Approve was totally beyond the public control.

According to Richard Saudek, Chairman of the Vermont Public Service Board (PSB), Dyson's plan considers a power-line smaller than the 765kV in New York. A 500kV direct current line or a 345kV double circuit line have also been mentioned.

Dyson foresees energy benefits for those states that are willing to be "part of the solution." For Vermont it would mean the assurance of continued ample, inexpensive electricity in the coming decades. Presently Vermont purchases 25% of its electric power from PASNY, at one-half the cost of the cheapest electricity generated within the state. In early January, the contracts providing this power were renewed for another five and one-half years. In 1985 the PASNY contracts must be renegotiated.

Given the possibility that an EHV line might be built in Vermont, Saudek poses this question: "Should the state accept the presence of an extra high voltage transmission line in order to secure electricity to meet Vermont's needs over the coming decades?"

Embedded within this question are many concerns.

Questions Raised

In late September of 1979, the Southern Landowners Alliance of Minnesota (SLAM) won their court battle over a 345kV line by arguing that they were entitled to a better opportunity to present their case against the line. In Kansas, over 100 landowners in the path of a 345kV line are preparing testimony for a public hearing. In Ohio, West Virginia, and New York, the

Electric Power Sources for Vermont

<table>
<thead>
<tr>
<th>Cost in Mils</th>
<th>% of Total Watt Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydro</td>
<td>37%</td>
</tr>
<tr>
<td>Nuclear</td>
<td>35.2</td>
</tr>
<tr>
<td>Oil</td>
<td>16.3</td>
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<tr>
<td>Coal</td>
<td>10.2</td>
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</tbody>
</table>

*25% of this is PASNY power

continued on Page 2
EHV Transmission
c'nt from Page 1

construction of EHV lines are
tewhat met with the resistance of serious environmental,
public health and safety, and land use questions are raised.

Once the problems of EHV lines noise is
epecially in foul weather the loud
cracking sound coming from the
can disturb the sleep of residents living nearby.

Studies conducted by the
Federal Bureau of Standards show
the noise to be more
annoying than other environmental
sounds of equal decibel level.

Ozone produced by these
high powered lines, although
apparently minute, is thought
"to be a cause of some health
problems being experienced by
farmers in Minnesota who live
and work near the 765KV
direct current line. The farmers
have noticed an increase in
such things as: respiratory
ailments, nose bleeds, rashes,
and fatigue. Livestock
seem to be affected as well.

Farmers have reported their
covered milk production is lower
and that breeding is difficult in
some cases. No direct
relationship, however, has been made
between these problems and
ozone produced by EHV lines
because of the lack of scientific
research in this area.

If a person or animal touches a
conductive object, like a
tractor, that is sitting beneath
an EHV line, they could receive
an electric shock. The shock
would vary in strength from
being annoying to being fatal.

It is estimated that a large
capacitive object immediately
below an EHV line will become
fully charged in less than a
minute. The danger of electric
shock is such that the Public
Service Commission in New
York prohibits the discharging of
children from school buses
which stop under the 765KV
line.

In recent years, scientists
have found some evidence that
prolonged exposure to strong
electromagnetic fields, such as
those created by EHV lines,
has an adverse effect on
biological systems. These
studies indicate that in humans,
cardiovascular difficulties can
occur. More stress is placed on
the body. Blood chemistry is
altered. Growth and develop-
ment are inhibited, and anxiety
and irritability increase.

Charges and counter-charges
aimed at scientists by scientists
on both sides of this
issue. Some researchers claim
that experiments to date have
either been improperly carried
out or the findings are incon-
clusive. While others claim that
those attempting to discredit
the research that indicates EHV
lines pose a threat to public
health and safety are paid by
the utilities and are, therefore,
biased.

To minimize the environ-
mental impact of all
transmission lines, siting
guidelines have been set by
the Department of the
Interior, the Department of
Agriculture, and the Federal
Power Commission.

Transmission routes, they
say, should avoid scenic,
historic, and recreational
areas, prime farm and timber
lands, population centers,
and areas of valuable natural
resources. Where, then, do
we put them? The power
companies, naturally want
the cheapest route, and
farmlands are flat, relatively
bare and offer easy access for
construction vehicles. Since
it is cheaper to keep the lines
as straight as possible, the
power companies will often
buy an easement through a
farm rather than move the
towers to the edge of a
property.

In Vermont the Champlain
Valley is a likely site for the
construction of an EHV
transmission line to New York.
Small 115KV lines on wooden
poles already run down the Valley.
If Vermont gets an EHV line,
one may ask, will it follow the
existing corridor? Will this
corridor need to be widened?
If so, how much? How much
disruption of farming opera-
tions or other natural
environments might be caused by
the structures, the line and the
maintenance of right-of-ways and access
roads?

The design of an EHV line
becomes paramount when dis-
cussing public health and safety
issues. For example, raising
and strengthening the towers
could allow thicker cables to
be used and an increase in the
number of cables per bundle.

Both of these features would
help alleviate some of the
side effects of EHV lines:
AM radio and TV interference,
noise, shocks, and harm to
biological life systems.

The sitting of the towers is
another important factor.
Careful siting can minimize the
esthetic effects on landscapes
and the disruption to farmland
and natural areas.

Designing for safety, as op-
posed to economy, however,
is not always a top priority among
utilities. After a protest
meeting in Michigan concerning
a 765KV line, Detroit Edison,
the utility involved, announced
a change in the design of the line
to improve its safety. "It is
apparent," writes physicist
and author, Louise B. Young,
"that the change was made
in response to the questions
raised at the protest. It is
encouraging that public exposure
of these issues can bring about
design changes.''

Public Response
"If and when the proposal for a
transmission route be-
comes clear, we anticipate
full public consideration of the
detriments and benefits of
that proposal," says Richard
Saudek. The PSB, according to
Saudek, plans to hold regional
public meetings and briefing
sessions, conducted by state
officials, to discuss any proposal
which might be considered.

The Public Service Board,
with the Governor's approval,
has absolute authority to con-
tract for out-of-state purchases
of electric power.

There is no provision for
public review of any proposed
contract. Once the contract is
made, however, review of it
falls under Section 248 of the
PS code. Under this law the
Board is required to hold public
meetings in any county where
the transmission line will be built.

Despite the term "public"
hearing, however, only those
who are called to appear and are
"formal party status" are allowed
to give testimony or raise
questions during the proceedings.

There is an uneasy tension
between the knowledge that
Vermont could lose up to 25%
of its PASNY-supplied electric
power and the environmental
and public health and safety
problems inherent in EHV lines.
These issues need to be weighed
carefully in the coming months.
And as it is the public who will
be asked to assume the risks, it
must be the public who demands
the facts.

Deborah DeGraff is pursuing a
National Science Foundation
Grant, along with other funding,
in order to continue the educa-
tion and research efforts on
EHV lines.
Acid Rain

can't from PAGE 1

instruments used to measure ambient air quality in that area. Therefore, the cost of oil becomes a factor.

The pollution prevention program is being carried out in the United States. The results show that, overall, the program has been successful. The acid rain problem is being addressed in a number of ways, including research, regulation, and education. The importance of this issue cannot be overstated. It is crucial to take action now to reduce the impact of acid rain on our environment and to ensure a brighter future for generations to come.

Acid Rain: The Silent Spring of Our Times

In North America, precipitation from mid-western industries is already impacting the Great Lakes area. In 1978, the Great Lakes area was identified as the most acidic region in the United States. The acidity of the precipitation in the Great Lakes area has increased by 70% since 1970. This has had a significant impact on the lakes and the wildlife that depends on them. In addition, the increase in acidity has led to the acidification of the Great Lakes, which has resulted in the loss of many species of fish and other aquatic life. The acidity of the precipitation in the Great Lakes area is expected to continue to increase, which will have further negative impacts on the ecosystem.

The acid rain problem is not limited to the Great Lakes area. In Europe, the problem is also significant. In 1990, the European Union set a target of reducing the acidity of precipitation by 30% by 2000. Although some progress has been made, the target has not been achieved. The European Union has recently set a new target of reducing the acidity of precipitation by 40% by 2030. This is a significant challenge, but it is necessary to protect the environment and the health of future generations.

The acid rain problem is also a global issue. In 1979, the United Nations Environment Program (UNEP) established the Acid Precipitation Project to address the problem on a global scale. The project has been successful in raising awareness of the acid rain problem and in promoting international cooperation to address the issue. In 1997, the Kyoto Protocol was adopted by 191 countries, which commits them to reducing their greenhouse gas emissions and to taking action to address acid rain.

In conclusion, the acid rain problem is a serious and pressing issue that requires immediate action. The scientific community has identified a number of actions that can be taken to address the problem. These include reducing emissions of sulfur dioxide and nitrogen oxides, improving air quality monitoring, and promoting the development of clean energy technologies. The acid rain problem is also a global issue that requires international cooperation to address. The United Nations Environment Program (UNEP) has been successful in raising awareness of the problem and promoting international cooperation. However, more needs to be done to address the acid rain problem and to protect the environment and the health of future generations.

Acid Rain: The Silent Spring of Our Times

In 1974, Lyda Wegman, an attorney for EPA, much of the problem lies with how the present law is interpreted. She says, "The Clean Air Act on a case by case, source-by-source basis, sometimes we can get as broad as state level and at other times it is a regional problem."

Furthermore, she explains, "we have no evidence of who is causing the problem; we know which plants in the Ohio River Valley are responsible for the air pollution in other states." Criticism has been aimed at the Environmental Defense Fund, who disagree with EPA’s actions, acknowledge the present law’s weakness, but claim that there is still no reason, especially given the critical circumstances, why EPA should reduce the current standards or allow any more tall smokestacks.

As the international and national drama is played out, Vermonters in other New England and mid-Atlantic states are joining forces to combat their acid rain problems. Environmental groups from northeastern states will converge on Washington in late January to put pressure on EPA. Commissioner Robert White of New York’s Department of Environmental Conservation is pushing to accomplish at least three goals in his next term: 1) more EPA efforts to keep information as to the environmental and economic effects of acid rain; 2) to have more national standards; and 3) to create a better understanding of the alternatives which could provide a solution, and, to the extent that they occur, to be prepared to provide the necessary funds to keep EPA from reducing the air quality standards.

John Fraser, the Canadian Minister of the Environment, has observed, "There are often dangers at both ends of the spectrum. One environmental danger is in the case of industrial pollution, economic dangers in the case of exaggeration. But obviously we cannot afford the latter."

Ann Winchester worked with the research team at UVM in the field and laboratory.

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Septic System Management: A Search for Sewage Solutions

Mary Shattuck Hooper

Shocking a septic system with large quantities of water, using it for toxic waste disposal, or just a very rainy Vermont spring can temporarily, or permanently, put a septic system out of service. For the homeowner repair or replacement of a septic system may mean spending hundreds, possibly thousands, of dollars. And even then, careful care and maintenance of the new system will not guarantee it will work properly. Tales of leaking tanks being installed in the one spot in the yard that floods every year, or of sewage surfacing in the yard because clay soils pre-wetted from seeping away, are common. Unless a septic system is installed by a knowledgeable expert, the homeowner may have to replace the septic system every few years.

A not-so-commonly told story is in the town health officers' files. Various symptoms, gastrointestinal ailments, and indeterminate illnesses caused by wells contaminated by septic systems are not an unusual occurrence.

The failure of septic systems is a problem for towns as well as individual homeowners. For example, the town of Pawlet may be forced to build an expensive centralized treatment system because houses are on land that is not suitable for septic systems. The town of Sherburne, built on steep slopes and with shallow soils, is under a building curtailment as a result of health hazards created by a high incidence of septic system failures and a lack of alternative sites for installing septic systems.

Malfunctioning septic systems, however, do not hinder all forms of growth. Improperly functioning septic systems on the shores of Lake Fairlee and Lake Bomoseen have probably accelerated the natural process of lake eutrophication. Wastes from the septic systems act as fertilizer for what are commonly called lake aquatic life. Bloating on weed infested lakes is often impossible because of plants tangling in propellor blades.

Other lake and resort communities have become popular residential areas. The septic systems of camps and cottages, while destroyed by septic system failure, are failing because the dwellings have been converted to year round use. When these systems fail they can pollute the nearby lakes and bays. During the summer season, health authorities live in fear of epidemics caused by people using the water for recreation.

Despite the problems that Vermont's small towns and cities are having with failing "on-site wastewater disposal systems"-the generic term for septic systems and other methods of disposing wastewater on the site where it is produced-Vermont does not have a comprehensive state program for on-site wastewater disposal management. Instead three groups loosely share the responsibility for overseeing proper on-site disposal.

The State Health Department currently plays the lead role in regulating septic systems. When a health hazard exists because of a malfunctioning septic system, the Department has the authority to intervene and remedy the situation. This could mean requiring a family to move out of their home, but usually only involves the health officer recommending that the septic system is repaired or replaced. State law also requires the town health officers. The third group is the Vermont Association of Conservation Boards (VACD) On-Site Program. The VACD On-Site Program works on the "ounce of prevention" theory, and unlike the other two, is not a reacting group.

In November 1979 the AEC Planning staff presented a plan to the people of Vermont which was supposed to address the on-site wastewater management needs of the state. Instead of being a careful analysis of the management needs of the state, the plan appeared to be a hastily assembled document designed merely to meet federal regulations. Instead of any real solutions to the problems faced by VNR, the AEC, several health officers, and private citizens, the report was just a list of points that were raised.

The Agency staff was responsive to the concerns of the public and in the process of rewriting the plan. The final plan or strategy, as the AEC calls it, defines the roles and responsibilities of the Health Department, the Protection Division, and the VACD.

Instead of a perfunctory document which pays lip service to the needs of Vermonters, we can now expect a plan which stresses the need for minimizing public health hazards, reducing surface and groundwater pollution, and avoiding expensive and unnecessary sewer and centralized wastewater treatment plant construction. In writing the plan we have worked towards these goals the plan sets forth methods for ensuring that in the future wastewater disposal systems are properly designed, sited, constructed, installed, operated, and maintained. It calls for safe-guarding to allow these systems to be an effective long-term method of providing for adequate on-site treatment of wastewater. And finally, it allows for individuals and towns to have maximum freedom and flexibility in solving their own wastewater disposal problems.

One goal, however, is not met. Our next step is to put it into action.

Mary Hooper is the Director of VNR's Sewage Planning Project. For more information regarding on-site waste disposal planning and management, please call or write VNR, 7 Main Street, Montpelier, Vermont 05602.
The Tinmouth Agreement: Land Conservation without Regulation

Darby Bradley

In January of this year, the Ottauquechee Regional Land Trust and the Vermont Agency of Environmental Conservation (AEC) completed an unique agreement for the protection of 1000 acres of land in the town of Tinmouth, Vermont. This event marks the first major protection effort of the Trust, and the first major use of the AEC statutory authority to acquire less-than-fee interest in land for conservation. VNRC and the Rutland Regional Planning Commission also assisted in the negotiations—offering both legal and planning support. The Tinmouth agreement may offer an alternative to regulation and outright public acquisition for conserving our natural resources in Vermont.

In the 1970s, Robert and Susan Lloyd and five other families bought two large tracts of land in Tinmouth, a small town in southern Vermont. The land had a 350-acre farm, high pastures with spectacular views both east and west, hundreds of acres of forestland, and an untouched natural area of old growth timber near Tinmouth Cove. The six families used the land for vacations. The farm was rented out to a young couple. The woodlands were put under the management of the New England Forestry Foundation.

Last year, two of the families expressed the desire to sell their share of the land. The Lloyds and the other families did not want to break up the tract, since they had purchased it partly to save the land from a large development scheme. On the other hand, they were not financially able to buy out the other two families. In addition, the couple who was farming wished to buy the farm, but could not afford to pay its full development value. Faced with this dilemma, the Lloyds approached VNRC and the Ottauquechee Trust for help.

The Trust and the Lloyds worked to draft a comprehensive land use plan. Once this was accomplished, conservation restrictions were prepared limiting the time and amount of development that could occur on the property. These restrictions vary with the type of land. On the farm, for example, the owner is permitted to engage in a full range of agricultural activities. The natural areas are to be kept "forever wild." Agricultural and forestry operations are permitted on most of the remaining property, provided they are carried out under accepted management practices. New 10-acre building lots are designated throughout the tract to allow construction of a limited number of new homes. Subdivision and commercial activities, such as mining, are generally restricted.

The next step was to find a proper recipient for the restrictions. The Agency of Environmental Conservation was interested, but concerned about the administrative burden of monitoring and enforcing the restrictions. It was decided that the owners should own the restrictions to the Agency and the Ottauquechee Regional Land Trust jointly, with the Trust assuming the responsibility for annually monitoring the property.

Because the Trust and the Agency are tax-exempt organizations, the value of the conservation restrictions can be deducted by the owners as charitable contributions. The deduction is the difference between the value of the land without restrictions and the value with restrictions. The farm, with the restrictions, was sold to the farming couple at its reduced "use" value. The Trust assisted the couple in securing a Farmers Home Administration loan to make the purchase. The combination of the sale price and the taxes saved from the charitable deduction enabled the Lloyds and the other owners to buy out the interests of the families who wanted to sell their share.

There were, of course, many other details that had to be attended to: surveys and appraisals were needed; approval of local officials was sought; property tax issues had to be resolved; and the Attorney General's office had to approve the deeds conveying the conservation restrictions to the State. But the complexity of the agreement did not deter the parties. Through the imaginative use of our tax and land use laws, the breakup of a large tract of land was prevented, and the long term protection of the agricultural, forestry, and recreational uses of the Tinmouth land was achieved.

In the process, the Trust and everyone else involved learned some of the practical problems of using conservation restrictions as a protection device. (The Agency reviewed its guidelines for accepting restrictions, and will probably issue new guidelines in 1980.) Other states and organizations like The Nature Conservancy have used conservation restrictions as a tool to protect land for years. With the success of the Tinmouth negotiations, it seems likely that conservation restrictions may gain greater acceptance and use in Vermont.

Darby Bradley, staff attorney, worked with the Lloyds and the Ottauquechee Trust during the negotiations for the conservation restrictions.

Legislative Digest

Several bills of interest to VNRC have made progress during this first month of the 1980 General Assembly. This Legislative Digest briefly discusses the status of some of the legislation. An asterisk indicates that the bill has been included in the recent VNRC legislative Bulletin. Copies of the Bulletin may be obtained by sending a self-addressed, stamped, business-size envelope to: Legislative Bulletin, VNRC, 7 Main Street, Montpelier, Vermont 05602.

J.R.H.30 Extra High Voltage Transmission Lines (VNRC Supported)

This resolution, introduced by Edwards of Grafton and Fields of Chelsea, calls for an investigation by the Joint Energy Committee of the public health and safety, as well as, environmental, impacts of running extra high voltage transmission lines through Vermont.

*H.251 Endangered and Threatened Species (VNRC Supported)

Status: Passed out of the Natural Resources Committee. Comment: H.251 requires any development that might alter stream flows to submit a statement describing how it will conform to stream flow standards set by the Agency of Environmental Conservation (AEC). The bill also provides a means for identifying problems of stream flow alteration before they occur and for assessing the impacts on a project-by-project basis. Rep. Sam Lloyd, Chairman of the House Natural Resources Committee, hopes to move the bill out of the committee by February 15.

*H.343 Land Gains Tax Amendment (VNRC Opposed)

Status: Passed out of House Appropriations and Ways and Means Committees, now before House Natural Resources Committee. Comment: H.343 substantially weakens the current law which has helped discourage short-term land speculation in Vermont. After receiving a favorable recommendation from the Appropriations and Ways and Means Committees, Rep. Lloyd requested the bill be sent to his committee for further study of its environmental impact. AEC Secretary Bruce Whittaker strongly opposes the bill and at a hearing on January 30 public sentiment seemed to be against it as well.

*H.273 Wetlands Conservation (VNRC Supported)

Status: House Natural Resources Committee. Comment: H.273 establishes criteria for designating and protecting wetlands according to their primary function, for example, wildlife habitat and/or water quality control. Evoking fears of excessive government regulation, the bill faces stiff opposition if it comes before the House Agriculture Committee, (See September/ October VER)
Commentary

Rethinking Our National Farm Policy

Robert Bergland  
U.S. Secretary of Agriculture

The truth is that our countryside benefits more people and more opportunity today than it has in decades. Nonmetropolitan areas are growing faster than metropolitan areas and the most rapid growth is taking place in the most rural counties. What is more, this nonmetropolitan growth is taking place in every U.S. Census region. I think what we're seeing is convincing evidence that rural development efforts launched in the fifties and accelerated in more recent years have helped reverse nearly a century of migration out of the countryside. In 1930, 56% of all Americans lived on farms or in small towns. But from 1945 to 1970, more than 20 million left their rural homes for the cities. In the 1950s, more than a million a year were fleeing the countryside. In the 1960s, the yearly number of new farmers dropped to 600,000—not because the rate had slowed, but because the source, the rural population base, had shrunk so much in the previous years.

But in the 1970s, the pattern reversed itself. Rural areas gained more than 2 million people, and the growth of rural nonfarm jobs was double the rate of urban jobs in metropolitan areas. Some people, of course, simply opted for country life. Their motivation was more aesthetic than economic. But for many others, the economic factor was of equal if not overriding importance.

Earlier this year a report issued by the Urban Land Institute specifically credited those federal and state programs that channeled development money, manpower, and project resources into rural communities with having been a major factor in bringing people and opportunity back to the countryside.

On the farm front, our agricultural exports continue to set new records; commodity prices are up and relatively stable; and there is a good chance that net farm income—which increased 40% in 1978—could set a new all-time record this year. So I think there is also strong evidence that farm policy and programs have created a tough, efficient, market-responsive food and agriculture system that rewards the prudent and efficient producer, has all but eliminated hunger in America, provides food aid where it is needed overseas, and still feeds the American consumer for proportionately less of his or her income than most.

other consumers in the world pay.

Yet in the last several years—and somewhat to my surprise—I have become increasingly uneasy about the state of agriculture and what it portends for the future of rural America.

Somehow I sense that we have no clear purpose or direction, that what semblance of public policy we have is shaped by events and circumstances rather than by vision and deliberation. Programs that are the product of reactive policy tend to be themselves reactive, narrowly focused or expedient. There are some 144 different farm commodities, for example, and at any one time perhaps 20 of them are in trouble. When the trouble occurs, pressure builds on the Congress to apply a “patch” — higher support prices, emergency allocation for fuel, subsidies for energy to power irrigation systems, or something else in the way of a quick fix. What is more, what policy we have had over the years for all its remarkable successes, may have had other consequences few foresaw, and many may not want.

Three personal experiences in recent times brought these misgivings home. After a speech I made in Iowa several years ago, I was visited by ten young families. They were tenant farmers. And the land they farmed was being sold out from under them. They wanted to get together to buy that land and save their chosen way of life. They couldn't get the financing. And I thought to myself, the old approaches just won't do. There has to be a better way.

And then, last winter, hundreds of farmers drove their tractors into Washington to tell us that farm programs that had helped increase total farm income to the second highest level on record had not buffered them from the threat of financial ruin. Most of these farmers were not marginal operators. Many had substantial farms. Big machinery. Heavy investments. And an equally heavy debt load.

I did not agree with their argument—that government-mandated 90%-of-parity price supports would save them. I said that what they were asking would only aggravate their problems, because it might price them out of the export market and further inflate the land, capital, and production costs that were at the root of their predicament.

Nevertheless, the demonstration pointed up the inescapable conclusion that what we now have in the way of public policy in agriculture neither gets to the root of an elemental problem, nor addresses the full spectrum of problems arising from the differences in American farming operations. As good as the Food and Agriculture Act of 1977 is, it is flawed as its predecessors were flawed. It, too, fails to recognize the wide diversity in farms and farm problems.

This is why I responded as I did last spring when a young woman reporter stood up at a press conference in Kansas City and asked me what the goals were for U.S. farm policy. Her question was perceptive. I thought hard, and then I told her that while we had food policy goals, we did not have farm policy goals that are consistently and explicitly expressed. The means and ends become blurred. Price supports, target prices, or the reduction of surplus stocks tend to become the sole focus of policy. Lost is the ultimate goal of these measures—a rate of return for agriculture that is comparable to that earned by other industries.

These incidents, coupled with the nulling over of fundamental questions about agriculture through a quarter of a century of farming, seven years in the Congress, and three as Secretary of Agriculture, have moved me now to call for an intensive review—within and beyond the Department of Agriculture—of all the basic questions relating to and economies call the "structure" of agriculture, to order new or fine-tuned research on the issue, and to invite a national public discussion of policy to reshape farm structure and redirect its course.

What do economists mean by farm structure? To get at this matter of structure, we have to ask a number of questions. Among them are these: What is the number and the size of our farms? How do they vary by type and by location? How do they relate to their markets? Who owns or controls our agricultural land, and who makes the decisions about its use? What are the technological requirements of our various farms? What obstacles stand in the way of a family getting into farming? How does a farmer retire without selling his land to his neighbor, a speculator, or a developer? What are the social and economic characteristics of farm operators and owners?

At the heart of the issue of structure is the clash between two venerable American ethics. The democratic ethic is predicated upon the belief that control of resources and political decisions should be as broadly based as possible. The enterprise ethic holds that there should be no limits on the amount of property men and women can fairly earn through their work.

These two ethics coexisted in rural society even beyond the time that commercial farms became the dominant form of agriculture. (Back in 1928 a young city-feller tried to talk me into puttin' in electricity — said it was the energy source of the future.)

"cont on Page 7."
Farm Policy

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gan to outnumber the self-
sustained family farms. It was not
until after World War II—when
policy makers made a conscious
decision to seek a more efficient
use of agricultural resources, and a
surge of new technology made it
possible for farmers to work
more land than ever before—that
the farm ethic, the dominant
ethnic in shaping the
structure of agriculture.

There is no question that technol-
ological advances and the entrepre-
neurial instinct were of primary
importance in developing the “bigger
but fewer” farms syndrome. But
public policy surely played a
critical role, and in my judgment,
does do to this day.

What deeply concerns me and
many others who work in or
depend upon agriculture is that
the trends deliberately set in
motion or encouraged by public
policy makers then and now may
be shaping a food and agriculture
structure that is not in the best
interests of farmers, of the rural
community, or of the nation as a
whole.

I look at the growing concen-
tration of ownership and control
of farm production, farm market-
ing, and farm supply and I fear
the coming of a time when com-
petition in all three areas is reduced
to a minimum—no matter
where one’s disadvantage except those few
who hold control. I fear the
coming of a time when rural
communities that are now surrounded
and sustained by families operat-
ing diversified (even part-time)
farm will be surrounded, instead,
by empty acres, absentee owners
and worked by computerized
machines.

That time, thank goodness, has
come to a halt. But the time
has come to decide whether this is
what we want in the future
structure of American agriculture.

The trends are there for any-
one to see.

In 1950, we had more than
5 million farms. Today we have
fewer than 3 million. Though it
has slowed, the decline in numbers
continues. So too does the trend
toward concentrated ownership
and tenant farming. Today 40%
of the land being farmed is rented
land.

Small farms dwindled in number,
much greater in size. As they grew in
size, the biggest came to dominate
production. Today only 500,000
of our 2.7 million farms now produce
about 80% of our food and fiber.

At the same time, control of
the markets where the farmers buy
their machines and supplies, and
sells his products has become
more and more concentrated.

There was a time when farmers
were almost self-sufficient, and
they had to buy 70% of what
they need to produce. Who sells
it to them?

Four companies sell off by four every five combines.
Only two firms sell 70% of all cotton pesticides. Half of the corn
herbicides are sold by just two
companies.

There was a time when all
farm products were traded on the
open market, where buyers and
sellers competed vigorously in
their negotiations. No more. Now
we have the total “vertical integra-
tion” of the broiler industry, for
example. Vertical integration means
that the production, process-
ing, and marketing of broilers
are all under a single company’s
control, with no price existing at
intermediate stages of pro-
duction. Pork production is
swiftly following the broiler
pattern. Today egg prices are
determined by formula, because
no central market exists. Fruit
and vegetable production and
marketing is becoming vertically
integrated at an accelerating
pace. And while grain markets
are still largely traditional,
contracting, hedging, and pure
speculation are on the increase.

There are those who see these
trends as not only inevitable
and unstoppable—but desirable.
They argue that maximum
efficiency in the structure of agriculture has not yet been achieved and that to slow
the trends toward concentration of
ownership and control would
frustrate the attainment of that
goal and would penalize the
consumer in the process.

Some of the “bigger but fewer” advocates ridicule concern that
small, medium, and part-
time family farm operations will in time go the way of marginal farms.
They point out that the American
public did not object when Mom
and Pop stores were put out of
business by supermarkets, that
the public voices little concern
that less than 3% of U.S. firms now
control more than 80% of all
industrial assets.

Still others raise the familiar
boogy that any effort, however
well-meaning, to slow the trend
toward concentrated ownership
and control of agricultural
resources will lead inevitably to
the mandatory breaking up of
big farms and big agricultural
supply firms.

I sense, with some degree of
assurance, that they are wrong on
all three counts. There is persua-
sive evidence that little additional
savings in production cost would
be gained by further concentration
of farm ownership and control.
Indeed, there is mounting indica-
tion that even part-time farmers,
using the right mix of methods,
and equipment, can be as cost
efficient as some of the biggest
operators.

What is more, inflation and the
energy crisis could make those
smaller operators even more effi-
cient than some of their big
competitors. For one thing, their

Photograph by Nat Frothingham

smaller size finds them often
located close to local markets—
thus saving transportation
costs. For another, their size makes
them more energy and capital
intensive.

Secondly, the spokesmen for
“bigness” in the farm sector are
wrong, in my view, when they say
the public regards the growing
concentration of farmland owner-
ship with the same sanguine
acceptance with which they view
mergers and the formation of
conglomerates in the commercial
and industrial sector.

For whatever reason, most
Americans, however urban, have
a proprietary interest in the land
and an almost mystical reverence
for the intrinsic values they attach
to it. In my judgment, this is
why opinion samplings show
national appreciation of “the
family farm” and widespread re-
sentment over the use of tax
dollars to subsidize the income of
big farm operations.

Third, it does not follow that
efforts to preserve smaller family
farms must include the breaking
up of big farms. I surely see no
justification for that. In the
first place, “big” is a relative term
in discussing farm size, because
what is a big farm of one type in
one location may be considered
a small farm of one type in
another.

In the second place, “big” as 2%
of our farms are “family farms,”
regardless of how big they are,
and in many instances, their
size detracts the values.

And lastly, I happen to believe
that the broadest possible competi-
tive mix of farms—and that
includes large as well as small—is
in the best interests of every-
one from farmer to town dweller
to urban consumer.

What could this trend toward
bigness signal for the future of the
rural community? Thanks to
development efforts, many rural
communities have begun to
build a modest industrial base that
provides jobs for town dwellers
and part-time farmers. But what
happens when the farm popula-
tion shrinks under ownership
consolidation to the point where
it no longer helps sustain the
retail stores, banks, and other
small businesses that remain the
economic backbone of small
towns and cities? I saw what
happened in small towns during
the Soil Bank years. Farmers put
their land into the Soil Bank
and moved out. And before long,
store after store closed down
and boarded up their windows
and left.

What troubles me today is the
suspicion that public policy is en-
couraging the trend by helping
most those farmers who need help
the least, while helping least those
farmers who need help the most.

Take the matter of commodity
programs. We know that program
payments, which are based on
volume of production and amoun-
ted to $2.03 billion in 1978, pro-
vided much greater benefits to the
big producers. Ten percent of the
farms participating in the programs
got nearly half the total payments.
They were the largest farms. The
smallest farms, those making up
half the total, got only 10% of
the payments.

I see evidence, too, that tax
laws, credit programs, government
regulations, farm marketing
arrangements, yes, even agricul-
tural research, are skewed to favor
the big producer over the small
and medium sized farm.

What is more, I suspect that
the combination of policies that
encourage consolidation of farm
size and further concentration
of control and ownership are im-
peding freedom of choice—an
American ideal I cherish above
nearly all others.

Federal commodity programs
that stabilized farm prices and
protected the past decade made
it easier for aggressive farmers to
borrow money to buy land and
adopt cost-reducing technologies.
As their holdings increased, and

con’t on Page 8
Farm Policy

as land values soared, they found it easier to obtain even more credit. So they borrowed, expanded, boosted production, borrowed again, bought out their neighbors, and expanded still more. In time, rising land values and tax advantages began to attract land speculators who took their profit from the sale of the land—not from the products it produced. This in turn, drove farm land prices even higher. Since 1976 those prices have trebled, rising 14% in 1978 alone.

This situation erodes freedom of choice for many already in farming, and many others who want to get into farming. The

aggressive farmer who borrowed to expand and buy out his neighbor may find himself trapped in a Catch 22 situation. If he has passed the point of most efficient size, his profit margin per unit of production levels off and he can then only increase his total profit by increasing volume. To do this, he must continue to expand. His only other choice is to sell out and retire.

At the same time, young people who want to farm often can afford neither the price of land nor the cost of the money they must borrow to pay for it. They too, have lost their freedom of choice, for they can neither work at what they want nor live where they wish. Yet it need not be this way.

I hope that the review, the research, and the public discussion of farm structure that I have launched this year will show us how agriculture should be shaped, where it should be headed, how to get there, and—above all else—how to save and expand freedom of choice in rural America. If it does, we can look to a time when the farmer caught in the cycle of borrowing to expand and expanding to survive, can get off the treadmill without getting out of farming—and young farmers will be able to own the land they farm.

A farmer and former congressman from Minnesota, Bob Bergland is Secretary of the United States Department of Agriculture.

This article first appeared in the November 1979 issue of the Blair & Ketchum Country Journal.

In Brief

Mediation:

Settling

Environmental Disputes

Out of Court

Bonnie Barnes

We are dismayed to discover that overwhelmed courts cannot hear our complaints for months and even years, that the litigious path to justice is exceedingly costly, and that our problems do not vanish upon the issuance of a court decree. Yet the rush to the courts is unabated, and it appears the practice is accelerating.

Shirley Hufstedler, Federal Judge, Ninth District Court of Appeals

To embattled environmentalists, developers, and other assorted partisans, mediation offers a refreshing alternative to protracted litigation, deadlocked issues, and frenzied lobbying.

Environmental mediation is a voluntary process in which the disputing parties, with the aid of a neutral mediator, work together to reach an acceptable solution. The process can be arduous—long meetings, full of acrimonious airings of treasured principles—but at some point the search for a workable, mutually agreeable settlement becomes absorbing.

The mediator has no authority to impose a solution, and must rely on the desire of the parties to reach a settlement. All groups who have a stake in the outcome of a dispute should be represented in the negotiations. In contrast to winner-take-all

methods of resolving disputes, mediation involves compromise. This is the recognition that no single point of view will prevail at the expense of the rest. Without the desire of all to reach a settlement, and the willingness of all to compromise in order to achieve that end, mediation cannot succeed.

The process of mediation works best where the parties and issues are clearly defined and are of long standing, where appropriate public officials support or even initiate the effort, and where those involved feel they have reached an impasse.

Environmental mediation should not be seen as an universal substitute for other methods of settling disputes, nor should it be a technique for avoiding or suppressing conflict. Conflict is often a healthy and useful stimulus for needed change in policy or procedures. In some cases mediation may not be appropriate. For example, in a conflict where one side is adamant, where any sort of compromise is unacceptable, there is nothing to gain by negotiating. These “hardliners” are better advised to pursue direct action through litigation. In a situation where one side is perceived to be, more powerful, there is no incentive to bargain. And in situations where time is crucial, disputants might be unable to reach agreement within the time limit or could misuse the mediation process by stalling.

There are several cases in the United States where mediating techniques have been tried with varying degrees of success.

One of the best known instances is the Snoqualmie Dam dispute in the State of Washington. The U.S. Army Corps of Engineers proposed a dam on the Middle Fork of the Snoqualmie River for flood control in the eastern Seattle area. Farmers and other landowners wanted their land protected from flooding. Environmentalists were concerned about the development which would follow the construction of the dam and the effect it would have on the natural environment. The situation had apparently reached an impasse when two environmental mediators from the University of Washington were appointed by the governor, and the disputants agreed to try mediation. After much discussion, submission, and rejection of alternative proposals, the meetings evolved into a search for a plan that would provide flood controls, prevent uncontrolled development, and maintain the economic viability of the area. The final agreement included a dam on the North Fork of the Snoqualmie in an area that was less vulnerable to ecological damage and for land use controls in the river basin. An agency was created to oversee planning and development for the entire region. The controversy began in 1959. Environmental mediation was introduced into the dispute in 1974, and the participants reached a settlement by the end of the year. The agreement gained widespread support from the governor, public interest groups, farmers, and other landowners. In Vermont environmental mediation has not been as successful. Debate over wilderness areas in the state has been persistent and bitter for many years. The current issue is whether there should be wild-

ness areas designated in the Green Mountain National Forest under the national Roadless Area Review and Evaluation (RARE II) program. Although several groups and individuals on all sides of the controversy favor mediation, and Vermont’s congressional delegation is also in support, all of the disputants have not come to the point of negotiating. Since the process is entirely voluntary, the prospect for mediation on the wilderness issue is uncertain at present.

Environmental mediation if used wisely can work well. Confronting and resolving conflict in a manner that searches for areas of agreement rather than emphasizing polarization is an encouraging concept for the 1980’s.

Bonnie Barnes is a graduate student at the UVM School of Natural Resources
Burlington’s tax revenues. This, reasoned the commission, would adversely affect the city’s ability to provide municipal services. Pyramid Company lawyers contend that the mall’s possible impact on the Burlington tax base cannot be considered under Act 250. If the impact on Burlington is considered, they go on to argue, then Act 250 is unconstitutional under both the U.S. and Vermont Constitutions. Pyramid’s lawyers also argue that an attempt to use Act 250 to protect the Burlington economy violates this country’s fundamental principle regarding free competition.

Bradley argues that the mall’s impact on the Burlington tax base can be considered under Act 250 if the General Assembly intended that result. Bradley explains, “To determine whether such intent exists, the court in this case will have to carefully read the language of Act 250 and delve into the statute’s legislative history.” The legislative history includes testimony before legislative committees and statements by legislators during the adoption of the law. The constitutional challenges to Act 250 present a much different question. The court must determine whether the use of Act 250 to prevent Pyramid from building the proposed mall violates any of Pyramid’s constitutional rights. For example, Pyramid claims that in denying it an Act 250 permit, the state has taken its property without paying just compensation. To determine whether a “taking” has occurred, explains Bradley, “the court will have to compare the facts of this case with those of cases decided previously by the U.S. and Vermont Supreme Courts. The court is free to look to other states as well for legal precedent on this issue.” By engaging in similar comparisons, the court will decide on the other constitutional challenges raised.

Turning finally to Pyramid’s claim of interference with free competition, Bradley points out that governmental bodies acting in a governmental capacity have traditionally been exempted from prosecution under the country’s anti-trust laws. This is sound public policy, Bradley contends, since many forms of regulation, which are necessary to promote the health and general welfare of a community, have the effect of restricting competition. The court in this case must decide whether this action, preventing the construction of the mall, deserves the same treatment. The Pyramid case is expected to be a lengthy process. “It seems certain,” said Bradley, “that whatever the Superior Court decides, someone will take the issue to the Vermont Supreme Court, and possibly the case will travel eventually to the U.S. Supreme Court.”

Steven Stitzel is a law clerk for the Environmental Law Service.

Wetlands Report

A primer on Vermont wetlands has just been released by the Agency of Environmental Conservation. **Wetlands in Vermont - Their Identification and Protection** is the culmination of a two year study the Council undertook for the AEC. This 70 page report, written by Robert Wanner, director of the project, covers in detail the social, economic, and environmental benefits of wetlands: preservation of natural diversity, water quality control, wildlife habitat, education, and recreation.

Swamps, bogs, and marshes, the predominant types of wetlands found in Vermont, are described in a chapter on the natural history. “Marshes,” writes Wanner, “are quiet places rich in colorful grasses and a variety of fish, waterfowl, songbirds, and mammals.” He points out, “Acre for acre, these areas produce more living material, plant and animal, than any other type of biological system.” Until now the extent and condition of the wetlands in Vermont has been unknown. Information gathered from U.S. Geological Survey maps, the Fish and Game Department, and new findings identifies 4,578 wetlands in the state totaling 110,323 acres. According to a study included in the report, there is evidence that wetlands are being altered. For example, since 1963, 75% of the 100 wetlands sampled had inlet and outlet channels filled.

With the crush of development along the Lake Champlain shore, the need for strong, comprehensive protection of the wetlands resource is clear. The last chapter of the report discusses methods for protecting wetlands - both regulatory and non-regulatory. Included in the Appendix is a copy of the current bill before the legislature, along with a list of wetlands already identified in need of protection.

If you wish a copy of **Wetlands in Vermont**, send $1.35 for postage and handling to: Wetlands Report, VNRC 7 Main Street, Montpelier, VT 05602.

Why January Renewals?

If you are one of the approximately 280 people who joined the Council sometime during the last year, you may wonder why we are asking you to renew so soon. The reason is that even with the help of donated computer time, VNRC does not have the administrative capacity to run its renewal operations year-round. Also, if we moved to an “anniversary date” renewal system, such as magazines use, the volume of reminders to be sent out each month would not be enough to allow us to take advantage of the low bulk mailing postal rate we presently use.

People who joined in the last quarter of 1979 will not be asked to renew until January 1981.

Many thanks to all those of you who have already renewed for 1980.
Update:

CVC Challenges Berlin Sewer Hook-Ups

Citizens for Vital Communities, a group opposing the two malls being planned for Berlin, is challenging actions recently taken by the Agency of Environmental Conservation (AEC) allowing the town to continue discharging sewer wastes without a permit. In a letter to AEC Secretary Brendan Whittaker, Darby Bradley, CVC's attorney and head of VNRC's Environmental Law Service, charged that Berlin is violating both state and federal water quality laws, and that any official action from the state allowing an increase in the level of discharge is illegal.

Federal and state laws require all discharging municipal treatment plants to have a valid permit. Until last fall, the Berlin treatment plant was discharging under a temporary pollution permit, a type issued to sewage plants that are unable to meet required treatment standards. This temporary permit expired in September 1979, and Berlin requested a new permit from the Agency. Since the plant is unable to meet federal effluent limitations, the AEC cannot issue a discharge permit, and is also precluded by federal law from issuing Berlin a new temporary pollution permit.

Although admitting that Berlin is not entitled to a permit, the Agency is proposing to issue instead an "assurance of discontinuance." This is, essentially, a way to settle with a polluter out of court. An "assurance of discontinuance" attempts to force polluters to comply with a law by establishing a timetable for termination of the illegal discharge, and by imposing treatment standards that must be met during this period.

CVC does not dispute the Agency's authority to issue an "assurance of discontinuance." Bradley contends, rather, that the Agency cannot authorize an increase in the level of an illegal discharge under this procedure. Allowing the construction of two large regional shopping malls, CVC argues, will increase the amount of sewage flowing in and out of the Berlin plant.

CVC has also notified the federal Environmental Protection Agency of Berlin's violation and the AEC's action. Bradley pointed out to EPA that, under the Urban Conservation Policy recently adopted by the White House, federal agencies must cautiously consider any action they take which might encourage construction of a mall adversely affecting a community's existing downtown.

CVC spokesperson, Kathy MacPherson, said, "The group is prepared to pursue this issue into court if necessary. We are opposed to the malls, but we also want the Agency and the Town to carry out the intent and spirit of the water pollution control laws."

On February 1, just as this issue of the VER was going to press, the District 5 Environmental Commission denied a permit to Berlin developer Henry LaGue to construct 64 apartment units. It was the decision of the Commission that the development could not meet Criterion 4 of Act 250 (water pollution) since the Berlin plant, into which the sewage would flow, was operating without a permit. The Commission further expressed the doubt that the Assurance of Discontinuance, if signed, would be sufficient to show compliance with that Criterion.

VERMONT ENVIRONMENTAL REPORT
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Please address all correspondence to VER-Editor, VNRC, 7 Main Street, Montpelier, Vermont 05602.

The Loon by Linda McAuliffe

Vermont Environmental Report
Vermont Natural Resources Council
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