

# Vermont Environmental Report

PUBLISHED MONTHLY BY THE VERMONT NATURAL RESOURCES COUNCIL, A NON-PROFIT CITIZENS' CONSERVATION ORGANIZATION SUPPORTED BY MEMBERSHIP DUES AND CONTRIBUTIONS. VNRC, 26 STATE STREET, MONTPELIER -- VERMONT, 05602; (802) 223-2328. CHAIRMAN: DAVID R. MARVIN; EXECUTIVE DIRECTOR: SEWARD WEBER; EDITOR: NAT FROTHINGHAM.

## Vermont Utilities Are Buying Into Out-of-State Nuclear Installations

Despite the passage of H.127, a landmark piece of legislation in the 1975 General Assembly that calls for legislative approval prior to the further construction of nuclear power plants IN Vermont, it appears that investments by major public utility companies in nuclear power generating facilities beyond Vermont's borders is committing the State to a future that is heavily dependent on nuclear power.

This is the word from Gordon Stensrud, Chief Engineer at the Vermont Public Service Board in Montpelier.

According to Stensrud, Vermont utility companies are looking ahead to provide for the additional 70 megawatts of additional electrical energy that they estimate will be needed in the State by 1982. Stensrud says that no new generating stations of any kind are presently being contemplated inside Vermont. But there is construction going on elsewhere, in Maine, in Massachusetts, in New Hampshire, and Vermont utilities are buying into nuclear power plants going up in these states.

The total peak demand for electricity in the highest day of electrical usage last winter in Vermont was 757 megawatts, a record. Here is how the nuclear contribution to Vermont's total energy demands works out. Vermont's only nuclear power plant, Vermont Yankee, contributes 283 megawatts. In

addition, Vermont receives 6 megawatts of electrical power from Rowe Yankee in Massachusetts, 11 megawatts from Connecticut Yankee, and 14 megawatts from Maine Yankee. These are all nuclear power plants and the sum total for all nuclear power contributions to the total demand is 314 megawatts. The balance of Vermont electrical needs is supplied by other sources of power, in-state hydro-power, hydro-power from the Power Authority of the State of New York (PASNY) and various other smaller sources.

These are the financial commitments that have already been made to the construction of out-of-state nuclear power plants by Vermont utility companies. Vermont has bought into Pilgrim II in Plymouth, Massachusetts. Pilgrim II is scheduled to "go on line" late in the summer of 1982. Vermont's share of Pilgrim II will be 26 megawatts. Vermont has bought into the Seabrook, New Hampshire installations, Seabrook I and Seabrook II. Seabrook I is scheduled to go on line in the summer of 1981, netting 24 megawatts for Vermont. Seabrook II is scheduled to go on line in the summer of 1983, and will yield a further 24 megawatts to Vermont. There is no pressure at present to build additional nuclear generating facilities in Vermont, not at least, says Stensrud, until Vermont Yankee's full generating capabilities have been exploited, and these capabilities are not at present being fully employed.



## utilities...

Stensrud estimates that Vermont utility companies are spending large sums of money to finance the construction of nuclear power plants beyond the State's borders. He says that our reliance on nuclear power

is increasing. The Central Vermont Public Service Corporation (CVPS) has already committed \$86 million over a 12-year period to help finance the construction of nuclear generating installations in neighboring New England states.

## referendums:

### CONTROLS ON NUCLEAR POWER GO DOWN TO DEFEAT IN SIX STATES

### BOTTLE BILL PASSES IN MAINE AND MICHIGAN, FAILS IN MASSACHUSETTS AND COLORADO

As part of the elections on November 2nd, there were six states that held referendums on proposed restrictions on the development of nuclear power. In all six states, Ohio, Montana, Colorado, Washington, Oregon, and Arizona, the proposed restrictions went down to defeat. Pro-nuclear advocates hailed the results as a dramatic popular endorsement of nuclear power. In Ohio alone, the nuclear and electric industries spent a total of one billion dollars, 25 times the funds available to supporters of the referendum, to kill the restrictive proposals.

In another series of referendums, proposals to institute mandatory deposits of five cents or more on beverage containers were approved by voters in Maine and Michigan, but failed to gain voter endorsement in Massachusetts and Colorado. Oregon adopted a mandatory deposit system for bottles and cans in 1972; Vermont followed suit in 1973. According to reports from Maine, the bottle and can industry and allied interests spent \$300,000 to defeat the bottle bill, compared to less than \$25,000 spent by advocates of the measure. The vote in Maine gave overwhelming approval to a mandatory deposit system: 234,649 in favor; 172,748 opposed. An effort to get national legislation on returnable cans and bottles has failed in the U.S. Congress, but a recent order by the federal Environmental Protection Agency will call for mandatory deposits at all federal facilities no later than July, 1977.

# Do We Need a GEOLOGIST?

"Geology is the science that deals with the physical history of the earth, the rocks of which it is composed, and the physical changes which the earth has undergone and is undergoing."

--Random House Dictionary of the English Language

The future of Geology as a discipline, a science, that might contribute to our understanding of the land and our management of the State's natural resources hangs by a slender thread. That slender thread is embodied in the person of Charles Ratte (pronounced Ratay), Vermont's Interim State Geologist.

Ratte took over as Interim State Geologist on September 7th. He is responding to the extremely mo-

dest commitment by the State of Vermont for this Fiscal Year, no more than \$15,000, the entire budget allotment for the Office of the State Geologist, salaries, office expenses, everything.

Charles Ratte wants to change this. He is looking for a firm commitment to the Office of the State Geologist. He is an ardent spokesman for his science, its important role, and for the applications of his discipline to the State's environmental problems.



## state geologist...

When he was hired, he was told by Environmental Secretary, Martin Johnson, "We need a Geologist because everything we do is either attempting to hide things under the ground or get things out of the ground."

Ratte goes on to explain. "In solid waste, you are dealing with a search for a site with the least effect on ground water. This is the test for a geologic engineer." And the State has never had a permanent geologist in this field.

Or take the problem of maintaining pure water. The geologist, as Ratte points out, understands the soil, the sediment that sits on top of the bedrock. Ratte sees a serious problem in the contamination of ground water supplies. Some of these problems are due to fertilization, to plowed land, to rapid erosion and siltation, to construction on the flood plain. Problems of water supply contamination are cropping up in places like North Troy, Vermont, near the Canadian border. There are problems with septic systems and leach fields that are contaminating the water supplies of Rutland from second homes in Killington and Pico that were built too rapidly and without central sewage disposal systems. If a thorough geologic investigation had been conducted, these problems, Ratte believes, could have been recognized early.

This is how Ratte sees his role as State Geologist. He would be similar to a consultant. His services would be available to the State, they would be available to local communities. A local planning board, a board of selectmen, might wish to find out why its water supplies were diminishing in quantity and quality, and what to do about it, or how to recognize, catalogue, and deal with other earth resources. The State Geologist could advise on the search for suitable landfill sites for solid waste. A State Geologist would be available as a consultant to mining companies concerning a search for additional resources, the interpretation of Vermont law regarding mineral rights, and land reclamation.

"What about mining? Would Charles Ratte promote mining in Vermont?" Ratte is cautious. "I would

promote mining, yes. I sympathize with those people who oppose any mining. We have to be careful that mining will not leave a scar or violate these people's rights and pleasures."

Ratte is cautious because he is unwilling to give a blank check to mining enterprises. He sees the final judgement of whether or not to mine as a local decision. A State Geologist could give his informed opinion. "Any disturbance," he says, measuring his words carefully, "would have to be reclaimed." And Ratte admits openly that the nature of the art of reclamation is somewhat suspect.

On the other hand, Ratte insists that mining is one of Vermont's basic economic pursuits. He believes that modern mining can reclaim the scars it produces. It will add to the cost of consumer goods, inevitably, but the land can be reclaimed, and a State Geologist would be there to see that the job was done right.

Ratte is not content to sit on his hands and accept the status quo. He talks about Vermont's rock products, its granite and marble. "We have not tapped all the stone and metallic resources in the State. I would try to employ more modern techniques in the search for products: chemical methods, geophysical methods, and the use of the gravity survey."

Ratte hopes that the Legislature will see the logic of the contribution that a State Geologist's Office can make to land use management decisions and to the development of the State's extractive industries. Ratte will be on the spot during the 1977 Session. It will be his job to justify the modest expenditure that the State is presently making to the State Geologist's Office. It is his hope that the Legislature will take steps, however modest, to improve the present situation. Ratte sees the job as much more than a comfortable sinecure, much more than sending out sets of rocks to the interested amateur, or of providing a convenient link to the academic world. Ratte, in fact, sees the science of Geology as a discipline that underlies all resource management. He is softspoken. Yet he would be uncomprehending of a State that had the foresight and intelligence to enact a land use development and planning law that couldn't exercise those same qualities of perception in seeing the needs that a State Geologist could answer.



# 208: 208: 208: 208: 208: 208: 208: Who Cares about Sewage Treatment??

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Roger Allbee, the newly-appointed Project Director of Vermont's "208" Water Quality Planning Program, is a gentle, candid figure as he talks about his work from the rented space of a second-floor hotel room in Montpelier's Tavern Motor Inn.

The "208" Water Quality Planning Program has an interesting history. That it is happening at all is because of a successful legal action brought by the New York-based Natural Resources Defense Council (NRDC) against the federal Environmental Protection Agency. The legal requirement of comprehensive water quality planning was enshrined in Section 208 of the Federal Water Pollution Control Act Amendments of 1972. The idea was citizen involvement and comprehensive, long-range planning, and the effort was to be nationwide. Then it was decided, administratively, that states such as Vermont did not require this kind of planning effort. Long range planning was seen as an exercise that could safely be left to the technicians, the professionals. The NRDC suit overturned all this. Vermont will have a program, there will be \$411,000 to spend between now and November, 1978, and Roger Allbee will be in charge.

Allbee is the first to admit that conventional efforts to develop public awareness and participation in water quality issues and planning have largely failed. There is a lot at stake, not just the massive sums of money involved, nationally \$24 billion overall, in Vermont approximately \$50 million in Fiscal Year 1976 alone, but there are key decisions that need to be made that will shape the future approach to wastewater treatment and water quality for years to come.

Allbee is committed to a vigorous 208 Program that will involve citizens in all the difficult, even controversial issues that must be faced. Allbee talks about lake eutrophication. A recent EPA Report indicates a serious problem in Vermont. Vermont leads the rest of New England with 24% of its lakes affected by eutrophication. Allbee talks about urban sprawl and the willingness of communities to look at the influence

of sewage construction decisions as a spur to growth, or as a constraint. There are serious questions about alternative sewage treatment technologies. In some communities, a commitment to conventional sewage treatment technologies has already been made and is therefore irreversible. In other communities, there are still choices. "I do not think it is late for some communities," Allbee says. "It may be too late in some cases."

Allbee wonders aloud if citizens will get involved, will make the effort to get informed, will be willing to grapple with the really difficult questions. Or will they, as Allbee remarks, "stay so general" as to make the planning exercise futile?"

There are a host of complicated questions. Lake eutrophication is one of them; urban sprawl is another. But there are still others as well: sedimentation and erosion, ground water contamination, combined sewer overflow, the proper disposal of sewage sludge. One very sensitive question involves the "assimilative capacity" of rivers and streams. What happens when the towns along a river basin have grown to a point where the further contribution of effluent will degrade the quality of water beneath acceptable levels? This situation raises the question of assigning "waste load allocations" to individual cities and towns. And the assignment of waste load allocations, in turn, raises the question of further growth.

Who will set such waste load allocations? Will such allocations be set at all? What are the acceptable trade-offs between continued growth and improved water quality? These are difficult, thorny questions, as difficult as the question of agricultural runoff from fertilizers and farming wastes, or the task of deciding whether or not to require people to change their activities around a threatened lake.

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## 208: 208: 208: 208: 208:



## VNRC ENVIRONMENTAL LAW SERVICE

The Vermont Natural Resources Council announces the establishment of the **VNRC Environmental Law Service** to advise and assist members, attorneys, conservation organizations, and businesses on problems of environmental law. The Service will provide informational and research services and will seek to improve Vermont's environmental protection programs through work in the administrative, legislative, and judicial arenas. It will be directed by VNRC's staff attorney, who will be assisted by an advisory board of Vermont attorneys and others experienced in environmental law and planning.

## THE NEED FOR THE SERVICE

During the past decade, this nation has embraced the need for environmental protection. Hundreds of new laws aimed at conserving and protecting our natural resources have been enacted by Congress, state legislatures, and municipalities: The National Environmental Policy Act, the Clean Air Act, the Water Pollution Control Act Amendments; Vermont's Land Use and Development Law (Act 250), Municipal and Regional Planning and Development Act, and Land Gains Tax . . . the list goes on and on. New legal concepts have been impressed upon the public's consciousness: "Development rights," "Conservation Restrictions," "rights-less-than-fee," "Floodplain management," "land trusts," "the taking issue" and "environmental impact statements." Little mentioned ten years ago, environmental law has grown into a field of startling complexity.

While public interest environmental law firms (like the Natural Resources Defense Council and the Conservation Law Foundation of New England) have sprung up on the national and regional scenes, no similar organizations have been established in Vermont. The legal profession in Vermont has partially filled the gap, but few attorneys have time to educate themselves carefully in an emerging field of the law, nor do those who do have substantial amounts of time to spend on cases **pro bono** or at a reduced fee. Faced with limited financial resources, conservation groups and citizens alike frequently must let important issues of environmental law go unresolved.

One area to which the Service will devote particular attention is land conservation. Recently, VNRC has received requests from two groups for assistance in establishing land trusts. In addition, several individuals and organizations have sought advice on methods of protecting their land from development after they are gone. The Council has already gained considerable expertise in land conservation techniques through its participation in the Hartland Open Space Project, and its natural areas protection work.

The Environmental Law Service will make legal tools available to those working to insure the wise use and conservation of the State's natural resources.

## THE PROGRAMS

Since the Service's resources are limited, the amount of time and effort spent in any one area will be determined by the staff attorney, acting with the advice of the advisory board and the VNRC Board of Directors. Priority shall be given to land conservation projects and to problems that appear to be of particular significance or benefit to the state or to a region or community. In the event that the

staff attorney is unable to handle a matter personally, the Service shall seek assistance from practicing attorneys, law students, or other qualified persons.

Initially, the program will include:

**Information/Education/Research:** The Service will: respond to requests for information, publish and revise the **VNRC Environmental Law Manual**, prepare brochures and pamphlets and sponsor workshops in environmental law and planning. It will research environmental law and planning. It will research environmental law problems brought to its attention if they are of particular importance or hold promise of establishing legal precedent. An environmental law reference library will be maintained and be available for public use.

**Land Conservation:** The Service will work with The Nature Conservancy, Audubon Society, conservation commissions, land trusts, and others on land acquisition and protection programs. This will include providing assistance to towns and regional planning commissions interested in establishing open space programs or protecting natural areas.

**Program Monitoring:** Vermont's environmental protection programs will be monitored as they are implemented through the permit process. The Service will participate in the review of applications for Act 250 permits and testify on proposed rule changes in administrative regulations. It will also seek to identify weaknesses in State environmental laws or their administration and make recommendations for improvement.

**Advocate/Adversary:** The Service will follow the progress of environmental legislation under consideration by the Vermont General Assembly and work for passage of bills having the potential for enhancing environmental



quality. Although it is not anticipated that the Service will engage in litigation, it may assist litigants, bring test cases, or submit legal briefs as *amicus curiae* in suits which will have a regional or statewide environmental impact.

## THE SERVICE'S ORGANIZATION

The **Environmental Law Service** is a special project of the Vermont Natural Resources Council. It is the Council's belief that the establishment of this Service is an important step toward the achievement of the Council's educational and program goals.

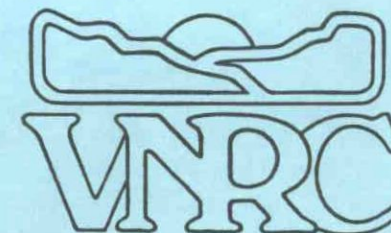
The Service shall seek to establish a network of environmental lawyers throughout Vermont for the purpose of sharing information, working on common problems, and making legal services in environmental law more available to the public. An environmental law internship program will be established to engage law students in research projects aimed at solving environmental problems. The Service shall also seek to formalize and strengthen ties with the Conservation Law Foundation of New England and similar organizations in order to work jointly toward the achievement of mutual goals.

## FUNDING

The Service will be financed through grants, charitable contributions, and, in some cases, fees for service. The cost of publications and workshops will have to be recovered from those directly benefitting, but every effort will be made to provide information and advice at no charge. When substantial research projects are undertaken for a particular group or individual, a grant or assistance in fund-raising may be requested to help defray the cost of the study.

VT. NATURAL RESOURCES COUNCIL  
26 STATE STREET  
MONTPELIER, VT. 05602

THE  
VERMONT NATURAL RESOURCES  
COUNCIL  
  
ENVIRONMENTAL  
LAW  
SERVICE





## 208...

The Vermont 208 Water Quality Planning Program consists of a State-wide Wastewater Treatment Board, eight District Committees, and Allbee's Office in Montpelier. This is a citizens' effort. There are twenty-two people who have been appointed to serve on the State Board. The District Committees, still in formation, will be comprised of fifteen people each, although these Committees can be expanded to include as many as twenty-five people.

One of Allbee's first tasks is to develop a Work Control Plan. This Plan must be completed early in the new year. It will identify the key water quality planning problems that will be examined over the next two years. Allbee will have a Technical Advisor on his staff. Under consideration is a proposal to hire a Public Education Specialist. Allbee, who returns to his native Vermont after service with the U.S. Army in Germany and with degrees in Agricultural Economics and Economics, is not holding any illusions about the task he has been asked to undertake. Peo-

ple have been willing to let the experts, the technicians, do the planning. Now they have an opportunity to participate, join District Committees, study the problems, and make choices.

Allbee wants a 208 Program that is more than a rubber stamp, more than an expensive afterthought to a state-wide water quality program that has already cost many millions of dollars. He wants the tough problems identified and the approaches worked out. Nor will this alone be sufficient. It will be the citizens' committees that will have the formidable task of convincing the Legislature, the Governor, and local towns of the rightness of their point of view and the soundness of their approach to the problems. "What if the citizens or the communities choose to go another way?" asks Allbee, raising the possibility that the citizens might differ from the experts. "Will the State buy it?"

For further information about the "208" Program, write to Mr. Roger Allbee, Agency of Environmental Conservation, 5 Court Street, Montpelier, Vt., 05602, or call (802) 828-2741.

## ENERGY FORUM '76 DRAWS STATE-WIDE ATTENDANCE

Between 250 and 300 people from across Vermont gathered on Saturday, November 6th, at Randolph Union High School, in Randolph, Vermont, for an all-day conference, entitled **ENERGY FORUM '76**. The conference was organized by Vermont Tomorrow, the Montpelier-based citizens' action group, and sponsored by Vermont Tomorrow, the Vermont State Energy Office, and the Vermont League of Cities and Towns. The purpose of the **FORUM** was to lead the way to the appointment of town energy coordinators and the adoption by individual towns of local ordinances exempting alternative sources of energy from local taxes.

The animating force behind **ENERGY FORUM '76** was the passage of Act 226 in the 1976 General Assembly. Act 226 empowers Vermont towns to appoint "town energy coordinators" who shall, in the language of the Act, "coordinate existing energy resources in the town and cooperate with the municipi-

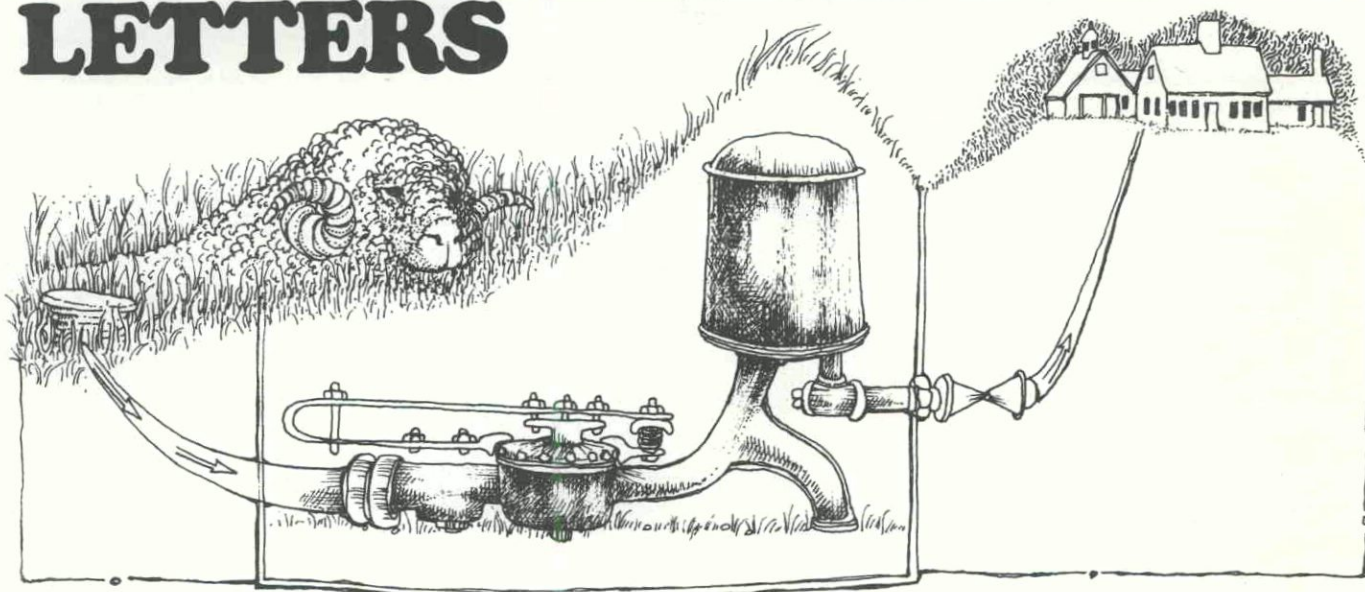
pal planning commission and with those federal, state and regional agencies of government which are responsible for energy matters." Again, in the language of the Act, the Town Energy Coordinator "may study and evaluate sources of energy which are alternatives to those presently available with a view towards more efficient and economical utilization of existing and potential energy sources." There are already approximately thirty towns in the State that have appointed energy coordinators. Citizens may take action to ensure such appointment by getting an article warned for that purpose at their town's annual meeting in March.

Participants at **ENERGY FORUM '76** received copies of the second in a series of **CITIZEN GUIDES TO COMMUNITY DEVELOPMENT**, produced by Vermont Tomorrow and the Community College of Vermont. The subject of this second **GUIDE** is "ENERGY" and it includes topics such as the Town Energy Coordinator, Town Energy Committees, Community Wood Supplies, School Energy Projects and Alternative Sources of Energy. The 28-page **GUIDE**, including a 7-page Resource Directory is available from Vermont Tomorrow, 5 State Street, Montpelier, VT., 05602, for \$1.00.

**ARE YOU MOVING? CHANGE OF ADDRESS?** If you are moving, please send us your new address as soon as you can (and your old **VER** address label if possible). That way, you'll not only get your next **VER**, but you will save VNRC postal return fees.



# LETTERS



## To the Editor:

Regarding your **Hydropower Potential** in (55) **VER**, September, 1976, what about the new turbines (rams) that one simply lays down in the bed of any stream?

Please give us a follow-up in the next **VER**.

Meanwhile, we liked the current number very much.

Morris Earle  
New Haven, Vermont

*Guest Editor, James Wallace, solicited the following comment on hydraulic rams, and the possibility of using such devices to produce power. The letter, which we print below was received from Mr. John J. Mullen, Superintendent of Power Control and Generation at the Central Vermont Public Service Corporation in Rutland.*

## To the Editor:

In a telephone conversation last week, Mr. Wallace requested information on a hydraulic ram. As I understand it, someone had suggested that a ram could be simply placed in a stream bed and produce power.

The attached brochure\* describes commercially available units. As you can see, their normal operation is pumping water to higher elevations. Further, they are dependent in their operation on a "fall" of

water to produce necessary motive power. A drawback of these units, is that they are considerably less efficient (the Rife Units described--nominally about 60%) than a modern conventional hydroelectric turbine (around 90% efficient). The greater the distance water must be pumped in comparison to the drop producing the input power, the worse the efficiency becomes. In other words, they consume considerably more water than they effectively move. If you refer to the performance chart at the top of the fifth page, you will find that with a fall of four (4) feet and a lift of eight (8) feet, only 22.5% of the water used is delivered to the higher elevation.

Although hydraulic rams have been used for water pumping applications, we do not know of any instances where they have driven electric generators. Since they may operate at a variable number of strokes per second, a rather elaborate mechanical linkage and governing system would probably be required to produce electricity at a reasonably steady level of voltage and frequency.

I hope the attached, plus the above information, will be of help.

Very truly yours,

John J. Mullen  
Superintendent, Power Control &  
Generation, Central Vermont Public Service Corporation  
Rutland, Vermont

\*The brochure to which Mr. Mullen refers is the **MANUAL OF INFORMATION** on Rife hydraulic water rams, available from the Rife Hydraulic Manufacturing Company, Box 367, Millburn, New Jersey, 07041.



## **vnrc news**

### **CONSERVATION LAW FOUNDATION MAKES GRANT TO VNRC LAW SERVICE**

The Conservation Law Foundation of New England has made a grant of \$5,500 to support the activities of the newly-established VNRC Environmental Law Service. The Environmental Law Service will provide information and advice to VNRC members, conservation groups and others who need assistance in the field of environmental law. The \$5,500 grant from the Conservation Law Foundation must be matched in cash and the VNRC is currently beginning fund-raising efforts to raise this money. The Vermont Natural Resources Council is grateful to the Conservation Law Foundation for its continuing support of the Council's activities.

### **VNRC ANNUAL MEETING MINUTES AVAILABLE**

VNRC members are invited to write the Council at 26 State Street, Montpelier, Vermont, 05602, for minutes of the 1976 VNRC Annual Meeting.

## **cssv news**

### **CONSERVATION SOCIETY NAMES NEW EXECUTIVE DIRECTOR, BILL PAINTER**

A Virginian, Bill Painter, is the new Executive Director of the Conservation Society of Southern Vermont. Painter succeeds outgoing Executive Director, Richard S. Wilson, who has gone on to further graduate studies at Dartmouth College in Hanover, New Hampshire.

Bill Painter comes to the CSSV fresh from three years as Director of the American Rivers Conservation Council, with headquarters in Washington, D.C. The American Rivers Conservation Council is a national coalition of people dedicated to the preservation and protection of America's free-flowing rivers. Painter has had experience as a lobbyist in the halls of Congress. He played a large role in defeating a proposed twin-dam hydro storage project on North Carolina's New River. This giant dam would have flooded 40,000 acres, displaced 3,000 people, and would have cost between \$500 and \$800 million to construct.

### **DOES ANYONE HAVE A MAP FILE?**

VNRC needs a multi-drawer map file in which to store flat maps and graphic materials of a size up to 36" X 36" or even 36" X 48". Anyone who might be able to donate such an item, or direct VNRC to someone who might, should get in touch with Seward Weber at the Council in Montpelier. Such an in-kind contribution would, of course, be fully tax deductible.

### **VNRC MEMBERSHIP FOLLOWS THE CALENDAR YEAR**

The Council wants to alert members to the fact that VNRC memberships follow the calendar year. VNRC members can expect to be asked to renew their membership in the Council in mailings that will go out in mid-January. Your membership in the Council is indispensable to our work, and our work together is indispensable to environmental quality in this State, Vermont.

### **VNRC MEMBERSHIP OFFER: BINOCULARS AT A DISCOUNT OF THIRTY PERCENT**

VNRC has purchased, as an experiment, a small number of high-quality, Bushnell (Japanese) binoculars to offer to VNRC members, particularly outdoor enthusiasts, at a discount of 30% below the retail price. These binoculars will make fine Christmas presents. They are among the best quality, medium-priced, binoculars on the market today. Each is equipped with center focus, retractable eye cups for use with eye glasses and separately adjustable right eye piece. We will offer the following models:

Model	List Price	VNRC Price	No. Available
7 X 35	\$169.50	\$117.00	3
9 X 36	\$179.50	\$124.00	2
10 X 50	\$189.50	\$130.00	1

Binoculars will be available for inspection and purchase by December 7th. If you wish to reserve a pair, please call or write the VNRC office. Mail orders will be accepted with an additional charge of \$3.00 for handling and insurance.



## BOSTON EPA ANNOUNCES DECEMBER CITIZENS' BRIEFING

The Boston Office of the Environmental Protection Agency (EPA) has announced plans for its fifth annual NEW ENGLAND CITIZENS' BRIEFING to be held in Boston on Thursday afternoon, December 2, between 1:00 p.m. and 4:00 p.m. The CITIZENS' BRIEFING will be held at the main auditorium of the New England Aquarium, located on Central Wharf in Boston. The theme of the afternoon BRIEFING is "Future Directions" and the session will focus on two pieces of recently-passed federal legislation, the Toxic Substances Control Act of 1976 and the Resource Conservation and Recovery Act of 1976. For further information, please call VNRC or the Boston Office of EPA, (617) 223-5779.

A U.S. Court of Appeals has ruled that state highway departments must hold public hearings BEFORE they spend federal funds to buy land for proposed highways. (Report from the National Wildlife Federation, November, 1976)

## VPIRG RELEASES REPORT ON MEDICAL AND DENTAL X-RAYS IN VERMONT

The Vermont Public Interest Research Group (VPIRG) has just released a 31-page study on medical and dental x-rays in Vermont. The VPIRG report is entitled: **X-Rated: The Story of Medical X-Rays in Vermont.**

The VPIRG x-ray study was written by Peter Franchot with the assistance of researcher, Deborah Katz. The VPIRG study is sharply critical of the cost of medical x-rays to the Vermont consumer, \$15 million in 1976. The report contends that as much as 30% of the State's annual 375,000 medical and dental x-rays **may not** have been **medically** necessary. Among the findings discussed in the report are the results of a recent survey that indicate that many Vermont physicians feel they are under pressure to order more x-rays than are medically necessary because of the fear of malpractice suits.

# VNRC

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ADDRESS CORRECTION REQUESTED

VERMONT NATURAL RESOURCES COUNCIL, 26 STATE STREET, MONTPELIER, VERMONT.