website at [www.vnrc.org](http://www.vnrc.org) or call us at 802-223-2328.





*From The Ground Up*  
**VERMONT'S  
BASIN-PLANNING INITIATIVE  
COURTS CITIZEN  
LEADERSHIP**

BY WILL LINDNER

**I**t seems hard to believe that the Lamoille River, no mere capillary but a true-blue artery in Vermont's corpus natura, would spring from a leak in little Horse Pond. Located in the hilly reaches of Greensboro, Horse Pond is just a stone's throw from Wheelock, and that's where the nascent river flows, wandering south before reentering Greensboro about a mile downstream. As it tumbles along it gains momentum from small tributaries like Page Brook, Pond and Bailey brooks, so by the time it swings abruptly west a mile or so out of Hardwick, the Lamoille has grown to earn the name "river."

A river it remains as it courses westward through Wolcott, Morrisville, and Johnson, into and out of Cambridge and Fairfax, through Arrowhead Mountain Lake and south into Milton. Finally, having carved its way across the northern portion of the state, it drains into Lake Champlain near Sand Bar State Park, discharging therein the contents of a watershed comprising parts of 37 towns.

But sadly, the Lamoille nowadays isn't the river it was. Hydroelectric dams obstruct the channel in its western reaches. Pipes, powerhouses and spillways sprawl across the now-exposed rocks and blocking the migration of salmon, walleye and the ancient, endangered, lake sturgeon. Particularly, the Peterson dam, a peak-load power facility, plays daily havoc with water levels and temperatures; with its current stymied, the Lamoille frequently violates Vermont's water quality standards for bacteria.

Dams are not the only problem.

"Back around the 1940s farmers were encouraged to basically cut everything right down to the riverbank to gain more land for agriculture, not knowing what the ramifications would be," says fisherman Joe Lane of Stowe, President of the Lamoille River Anglers Association. "Consequently, the stream banks, especially in the Wolcott area, are unstable. There's no vegetation to keep them together."

Agriculture, a bedrock component of Vermont's economy and self-image, has had other ill effects upon the state's waterways. Livestock lumbering into the water to cool off in summer (a practice growing less common) erode streambanks and deposit waste; natural and chemical fertilizers from adjacent fields seep into the river. Siltation and the disappearance of shade trees make for a wider, shal-



*"The problem they are experiencing would have been avoided if the agency had done basin planning in the early 1990s."*

— Kelly Lowry,  
VNRC Water  
Program Director

*"We've done what we could, given the resources we've had."*

— Stephan Syz,  
Chief of Water  
Resource Planning  
at the DEC.

lower and warmer river — bad news for fish and other aquatic organisms.

"The wild fish population in the Lamoille has been decimated over the last 30 years," says Lane. "The only fish it sustains at all are stock fish from the state."

However, hatchery fish compare poorly to wild fish in terms of stamina, conditioning and instinct, and their survival rate through the course of the seasons is low, so the river must be regularly restocked. The fishery is essentially artificial.

"It's a slow process when a river becomes degraded," Lane observes. "It happens over so many years that it's hard to notice, unless you know what you're looking for."

### CATCHING UP

Jim Ryan does know. Ryan is the Department of Environmental Conservation's watershed coordinator for the Lamoille basin (the DEC is a department within the state Agency of Natural Resources). "I have seven or eight impaired reaches within the Lamoille River itself," he reports, adding that tributaries like the Brown's River also are impaired in places.

"Impaired" is an official designation for surface waters that fail to meet Vermont water quality standards. The label is supposed to trigger remedial federal action under the 1972 Clean Water Act. It hasn't happened that way. But as one of three watershed coordinators appointed earlier this year by the DEC, Ryan's job now will be to implement basin planning, a holistic approach to rescuing and restoring the state's 17 watersheds that conservationists consider long-overdue.

As Ryan and the diverse group of citizens he has recruited to form a Lamoille basin council know, cities and suburbia have compounded the damage done by farms and dams. Manicured lawns in housing tracts become nearly as impervious as asphalt to rain and snowmelt, so the runoff flows into the municipal drainage system and gets discharged into the public waterways — herbicides, insecticides and all. Stormwater runoff from streets, malls, and parking lots flushes grease, oil, trash, and other pollutants into our brooks and rivers.

The latter problem came famously to a head last summer when the Vermont Water Resources Board ruled that the Clean Water Act forbade any development activities that would further degrade the officially polluted Potash Brook. The ruling effectively negated a stormwater-discharge permit that Lowe's Home Centers Inc. had obtained for its planned new store in South Burlington. More significantly, it threatened to halt development anywhere in the Potash Brook mini-basin.

The ruling's potential ramifications were greater still, for logic dictated that it would apply to water-

ways all over the state whose capacity to absorb pollution had long since been exceeded. Near panic over this possibility led the state to propose new stormwater rules to address the pollution crisis in the Potash Brook and elsewhere. VNRC will participate in upcoming hearings on the rules, but as Water Program Director Kelly Lowry says, "The problem they are experiencing (with the Lowe's controversy) would have been avoided if the agency had done basin planning in the early 1990s."

Known in the Clean Water Act as Water Quality Management Plans, the idea was for states to design processes for making proactive, watershed-wide decisions about managing and protecting water resources, not by barring every use with a potentially deleterious effect but by studying the river's morphology and balancing negative influences with effective safeguards.

Pristine stretches would be protected as Outstanding Water Resources. The philosophy, says Lowry, is "to protect the best and clean up the rest. The requirement to do basin plans has been there, in the Clean Water Act, for 30 years."

Of course, the ground has shifted under the agency. After the Clean Water Act was passed the initial thrust of remedial efforts, nearly universally among states, was to get untreated human and industrial waste out of the rivers. Federal and state money was available to enable regulators to calculate the assimilative capacity of waterways — their ability to absorb pollutants yet remain in compliance with water-quality standards — and construct municipal treatment plants. Vermont complied with those provisions and successfully reduced such "point-source" pollution.

Which only revealed the many "non-point" sources also at work in the streambeds. Harder to pinpoint and remedy, these problems became the focus of agency attention as it helped develop Vermont's Accepted Agricultural Practices, construction site regulations, silviculture and forestry controls to protect streams, and stormwater rules.

"We've done what we could, given the resources we've had," says Stephan Syz, Chief of Water Resource Planning at the DEC.

But comprehensive basin planning was not among those accomplishments. After the ANR missed a state-imposed January 1, 2000, deadline for drafting management plans, the Legislature instructed the agency to get the work done by January of 2006. The ANR committed itself to that schedule, and VNRC participated in the first stages of the project as Water Program Director Lowry sat on a "Framework Committee" that included stakeholders with a range of interests in the watersheds — agriculture and silviculture representatives, conservationists, ski areas, sports groups, regional planners, state regulators and others. The committee



put forth guidelines to help local basin-planning councils focus their efforts and meet the strictures of the Clean Water Act, and then metamorphosed into a loosely structured Steering Committee, which is now waiting to review the plans that are to be put forth by those watershed councils.

But the councils, it must be noted, hardly exist yet. In only 3 of the 17 basins — the Lamoille, Poultney/Metawee and White River basins — have organizations with a formal relationship to the state coalesced, and only in the White River Basin has a draft basin plan been produced.

### CLEANER AND FEWER

Nevertheless, it is such groups with whom the ANR expects to work when composing the plans.

"We have compiled a list of all the local groups we know of ... and some are groups we've been working with on watershed issues for some time," says Syz.

The extra-added ingredient that Syz believes has the most potential to bring planning to fruition is the DEC's three new watershed coordinators.

"There's no substitute for having qualified people, on the ground in the watersheds, doing good work," says Syz. "For non-point source pollution we need the cooperation of landowners. It's not a bureaucratic exercise as much as a problem-solving exercise at the community level."

VNRC's Lowry sees the merit in that approach, and urges citizens to use their local basin planning councils to push constantly for real improvements.

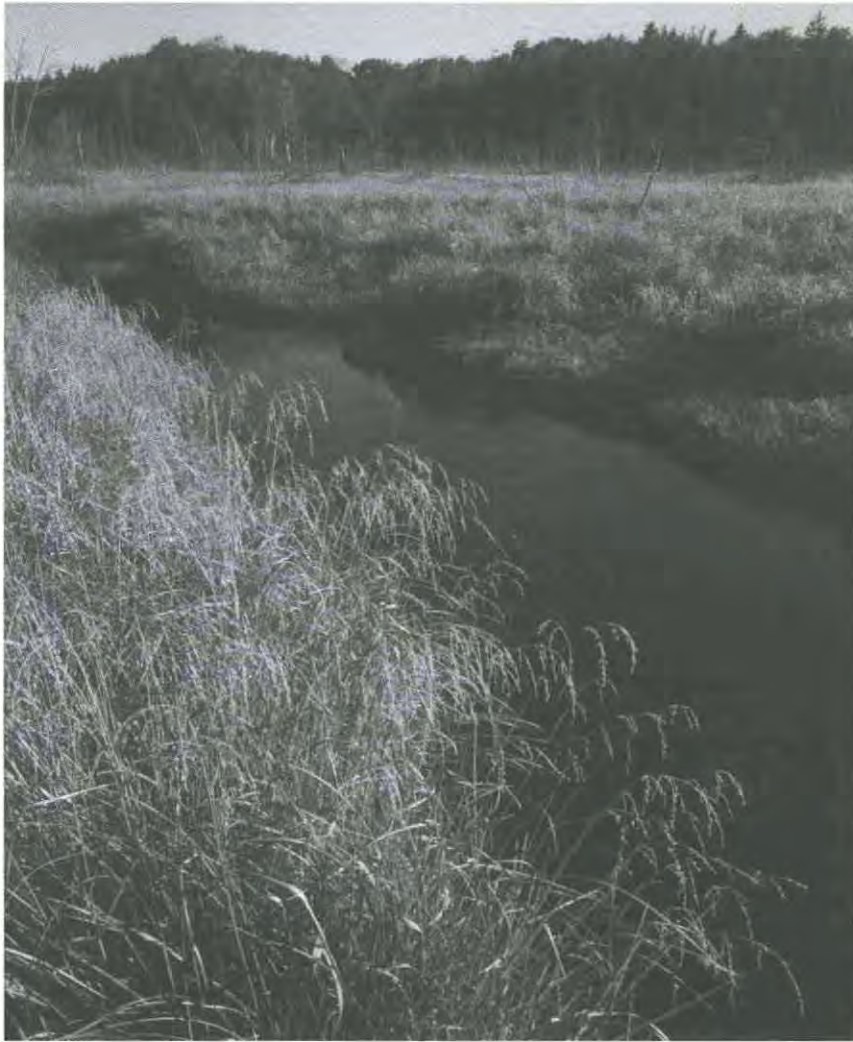
"The paramount goal of the Clean Water Act is to improve our waters," says Lowry. "People must not be satisfied with maintenance of the status quo. The message they need to relay to the agency is to keep ratcheting upward, to manage the waters of the state in such a way that what's in them is healthy, and that the inputs they receive are both cleaner and fewer. Citizen involvement on the basin councils can keep the agency's feet to the fire."

That said, Lowry is also wary of pitfalls in the localized planning process.

"The agency didn't want to be heavy-handed," says Lowry, "and that will be advantageous in many situations because local people know the local issues and can be better suited to influence

*"Citizen involvement on the basin councils can keep the agency's feet to the fire."*

— Kelly Lowry



someone who's causing degradation.

"Still, it's a curious dynamic. The federal regulations are clear about what (must) go into a plan. The agency has chosen to go pretty far on the spectrum of letting local people do most of the planning, but it will be subject to levels of approval from above. This may work well, and it may not. Where action does not follow voluntarily, the agency must step in and require remedial actions wherever they are necessary to fix a problem. This can and should involve enforcement."

### ON THE GROUND

Which brings us back to the Lamoille, where DEC Watershed Coordinator Jim Ryan has taken it upon himself virtually to embody people's concerns about the river and its basin. He works on three parallel tracks:

- At the stream: Ryan assists residents with hands-on restoration projects by bringing his technical know-how and levying whatever state resources might be available; he has been known to walk the streambanks to identify the source of some particular contaminant, then work with the

landowner to try to abate the problem.

- In the community: Speaking at schools and civic organizations, Ryan raises awareness not only of problems in the familiar waters, but of the existence of the watershed as a unit for implementing environmental programs.
- As an organizer: With the statewide Framework Committee having developed guidelines for basin planning, the next step is to find or create local groups to bring the concept down to the ground.

"We started back in the spring recruiting council members," says Ryan. "We sent out a mass mailing and did press releases and radio interviews. We contacted pre-existing groups (Joe Lane's Lamoille River Anglers was one), and in time had a couple dozen or so (people) coming to our monthly meetings."

Among the recruits was Bill Rossmassler of the Lamoille County Regional Planning Commission.

"It's logical that we would be at the table," Rossmassler says. "We're the only entity that has a regional planning perspective, and the watershed is about as regional as you can get. We'll get something out of it too, because we're in the process of updating our regional plan, which will have to consider water resources. This offers an opportunity for us to approach that subject."

Ryan held eight public forums, widely scattered in the watershed, to hear people's thoughts and concerns. The local soil conservation district held three more, focusing on the needs of a working landscape. Ryan's challenge now will be to assimilate this diverse input and work with his incipient council to form the Lamoille Basin Plan.

Watershed participants everywhere agree that the most tender issue looming over the planning process will be the conflicting need of farmers to maximize production on their land and nature's crying need for riverside buffers to protect the waters from those very same agricultural activities.

"If you talk to a biologist they'll tell you that a good buffer zone is six times the width of the river," says Lane. "We know that's not feasible. It would put people out of business. So the object will be to ascertain how wide a zone is realistically achievable and then figure out how to compensate farmers or other landowners fairly for their loss."

If there's a way through this thicket, Ryan says, it will be through human interaction.

"Sometimes I have to play referee," he admits, "but it's good to have all the users of the resource at the table. It can get contentious, but there's less of that now that we meet monthly and relationships begin to develop. 'Okay, now I see your side, but here's our side, and let's put our heads together and work it out.'"

Rossmassler agrees there can be magic in these exchanges.

"If you ask me, I would say that the state's effort (in basin planning) should have been done long ago. But I applaud the agency for the way it has reached out to get broad community input for the statewide framework, and for individual councils to have a similar (inclusive) approach. These watershed councils will not be an interim entity; they'll take on a life of their own and implement the ideas they are helping to identify."

Progress has followed a similar course in the Poultney/Metawee Basin, far south of the Lamoille. But there, Watershed Coordinator Ethan Swift has had advantages over the Lamoille project — the presence of existing entities with track records of success in watershed research and protection, such as the Friends of the Poultney River. Now, the Poultney/Metawee Watershed Partnership — previously established, and with conservation goals of its own — has become a major player in the development of a basin plan.

Plus, Swift's project is bolstered by the presence of Green Mountain College in Poultney, where students can specialize in environmental studies. They provide a cadre of energetic arms, legs, eyes, and ears.

"A class recently undertook a public-attitude survey regarding watershed conservation issues," says Swift. "They're interviewing folks who may be on different sides of several important issues."

These include public access to the river — a subject fraught with property rights concerns, apprehensions about the regulatory implications of basin planning, and people's desire for recreational opportunities. Other issues addressed by the students include wildlife protection, fisheries (temperature fluctuations in the Metawee have crippled a once-vibrant brown trout population), and riverbank stabilization.

The summer and fall were a time for recruiting, organizing, talking and listening, as well as hands-on activities to restore damaged sections of the waterways. But as winter approaches, says Swift, "I'll be putting pen to paper and drafting a preliminary plan that will go out for review among the different cooperators and collaborators here." After incorporating their feedback, Swift hopes to have a plan ready for implementation over a period of two years or so.

"The basin plans are intended to be five-year projects that will be renewed and re-evaluated cyclically," he says. "We're developing a living document, not one to sit on a shelf and collect dust. The more input we have from folks who live in the watershed, the more success we'll have implementing the strategies that are being developed."

## A QUESTION OF SURVIVAL

Criticized by the environmental community for coming late to the basin-planning party, the ANR might be eager for the draft plans to begin arriving from Vermont's watersheds, each one crystallizing a vision for finally protecting and improving the resource. The first out of the gate was the White River Basin, where the DEC watershed coordinator issued a draft basin plan in October. As in the Poultney/Metawee watershed, the state had a leg up on the effort by working with an existent group with a watershed interest. The White River Partnership, based in Rochester, hosted three public forums that brought some 90 residents out of their homes to dip their toes in the state-sponsored basin-planning process.

"Our role was to facilitate citizen participation," says partnership director Amy Sheldon. Established in 1996, the group's mission statement commits it to "help(ing) local communities balance the long-term cultural economic and environmental health of the watershed through active citizen participation."

With that community focus so near the DEC's own basin-planning design, the partnership was a logical choice when the agency came looking for assistance. But the partnership seems a little mystified about the process that so quickly moved from gathering citizen input to distilling it into a draft plan.

"I think it was unclear to both the citizens and the state where they were trying to go," says Sheldon. "Being first was not what we thought it would be. We're not sure who's supposed to be doing what under the state's plan, because we're already addressing riparian planting projects ourselves. We're also working on a proposal for the upper White River that would swap uses of open land. For instance, if a farmer is asked to sacrifice a portion of his hay field to build a buffer zone along the river, he could get hay from some nearby upland meadow."

This is the kind of thinking the DEC wants to encourage. And if there's some confusion at the outset about who's doing what, time and experience are likely to resolve those questions.

Moreover, the partnership's attitude of independence from the state could be an asset. Vermont's faltering economy has dashed Syz's hopes to hire more coordinators to supplement the work of the three he has. The clock is ticking. He has four years to organize 13 more basin councils and write 16 more basin plans. He'll need a boatload of citizen commitment.

"I hope (the program) survives," says Syz. "I really do. One comment I heard at a meeting was, 'We're finally seeing people on the ground out there, solving problems instead of talking about them.' I couldn't share that feeling more."



*The most tender issue looming over the planning process will be the conflicting need of farmers to maximize production on their land and nature's crying need for river-side buffers to protect the waters from those very same agricultural activities.*

# BASIN 'PARTNERS' MARCHING TO THEIR OWN DRUM

BY WILL LINDNER

*"The inter-connectedness of it all was essential to our understanding, before we go off and do our own little town projects. The river is the bottom line."*

— Marty Illick

The Agency of Natural Resources has arrived at a conclusion: To accomplish basin planning in Vermont, it needs the help — and not just the grudging help, but the commitment and steady, reliable involvement — of the state's citizens.

Basin planning isn't just a requirement that the agency has to meet under the federal Clean Water Act, although it is that. It is also an environmental necessity. Our streams, rivers, and brooks are sliding over the edge into official "impairment". In many cases they did the sliding years ago; it just wasn't noticed or recorded at the time.

The Potash Brook controversy last summer changed all that. A major development project was at least temporarily shelved because the environmental community successfully made the case to the Water Resources Board that it would constitute an irrefutable violation of the law to allow additional stormwater discharges into a stream that already had more such discharges than it could handle. In water-quality terms, the Potash was a goner.

But even before that controversy, environmental activists and the state Agency of Natural Resources (ANR) knew that our waters were in deep trouble.

Now the public and the development community know it, too. Yet there are 17 major watersheds in Vermont, each with dozens of tributaries flowing into the central artery; while basin (or watershed) planning is the optimal way not only to remedy, but to prevent, water pollution, the ANR can't be everywhere at once. It needs to team with citizens, acting within the framework of local watershed groups.

In some places the agency's new watershed coordinators are organizing citizens groups to look comprehensively at their basin and learn to act as its stewards. In other places the state is working with existing, sometimes longstanding, watershed groups. And there — surprise, surprise! — it is finding that those groups have minds of their own.

There are 90-some watershed groups active in Vermont. Here are the stories of two of them.

## LEWIS CREEK ASSOCIATION

"We're the donut of Burlington, which is the donut hole," says Marty Illick, meaning no slur against Vermont's Queen City. She's merely describing the cultural lay of the land.

Communities surrounding Burlington face



*Volunteers with the Friends of the Winooski clean up the river.*

intense pressure for residential development, as well as the secondary growth of services to accommodate the new arrivals. It's called sprawl, and nowhere is the pressure greater than in the Champlain Valley, the so-called Banana Belt of Vermont, with its low, rolling hills and seductive views of the lake and the blue Adirondacks beyond.

Resisting this pressure is how the Lewis Creek Association (LCA) got started. In 1990 Illick, a Middlebury native, had settled in Charlotte with her family and was working on the conservation component of the town plan. "I got very sensitized to issues of natural resource planning, because it's beautiful here," she says. In the midst of her work for the town, a proposal surfaced to construct a major housing subdivision near the river in what Illick describes as "a most special part of town, a great place for wildlife."

With others, she set about opposing the subdivision through local permitting processes. She soon heard about people in nearby towns waging campaigns of their own — for a recreation path in Monkton, for public land acquisition in Hinsburg. In time, she received a letter from Andrea Morgante in Hinsburg. "Do you want to think about this stuff in terms of the watershed?," Morgante inquired.

"We said, yes," Illick recalls. "We realized that while we were each working on unique projects, we shared a watershed. The interconnectedness of it all was essential to our understanding, before we go off and do our own little town projects. The river is the bottom line."

Thus was born the Lewis Creek Association, incorporating members from seven towns (Bristol, Starksboro, Monkton, Hinsburg, Huntington, Charlotte and Ferrisburg) within the Lewis Creek sub-watershed, a part of the larger Otter Creek Basin. Now 10 years old, the Association is one of the most active, well-connected, sophisticated and ambitious watershed groups in the state. Its newsletter, *"The Kingfisher,"* describes any number of works-in-progress: water-quality monitoring, planting parties along the streambanks, educational programs to involve local students in remedial projects. In 2000 the LCA created a set of 30 3"x5" waterproof, plastic cards called Animal Tracks of the Northeast, which it sells to raise funds but also gives away to schools and public libraries. Every track can be found somewhere in the dirt or mud in the Lewis Creek Watershed.

The Association has studied the creek exhaustively, and its members know what they are looking for. They know that Lewis Creek runs about 40 miles long when you add in its major tributaries, and that the watershed contains some 52,000 acres and 24 dairy farms. They have calculated the per-animal ratio of cropland available for surface-



*Members of the Lewis Creek Association monitoring water quality.*

disposal of manure, and they know where the phosphorous buildup in the soil is high. They measured ecoli and phosphorous in the waterways for a decade and provided data to the Agency of Natural Resources that got some 13 miles of waters classified as impaired. They know that, even with high ecoli readings, sedimentation is the creek's greatest problem.

The members appreciate how the contours of the land and the threads of the waterways bind them. "If the streambanks are eroding in Starksboro it affects us, the next town over," says Illick. "It's the same with the uplands, the hills away from the river." The human affect upon the land inevitably shows up, one way or another, in the water.

And in the Champlain Valley, that presents a problem.

"We're hugely human-impacted here," Illick explains.

The Otter Creek Basin is not among the first three basin-planning projects that the state has undertaken (though if money for basin planning survives budget cuts, the huge western-Vermont basin could be next in line, thanks in part to the exhaustive data collected there by local volunteers). But this veteran association has had ample contact with the ANR, including receiving grants to plan and evaluate its work and stabilize the organization.

"The agency has great goals," Illick says. "In recent years they've put together goals that closely match ours. We've been fortunate to partner with incredible staff at the agency. We did an interdepartmental project with the state this summer, and it was so exciting! Fish & Wildlife and the DEC (Department of Environmental Conservation) partnered on a water-quality and habitat project. They had made up a protocol for monitoring the health

*The human affect upon the land inevitably shows up, one way or another, in the water.*



*Friends of the Winooski removing trash from the river.*

and condition of the resource, and came to Lewis Creek and said, 'Try it out.' The baseline information will be held by the state and the community, so we could go to the data and make calculations and recommendations that are based in watershed thinking."

Yet despite close working relationships with some ANR staff, Illick expresses reservations about the state's approach to watershed planning. Historically, she says, there has been a bias in favor of agriculture — and the planning process includes an influential role for Natural Resource Conservation Districts (derived from federal soil conservation districts). Illick believes that emphasis is misplaced.

"Those districts are not keeping up with the cultural changes in our state. They don't even think about sprawl."

Illick also believes that the basin planning process gives short shrift to lands away from the water's edge.

"Plant and animal life are huge for us," she says, "but it really does not have a place in the state's basin planning. We spend more than 50 percent of our time on the landscape."

Finally, Illick is wary of politics. The quick attention paid to stormwater rules after the Water Resources Board effectively halted economic development near the Potash Brook in South Burlington revealed, to her thinking, that state government is primarily interested in urban issues.

"The ANR, I believe, has the natural resources

first and foremost in mind," she says, "but they have to follow orders. There's a lot of politics they have to deal with."

"Yes, the economy is important. But what about the rural (areas), where there are fewer people but, who knows, maybe more valuable resources?"

## WHITE RIVER PARTNERSHIP

When the ANR activated its basin-planning initiative early in the year, its Department of Environmental Conservation appointed three "watershed coordinators," who got their feet wet in the Lamoille, the Poultney/Metawee and the White River basins. Their objective was to combine scientific data that the agency had been collecting in each watershed with enthusiastic citizen participation, and come up with a five-year basin-management plan that would remedy water-quality violations, protect healthy parts of the ecosystem, prevent degradation in threatened areas, and be, largely, locally managed.

The White River Basin is a rugged swath of land that cuts east-west through a good chunk of the central portion of the state. It is characterized by narrow valleys, with the White tumbling over the rocks and boulders strewn at the valley floors. In this basin, the DEC teamed up with an existing citizens group with a watershed focus, the Rochester-based White River Partnership. The result was Vermont's first, draft, basin-management plan, published in October and distributed for public review and comment.

The plan represents a milestone for the agency, which has been under regulatory and popular pressure to produce federally mandated plans for all 17 Vermont watersheds. (It should be noted, however, that over the years Montpelier has not been forthcoming with the funding necessary for such a huge and comprehensive effort).

But there's a fly in the ointment with this first, breakthrough plan: The White River Partnership (WRP) doesn't seem to be all that interested in it.

"I haven't read the basin plan yet," says Tom Honigford, an organic vegetable farmer from South Royalton who was a founding member of the group in 1996 and in early November, became its immediate past president. "Maybe that speaks volumes in itself." (A quick check confirms he's not the only member of the leadership that hasn't read the plan.) "I'm not sure how the basin plan pertains to me — not an agency person, not a hardcore environmentalist, just the (average Joe) living in the watershed."

The indifference with which the plan was greeted, at least in some quarters, must be frustrating to the agency. Government representatives have been there for the Partnership even before basin plan-



*Students from Central Valley Union use Lewis Creek as their lab.*

ning was instituted. People from the ANR, the soil conservation district, and the US Fish & Wildlife Service have attended meetings of the Partnership and, in Honigford's words, "become valued members of our group." The USFW's Partners For Wildlife program has helped farmers meet conservation requirements, and the service also funded a tree-planting program to stabilize precarious streambanks.

But Honigford and the WRP's lead staff person Amy Sheldon believe the agency saw the Partnership as a shortcut for reaching the watershed's citizens. The WRP agreed to host three public meetings to help the agency in its outreach efforts, but it balks at too close an identification with the state and its plan.

"From my perspective," says Honigford, "they were trying to get us to be the voice of the watershed. But we're only the voice of the Partnership — one voice in the basin."

What's really going on is that the WRP is up to its waders in its own work, and it does not plan to be distracted by the state's effort. Nor does it identify itself strictly in classic environmentalist terms.

"We're about culture," Honigford says thoughtfully. "It's hard to define what culture is, but what we're not interested in is

looking like the Burlington area. Here, the fishery's declining, there's erosion and unstable banks, and people are losing property. We're trying to get people into the idea that we all live in this valley, and how can we keep it the way we like it, the way it has been?"

To that end, the Partnership is guided by practicality.

"We have realized that we can't get people to change long-term behaviors unless we watch out for their economic health. So we draw a line that says, 'This (practice) is acceptable because these people need to make a living.'"

Yet the Partnership does try to help people reduce their negative impact on the basin's natural resources. Honigford uses himself as an example.

"I pump water out of the river for irrigation," he says. "The hard-core environmentalist would say 'No way.' But the Partnership might say, 'He needs water; it's a resource for him. Is there any way we could work with him to lessen his water usage, for an approach that's better for him and better for the environment?'"

"That's our approach," Honigford says. "We're trying to balance those things in the Partnership."

Which is not to say that the WRP's philosophy clashes with the state's.

"I don't want to come across pooh-poohing the state's effort, or being against them, or seeing them as the competition," Honigford stresses. "I guess it's just that we spent a long time developing our organization, talking about how it's going to work, and getting people in. We wrote a business plan. We know what we want to do. Now the state says, 'We're going to develop a basin plan.' We look at their plan and say, 'So what? We have a plan.'"

"Maybe," Honigford concludes, "they should have taken the opposite approach. Maybe they should have gone to a watershed without an active group working in it."

There are 16 more basin plans to write. It's a sure bet the agency will have ample opportunity to try that approach as well.



*Tree planting to help with erosion problems*

*"Here, the fishery's declining, there's erosion and unstable banks, and people are losing property. We're trying to get people into the idea that we all live in this valley, and how can we keep it the way we like it, the way it has been?"*

**— Tom Honigford**

# The Land Use - Property Tax Connection: WHAT'S THE LATEST SINCE ACT 60?

BY DEB BRIGHTON & STEPHEN HOLMES

If you're a municipal official weighing the pros and cons of new land development proposals in your community or a taxpayer struggling with your property tax bill, have you wondered about how local decisions about the use of land will affect your community's tax base?

If so, you may be interested in a new study to be published early in 2002 by the Vermont Natural Resources Council (VNRC) and the Vermont League of Cities and Towns (VLCT). "Property Taxes and Land Use Decisions", co-authored by Deb Brighton and Brenda Hausauer updates the 1990 joint study by the two organizations called "*The Tax Base and the Tax Bill*".

Since the passage of Act 60 in 1997, VLCT and VNRC have recognized that there are many questions and a degree of uncertainty about the relationship between land use decisions and property taxes. The project partners believe that town officials and interested citizens will be able to make better decisions if they have better information. With assistance from an EPA Livable Communities Grant and the Vermont Community Foundation, VLCT and VNRC have cooperatively undertaken this project to bring local officials more information on the tax implications of growth and land conservation. The study will be accompanied by a workbook to help in the review of the fiscal and other community impacts of development.

The study examines the relationship between the municipal tax bill on the average-value house in each Vermont town and various characteristics of the town. The school tax is not considered because, as a result of Act 60, school tax rates do not depend on the tax base, but rather on the district's per-pupil spending.

## Summary of findings

- ◆ The municipal tax bill on the average value house is higher, on average, in the Vermont towns that:
  - Have the most year-round residents
  - Have the largest tax bases
  - Have the most commercial and industrial taxable property
- ◆ The municipal tax bill on the average-value house is lower, on average, in the Vermont towns that:
  - Have a greater proportion vacation property making up their tax base
  - Have fewer residents
  - Have smaller tax bases
  - Have less commercial and industrial taxable property
- ◆ There is a greater range from town to town in the tax bill on the average-value house now than there was a decade ago. The towns in which the municipal tax bill increased the most in the last decade were:
  - Likely to be larger, both in terms of population and tax base, at the beginning of the decade.
  - Likely to be categorized as "traditional centers" or "new growth" according to the Vermont Forum on Sprawl definitions.
- ◆ In the past decade, the taxable value of commercial property in Vermont increased by about \$32,000 for each new resident. However, this was not distributed evenly. The towns that lost commercial property value, or which gained a below-average amount of commercial property value per new resident, were more likely to see large increases in the tax bills. The towns that gained a higher-than-average amount of commercial property value per new resident were more likely to see small increases in their tax bills.

- While the towns that experienced the most growth in commercial tax base (as opposed to growth per capita) were likely to have the smallest increase in tax rates. This did not hold true for tax bills because the market value of property tended to increase in these towns as well.

## Summary of Conclusions

In general, towns with more development have higher tax bills. However, not every development will increase taxes, at least not immediately.

Taken to the extreme, the obvious way to lower taxes is to make sure there are no people to serve, or to lure commercial development away from the neighboring town so that the employees don't move with it. But these are neither possible nor desirable planning goals. A more realistic goal would be to maintain balance between different types of land uses.

The main conclusion of this study is that property taxes should not drive land use planning. When planning for a town's future, property taxes are just one of many concerns. Most communities strive to create a prosperous and healthy environment in which to raise the next generation—not solely to maintain low tax rates. The challenge when evaluating planning options is to strike a balance between what improves the community, what is responsible, and what taxpayers can afford. The study and the accompanying workbook are designed to clear up some of the myths and mystery so that townspeople can make more informed decisions.

## WINTER WORKSHOPS

VLCT and VNRC will be holding workshops this winter with regional planning commissions and communities to explain the results of the study. For more information please contact Steve Holmes at VNRC 223-2328 or [sholmes@vnrc.org](mailto:sholmes@vnrc.org).

# BURLINGTON TAKES LEAD IN CLIMATE ACTION CAMPAIGN

BY MARY SULLIVAN

**D**etermined to reduce the greenhouse gas emissions in the Greater Burlington area by at least 10 percent, the Alliance for Climate Action (ACA) will be launching the Ten Percent Challenge sometime in early 2002.

Tom Buckley, chair of ACA and manager of Customer & Energy Services at the Burlington Electric Department, said, "The Ten Percent Challenge campaign will ask every business and every individual around Burlington to change the way they run their everyday lives enough so that they are reducing the greenhouse gas emissions they generate by at least 10 percent. Many businesses have discovered that such behavioral changes often improve their bottom line as well as the environment."

The ACA has done significant groundwork to get such a campaign underway. In 1996, the city of Burlington recognized the threat posed by increasingly rapid climate change and joined the "Cities for Climate Protection," a campaign organized by the International Council For Local Environmental Initiatives (ICLEI). In the spring of 1997, Mayor Peter Clavelle formed the Burlington Climate Protection Task Force and charged it with developing an action plan to achieve the city's goal. In May of 2000, the City Council adopted the Climate Action Plan developed by the task force. A main component of this plan is the Ten Percent Challenge, a public outreach campaign that will reach to all areas of the community. The goal of this effort is to heighten awareness of the climate change issue in the general public and to help citizens integrate climate-friendly behaviors into their daily lives.

## 10% Challenge ALLIANCE FOR CLIMATE ACTION

The Ten Percent Challenge campaign will enlist Burlington's homeowners, businesses, government and schools to join in the fight for lower emissions of greenhouse gases. It will empower Burlington's citizens so that they have the information, tools and support to reduce their greenhouse gas emissions, both at home and at work. It will document the progress of Burlington's community effort to reduce emissions. It will use a common platform across which these actions might be recognized, tracked and reported to the community.

Anyone who lives or works in Burlington will be invited to take these five steps to become a participant in the Ten Percent Challenge.

**I. Enrollment:** Participants sign up to take the Ten Percent Challenge.

**II. Estimate Emissions:** Participants use a carbon emissions calculator developed with the assistance of the U.S. Environmental Protection Agency (EPA) to determine the annual greenhouse gas emissions that occur in the operation of their homes and businesses, their transportation and their management of solid waste.

**III. Select Actions:** Participants choose actions that they agree to take to reduce their annual emissions.

**IV. Report Progress:** Participants identify:

- A. Actions completed
- B. Problems encountered

**V. Retest:** Participants will agree to reuse the EPA carbon emissions calculator at a later date to determine their progress toward achieving the Ten Percent Challenge.

The Campaign will develop methods of measuring the community's progress towards its greenhouse gas reduction goals. In addition, it will provide recognition for those who participate.

The Alliance for Climate Action is made up of a group of governmental entities, nonprofit groups and individuals. The progress ACA has made so far in quantifying the emissions of the area and establishing a plan to reduce them places the group in the forefront nationally of trying to combat global warming at a local level. ACA has received grants from several foundations and support and money from the U.S. Environmental Protection Agency and the U.S. Department of Energy.

For more information on ACA or the Ten Percent Challenge, please contact Deb Sachs ([dsachs@ccrpevt.org](mailto:dsachs@ccrpevt.org)) at the Chittenden County Regional Planning Commission: 802-872-1600, ext. 105.

*Mary Sullivan is a marketing specialist at the Burlington Electric Department.*

## WELCOME JAY!

Jay Stewart is a recent graduate of Vermont Law School in South Royalton. A transplant from Wyoming, Jay was able to find the time to have fun in law school and as a result fell in love with Vermont. He now finds himself in the enviable position of



Jay Stewart

fulfilling the Vermont clerkship requirement with VNRC.

As a law clerk Jay is working with Kelly Lowry on a variety of issues around the state. Notable among these projects will be the reclassification of Vermont's finest wetlands which are in danger from draining, development, and degradation due to inadequate state protection. It will be a continuation of VNRC's successful argument and strategy that won Class One protection for the Northshore Wetland in Burlington, now one of only two wetlands afforded such classification. Jay will also be working to revise VNRC's petition to assert that Vermont's last free-flowing river systems, the Nulhegan and Paul Stream basins, be protected and maintained as

Outstanding Resource Waters.

Jay lives in Montpelier where he loves cycling the many hills and beautiful river valleys that surround the town and make it such a wonderful place to live. He can also be seen unicycling on the trails and dangerous roads around Hubbard Park on the weekends when weather permits.

## CHECK OUT VNRC'S IMPROVED WEBSITE

We've been working hard to improve our website so that it can be the resource VNRC members and activists need and deserve! Extra consideration has been given to the Take Action! section of the website to provide people with recent editorials, news alerts, and legislative updates. We also have established links to other relevant sites, such as a link to the Vermont Agency of Natural Resources, so that you can get more information or download the latest draft of the West Mountain Wildlife Management Area. You can also find the schedules of public meetings in your area, and information about ways you can become more involved with issues that are important to you.

A comment section is also provided. If you have any questions or comments about the website or the work VNRC is doing, hop on-line! VNRC's address is [www.vnrc.org](http://www.vnrc.org).



## ALEX STAYS ON!

For the next six months, Alex Metcalf, this summer's Molly Beattie Intern, will be working at the VNRC office improving VNRC's in-house GIS and assisting Kim Kendall with various environmental science projects. This will include researching wetland classification upgrades, continuing to work for the removal of Jackson Dam in Hardwick, and meeting the mapping needs of all three programs. In addition, during the legislative session Alex will be working with VNRC staff to increase VNRC's influence in the statehouse. By providing a constant presence in committee rooms, researching legislation, tracking bills, and increasing communication among staff, members, and activists, Alex will be working to make the 2002 session a success for both Vermont's environment and economy.

## VNRC'S BULLETIN IS COMING SOON

Are you curious about what's on the agenda for the upcoming legislative session? Keep an eye out for VNRC's *Legislative Bulletin*. The *Bulletin* will be arriving in early January, and it will provide you with information about environmental issues which will be debated during this year's session. VNRC is hoping that the more we inform members and activists, the more comfortable people will feel testifying at the State House or calling their local representative.

## FAREWELL JOB

VNRC is sorry to announce the departure of Forest & Biodiversity Program Director Job Heintz. Job left VNRC in September to pursue international work stemming from his efforts with Pro Public, a nonprofit organization in Nepal which Job co-founded. We wish Job the best of luck!



Job Heintz

## JOIN THE EARTH CHARTER ON TOWN MEETING DAY

A charter is a document which sets forth the aims and principles of a united group. For over a decade, groups throughout the world have worked to create an Earth Charter which proclaims that we share responsibility for the present and future well-being of the human family and the larger living world (see <http://www.earthcharter.org>).

VNRC proudly supports the Earth Charter, and encourages you to help spread the word throughout the state at Town Meeting Day.

You can help by circulating a petition to get the Earth



Charter onto your community's Town Meeting agenda for endorsement next spring. Most petitions are due into the town clerk's office sometime in December — for most of us it's not too late!

The Town Meeting endorsements will go to the General Assembly of the United Nations in September 2002.

For more information, petitions, brochures, and/or a copy of a videotape available for cable access, contact Gwendolyn Hallsmith at (802) 454-7829 or ghs@innevi.com.

## MATTEO BURANI JOINS VNRC!

Matteo Burani has taken the Outreach Coordinator position at VNRC! Patrick Berry, who previously oversaw outreach efforts at VNRC, will now be focusing more on year-round legislative and communications work.

Matteo has been working as Vermont Outreach Coordinator with the Northern Forest Alliance for three years and prior to that worked as the Northeast Field Organizer for the Center for Environmental Citizenship.

Matteo came to Vermont in 1993 to attend the University of Vermont where he double-majored in Environmental Studies and Political Science and got his first taste of activism organizing for the Rainforest Action Network.

Matteo lives in a solar powered home in Worcester and enjoys cooking, gardening, backcountry skiing, fly fishing and mountaineering.



*Matteo Burani*

## NOFA CONFERENCE ANNOUNCEMENT!

The Northeast Organic Farming Association of Vermont is holding a Winter Conference on Saturday, February 16th, 2002 at the Vermont Technical College in Randolph, Vermont.

NOFA is a diverse organization working to promote an economically viable and ecologically sound Vermont food system. Each year the Winter Conference provides an opportunity for people to gather and share stories and ideas.

John Elder, writer and Stewart Professor of English and Environmental Studies at Middlebury College, has been invited to give the keynote address this year. In addition to the keynote, there will be over 30 workshops offered, including: backyard composting, small fruit production, alternative energies, and community supported agriculture.

For more information visit [www.nofavt.org](http://www.nofavt.org) or call 434-4122.

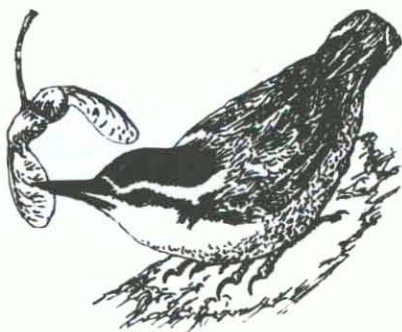
## VNRC COMMENTS POSTED

Curious about what VNRC thinks of the Draft Management Plan for the West Mountain Wildlife Management Area? Or maybe you wonder what we think about the Draft Basin Plan for the White River Basin? Check out the comments we submitted to the Agency of Natural Resources, now posted on our website at <http://www.vnrc.org/action.htm>, and contact the agency to let them know what you think!

## NEW BOARD MEMBERS ELECTED

In September, VNRC held the annual meeting at Shelburne Farms, and 4 new board members were sworn in. Please help us welcome Stark Biddle—Rutland County, Terry Ehrich—Bennington County, Dick Munro—Windsor County, and John Nutting—Washington County. For a brief biography of the new members, please call Jimmy at the VNRC office (802-223-2328) or go on-line to the VNRC website ([www.vnrc.org](http://www.vnrc.org)).

VNRC would also like to thank board members who stepped down in September for their years of service and dedication. Please join us in thanking Gail Byers-Freidin, Rus Janis, and Carolyn Kehler. VNRC board members put in an enormous amount of time and energy into the organization, and VNRC would not be the organization it is today without their efforts. Thank you!



**"Community Strategies for Watershed Protection"  
Training Session for Community Leaders  
April 2002**

The Association of Vermont Conservation Commissions empowers conservation commissions in their stewardship of Vermont's natural resources. Call us at 802/223-5527 for more information.

**Subscribe to our newsletter, *The Seedling*, for \$25/year.**

AVCC, 114 Sparrow Rd., Adamant, VT 05640

## **The Sand Bar Inn**

*Lakefront Dining & Lodging  
Marina ~ Dockage ~ Rentals  
Special Event Catering*

~

*Dining Wed-Sun 5pm ~ 9pm  
Saloon Nightly 4pm ~ Close*

*Call for Reservations*  
**802-372-6911**

59 U.S. Rt. 2 South Hero, Vermont 05486  
sandbarinn@aol.com

• Experiential Academics • Challenge • Work • Service • Community •

Commitment • Sustainability • Awareness • Adventure • Leadership • Solutions • Internships

*Looking for a college that combines interdisciplinary academics with hands-on experiences?*



Our motto—*Working Hands ♦ Working Minds*—speaks for itself. We integrate research and discussion, field programs, culture and history, and the dynamics of human relations in a learning environment that combines solid academics with experiential learning. Our B.A. programs include Outdoor Education and Leadership, Sustainable Agriculture, and Wildlands Ecology and Management. Students may also self-design their B.A. degree.

## Sterling College

WORKING HANDS ♦ WORKING MINDS

P.O. Box 72 Craftsbury Common, Vermont 05827

To learn more about our innovative programs contact us.

1-800-648-3591 • 802-586-7711

[www.sterlingcollege.edu](http://www.sterlingcollege.edu) • [admissions@sterlingcollege.edu](mailto:admissions@sterlingcollege.edu)

Commitment • Sustainability • Awareness • Adventure • Leadership • Solutions • Internships

• Field Programs • Interdisciplinary Studies • Stewardship • Knowledge •



## UNITING FAMILY FARMS WITH THE OLD-WORLD ART OF CHEESEMAKING

GOATS' MILK: CHÈVRE • IMPASTATA • FONTINA • BONNE-BOUCHE  
CHEVRIER • FETA

COWS' MILK: CRÈME FRAICHE • MASCARPONE • FROMAGE BLANC  
QUARK • CULTURED BUTTER

WEBSTERVILLE, VERMONT

800-884-6287

# HEADS UP!



## VNRC CAN ONLY CONTINUE TO PROTECT VERMONT WITH YOUR HELP — JOIN VNRC!

**W**e have a \$20 introductory rate, with a regular membership of \$35. Besides helping the leading statewide environmental group preserve Vermont's valuable resources, your membership includes:

- Invitations to local events and meetings
- VNRC publications: two issues of the *Vermont Environmental Report* and three issues of the *Bulletin* annually.
- Access to environmental information and resources
- Opportunity to participate in writing letters to the editor, talking to legislators, testifying at public hearings

Name \_\_\_\_\_

Address \_\_\_\_\_

Town \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

*For more information, call Stephanie Mueller  
at (802) 223-2328.*

**Call us at (802) 223-2328 in Montpelier  
or (802) 864-9600 in Burlington.**

*Please return this form to:*  
VNRC, 9 Bailey Avenue, Montpelier, VT 05602  
E-mail: VNRC@together.net

# GREENSBORO GARAGE



Quality Sales and Service  
for Over 20 Years

[www.greensborogarage.com](http://www.greensborogarage.com)

Main Street  
Greensboro, VT 05841  
533-2221 533-7110

Route 15  
Hardwick, VT 05843  
472-6555

"Imported Cars Are Not Foreign To Us"

## Knoll Farm



### In the Mad River Valley

The first farm in the Mad River Valley,  
conserved with permanent  
easement restrictions through the  
Vermont Land Trust.

There are now more than 6,000 acres  
of farm and forest land,  
wildlife habitat, and recreational areas  
protected in the Valley.

Knoll Farm, Fayston, VT 05673



Telemark • Backcountry  
Touring • Racing Ski Gear

Karhu USA 30 Main St Ste 430  
Burlington, VT 05401 [karhu.com](http://karhu.com)



# GLOBAL RESOURCE OPTIONS

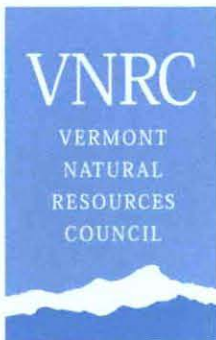
 Solar  Wind  Energy Solutions

Go Solar

Call Global

Photovoltaics Solar Hot Water  
Wind Turbines Hydroelectric  
Commercial Power  
Green Building Design Consulting  
Energy Saving Lighting Appliances  
Mobil, Temporary & Festival Power  
Site Assessment Backup Power  
Sustainability Audits Education  
Power Systems Installation  
Residential Power  
Remote Sites Parks  
Building Integrated Photovoltaics  
Urban Sites Remote Water Pumping  
Green Power

800-374-4494  
Strafford, Vermont

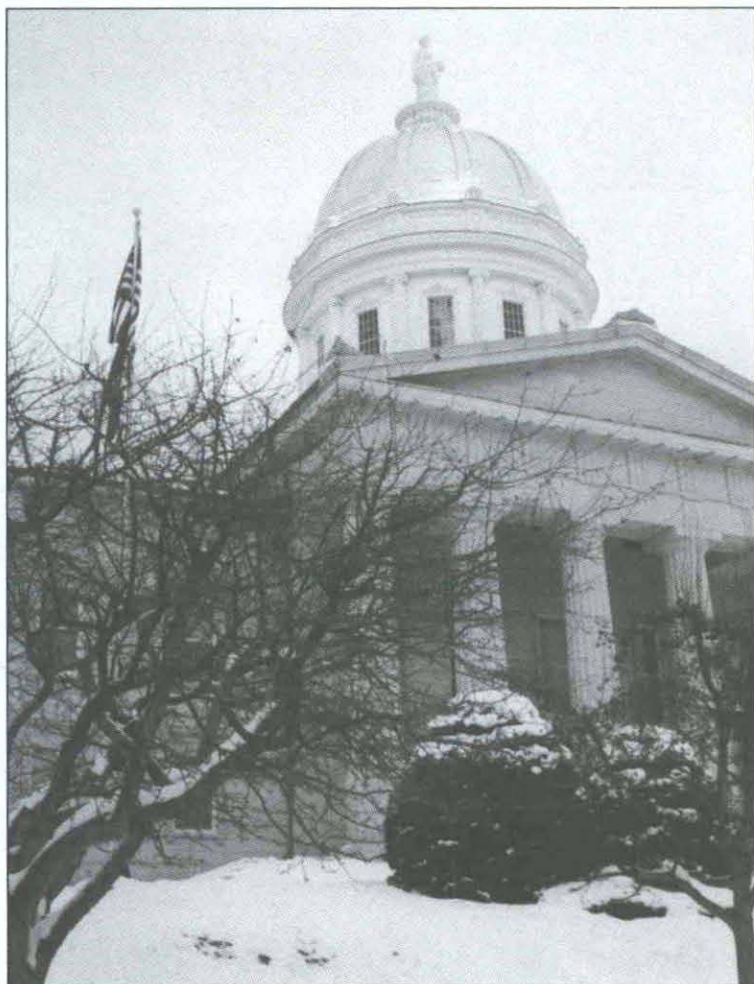


VERMONT NATURAL  
RESOURCES COUNCIL  
9 BAILEY AVENUE  
MONTPELIER VT 05602

E-mail: [VNRC@together.net](mailto:VNRC@together.net)  
Web: [www.vnrc.org](http://www.vnrc.org)

Non-Profit Org.  
U.S. Postage  
PAID  
E. Barre, VT  
Permit No. 2

The *Vermont Environmental Report* is printed on recycled paper with soy-based ink.  
*Please recycle this issue by sharing it with your family and friends!*



## THIS HOUSE IS YOUR HOUSE

**T**he upcoming Legislative Session may prove to be tough on the environment. If you find that decisions are being made which are not consistent with your values, please remember one very important thing: the State House is your house too!

Vermont's legislative body is comprised of citizen legislators. They are not full-time politicians. They are teachers, nurses, carpenters, etc. Legislators were elected to represent their constituents — and that's you. They want and need to hear from you. If you feel strongly about an issue, please, let them know. Your input is critical.

The pre-legislative rhetoric is pointing towards a difficult upcoming session on issues such as water quality and land management. Many of these issues affect not only the environment, but the quality of our health and the economy. VNRC will be at the State House every day the legislature is in session, but we can't do it alone.

Call us for your legislator's address or phone number. Drop him/her a line about how you feel. Testify about an issue important to you.