

League of Women Voters of Minnesota Records

Copyright Notice:

This material may be protected by copyright law (U.S. Code, Title 17). Researchers are liable for any infringement. For more information, visit www.mnhs.org/copyright.

League of Women Voters of Minnesota, 555 Wabasha Street, St. Paul, Mn. 55102 July 1969

We wish to take this opportunity to reiterate the concern of the League of Women Voters as pointed out in our testimony of April 8, 1969, regarding the construction of nuclear plants.

We are becoming increasingly concerned about the number of nuclear plants either now under construction, or being proposed for our state.

We believe that requests for permits for water use should be made before the construction of a plant is begun.

It should be a public decision whether the dumping of any affluent which might endanger plant or animal life should be allowed.

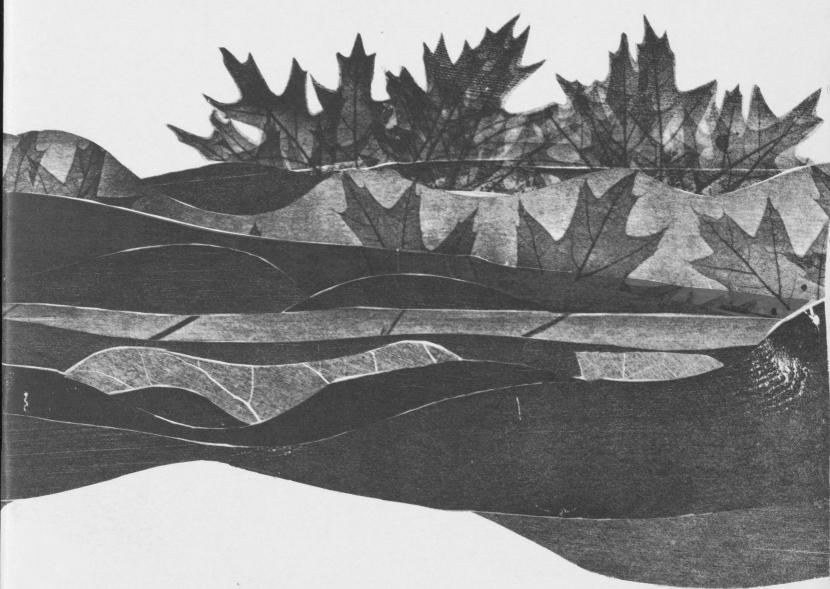
It is our belief that it is becoming increasingly important for industries to return water to the rivers in as much the same condition as it was withdrawn as is possible. Successful efforts are being made by a number of industries across the country to do this. The burden of proof of safety rests with industry.

We believe that at this time it is most important that no new permits be granted for construction of any type of nuclear plant, whether it be for initial construction, water use, or the actual operation of the atomic plant, until extensive studies have been completed to determine the long range effects of the plants already in operation.

We believe that people are willing to pay for clean water. If installation of pollution control devices places a company at a competitive disadvantage, we offer the services of the members of our organization to promote public understanding and acceptance of whatever price safety requires.

League of Women Voters of Minnesota, 555 Wabasha St., St. Paul, Minn. 55102 April 1970 STATEMENT MADE BY MRS. O. J. JANSKI, STATE PRESIDENT, LEAGUE OF WOMEN VOTERS OF MINNESOTA AT THE ATOMIC ENERGY COMMISSION HEARING APRIL 28, 1970 FEDERAL BUILDING, 313 NORTH ROBERT, ST. PAUL, MINN. In a letter written to the Joint Committee on Atomic Energy January 1970, the League of Women Voters of Minnesota summarized its positions and previous statements as follows: 1. We are concerned about the number of nuclear plants now under construction or being proposed for our state, and their location. Requests for permits for water use should be made before plant construction begins. 3. It should be a public decision whether the dumping should be allowed of any effluent which might be dangerous to plants and animals. 4. Industries should return water to rivers in a condition equal to, or better than, the condition in which it was withdrawn. The burden of proof of safety rests with the industry. 5. We believe people are willing to pay for clean water. If installation of pollution control devices places a company at a competitive disadvantage, we offer the services of the members of our organization to promote public understanding and acceptance of what ever price safety requires. 6. We believe that at this time it is most important that no new permits be granted for construction of any type of nuclear plant, for its water use, or for the actual operation of the atomic plant, until adequate studies have been completed to determine long-range effects of plants already in operation. At the first hearing concerning the Monticello Plant, we questioned the fact that the Northern States Power Company was requesting a permit long after the project was well under way. Company officials stated at subsequent hearings that it was an economic necessity to establish a plant site and buy the land before a public announcement. Last February, Northern States Power set up a Public Task Force to study and work with them in choosing potential sites for the new power plants - the League, among other organizations interested in the environment, was invited to send a representative. We have said that it should be public decision whether or not dumping of thermal effluent is allowed. We have said that no permit should be granted until the state atomic standards are met, and according to recommendations of the Minnesota Pollution Control Agency, a single permit granted. We have heard Northern States Power officials testify that state standards could not be met, but it now appears that they will be able to do so. We also understand that the next plant will operate with fossil fuel. We cannot help but feel that public opinion has made the difference. Another major concern is the safety factor of the nuclear powered plants and that there is no agency whose sole responsibility is the assurance of the health and safety of the public. We understand that the business of the Atomic Energy Commission is to encourage development of nuclear power plants. We believe the people of Minnesota have a right to effect these safeguards, particularly in a plant so near a large metropolitan area. We commend our Governor, Harold LeVander, for the stand he has taken and for his testimony in Washington. Certainly, his statement reflects the public sentiment. The people of Minnesota have a right to set standards for the plants in our state in accordance with the recommendations of our Minnesota Pollution Control Agency.

HOW TO PLAN AN ENVIRONMENTAL CONFERENCE



a technique for developing citizen leadership



Partially Scanned Material

The remainder of this page/item has not been digitized due to copyright considerations. The original can be viewed at the Minnesota Historical Society's Gale Family Library in Saint Paul, Minnesota. For more information, visit www.mnhs.org/library/.

• E M.C

O: League of Women Voters of the U.S.

FROM: Mary Ann McCoy State President

SUBJECT Telegrams to Congressmen

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA

ST. PAUL, MINNESOTA 55102 PHONE: 224-5445

DATE 7-28-73

In response to telegram from LWV of the U.S. (R. Clusen), I sent the following "Personal Opinion Message" to Minnesota's 8 Congressmen:

"We oppose weakening NEPA. Pipeline exception in HR 9130 may precedent Other exceptions."

Mary Ann McCoy, President League of Women Voters of Minnesota

Copy to: McCoy, Ebbott, Watson, Borg, Office

LEAGUE OF WOMEN VOTERS OF MINNESOTA 555 WABASHA, ST. PAUL, MINNESOTA 55102 July 27, 1973 Col. Rodney Cox

Corps of Engineers 1210 Post Office Building St. Paul, MN 55101

Dear Col. Cox:

The League of Women Voters of Minnesota seriously questions the wisdom of locating the coal terminal at Pig's Eye. Our comments are concerned with one aspect only - the resultant degradation of water quality; this one aspect alone should be reason to relocate the facility.

The voluminous impact statement cites the many unavoidable effects including:

- loss of more than 221 acres of flood plain with forested areas as well as marsh

- deleterous effects on the water quality due to the initial dredging and subsequent periodic dredging

- discharge of the drainage water from the coal storage areas into the lake, further despoiling the water quality of the lake.

These known effects are serious enough to rule out this environmentally fragile location, but added to that are the many unknowns:

- the impact of the sulphur in the leachate; the degree to which the leachate would get into the groundwater and the lake
- the results from compaction of the dump landfill with the possibility of mud or solid waste pushed into the lake
- the effects of compaction on the decomposition of the dump as well as the impact on water quality in the lake and the groundwater
- the possibility of chemicals in the earthworks being washed into the water by rains or floods.

Does it not seem senseless to thrust all of these extremely harmful activities on an already polluted lake and river? It is ironic that serious consideration is given to this project at a time when plans for advanced waste treatment will result in improvement of the water quality of both the river and the lake.

We urge the consideration of an alternate site.



Sincerely,

Mary Watson, Chairman, Environmental Quality

TELEPHONE 224-5445

League of Women Voters of Minnesota, 555 Wabasha, St. Paul, Minnesota 55102

MEMO

To: Local League Presidents in Golden Valley, Mankato, St. Cloud, Granite Falls, Duluth, Rochester, St. Paul and Minneapolis
From: Mary Watson, State Environmental Quality Chairman
Re: Highway Department Public Meetings
August 21, 1973

We are writing you because your community is one of those in which a public meeting will be held on the Highway Department's procedure for accounting for social, economic and environmental effects in future highway projects.

We are not suggesting you take any action as a League, but because it is an issue on which League members as INDIVIDUALS may wish to comment, we encourage you to inform as many members as you can of the existence of the Action Plan and the public meeting.

Copies of the draft of the Action Plan are available in the county auditor's office and in the state League office; the draft plan runs over 130 pages with no summary available.

If, after reading the Action Plan, your local League sees some issue of local significance that falls under national or your own local consensus, you, of course, are free to comment as a League.

NOTES & QUOTES From E. Q. Committee

The League of Women Voters of Minnesota

Minnesota legislators in the news --

Mondale's proposal to give consideration to a Canadian route to bring the oil where it was most needed, here in the Midwest, was defeated in the Senate. The House in voting on an amendment to have court consideration on the adequacy of the impact statement on the pipeline rejected the amendment. Karth, Quie, Fraser, Frenzel and Bergland all voted in favor of the amendment; Nelsen opposed it.

Mondale spoke on the problems of the Calser Corporation development at Hudson, Wisconsin, a plan completely opposed to the goals of the Wild and Scenic Rivers Act. Attorney General Spannaus has filed suit to prevent construction until the master plan for the area becomes effective. Mondale urged Interior Secretary Morton to use his resources to assist Governors Anderson and Lucey in protecting the river.

Russel Train in commenting on auto emission controls and their effect on gas mileage noted that comparable fuel losses come from the use of autoatic transmissions and air conditioners; the weight of the car is even more important in determining mileage performance.

Information on energy saving from National Wildlife Federation --

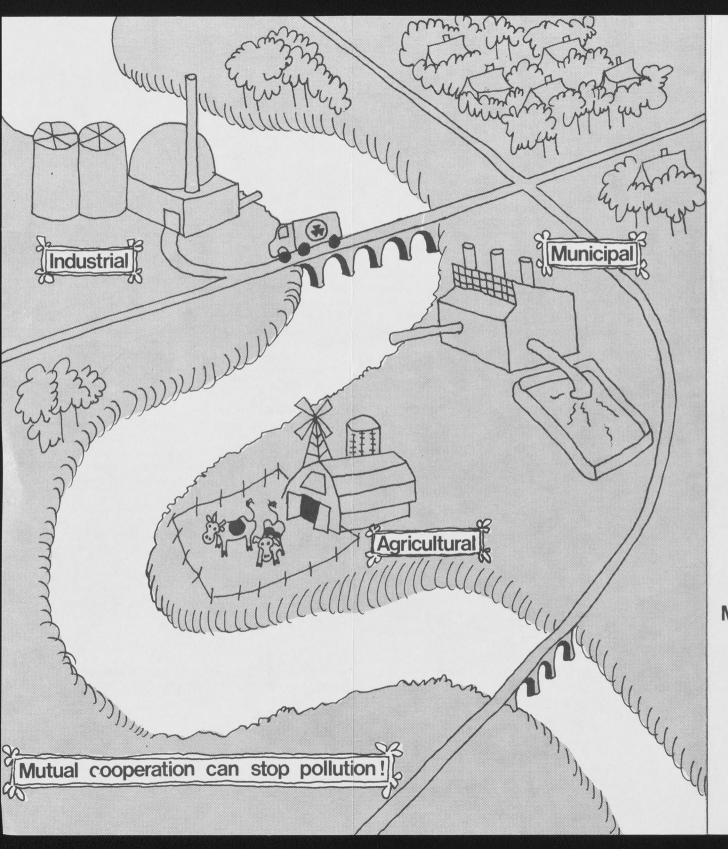
Cars driven at 75-80 m.p.h. use more than twice the fuel per mile than those driven at 50 m.p.h.

Water heaters account for about 15% of your fuel bill; use hot water

If a freezer is a necessity keep it well stocked for it requires less energy to operate than a partially full one.

If you are buying a new appliance remember: Self cleaning ovens consume a large amount of energy Frost free refrigerators use 50% more energy than standard models Side by side refrigerator-freezers use 45% more energy than conventional models

Optional extras on all appliances use extra energy At least 10% of natural gas consumption is used to keep pilot lights burning; a switch operated electric starter can be substituted.



Minnesotans Against Pollution

M.A.P.



For further Information write to:

Public Information Office
Minnesota Pollution Control Agency
1935 W. County Road B2
Roseville, Minnesota 55113

or

M.A.P. C/oMPIRG 3036 University Avenue S.E. Minneapolis, Minnesota 55414

FEDERAL PROGRAM

The most comprehensive program ever enacted to clean up the Nation's waters became law on October 18, 1972. Known as the Federal Water Pollution Control Act Amendments of 1972, the new law mandates a

OUR FEDERAL WATER POLLUTION LAW

sweeping federal-state campaign to prevent, reduce and eliminate water pollution. The law proclaims two general

goals for the United States: (1) To achieve wherever possible by July 1, 1983, water that is clean enough for swimming and other recreational uses, and clean enough for protection and propagation of fish, shellfish and wildlife, and (2) by 1985, to have no discharges of pollutants into the Nation's waters.

Those are the goals. They reflect deep national concern about the condition of the Nation's waters and a strong commitment to end water pollution.

The 1972 law establishes a new system of permits for discharges into the Nation's waters. Every point

NPDES PERMITS REQUIRED FOR ANY DISCHARGE

source discharger of pollutants into navigable waters of the United States must have a National Pollutant Dis-

charge Elimination System (NPDES) permit by December 31, 1974. These are issued by state governments, where possible, or by the federal government. They contain cleanup requirements and deadlines in line with the 1972 law.

MINNESOTA PROGRAM

The Minnesota Pollution Control Agency (MPCA) is the State agency that must issue permits to all discharges in Minnesota. Any company, city, or large farming operation that discharges ANY POLLUTANT into any

MINNESOTA
POLLUTION CONTROL
AGENCY ISSUES
THE PERMITS

river, lake or stream in the State must apply for a NPDES permit. This includes sewage plants, industries, businesses, large feed

lots and others. The permit lists the applicable state standards or, if the discharger is not in compliance with

state regulations, spells out the various steps the discharger must take to clean up the discharge in order to come into compliance. The MPCA estimates that 1,350 facilities will need permits by the end of 1974.

Minnesota's program places high emphasis on public participation in cleaning up our water. When the permit is drafted, it goes on public notice for 30 days. The public notices are printed in local newspapers. "Fact

PUBLIC PARTICIPATION IS PROVIDED FOR

Sheets" are prepared for every discharger that identifies proposed discharges of more than 500,000 gallons on any day of the year.

These fact sheets are sent to anyone who requests them from the Roseville and/or the regional MPCA offices. A citizen may also request to be put on a mailing list to receive public notices and fact sheets regularly. A public hearing may be requested by anyone, and the MPCA Board will authorize a public hearing if "significant public interest" is shown. Generally, in instances of doubt, a public hearing will be held by the MPCA.

The citizens of Minnesota have another important channel open to them through MINNESOTANS AGAINST POLLUTION (M.A.P.).

MINNESOTANS AGAINST POLLUTION M.A.P.

"So all these good laws exist; the government can't always effectively enforce them, and the laws are much too complicated for me..."

True? No, False! YOU CAN JOIN M.A.P.! M.A.P. is a multi-organizational system that will inform citizens

A M.A.P. CITIZEN NEEDS NO PRIOR KNOWLEDGE OF WATER POLLUTION PROBLEMS AND LAW – TO START and correlate their work under the Minnesota NPDES permit program. M.A.P. provides an opportunity for tens of thousands of Minnesota citizens to learn about and help prevent water pollution.

M.A.P. citizens can get involved by simply caring enough about water quality near their homes or schools

MAPS WILL BE SENT

to write to M.A.P. in care of a participating M.A.P. citizen group. M.A.P. will send a diagram showing all permitted dischargers located within the

requested area together with advice on how to use the map. The M.A.P. person, alone or with a group, can then walk or boat the waterways of the area using his/her map to see if there are any non-permitted dischargers. Any non-permitted dischargers can be reported (forms will be supplied) through the M.A.P. system.

M.A.P. has just one missing part; it needs one person - YOU - a citizen, student, worker, ANYONE - to

WRITE TO M.A.P.

take that map and check the rivers and lakes of your area. Write to M.A.P. using the

addresses listed; state what area you are interested in and just SAY YOU WANT TO HELP. We will send you the map for your area and related materials.

Let's assume a group has checked the Cannon River, the Minnesota River, and every other stream, lake or creek in its area. What then? Can they do more? YES!

GET INVOLVED IN A MEANINGFUL WAY

They can select the worst discharges they have seen and check to insure that each discharger is con-

forming to its NPDES permit conditions. They can comment on proposed standards for dischargers within their area. M.A.P. will furnish all needed information and assistance.

WRITE TO M.A.P.

There is more, but it is all here at M.A.P. where it won't do any good unless someone

uses it. Write to M.A.P. We'll keep you informed about what M.A.P. has to offer.

Many other citizens groups are planning involvement in the M.A.P. program. These include the Izaak Walton League, Clear Air - Clear Water Unlimited, the Northern Environmental Council and others.

MINNESOTANS AGAINST POLLUTION: IT WILL WORK IF ONE PERSON MAKES IT WORK — YOU!!!

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA, ST. PAUL, MINNESOTA 55102

Copy of a letter sent to President Nixon on November 14, 1973

We recognize the critical nature of decisions to be made as citizens and government face singly and as a group the supply and distribution of available energy.

We urge you to consider the functioning of citizens organizations (such as the League of Women Voters) when assigning priorities for gasoline consumption.

Our organization's purpose is to aid citizens in their informed participation in government. Our members volunteer their time in research and service. Attendance at planning, information-gathering and dissemination meetings is essential. Presently, public mass transportation is not generally available as an alternative to the private auto.

We seek the continuing access to government afforded by participation in citizen groups. We acknowledge the dependency of these groups upon use of private autos. We seek the allocation of gasoline purchase priorities to citizen groups for use in their activities.

Sincerely,

Mary Ann McCoy President League of Women Voters of Minnesota

Similar letter sent to:
Rogers Morton, Secretary of the Interior
John Love, Assistant to the President for Energy
and Director of Energy Policy Office

Copies for Senators Mondale and Humphrey
Congressmen Quie, Nelsen, Frenzel, Karth,
Fraser, Zwach, Bergland and Blatnik
Lucy Wilson Benson, President, LWVUS
Irene Janski, LWVUS



League of Women Voters of Minnesota, 555 Wabasha, St. Paul, Minnesota 55102 November 1973 Testimony before Minnesota Environmental Quality Council Re: Proposed Rules and Regulations of Minnesota Environmental Quality Council for Environmental Impact Statements by Naomi Loper, League of Women Voters of Minnesota November 15, 1973, St. Paul Vocational Technical Institute I am Naomi Loper speaking for 5100 members of the state League of Women Voters; we have studied problems of air, water and solid waste and adopted programs for legislative and administrative action. In general, we find your draft regulations quite adequate and clear. The Environmental Impact Statement is a most important step to bring about increased awareness to both citizens and public agencies of the effects of action. We feel that this increased awareness is going to lead to better decisions. There are several specific points on which we wish to comment: We highly approve the concept of "threshold" as expressed in the discussion of internal guidelines of Public Agencies (Article V B 4) and (Article VI B 2) Other Actions Requiring an EIS. It is important that all persons understand that while a little bit won't hurt, a little more might. All of the discussion in Article VI B 2 c regarding patterns of separate actions which really, together, create a major impact on the environment, is excellent as it, too, treats realistically of cumulative effect. We do question whether it is quite clear that an action by one agency can be considered cumulative if it, together with a quite different action of another agency or person, creates a potential environmental impact. To clarify it we suggest the following in VI B 2 (6): "Cumulative effects (including unrelated actions of other agencies or private persons)." We recommend the following changes in lists of actions for which an EIS is mandatory: (d) Add "or major expansion of existing refining facilities." It seems clear that an expanded facility could be of greater impact than a small new one. (s) We would suggest a ratio or percentage of the total area involved be included here. One hundred acres of drainage over a 10,000 acre area would not have the same potential for adverse impact as if the total area were much smaller and where even a lesser amount of drainage might have greater impact. We suggest adding "or a lesser figure than 100 acres if the percent of drainage of the total area would cause a significant impact." (t) The words "non-metalic" should be stricken, so that any mine opening be accompanied by an EIS.

E.Q. Committee Meeting Dec. 5

Discussion on keeping committee members informed on action taken between meetings; copies of E.Q. section of Board Memo will be sent to those interested. Discussion on strategy for Beverage Container Deposit legislation; T/A will be sent to all Leagues asking them to contact their senator. Each T/A will indicate the senator's position, i.e. for, against, or undecided so the Leagues can speak from an informed base.

PCA will have a grants-in-aid program for regional resource recovery; information

on it will be sent to the Leagues.

Discussion on the energy bills and our position in relation to them; our Air Quality consensus allow us to act on measures which would lower air quality standards. Involvement in the current bill, part of which deals with the structure of an energy board lies with the interpretation our position in Organization of State Government. The bill calls for a citizens advisory board; environmental groups are asking for an independent policy making board similar to the PCA, The E.Q. committee recommended that we support an independent board structure and that it be taken to the board for a decision. (Later action—a telephone conversation with Ann Knutson and Liz Ebbott brought out that we would be in the position of denying the worth of a citizens advisory board and that such action would be beyond our position).

The Christian Science Monitor article, WHERE DO WE GROW FROM HERE? was ordered in

the amount of 1725 copies.

The EQC is contemplating holding land use meetings throughout the state to hear local and regional concerns. Chuck Dayton asked if the Leagues might be a sponsor; he was told that Leagues would have to be consulted to see if they were interested. Mary Poppleton will check with Chuck Dayton for further developments.

Discussion on pending legislation; mandatory sedimentation is in House Appropriations and Senate Finance. The wetlands bill was boycotted when it was heard in subcommittee and few appeared to hear testimony in the House subcommittee.

EPA is sponsoring a workshop to train people in all the details of the amendments to the Water Pollution Control Act; it would be the responsibility of the trainee to told a workshop in the state. Mary Sullivan's name has been given to Steve Anthony, Environmental Library of Minn., as an interested participant.

Mary Watson reported on the EQC meeting. Christianson stated the appropriations for the EQC are inadequate and they will ask the legislature for more. Benzoni suggested that the provision allowing for 500 citizen petition for Environmental Impact Statement be deleted. Shirley Hunt responded that the citizens are acting responsibly and that only six petitions have been received. The Rules and Regulations for EIS will be considered Jan Salong with the possibility of requiring EIS for MM. Power and Light Co. and the NSP plant at Henderson. The Citizens Advisory Committee asked that the Energy Task Force recommendations be made available to the general public, that land use meetings be held throughout the state, that KUOM be asked to do a series on the energy shortage and its causes, and that the agenda of the EQC be non-amendable so that decision making action would require advance notice.

Discussion on League representation on boards and in official capacity. The committee recommended a policy statement go the Board for approval and then to be sent to the Leagues as a reminder that they must clarify their statements when speaking as an individual so their remarks will not be confused with the League's positions.

Lenore Parham and Jane Grose have compiled material on the state's role in providing safe drinking water. This is an 11 page document and some Leagues may just ignore it. The dommittee recommended that we indicate to Leagues that it is available upon request without cost. This recommendation will be taken to the Board meeting.

Committee recommended a state policy on energy conservation be sent to all Leagues. The recommendation will be taken to the Board for approval.

ENVIRONMENTAL SERVICE BUREAU

of the joint religious legislative committee

Ed Finklea executive director Vol. 3 No.1

1973 legislative voting record

122 w franklin av minneapolis 55404 (612) 871-1571

August 1973

MINNESOTA STATE SENATE

name

city

dist.

1 2 3 4 5 6 7 8 9 10*

			7
(ra	iti	ng	1
1		-	

		-
Gerald C. Anderson	North Branch	19
Norbert Arnold	Pengilly	. 3
Robert Ashbach	Arden Hills	- 48
Otto Bang	Edina	39
Charles Berg	Chokio	15
John Bernhagen	Hutchinson	. 22
Jerome Blatz	Bloomington	38
Winston Borden	Brainerd	13
Robert Brown	Stillwater	51
John Chenoweth	St. Paul	66
Florian Chmielewski	Sturgeon Lake	14
Nicholas Coleman	St. Paul	65
George Conzemius	Cannon Falls	25_
Jack Davies	Mpls.	60
Ralph Doty	Duluth	8
Robert Dunn	Princeton	18
Richard Fitzsimons	Warren	1_
Mel Frederick	West Concord	32
Edward Gearty	Mpls.	. 54
C. R. (Baldy) Hansen	Austin	31
Mel Hansen	Mpls.	61
Roger Hanson	Vergas	10
Jerome Hughes	Maple Wood	50
(Skip) Humphrey	New Hope	44
Carl Jensen	Sleepy Eye	28
J. A. Josefson	Minneota	20
John Keefe	Hopkins	40
Stephen Keefe	Mpls.	59
William Kirchner	Richfield	37
Jack Kleinbaum	St. Cloud	17
Howard Knutson	Burnsville	53
Al Kowalczyk	Brooklyn Park	45
Harold Krieger	Rochester	33
Lew Larson	Mabel	35
Roger Laufenburger	Lewiston	34_
B. Robert Lewis	St. Louis Park	41
James Lord	Chanhassen	36
William McCutcheon	St. Paul	67
John Milton	North Oaks	49
Roger Moe	Ada	2
Rolf Nelson	Golden Valley	43
Robert North	St. Paul	62
Edward Novak	St. Paul	64
Harmon Ogdahl	Mpls.	. 58
Wayne Olhoft	Herman	11
Joseph O'Neill	St. Paul	63
Alec Olson	Willmar	21_
Howard Olson	St. James	27_
John Olson	Worthington	26
John Patton	Blue Earth	30
A. J. (Tony) Perpich	Eveleth	6
George Perpich	Chisholm	5
George Pillsbury	Wayzata	42
Clarence Purfeerst	Faribault	24
Earl Renneke	LeSueur	23
David Schaff	Fridley	46
Ed Schrom Douglas Sillers	Albany	16
	Moorhead	7
Sam Solon	Duluth	
Allan Spear	Mpls.	57
I Dohout Charren	S. St. Paul	52
J. Robert Stassen	Made	
Eugene Stokowski	Mpls.	55
Eugene Stokowski Robert Tennessen	Mpls.	56
Eugene Stokowski Robert Tennessen Stanley Thorup	Mpls. Blaine	56 47
Eugene Stokowski Robert Tennessen Stanley Thorup Arnulf Ueland, Jr.	Mpls. Blaine N. Mankato	56 47 29
Eugene Stokowski Robert Tennessen Stanley Thorup	Mpls. Blaine	56 47

N	N	Y	N	Υ	Y	N	Y	N	Y_
A	_ A_	Y	Y	Y	Y	N	N	Υ	Y_
Y	Y	A	N	N	N	A	N	N	N.
A	A	N.	Y	_ A	N	Y	N N	Y N	N N
Y	Y	N	N	N_	N				
<u>Y</u>	Y	N	N	N	N	_ Y	N_	N.	N.
<u>Y</u>	Y	N	N	Υ	N	Υ	N.	N	N
N_	N	Y	Y	Y	Y	N	Y	Y	Y
Y	Y	N	N	Y	Y	Y	N	N	N_
N	N	Υ	Y	_A_	Y	N	Y	Y	_Y_
Y	Υ	Y	N	Y	N	N	N	N	_Y_
N	N	A	Y	Α	Y	N	Υ	Y	_Y_
N	N	Y	A	Α	Y	N	Y	Y	Y
N	N	Y	Y	Y	Y	N	Y	Y	Υ_
N	N	Y	N	Y	N	N	Y	Y	Y
N	N	Y	Y	Y	N	A	N	N	Υ_
Y	Y	N	Y	Υ	Y	Y	N	Υ	_Y_
Y	Y	N	N	N	N	Y	N	N	N_
N	N	Y	Y	Υ	Y	N	Y	Y	Y
Y	Y	N	Y	N	N	N	N	Y	Y
N	N	N	Y	Y	Y	N	N	Y	_A_
Υ	Y	Y	Υ	Υ	N	Α	N	Y	Y
N	N.	Y	Y	Υ	Y	N	Y	Y	Y
N	N	Y	N	Y	Υ	N	Y	Y	Y
A	A	N	N	N	N	Y	N	N	Y
Y	Y	A	Y	A	N	Y	N	Y	A
N	N	Y	Y	Y	N	Y	N	N	Y
N	N	Y	N	Y	Y	N	Y	Y	Y
17/10/10			Y					The second second	
N	N	A		A	Y	Y	N	N	N
N	N	A	N	Y	Y	N	Y	Y	Υ_
N	Y	N	Y	Y	N	Y	N	N	N
Y	N	A	Y	N	N	Y	N	N	_N_
A	_ A_	A	Y	A	Y	Y	N	N	_A_
A	A	Y	Y	ΥΥ	N	_A_	N	Y	_Y_
N	N	Y	Y	Y	Y	_A_	Y	Y	_A_
A	A	Y	Y	Y	Y	N	Y	Υ	Υ
N	N	Y	N	Υ	Y	N	Y	Y	Y
A	A	A	Y	A	Y	N	N	Y	Y
N	N	Α	Υ	Υ	Υ	N	Υ	Υ	Υ_
N	N	Υ	N	Υ	N	N	Υ	Υ	Υ
N	N	N	Υ	Y	N	Y	N	N	_Y_
N	N	Υ	Υ	Υ	Y	N	Y	Y	Y
N	N	Y	Υ	Α	Y	N	_A_	Y	Y
N	Α	Α	Υ	Y	N	Α	N	Y	N
N	N	Y	N	Υ	Y	N	Y	Y	Υ_
N	Α	Α	N	Υ	N	N	N	N	N
N	N	Y	N	A	Υ	N	N	Y	Y
Y	Y	Α	N	Υ	N	Y	Y	N	_Y_
Y	N	N	Υ	Y	N	Y	N	Y	N_
Y	Y	N	N	Y	N	Υ	N	N	_N_
N	N	Y	Y	Α	Υ,	N	Y	Y	Y
N	N	Υ	N	Υ	Y	Α	Υ	Y	A
Α	Α	N	N	Υ	Α	Y	N	A	N
N	N	Α	N	Α	Α	N	Y	N	Y
N	Y	Y	N	N	N	Y	N	N	N
N	N	Υ	Υ	Υ	Y	N	Υ	Y	Y
Y	Α	N	N	N	N	_A_	Y	Y	_Y_
N	N	Y	Υ	A	N	A	N	N	Y
N	N	Υ	Υ	Y	N	N	Y	Y	Y
N	N	Y	N	Y	Y	N	Υ	Y	Υ
N	N	N	Υ	Υ	Y	Υ	N	Α	Υ
N	N	Υ	Υ	Y	Y	N	Y	Y	Υ
N	N	Y	Υ	Y	Y	N	Υ	Y	Υ
N	N	Y	·N	Y	Y	N	Y	Y	Y
N	Y	A	N	Υ	A	Α	N	Α	N
N	N	Y	Y	Y	Υ.	N	Υ	N	Y
Y	Y	Y	N	Υ	N	N	Y	Y	Y
								Will be division.	

1 2 3 4 5 6 7 8 9 1011 12*) dist. city name

60-A

1	
1	
r	

100 76 84

James L. Adams	Mpis.	60-A
Salisbury Adams	Wayzata	42-B
Richard Anderson		48-A
	New Brighton	
Delbert F. Anderson	Starbuck	15-A
Glen H. Anderson	Bellingham	15-B
Irvin N. Anderson	Int 'I. Falls	3-A
Lynn H. Becklin	Cambridge	18-A
		Annual Course Course Course And A
Jerome J. Belisle	St. Paul	50-A
Robert C. Bell	Roseville	48-B
Tony Bennett	St. Paul	66-B
Tom Berg	Mpls.	56-B
The second secon	THE RESIDENCE OF THE PARTY AND PARTY	
Linda Berglin	Mpls.	59-A
John Biersdorf	Owatonna	32-A
John Boland	Maple Wood	50-B
Art Braun	Greenbush	1-A
Bernard Brinkman	Richmond	16-B
Arnie Carlson	Mpls.	58-B
Bernard O. Carlson	Cloquet	14-B
Douglas W. Carlson	Sandstone	14-A
	atte Sanna van Franciskopi (maar arka ar 1 s ka 1 r fan 1 mae 4 san ar arka aniskiski	and the second second
Lyndon R. Carlson	Brooklyn Center	44-A
James R. Casserly	Mpls.	56-A
David Cleary	Bloomington	38-A
J. B. (Bill) Clifford	New Hope	44-B
	The same of the sa	
Joe Conners	Fridley	46-B
Robert Culhane	Waterville	24-B
David R. Cummiskey	Mankato	29-A
Harold J. Dahl	Howard Lake	THE RESERVE OF THE PARTY OF THE
		22-B
Frank H. DeGroat	Lake Park	10-A
Neil Dieterich	St. Paul	62-A
Aubrey Dirlam	Redwood Falls	21-B
Maderica and a second		
A. J. (Tony) Eckstein	New Ulm	28-B
Willis Eken	Twin Valley	2-B
Stanley Enebo	Mpls.	60-B
Dale E. Erdahl	Blue Earth	30-A
Wendell O. Erickson	Hills	26-B

Gilbert Esau	Mountain Lake	28-A
Ray W. Faricy	St. Paul	63-A
Robert W. Ferderer	St. Paul	64-A
David Fjoslien	Brandon	11-B
Gary Flakne		
	Mpls.	61-A
Mary Forsythe	Edina	39-A
Stanley Fudro	Mpls.	55-A
Peter Fugina	Virginia	5-A
	CONTRACTOR COMPANY AND PROPERTY AND PARTY OF THE PARTY OF	
Joseph Graba	Wadena	10-B
Joseph Graw	Bloomington	38-B
Joan Growe	Minnetonka	40-A
Thomas Hagedorn	Truman	27-B
Walter Hanson	St. Paul	
A1 :1 11		62-B
Neil Haugerud	Preston	35-A
O. J. (Lon) Heinitz	Wayzata	43-A
Julian Hook	Golden Valley	41-A
Joel Jacobs		47-A
Proceedings of the contract of	Coon Rapids	CONTRACTOR OF THE PARTY
Mike Jaros	Duluth	7-B
Carl M. Johnson	St. Peter	23-B
Douglas Johnson	Cook	6-B
John W. Johnson		58-A
	Mpls.	
Robert W. Johnson	St. Paul	63-B
Ralph Jopp	Mayer	36-A
Tad Jude	Mound	42-A
Phyllis Kahn	Mpls.	
***		57-A
William Kelly	E. Grand Forks	2-A
Ray Kempe	W. St. Paul	53-A
Walter Klaus	Farmington	25-A
Jerry Knickerbocker	- armington	
- N. C. and Proceedings of Concession of the Concession of	Male	
Adalah Vuone	Mpls.	40-B
Adolph Kvam	Mpls. Litchfield	22-A
al the same of the	Litchfield	22-A
Gary Laidig	Litchfield Bayport	22-A 51-A
al the same of the	Litchfield	22-A

James L. Adams

	Y Y Y N Y A Y Y N A Y Y N A Y Y Y N Y N										
٨	v	۸	٨	~	~	NI.	V	N!	V	~	V
Y								-			
Y		-	-								
Y					-						
Y						Υ					
N											
Y											
		INDICATE AND AND THE OWNER, AND THE				CONTRACTOR OF THE PARTY					
A			Y								
N	Υ										
N	Υ	N	Υ		Υ	Υ		N			
_ Y									- white was the	DAMPSON ALICE	AUDITOR OF THE
N								N	Y	Y	<u>Y</u>
Y N	N	Y	N	Y	Y	A Y	N	N	Y	N Y	Y
N	A Y	N	N	Y	Y	Y	A Y	N Y	Y	Y	Y
Y	A	Y	N	Y	N	Y	A	N	Y	A	Y
Y	Υ	Υ	N	N	N	Υ	N	Υ	N	N	A
N	Υ	N	Υ	Υ	Υ	N	Υ	N	Υ	Υ	Y
N	A	N	N	Y	Y	Y	Y	N	Y	Υ	Y
-A Y	Y	N	Y N	Y	Y	Y	Y	Y	Y	N	Y
N	A	N	Y	Y	A	Y	Y	N N	Y	Y	Y
Y	N	Y	N	Y	N	Y	A	N	N	A	N
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Y
N	Υ	N	Υ	Υ	Υ	Α	Υ	N	Υ	Υ	Y
Y	N	Y	N	Y	Y	Y	N	Y	Y	N	N
N	Y	N	Y N	Y A	Y	Y A	N	N A	A	N	N
Y	Y	Y	N	Y	Y	Y	N	A	Y	N	N
Y	Ņ	Y	N	Y	Y	Y	N	N	N	N	N
N	Υ	N	Α	Υ	Υ	N	Υ	N	Υ	Υ	Υ
Y	N	Υ	N	Υ	Α	Υ	N	Α	N	N	N
Y	N	Y	N	Y	N	Y	N	Y	N	N	N
N	N	Y N	N	A	N Y	Y	N Y	N	Y	N Y	<u>N</u> Y
Y	Y	N	Y	Y	Y	Y	Y	A	Y	Y	Y
Y	N	Υ	N	N	N	A	N	N	N	A	N
A	Υ	N	Α	N	Υ	Α	Υ	Υ	Υ	Υ	Υ
Υ	N	N	N	Υ	N	A	Y	N .	Υ	Υ	Y
N	Y N	N N	Y	Y	Y	A	Y	N N	Y	Y	Y
N	Y	N	Y	Y	Y	Y	A	N	Y	Y	Y
Y	Y	Y	N	Y	Y	Y	N	Y	N	N	Y
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Y
Υ	N	Υ	N	Υ	А	Υ	N	Υ	N	Α	N
N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y
Y	Y	Y N	N N	Y	A Y	A	A Y	N N	N A	N	Y
Y	Y	A	Y	Y	A	Y	Y	A	Y	N	Y
A	Y	N	Υ	Υ	Υ	N	N	N	Υ	Υ	Y
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
Υ.	N	Υ	N	Υ	Υ	Υ	N	N	Υ	N	N
N	N	N	Y	Y	Y	Y	Y	N	Y	Y	Υ
Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y
Y	N	Y	N N	Y	Y	N	N N	A N	N N	Y N	N N
A	Y	N	N	Y	Y	A	Y	N	Y	Y	Y
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
Y	Y	N	_ Y	Y	Y	Y	N	N	Y	Y	N
N	Y	N	Y	Y	Y	N	Y	N	N	Y	Y
. Y	N	Y	N N	Y	Y	N	N	Y A	N	N	Y
Y	Y	Y	N	N	Y	N	N	Y	N	N	N
Y	Y	A	N	Y	A	N	A	N	Y	Y	Y
Y	N	Y	N	Y	Y	A	N	Y	N	N	N

name	city
------	------

dist.

1 2 3 4 5 6 7 8 9 1011 12

rating

Jack LaVoy	Duluth City	8-A
Richard Lemke	Lake City	34-A
Ernie Lindstrom	Richfield	37-A
John Lindstrom	Willmar	21-A
Vincent Lombardi	Lino Lakes	49-A
Verne Long	Pipestone	26-A
George Mann	Windom	27-A
Ernee McArthur	Brooklyn Center	45-B
Paul McCarron	Spring Lake Park	46-A
M, J. "Mac" McCauley		34-B
Bob McEachern Robert McFarlin	St. Michael	18-B
	St. Louis Park	41-B
Helen McMillan	Austin	31-B
R. J. (Dick) Menke	Prior Lake	36-B
Darrel R. Miller	Pine Island	32-B
Melvin Miller	Randall	12-A
Donald Moe	St. Paul	65-B
August Mueller	Arlington	23-A
Willard Munger	Duluth Course	7-A
Leonard Myrah	Spring Grove	35-B 59-B
Ken Nelson	Mpls.	
Thomas Newcome	White Bear Lake	49-B
Joe Niehaus Fred Norton	Sauk Centre St. Paul	16-A
	Stacy	19-4
Mike Ohnstad William Ojala		6-A
	Aurora	43-E
Richard Parish	Golden Valley Sartell	17-4
Al Patton	0411011	52-A
Raymond Pavlak	St. Paul St. Paul	67-4
Robert L. Pavlak Jim Pehler	St. Cloud	17-E
And the second s	Madison	20-/
Harry Peterson	The state of the s	53-E
Bradley Pieper	Burnsville	
Ray Pleasant	Bloomington	39-E
Norman Prahl E. W. "Bill" Quirin	Keewatin Rochester	3-B 33-E
Thomas Resner	Rochester	33-4
James Rice	Mpls.	54-E
Roy Ryan	St. Paul	64-E
Martin Sabo	Mpls.	57-E
Doug St. Onge	Bemidji	4-A
John Salchert	Mpls.	54-4
Don Samuelson	Brainerd	13-4
John Sarna	Mpls.	55-E
Henry Savelkoul	Albert Lea	31-4
William Schreiber	Brooklyn Park	45-7
Victor Schulz	Goodhue	25-E
Rod Searle	Waseca	30-E
Glen Sherwood	Pine River	4-B
Harry Sieben, Jr.	Hastings	52-E
Mike Sieben	Newport	51-E
Andrew Skaar	Thief River Falls	1-B
Howard Smith	Crosby	13-E
John Spanish	Hibbing	5-B
Arlan Stangeland	Barnesville	9-B
Russell Stanton	Marshall	20-E
James Swanson	Richfield	37-E
John Tomlinson	St. Paul	67-E
James Ulland	Duluth	8-B
Robert Vanasek	New Prague	24-
Bruce Vento	St. Paul	66-4
Gordon Voss	Blaine	47-6
Charles Weaver	Anoka	19-8
Stephen Wenzel	Little Falls	29-1
Richard Wigley	Lake Crystal	29-1
Neil Wohlwend	Moorhead	9-A
The same of the sa	Mpls.	61-1

N	А	N	Υ	Υ	Y	Υ	Υ	N	Υ	Υ	Y
Υ	Υ	Υ	A	Α	Υ	Υ	A	N	Υ	N	A
Y	Υ	N	A	Υ	N	N	Υ	N	Υ	N	Y
N	Υ	Α	Υ	Υ	Υ	Α	Α	Α	Υ	Υ	Y
Y	Υ	Υ	Α	Υ	N	Α	N	Α	Y	N	Y
Υ	N	Α	Α	Υ	N	Υ	N	Υ	N	N	N
Υ	Υ	Y	Α	Y	A	Υ	Y	N	Υ	A	_A_
Υ	Υ	N	N	Υ	Y	N	Y	_A_	Υ	N	Y
N	N	N	Y	Y	Y	Υ	Υ	N	Υ	Y	Y
Υ	Υ	A Y	N	Y	A	Α.	N	. A	Y	N	_A_
Α	Υ	Y	N	Υ	Υ	Α	N	N	Υ	Υ	Y
Υ	Υ	Υ	N	Υ	Y	Α	Y	N	Υ	Υ	Y
Α	Α	Α	Α	Α	Α	Υ	Α	N	Α	Υ	Y
N	Υ	N	Υ	Υ	Υ	Y	Υ	N	Y	Υ	Υ
Υ	Υ	Α	Y	Α	Υ	Υ	N	N	Υ	Υ	A
Υ	N	Υ	N	Y	Y	Υ	N	N	Υ	Α	A
N	Υ	N	Y	Υ	Y	Υ	Υ	N	Υ	Υ	A
Υ	Υ	Α	Α	Α	Α	Α	Α	N	Α	Y	Y_
N	Υ	N	Υ	Υ	Y	Υ	Υ	N	Υ	Υ	Y
Υ	N	Α	N	Υ	Υ	Α	N	Υ	Y	N	Y
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
Y	Υ	N	Α	Υ	Α	Υ	Υ	N	Y	Y	Y
Y	Y	Y	N	Y	Y	Υ .	N	Y	N	N	N
N	Υ	N	Y	Y	Y	Y	A	N	Y	Y	Y
Y	N	Y	N	N	Y	N	N	Y	N	N	N
N	Y	N	Υ	Y	Y	Y	Υ	N	Y	Y	Y
N	Υ	N	Υ	Υ	Υ	Y	Υ	N	Y	Y	Y
Υ	Υ	Υ	Υ	Υ	Y	Υ	N	N	Y	N	Y
N	Υ	N	Υ	Y	Y	Y	Y	N	Y	Y	Y
Y	N	Y	A	Y	Υ	Y	N	A	N	Y	N
N	Υ	N	Y	Y	Y	Y	Y	N	Y		Y
Υ	Υ	Υ	N	Y	Y	Y	N	N	Y	A	Y
Υ	Υ	Υ	N	N	Υ	N	N	A	N	N	
A	Υ	N	N	Υ	A	A	Y	A	Y	N	_ Y_
A	Y	N	N	Y	Y	Y	N	N	Y	N	Y A
N	Y	N	Y	A	Y	Y	Y	N	Y	Y	_A_
N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	A
N	Y	N	A	Y	Y	N	Y	N	Y	Y	Y
N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y
Y	Y	Y	N	Y	A	Y	Y	N	N	Y	Y
N	Y	N	Y	A	A	Y	Y	N	A	A	A
Y	N	Y	Y	N	Y	Y	Y	N	Y	A	N
N	Y	N	Y	Y	Y	Y	Υ	N	Υ	Υ	Υ
Y	Y	N	Υ	Υ	N	Υ	Υ	Υ	Y	А	Υ
Y	Y	A	N	Y	Y	N	Y	Y	N	A	N
Y	N	Y	N	Y	A	Y	N	N	Υ	Υ	A
Y	Y	Υ	N	Α	Υ	Α	N	Α	N	Υ	N
N	Υ	N	Υ	Υ	Υ	Υ	Υ	Α	Y	A	_ Y_
N	Υ	N	Υ	Υ	Y	Υ	Υ	N	Υ	Υ	Y
N	Υ	N	Υ	Υ	Α	Υ	А	N	Υ	Y	Υ
Y	N	Υ	N	Υ	N	Υ	N	Α	N	Υ	N
Y	N	Υ	N	Y	Α	Υ	Υ	Α	Υ	Y.	N
N	N	Υ	N	Y	Υ	Α	Α	N	Α	N	_A_
Υ	N	Υ	N	Α	Α	Υ	N	Υ	Α	N	N
N	Υ	Α	Α	Α	Υ	Υ	Υ	N	Υ	Υ	Y
N	Υ	Α	Υ	Υ	Υ	N	Υ	N	Υ	Α	Y
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Y
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
N	Υ	Υ	Α	Υ	Υ	Υ	Υ	N	Υ	Υ	A
N	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Y
A	Υ	N	Υ	Υ	Υ	Α	Α	N	Υ	Υ	Y
Υ	Α	Α	N	Υ	N	Α	A	Α	Υ	Α	Y
Y	N	N	Υ	Υ	Υ	Y	Y	N	Υ	Υ	Y
Y	Υ	Y	N	Υ	Υ	A	N	N	N	N	N_
Y	N	Υ	Α	Υ	Α	Α	N	N	N	Υ	Υ
				Υ						Υ	Y

^{*}see key on page 4 for explanation of votes

KEY to SENATE VOTES

- Vote on an amendment to the Wild and Scenic Rivers. Act, S.F. 642. The amendment would have made the law non-applicable to lands in incorporated areas. This would have severely limited the effectiveness of the act. The motion failed 17-42. In this case a no vote is a positive vote for the environment.
- 2. Vote on an amendment to the Wild and Scenic Rivers Act. This amendment would have taken all the authority to designate rivers as wild or scenic away from the Department of Natural Resources and left it with the legislature. The amendment failed on a 17-40 vote. In this case a no vote is a positive vote for the environment.
- Vote on final passage of S.F. 765 which authorized the Department of Natural Resources to limit or prohibit the use of motor boats on parts of the St. Croix River. The bill passed 36-17 and was enacted into law.
- 4. Vote on final passage of S.F. 67 which gave the Department of Resources eminent domain power under certain conditions to acquire lands for parks and wilderness areas. The bill passed 37-29 and now awaits action in the House.
- 5. Vote on final passage of the Critical Areas Act. The bill gave the Governor the power to take action now to preserve areas of the state which are of particular "historical, cultural or esthetic" significance. The bill passed the Senate 45-9 and has thus been enacted into law.
- 6. Vote on final passage of S.F. 1840 the Bicycle Registration Bill. The bill establishes a state-wide bicycle registration system and provides the registration funds to be used for the development of bicycle trails. The bill passed 35-29 and now awaits final action in the House.
- 7. Vote on an amendment to the Solid Waste Recycling Bill. The amendment would have struck the user fee section of the bill which was the funding mechanism for the recycling program. The amendment failed 21-36 and was not adopted. The bill finally passed the Senate unanimously and was enacted into law. In this case a no vote is a positive vote for the environment.
- Vote on an amendment to S.F. 371 relating to regulation of radiation sources. The amendment stated that the state should be able to set stricter emission regulations than the Atomic Energy Commission. The amendment failed 32-34.
- Vote on final passage S.F. 1964 which prescribed additional powers to watershed districts. The bill passed 41-23 and was enacted into law.
- 10. Vote on a resolution to the President and Congress to provide by law that industries may not move operations to escape environmental protection legislation. The resolution was adopted by a 45-17 vote.

KEY to HOUSE VOTES

- Vote to re-refer H.F. 150 to the Agriculture Committee.
 H.F. 150 attempted to make some necessary changes in
 the Environmental Right Act of 1971 in order to
 strengthen it. The motion to re-refer the bill prevailed on
 a 69 to 54 vote. As a result of this action the bill died
 in the Agriculture Committee. In this case a no vote was
 a positive vote for the environment.
- Vote on final passage of H.F. 530. The bill designates the timberwolf as a big game animal and directs the Department of Natural Resources to manage and protect the animal. The bill passed the House 94 to 32.
- 3. Vote to re-refer H.F. 672 to the Agriculture Committee. H.F. 672 was the Wild and Scenic Rivers Act which was enacted by the 1973 legislature. There were many votes taken on the bill. We determined that this was one of the two most important. This motion was made by opponents of the bill and was intended to kill the bill in the Agriculture Committee. In this case a no vote was a positive vote for the environment. The motion failed 51-67.
- Vote to include eminent domain authority for the purchasing of scenic easements in the Wild and Scenic Rivers Act.
 This was considered a vital part of the bill by its supporters. The amendment was adopted 60-58.
- Vote on a final passage of H.F. 765 which restricted the use of motor boats on certain parts of the St. Croix River. The bill passed 113-8 and was signed into law.
- Vote on final passage of H.F. 680 which amended the 1971 Environmental Rights by adding a provision for the reimbursement to a successful plaintiff of court costs. The bill passed the House on a 97-17 vote and now awaits Senate action.
- Vote on final passage of H.F. 837 the Freeway Moratorium bill. The bill called for a two year moratorium on construction of several freeways in the metropolitan area. The bill passed the House 89-19 and now awaits Senate action.
- 8. Vote on final passage of H.F. 1465 which broadened the definition of public waters to include "all waters of the state which serve a beneficial public purpose." The redefinition was needed to include marshes. Draining or filling is prohibited without a Department of Natural Resources permit according to the bill. The bill passed the House 73-44 and was enacted into law.
- 9. Vote was on an amendment to strike the packaging review authority from the Solid Waste Recycling bill, H.F. 1821. The bill granted money to start a solid waste recycling program in the state and gave the Pollution Control Agency the power to review new packages prior to entering the solid waste cycle. The amendment failed 21-93 and the bill was passed with the review authority. In this case a no vote is a positive vote for the environment.
- Vote was on final passage of H.F. 595 which required the PCA to hold public hearings on any variance from PCA regulations. The bill passed the House 96-30 and was signed into law.
- 11. Vote was on final passage of H.F. 1659, the Critical Areas Act. The purpose of the bill is to allow the Governor to take action now to preserve areas of the state which are of particular "historical, cultural or esthetic" significance. The bill passed the House 82-38 and was signed into law.
- Vote was on final passage of H.F. 1381 which directs the DNR to establish criteria governing drainage systems. The bill passed the House 91-30 and was signed into law.

EDF LETTER®

A REPORT TO MEMBERS OF THE **ENVIRONMENTAL DEFENSE FUND** JANUARY 1974

EDF Seeks Broader Criteria To Identify Toxic Pollutants

On December 7, 1973 EDF joined the Natural Resources Defense Council. the National Audubon Society, and Businessmen for the Public Interest in a suit to require the Environmental Protection Agency (EPA) to broaden the criteria it uses for selecting toxic pollutants to be prohibited from being discharged into U.S. waters. The suit also requests that EPA expand its list of such effluents.

A toxic substances list released by EPA on September 7, 1973 included only the following substances: aldrin, dieldrin, benzidine, cadmium, cyanide, DDT, DDE, DDD, endrin, mercury, polychlorinated biphenyls, and toxaphene. EPA's list did not include many other pesticides, herbicides, heavy metals, and industrial chemicals which are known to be toxic or to cause birth defects or cancer.

In addition, EDF and the other groups maintain that EPA used inadequate criteria to determine its list of toxic water pollutants. If broader criteria were used, the list would be expanded to include pollutants derived from many chemical or manufacturing processes.

Dr. Robert H. Harris, a water quality engineer, and Dr. Lucile F. Adamson, a biochemist, are EDF's scientific coordinators for this case.

EDF Defends New York Wetlands Law

New York State's Tidal Wetlands Act became effective in September 1973 and received its first challenge a month later. The act imposes a moratorium on the development of any New York wetlands until the New York State Department of

Environmental Conservation (DEC) has completed an inventory of valuable wetlands to be protected. Three developers on Long Island, however, requested permission to fill their 104 acres of wetlands at Lido Beach and build 607 single-family houses on the filled land.

EDF participated in a hearing on this issue on November 27 and 28, 1973, to preserve the integrity of the new wetlands law and save the threatened 104 acres. EDF attorney James T. B. Tripp opposed the developers' request, argu-

ing that sound scientific reasons existed for the passage of the Tidal Wetlands Act. and that wetlands must be protected from development until the DEC's inventory can be completed.

The Lido Beach Wetlands, part of the disappearing salt marshes of Long Island's south shore, are exactly the type of wetlands the act is intended to protect. Tidal wetlands, areas that lie beneath or border tidal waters, are among the most biologically productive areas on earth. They produce and maintain

marine life, from the smallest organisms to clams, oysters and fish, and provide

habitat for wildlife and waterfowl. It is estimated that the Lido Beach wetlands are capable of producing 41,000 pounds of fish actually caught each year.

The wetlands at Lido Beach, like other salt marshes

along the Great South Bay, provide food and habitat for birds migrating along the Atlantic flyway, as well as for birds which nest in the area.

Wetlands serve as buffer zones between the ocean and the land. Because they produce a large quantity of organic matter, wetlands also tend to build up the land, in this case offsetting the rise of the ocean against Long Island's shore.

Water quality is affected by the presence of wetlands. They consume and break down organic wastes and maintain the clean water necessary for marine food production and recreation.

EDF's testimony was presented at the Lido Beach hearing by Dr. Robert E. Smolker and Dr. Joel S. O'Connor of the State University of New York at Stony Brook and Dr. George M. Woodwell, Senior Ecologist a Brookhaven National Laboratory, who is involved in extensive research on salt marshes. Smolker and Woodwell are EDF trustees.



EDF trustees Dr. George M. Woodwell and Dr. Robert E. Smolker and attorney James T. B. Tripp visit a salt marsh on the south shore of Long Island. Photo by

Substantial Evidence Found for DDT Ban

On December 14, 1973 the U.S. Court of Appeals for the District of Columbia upheld the Environmental Protection Agency's (EPA) decision of June 14, 1972 to ban almost all uses of DDT. The Court ruled that there was substantial evidence to support the ban.

The ban followed six years of litigation in state and Federal courts by EDF and other environmental groups. The suits were pursued because DDT is a hazard to human health and the environment, and because numerous safer and more effective insect control procedures are available. EDF staff attorney William A. Butler represents the environmentalists.

Meanwhile, there are renewed efforts to bring DDT back again. Chemical, timber, and other interests assert that only DDT controls gypsy moths in the northeastern U.S. and tussock moths in the Northwest. A substantial public relations campaign has been launched to promote these views, and bills have been introduced in Congress to force EPA to grant permission for such DDT use. If this legislation became law, it would undermine the regulatory function of EPA by subjecting pesticides to political rather than scientific regulation.

Dr. Steven G. Herman, a biologist who represents EDF on the tussock moth issue, indicates that DDT has not been shown to be effective in controlling this insect and that other control procedures are available. Some scientists claim that DDT may actually be beneficial to tussock and gypsy moths because it destroys their natural enemies and temporarily thins their populations, preventing epidemic disease transmission among the moths. EDF maintains that an integrated control system would avoid such problems and protect the environment.



Partially Scanned Material

The remainder of this page/item has not been digitized due to copyright considerations. The original can be viewed at the Minnesota Historical Society's Gale Family Library in Saint Paul, Minnesota. For more information, visit www.mnhs.org/library/.



EQ NOTES AND QUOTES

The League of Women Voters of Minnesota

January 1974

Mini Dams: Leagues wanting to swell their coffers and help the environment by conserving water should read about Prince Georges Co., MD League who raised \$600 by selling Mini-Dams. The Mini-Dam saves two gallons of water per flush! See page 28 of October-November '73 national VOTER.

Sample Outlines for Local Unit Meetings:

We received several requests at the Land Use workshops for help in putting together a local Land Use meeting.

Each local League will have to determine the exact format but certain basics should be included.

You now have summaries of national Land Use publications and an outline of Minnesota Land Use. It would be valuable for each member to have copies of these publications - or publish them in your local bulletin.

The committee should be very familiar with the national League Committee Guides and especially the latest Current Focus - Land Use at the Growing Edge.

our committee should then find the answers to the following questions at the local level:

- 1) What are the primary land use decisions being made in your area?
- 2) What are your main land uses?
- 3) Who makes the decisions?
- 4) Who influences them?
- 5) Who should set priorities for human needs and concerns?

You now have the basic tools for your meeting.

A resume of national and state goals and legislation could start the meeting off. Use your Current Focus and Land Use in Minnesota for this. Now move into a presentation of local conditions. The answers to the above questions should provide all the information you will need.

Another approach is the panel discussion. Use state, county and local officials. A representative from a human services agency should be included and a person knowledgeable in citizen action would be extremely helpful. Ask each person to speak on a specific area of concern and have them respond to questions at the end.

Remember, this is only the beginning of the Land Use study. The forthcoming national LWV publication should indicate where the study is going from here.

We will also keep you abreast of land use bills as they progress through this session of the Legislature.

Minnesota Association of Planners - Observers Report: This organization had been out of circulation for five years but land use has brought it back to life.

Gerald Christensen of the Minnesota State Planning Agency was the keynote speaker. He addressed most of his comments to the effectiveness of different levels of government in handling the land use problem. He feels that the federal government is not prepared to do it, that the states must (and

Minnesota is well set up to do it) with the regional planning concept. He cited the Rural Development Council as being an exciting concept and also talked of the new Commission on Minnesota's Future created out of the 1973 Legislature.

This writer then attended one of five workshops - "Can We Preserve our Farm Land?" - moderated by Bob Snyder of the University Ag. Ext. He listed ten socio-economic problems connected with the use of farm land for urban development. He said that the land ethic should change as problems will intensify Three approaches might be used to contain the farm land: 1) large lot zoning, 2) conditional use permit and 3) exclusive Agricultural Districts. New York State had adopted this last approach (a copy of it may be found in the state office). Eminent Domain is addressed; acreage involved is 500-52,000 acres.

Sen. John Milton was the speaker at dinner. He addressed his comments largely to the Met Council area (Region 11).

The next day we heard four elected officials:

Paul Redpath, mayor of Eden Prairie, wants Metro Council to move faster. EP has no zoning - just Planned Unit Developments (PUD's).

Jerry Tiedeman, Olmstead Co. Commissioner, feels that state agencies are a hindrance; that there should be more guidance from DNR and the Legislature; that the EQC should be citizen controlled; that there should be more co-operation between units of government.

Mayor Barbara Donoho of Fergus Falls wonders "how you goin' to keep 'en down on the farm?" She sees the regional approach as one way to get money. Says, also, that outstate legislative committee meetings are helping the members to discover the state.

B. Van Johnson of Cook Co. has a problem - 92% of the county is owned by the state but the Arrowhead Region has given them a voice. Solid waste is a problem; the highway department owns a good deal of their land; recreation is big as they have no industry.

We proceeded from there to neighborhood meetings (regional); this writer attended Region 11's meeting. Among other recommendations which came out of this session, one was for the rehabilitation of the inner city housing. The two-day meeting closed with lunch and thoughts from the other regions.

Alison Fuhr Report on November 1973 meeting. March 18, 1974

Colonel Rodney E. Cox
Colonel, Corps of Engineers
District Engineer
Department of the Army
St. Paul District, Corps of Engineers
1210 U.S. Post Office and Custom House
St. Paul, Minnesota 55101

Dear Colonel Cox:

We are grateful, that the League of Women Voters of Minnesota was one of the twenty recipients of the Environmental Impact Statement on the proposed Coal Terminal at Pig's Eye.

We are concerned that only one other citizen group was included in the original mailing.

The receipt of the document on Friday, February 15 with the hearing on February 25 created a serious demand; nine days is insufficient time to read and comment on a document of 296 pages along with an appendix at twice that amount.

The goal of participation by citizens in decision making would appear to be negated when material on which they are supposed to comment is available only under such adverse conditions.

Sincerely,

Mary Ann McCoy, President League of Women Voters of Minnesota

MM: jm

cc: Minnesota Pollution Control Agency
U.S. Environmental Protection Agency

c: McCoy, Watson, Ebbott, Jenkins (St. Paul consultant), Borg



DEPARTMENT OF THE ARMY ST. PAUL DISTRICT, CORPS OF ENGINEERS 1210 U. S. POST OFFICE & CUSTOM HOUSE ST. PAUL, MINNESOTA 55101

IN REPLY REFER TO

27 March 1974

Ms. Mary Ann McCoy, President League of Women Voters of Minnesota 555 Wabasha St. Paul, Minnesota 55102

Dear Ms. McCoy:

This is in response to your 18 March 1974, letter concerning the Environmental Impact Statement for the proposed coal handling facility at Pig's Eye Lake. In that letter you expressed your concern that only one other citizen group was furnished a copy of the final impact statement prior to the PCA hearing.

As you know, the impact statement was prepared in connection with the Port Authority application for a Department of the Army permit. After the draft impact statement was prepared, it was circulated for public comment and as you know, a substantial number of comments were received. The final impact statement was then prepared, taking into consideration those comments. This procedure is required by the applicable laws and does provide for complete public participation. Before any action can be taken regarding the permit application the final impact statement must be forwarded to the Council on Environmental Quality and must repose there for 30 days.

During the preparation of the impact statement it was suggested by PCA representatives that the impact statement would be a valuable document for use in connection with the PCA hearing. This being the case, we expedited the finalization of a limited number of copies in advance so that such copies could be available for the PCA hearing. The copies were distributed using our best judgment, to those parties and groups which had expressed the greatest interest. Considerable time is required for reproducing the required number of final copies; therefore we reproduced 25 copies by hand to be available for the hearing. I do not feel that this procedure has limited public participation. I would also like to point out that we have received no complaints from other groups regarding this procedure. The public hearing being held by the PCA is in accordance with their statutory requirements. We have provided the Environmental Impact Statement as a matter of courtesy and feel that we have done all we can to be cooperative.

Sincerely yours,

RODNEY E. COX

Colonel, Corps of Engineers

District Engineer



NOTES AND QUOTES

The League of Women Voters of Minnesota

March 1974

RESOURCE RECOVERY: The Minnesota Pollution Control Agency staff
held an informational meeting on the Resource Recovery
Act grants-in-aid program March 12, 1974 in the MPCA board room in Roseville.
The meeting included a review of the state grants-in-aid program and a discussion of local projects currently being developed in the metro area. I attended this meeting as a representative of LWV.

Information was also obtained at the meeting about the Austin, Minnesota recycling program. The program in Austin consists of separation at the source (in the home) of newsprint, cans and garbage. Compliance is mandatory in this program. The program started in March 1974 so data other than that from the first week of operation report is not available at this time.

Richard Dougherty, chief administrator of the Metropolitan Sewer Board, spoke of the sewer board's interest in the possibility of using solid waste as an energy source. By 1978 the sewer board's natural gas supplies will be eliminated thus forcing them to use an alternative fuel. He mentioned garbage as a possible alternative fuel.

Milton Knoll, vice president of Public Relations for Hoerner Waldorf Co., pointed out the importance of locating a market for your recyclable materials rior to starting a community program. He said his company would like to assist communities in the planning stages of their programs. He said the present price for recyclable paper is high and the price is dependent upon demand. He further stated he expects the demand to remain high for several years.

Kenneth Roth from the Institute of Scrap Iron and Steel spoke of the limited market for the scrap bi-metal can (most throwaway beverage containers). This is due to the metal separation problems. He stated that magnetic separation is not feasible until we have all steel cans. He also stressed checking out the markets prior to attempting a recycling pick-up program.

The Resource Recovery Act grants-in-aid are not intended to go to voluntary groups' recycling programs. These funds are to go to programs designed to be carried out on a commercial level. The funds are to be on a matching basis and expire as of June 30, 1975. The MPCA staff stressed the desire that the projects be self-sustaining after the grant-in-aid moneys are exhausted. The MPCA will look favorably upon countywide projects though smaller areas will also be considered. Any planned program should also take into consideration the effect it would have on the existing resource recovery facilities in the area.

Sheila O'Connell of the MPCA indicated an interest in working with League of Women Voters on sponsoring an informational meeting on the grants-in-aid program. She suggested that if we would make the arrangements, they would supply the speakers and program.

I also believe the LWV could provide a needed service to the state in assisting in community education in solid waste recovery. I am in the preliminary stages of exploring this idea with members of the MPCA staff. I will get together with Mary Watson to discuss it further when she returns next week.

Pauline Langsdorf Environmental Committee CLEAN AIR STANDARDS: Continue letter writing to congressmen in support of strong clean air standards. Publicize information of emission controls on cars; it is true that controls reduce engine efficiency by about 7%, but in comparison automatic transmission has a 6% fuel penalty, air conditioning from 9%-20% and weight of a car carries the largest penalty. A 5,000 lb. car burns twice as much gasoline as a 2,500 lb. one.

A decision is expected this month on a suit filed by the state and the Minnesota Pollution Control Agency seeking the release of federal funds impounded by President Nixon for the construction of sewage treatment plants. Minnesota's share of the impounded money for '73 and '74 would amount to \$121 million; most of this would go to small communities throughout the state where construction is stalled because of lack of funding.

DRAINAGE HEARING: A public hearing was held February 20 and 21 by the Dept. of Natural Resources on the proposed rules and regulations concerning drainage as instructed by the Laws of Minnesota, 1973, Chapter 479.

Farmers were the majority attending; their response appeared to be extremely negative. Many of the legislators and representatives of rural groups felt that:

- 1. The DNR had exceeded the intent and authority intended by the Legis-lature.
 - 2. The proposed rules were too strict and unreasonable.
 - 3. It is not clear as to what are and are not public waters.
- 4. Impact statements and soil and water studies were too costly, and too much red tape and time would be involved in granting permits.
- 5. There was not enough input and thought given to what was said at the grass roots level.
- 6. The rules are antidrainage and antifarm and will destroy farming as we know it today.

The DNR will now review with representatives of farm organizations in an effort to come up with a more acceptable set of rules and regulations. Speaking against: Secretary of State Urdahl, Senators Carl Jensen, Earl Renneke, Howard Knutson, John Patton, Representatives Joe Niehaus, Thomas Hagedorn, John Lindstrom, Harry Petersen, Delbert Anderson, George Mann. The League supported the regulations saying environmental concerns were rightly given more consideration.

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA, ST. PAUL, MINNESOTA 55102

January 21, 1975

The Honorable Wendell Anderson Governor of Minnesota State Capitol St. Paul, Minnesota 55155

Dear Governor Anderson:

Rumors abound over the impending forced resignation of Grant Merritt. The League of Women Voters of Minnesota wants to add its voice to those of other groups in support of Mr. Merritt. The PCA has been a remarkably open agency, always willing to give information to citizen groups; we feel much of the credit is due to the executive director. Any regulatory body is bound to incur enmity and unfortunately, the PCA and its director are no exception.

Mr. Merritt has honestly and fearlessly worked to protect Minnesota's environment, and we hope he will be retained.

Sincerely yours,

Mary Ann McCoy President League of Women Voters of Minnesota

MM/jm

Copy to: Mary Ann McCoy, Mary Watson, Helene Borg, office



1730 M STREET, N.W., WASHINGTON, D.C. 20036 • TEL. (202) 296-1770

W

memorandum

The League of Women Voters of the United States

March 26, 1975

This is going on DPM

TO: State and Local League Presidents

FROM: Ruth C. Clusen

RE: March National Board Report

A large portion of the March Board meeting was spent in preparing for the May Council and in discussing the final content of the new Land Use position. Enclosed is a copy of the position statement and amplifying details. We know you expended a great deal of time and energy in reaching member agreement on this important and complex issue and wanted to get the results out to you as quickly as possible. We're very pleased by what has emerged and hope you will be, too. The timing couldn't have been better and I was on very firm land when I testified before the House Committee on Interior and Insular Affairs on Tuesday, March 25.

Because of the short time between this meeting and Council we will not be issuing a regular Board Report for this meeting — the next one will follow the June 17-19 meeting. However, there are a few items from this month that should be of interest.

First of all, we can finally announce a due date for the long awaited new version of the Local League Handbook. It will have a new look and a new name, In League — Guidelines for League Boards (Pub. #275, LWVUS, \$2.00) and will replace the local handbook and parts of the State Board Handbook. It will be mailed out on the Presidents and Duplicate Presidents list in May and additional orders can be placed after May 1.

We're still in the process of analyzing local and state League annual reports but one item that I wanted to share with you now concerns membership. The count, as of January 1, 1975, indicates that total membership is 140,000, down approximately 6,000 from last year. We'll be doing some digging into the reasons and will have more to say about membership levels later. Also, for those of you who are wondering, the annual reports showed that 3,020 of our members are men.

On Thursday, March 20, the national Board heard Dr. Robert Hartman, a Senior Fellow at Brookings Institute, give an analysis of the Administration's FY '76 budget and the implications that its ceilings had on the people-oriented programs we support. Dr. Hartman did not advocate any particular line of action for the League but did demolish some of the myths about the budget which should be helpful as we prepare to testify on Congressional proposals and inform Congress about polices we support to alleviate short term unemployment and assist the hard-core unemployed over the long run. Additional materials will be issued shortly to local Leagues about what you can do in your own communities.

With Congress heating up again on issues of League concern, we're reviving the Spotmaster service. In the last two weeks, we've submitted statements on Child Care and N.E.P.A., have testified on the Clean Air Act, the Voting Rights Act, and Land Use and lobbied on foreign aid appropriations. Opportunities for action are mounting and the recorded Spotmaster Alert will start again on Friday, April 11. Call 202 296-0218 from 5 pm Fridays through noon on Mondays for latest developments. The charge will be for a regular, station-to-station 3 minute call (if there is nothing to report, your call will not be answered). Many Leaguesare taping the message to share it with members

and other Leagues in the vicinity.

The ETF's energy conservation conferences are rolling along. Two have been held --Southwest at Santa Monica, Calif., and Southeast at Atlanta, Georgia. The remaining ones are scheduled as follows: Great Lakes, Lake Bluff, Ill., April 11-12; Northwest Issaquah, Wash., April 23-24; Northeast, Wethersfield, Conn., April 29-30; Heartland, Dallas, Texas, May 21-22; and Plains/Mountain, Boulder, Colo., August 16-17.

Also nearing completion is a Community Guide on energy problems, which, along with a kit of energy materials, should be ready for the mails in May.

And, last but not least, be on the lookout for the following materials relating to the Executive Branch Study. In April, a publication on Presidential Accountability; in May/June the first of two Facts and Issues, "Perspectives on the Presidency" plus member agreement questions, which will deal with two areas: Presidential Powers and Presidential Succession, and a Committee Guide; and in July a second Facts and Issues on proposals for change.

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA, ST. PAUL, MINNESOTA 55102

To: Members of the Senate Natural Resources and Agriculture Committee

From: Mary Watson, State Environmental Quality Chairman

Re: S. F. 1308 April 16, 1975

The League of Women Voters of Minnesota has supported state control over identification of public works. The present bill represents an extreme compromise on the part of the Department of Natural Resources; we hope it will not result in great loss of wetlands and great variances between counties. To counteract that possible weakness, we urge the inclusion of a provision allowing the Department of Natural Resources to contest the decision of the board composed of representatives of the Soil-Water Conservation Commission, the Regional Development Commission and the County Soil-Water Conservation District. This was suggested by a member of the agricultural community and by Charles Dayton, Sierra Club and we support it as a necessary safeguard.

WILL THE GROUP NEED TO PUBLISH?

Rushing into print should not be a primary goal of a new inter-League group. The first order of business for a steering committee is to establish contact with local experts in the topic under study and select resource materials for local League use. On many issues and in many communities abundant material is already available, some of it at little or no cost--publications, slides, films, cassettes, posters, tours, outside workshops and conferences. Sometimes it becomes clear that only a League-type fact sheet will meet the needs of the group. Perfected and updated, these fact sheets can be the basis for a more comprehensive pamphlet for general public use and sale.

ARE INTER-LEAGUE POSITIONS REEXAMINED?

al program must be readopted by vote at annual meet- LWVUS. Each inter-League group should remember that ings or conventions if they are to continue to be part of League program (see In League p. 35, para.2), wants to communicate with a member of Congress, the inter-League groups are expected to review their positions every two years. This reexamination can be done by each local League in the group, with report view can be made at a meeting of inter-League group representatives. The reexamination should consider whether the member Leagues still support a particular position or whether, through passage of time or even changing definitions, the position needs to be updated, restudied, or dropped.

TAKING ACTION

WHO DECIDES ON INTER-LEAGUE ACTION?

When there is member agreement on the broad aspects of a particular question, the steering committee considers how action shall be developed, what form it effective in that particular action. The steering committee also reviews proposed legislation in the light of the positions under which the group might act and the political realities of the situation.

WHAT DOES THE STEERING COMMITTEE CONSIDER?

Whatever action is contemplated, the same three primary questions need affirmative answers. In terms of inter-League group action these are:

1. Does the action the steering committee is considering fall within LWVUS principles and relevant national, state, and local positions and/or under the group's regional positions?

2. Do members of Leagues in the group understand the reason for action? Are they in agreement with the stand? Are they sufficiently informed to take effec- Each local League should advise the steering comtive action? Are they interested in the outcome? 3. Are most of the boards of Leagues that may be affected willing to have the group take this action at this time?

Usually any disagreement a League has with the proposed actions of the inter-League group can be resolved through person-to-person communication (see In League, p. 41).

HOW AND BY WHOM IS INTER-LEAGUE ACTION HANDLED?

Where there is an opportunity to speak for the inter- But most of all each local League in the group League group as a whole, its steering committee drafts the statement, and a member of the steering

committee or another appropriate League member presents that statement.

If the proposed action is simply a continuation of a type already taken and clearly applies positions reached by the formal League organizations, the steering committee of the inter-League group need not obtain approval before acting. If the regional action contemplated is entirely new or if it seems to go off on a tangent from national, state, or local League positions, the steering committee should seek approval from the appropriate League boards. Remember that state resource chairmen or off-board consultants are a valuable resource for advice.

If there is some question whether or not the contemplated action is authorized under a national pro-Because issues previously on local, state, or nation- gram item, clarification should be sought from the whenever its steering committee or a member League procedures set forth under "Acting nationally on state and local League and ILO positions" must be followed (see <u>In League</u>, pp. 40-41). Copies of all sheets returned to the steering committee. Or the re- communications with federal officials should be sent to the LWVUS, attention Legislative Action Division.

> At times, action to be taken in the group's interest may affect just one state or deal with matters in just one state legislature. Under those circumstances, action should be directed by that state League board in consultation with the inter-League steering committee, particularly with steering committee members from its own state.

What if the steering committee thinks there is need for specific action by selected Leagues in the group or for an action alert to all Leagues in the group? Before a request for action is sent by the steering shall take, and what level(s) of League will be most committee to selected Leagues in an interstate group, the state board should be consulted via the appropriate chairman. For an action alert, the steering committee drafts a sample and recommends to the appropriate board(s) that it be sent. Because only League boards may authorize action alerts, each board can use its own discretion about sending or not sending the alert, either as received or with such modifications as that board chooses to make. If the board(s) agree to sending the alert exactly as prepared by the steering committee, the steering committee may process it. If the formal action alert seems too cumbersome, a steering committee may use simpler ways to tell Leagues that action is timely.

WHO SHALL BE NOTIFIED OF ACTION?

mittee of the inter-League group whenever the League contemplates action based on inter-League positions. This contact is not to seek permission to act but to help the steering committee coordinate the types and times of action taken throughout the region on a specific topic.

The steering committee should inform state and local boards and the LWVUS national office of all action taken by an inter-League group.

should inform its members about action taken and activities carried on by their inter-League group.

ORDER FROM League of Women Voters of the US 1730 M Street, N.W. Washington, D.C. 20036 Pub. No. 563--25¢

Guidelines for inter-League work on regional problems under shared environmental, land use and energy positions

in many of the issues that interest League members. Nor should this interweaving surprise us. As John Muir said, "When we try to pick out anything by itself, we find it hitched to everything else in the universe." Environmental interest in wetlands, floodplains, river and lake basins, the coastal zone, and quantity and quality of water supply interlocks with land use positions on areas of critical concern. Energy conservation interrelates with ways to improve air quality and achieve state implementation plans and transportation controls. Land use, energy, and water supply are entwined in stripmining, oil shale, and resource recovery. League members can scarcely think about one LWVUS program without another coming

For effective action, people from a League's various program committees need to work together Only by developing a thorough understanding of each other's views can League program leaders help their Leagues decide what stand to take on an issue where synthesis or accommodation of positions is necessary.

A League also often finds that an issue on which it is working involves a geographical area extending beyond its own boundaries. Within this geographic area there may be other Leagues, some considering the same issue. Under such circumstances, consultation between Leagues is essential.

An Inter-League Organization (ILO) is the formal arrangement through which local Leagues work together. It is described in the current League handbook, In League, on pages 9 and 15. ILOs must meet minimum standards set by the League's national convention and must be recognized by the board of directors of the League of Women Voters of the United States. Along with responsibilities, ILOs enjoy the privileges of adopting program--they can study and take positions on matters germane to their area-and have representation at the national convention.

The guidelines given in this publication are for less formal arrangements, which local Leagues, ILOs, county councils, or state Leagues can use to facilitate working together to solve a joint problem. Some cooperative work--a few Leagues, a simple resource bank, a short task, for example--can be handled more casually than is suggested here. If an association lasts much longer than contemplated, grows more com- WHERE TO START plicated, or extends its scope, more systematic regular arrangements such as these may need to be made. The methods that will be described can be used for any subject or combination of subjects, but this publication speaks only about inter-League arrangements for work on regional problems under shared environmental, land use, and energy positions. All Leagues have the national positions in common, and some Leagues share state and ILO positions as well.

Land, energy, and environmental problems intermingle The number of Leagues involved and the area basis may be large or small. The geographical area of the problem will be defined in various ways. Leagues in a river or lake basin might form an inter-League cooperative group, as many have done. For effective action, Leagues may decide they need to combine in an air quality region, in a planning area as defined by Section 208 of the 1972 Federal Water Pollution Control Act, in an A-95 region for review and coordination of federal programs, or in any special-purpose district -- a metropolitan sewage district or a public utility district, for example. Or an inter-League group can form as a coalition at the state level in a federal region--as the Mountain/Plains six-state group in Federal Region VIII did. Leagues might form an inter-League group to work on land use decisions as they affect air pollution or the problems of a particular geographic locality such as a mountain valley or a semi-arid area. Leagues in a coastal zone may wish to unite in considering a proposal for siting a refinery or an offshore platform fabricating facility. Or the Leagues in a metropolitan area might combine to examine alternative choices surfacing in a U.S. Army Corps of Engineers urban water study.

> Regardless of what problems or geographic regions the cooperating Leagues encompass, they use League procedures and function under League positions as they work together. However formal or informal their structure, they come and go as the need determines. Whatever their organizational design, they exist to help Leagues pool the knowledge, skill, and interest present in the Leagues and their communities and to make the result available to all Leagues affected. Thus, rather than being a burden to local League chairmen or committees, inter-League groups serve as task forces and resource banks, assisting local Leagues with information, materials, and programs relating to the group's specific studies.

> Working with members of other Leagues to develop materials that all will use makes research more exciting. Action becomes more effective because it is broader based. Experienced inter-League groups become known as the contact point and common voice for their member Leagues, a plus when action heats up and quick response is a must.

THE FIRST STEP

If you are the League leader who perceives a need for a number of Leagues to work together on a problem in an ongoing way, for more than a few months, your first step is to scout out the territory: Are there enough Leagues out there who see the need, too? Are there enough members among them willing to take on the job with you? Chances are, if a problem is truly multi-League in scope, other Leagues will © 1975 League of Women Voters of the United States be having some of the same experiences that have

set you on your search--a study, a position, and then stymied action, because one community, one county, one state can't and won't provide solutions. Somebody will have to make the first move to bring those Leagues together. Why not you?

FINDING INTERESTED LEAGUES

Probably you have met likely coworkers at conferences, conventions, workshops, and regional meetings. Informally, you'll be watching for League members who share your interest, sounding them out about inter-League work. Your first direct move should be to discuss the possibilities of an inter-League arrangement with the relevant chairman on your state League board. (When Leagues in more than one state might be involved, state leaders in the appropriate program fields in all these states should be consulted early, before any inquiry is sent to local Leagues.) State program heads should bring this burgeoning idea to the attention of the state president and state board.

The next step is a letter from the appropriate person to each League affected by the issues the group might consider. The letter will explain the reasons for group cooperation and inquire whether that League's members might be interested in forming an inter-League group. Who "the appropriate person" is depends on the characteristics of the proposed group. Your local League president might send such an inquiry to other Leagues in your county, or to neighboring county Leagues, or to those in a service district. Your ILO president might contact other ILOs in your state. In an interstate situation the state board environmental, land use, or energy specialist might be the one to write to an opposite number on other state League boards. Or if the state League specialist preferred not to do this, a local League in the initiating state could make the suggestion directly to local Leagues in the other state(s), with copies or a letter of explanation to the state president(s).

BRINGING INTERESTED LEAGUES TOGETHER

If there is sufficient interest, arrangements may be made for the local League presidents or local League chairmen interested in the issue to meet together informally to discuss the various organizational possibilities, gauge whether local Leagues are able to give appropriate representation and financial support, and discover whether there are enough individual League members willing to work together in such an arrangement. It is helpful to have the state program chairmen or off-board consultants participate in this discussion.

If a positive feeling emerges from this initial meeting, a chairman and a small steering committee should be chosen to draw up a statement reflecting the "sense of the meeting" and outlining a simple, proposed agreement covering arrangements for coopera- travel is usually the most expensive item. tive work (structure, financial support, responsibility for action). The statement should be sent to each local League president with the request that each local board (a) decide whether the members of that League will want to become part of the group and (b) suggest changes in the proposed organizational structure. The state board(s) should be asked to comment on the proposed procedural agreement and those suggestions should be considered. When this reworded statement of organizational structure and pur- ized into subgroups covering smaller areas, to make

pose is approved by the local League boards, it becomes the inter-League group's procedural agreement.

DECIDING HOW MANY LEAGUES ARE NEEDED

Hopefully, more than half of the Leagues in the area affected by decisions on the issue(s) will be interested in formation of the inter-League group, but it is important to remember that which Leagues are as important as how many. Leagues making up a group should be well distributed over the proposed area. Ideally they should be in different counties, towns, or states, in different types and sizes of communities, and in different sizes of Leagues.

If there are only a few Leagues in an area, almost all will need to be interested in forming an inter-League group, to have it move ahead successfully. In larger areas with more Leagues, the participation of more than half should be enough at the start, provided the distribution is reasonable. Leagues that say they are interested but have too many commitments will not want to hold back Leagues able to put more effort into getting the group started.

The newly-appointed steering committee for the proposed inter-League group and the state board(s) will need to scrutinize the type (suburban, central city, numbers of members, etc.) and distribution of Leagues before concluding that there is promise of a viable and balanced inter-League group. Whether there are enough Leagues to share the work and financial responsibilities, whether these Leagues are characteristic of the area as a whole, and whether more Leagues can be expected to join later must be matters of judgment.

GETTING STARTED

FINANCIAL ARRANGEMENTS

In considering how to finance the work of the informal inter-League group, the two questions are 1) Will the arrangement supply enough money to enable the inter-League group to function well and efficiently? 2) Will each member League bear this financial responsibility on an equitable basis?

Usually, local and state Leagues are asked to pay an assessment each year to cover the cost of postage, phone calls, paper, printing, and travel expenses for the steering committee to attend regular meetings. The exact amount of these dues should remain reasonably flexible to assure that necessary expenses can be met and do not become a personal financial burden to individual steering committee members. In some inter-League groups supportive state board(s) share travel expenses of steering committee members from their states. The cost of participation depends to a great extent on the size of the area, since

When an inter-League group continues for a long time, there may be workshops and annual meetings to which a local League will want to send a designated representative. If so, Leagues will need to budget for travel and miscellaneous expenses of their representatives as well as for regular dues to meet expenses of operating the group. Some long existing, geographically widespread, inter-League groups have organ-

working together less expensive. Others conduct most ously whether the specific issue should be studied of their business by mail or telephone.

PROCEDURAL AGREEMENT

Experience shows that some inter-League groups continue for years. Fewer misunderstandings will arise down the road if arrangements for inter-League cooperation are set down in simple form and participating Leagues indicate their approval. A procedural agreement might state the purpose of the group; its composition; the plan for meeting expenses, for communication, for individual League representation, and for general administration; how decisions on when and how to act will be reached and executed. With approval of the member Leagues, changes in the procedural agreement can be made as needed.

LEAGUES THAT CANNOT HELP

All Leagues that are within the geographical problem-area of the inter-League group should be treated as if they were members, supplied with materials, and kept up to date on the group's activities. Often Leagues that show little interest at first are drawn in as opportunities for action develop or as they perceive decisions approaching that will specifically affect their areas. As interest grows, Leagues become increasingly willing to provide a fair share of the necessary financial support and to participate in reaching agreement on issues.

KEEPING IN TOUCH

All inter-League group communications and materials should go to one contact person in each local League, preferably whoever heads up the League's work on the subject. That contact person circulates the information to the local League's specialists in related subjects, reports to the League board about developments in the inter-League group's work, and through the local League bulletin keeps League members informed. It is impossible to overemphasize the importance of the steering committee's keeping in touch with local League boards and members, because their continuing involvement is the key to the group's success.

GETTING READY FOR ACTION

CAN INTER-LEAGUE GROUPS TAKE ACTION?

Inter-League groups can take action if they wish to. Action is usually the chief reason for their formation. Inter-League groups can take action that is in group's geographic area. accord with their local, state, and national League positions and League principles (see In League, p. 41). In relation to its own area and problems the group can utilize appropriate stands expressed by the League at other, higher government levels. Where report. preexisting positions are applied regionally, new study or development of member agreement is not required, but the steering committee must be confident that the members of the participating Leagues understand and will support the action. Without member support, action will be ineffective.

The inter-League group may also take action on restand expressed in the position. Under these circum- ment, as finally expressed, to each local and state

and member agreement determined in one of several ways, as described on p. 37 of In League.

An example will help to illustrate the point. The LWVUS water position supports the weighing of alternatives and citizen participation in policy decisions affecting the direction water resources development will take. The LWVUS and many state and local Leagues have spoken for preserving floodplains for their natural function and have sought to limit floodplain occupancy. But what if an inter-League group's steering committee is considering whether or not to support or oppose construction of a dam in a particular river, or in a particular place on the river? The specificity of the stand may make it wise to find out what members want, after they have been supplied the pros and cons of the project, rather than to move into action relying on a general, perhaps tangential, position.

ON WHAT SHOULD AGREEMENT FOCUS?

The criteria for developing a useful, durable position are no different for inter-League groups than for any other level of the League. League members should try to reach agreement on what they wish to see accomplished in the geographic area the inter-League group encompasses. The inter-League position should have relevance to the choices facing the area. Proposals under discussion for the area should be understood, but the inter-League position should be expressed as much as possible in general terms, not for or against specific legislation or proposals. For example, a group might reach a position on criteria for administering a particular regional wastewater management program, or on citizens' rights that need protection during offshore oil explorations and drilling, or on the suitability of various types of proposed land use development within a particular ecosystem.

HOW ARE INTER-LEAGUE POSITIONS DEVELOPED?

The steering committee, with help from other League members in the area, serves the local Leagues in the inter-League group in the same ways that a state resource committee serves the local Leagues in a state or as a local League resource committee serves its own League. (See In League, pp. 19-20, 25-27, 35-36.)

- The steering committee decides upon a way to focus or pinpoint the exact problems to be studied.
- It sends materials to all local Leagues in the
- It suggests the procedure by which member agreement will be ascertained (see In League, pp. 37-38).
- It sets a time by which local Leagues should
- It analyzes local League reports.
- It draws up a statement of the position it believes has been reached and sends this to the state board(s), who comment on the wording of the position and/or the process of arriving at agreement.

Additionally, after giving serious consideration to gional problems when the action is related to League the views of the state board(s), the steering commitprogram and positions but is more specific than any tee transmits the official statement of member agreestances it will be necessary to consider very seri- board and to the related departments of the LWVUS.

EQ for local league leaders

WELCOME! Old or new, experienced or starting fresh, you are part of a vital and significant League activity. You have a lot to build on and important work to do.

League work to maintain and improve man's physical environment and to forestall depletion of non-renewable resources started early and continues steady and strong. Being an environmental leader is even more challenging now than it was a few years ago when the fragility of the planet Earth's life-support systems began to receive so much U.S. attention.

Public awareness and public insistence influenced Congress, state legislatures, and local governing bodies to establish environmental laws and programs. Now the challenge is to retain these legislative gains and to make them real by application and enforcement. Sustained public interest and broad based public support are as essential to this second stage as they were to earlier successes.

Public opinion polls show very clearly that citizens persist in their support for maintaining and improving environmental quality. League environmental chairmen like you can do much to convert this strong but generalized public desire into active support of specifics important to nation, state, and community. This work is important and rewarding. The League has the reputation. You have or can develop the skills.

Getting started

Did you become the local League's environmental chairman just last spring? Or having served a year, do you still feel you are just getting started? If you were on the EQ committee or working on land use, energy, or a related state or local subject, or if you have been interested in conservation, wilderness, or ecology, you came to the chairmanship with valuable information. Now it is essential that you and other members of the committee

Get well acquainted with League environmental materials

☐ Start with the summer National VOTER article on program. The section on environmental quality will give you a glimpse of what it's all about in terms of the LWVUS.

□ Turn to Documents: Background on the National League Program (LWVUS pub. no. 521), which lists the wording of each subject on the national program as adopted at the last national League convention and then, in full, the solid waste management, air quality, water resources, and other natural resource positions reached by the LWVUS. As the 1975 handbook, In League (LWVUS pub. no. 275) states (p. 34), our program "cuts across governmental and League levels horizontally and vertically." It's important for you to know what the LWVUS agreed on in the past, because a position reached at the national level can be applied at the local level too.

☐ Consult the most recent LWV catalogs, both the

© 1975 League of Women Voters of the United States

"Member and the Public" and the "Leaders", and watch for catalog supplements that appear in the late fall. One copy of each is sent to your local League president, but since catalogs in any reasonable number are free on request from the LWV national office (requests for unusually large numbers should be accompanied by an explanation of intended use), you and each committee member can have your own copy for handy reference. Studying the most recent catalogs is the only way you can know that you are seeing all the materials prepared by the LWVEF and the LWVUS to help you.

Be sure that your committee has access to all League environmental publications now in print. Dig them out of the files your predecessor transferred to you. If you can't find them, order them. You'll need Environmental UPDATE and the publications listed under solid waste, air, and water in the Member and Public catalog. Look too at the other briefs and newsletters and at the other categories of publications grouped there under "Energy, Land Use, and the Environment." Your League received one free copy of each of these when it was published. Try to borrow those that interest you from another board member or from your president's file, or order another copy. The other catalog, for leaders, lists recent statements to Congress by the LWVUS on environmental matters; order if you want the full text. Another portion of the leaders catalog tells you the environmental publications local and state Leagues are selling. There may be something in that list that seems just meant for you.

For the very newest publications, too recent to be listed in either catalog or supplement, make sure you see the NATIONAL BOARD REPORT (NBR). Watch for EQ guidance and information about developments and action in both the LWVUS and the LWVEF sections of every NBR, which goes to each local League and on duplicate presidents mailings (DPM) after the four board meetings held each spring, summer, fall, and winter. This publication reports succinctly on the way the national board sees each program subject developing, on forthcoming national materials, and on related projects under national League leadership. This is the place to find national board direction developed from national convention, national council, and national environmental committee recommendations. Consult NBRs in sequence, beginning with the post-convention issue, through any bien-

Have your name put on the mailing list of agencies and organizations

There are many sources of information beyond League publications. Some of them you can arrange to get regularly at no cost.

☐ Seek our agencies and organizations in your state and region that cover environmental subjects in their newsletters and pamphlets. Usually a request on League stationery will put you on the mailing list for single free copies. Or you may be asked for your League's publications in exchange. From others'

League of Women Voters 1730 M Street NW, Washington, D.C. 20036 who is doing what where. Newsletters from your representatives in Congress and the state legislature are worth getting, because they make you familiar with their general views even if the newsletters don't often deal with environmental matters.

☐ Ask to be put on mailing lists for free national publications. They'll come to you directly and you'll know what is happening sooner and in more detail than the League's national office can get the word to you. Here are some you should not miss:

Council on Environmental Quality (CEQ) 722 Jackson Place, N.W. Washington, D.C. 20036 Annual Report. Request to be chairmen in that region. put on the mailing list for this National Wildlife Federation comprehensive look at environmental problems and progress Washington, D.C. 20036 published.

Environmental Protection Agency (U.S. EPA) Office of Public Affairs A-107 401 M St., S.W. Washington, D.C. 20460 Request pamphlets, posters, etc., specifying the environmeninformation. EPA does not maintain publication mailing lists. Ask | Soap and Detergent Association the EPA personnel in the stand- New York, N.Y. 10016

affairs in the U.S. EPA regional offices do have mailing lists and newsletters and are valuable sources of information for EQ 1412 16th St., N.W.

and for other reports as they are | Conservation News and Conservation Report. Use a separate letterhead for each when you request to be put on the mailna list. Resources for the Future

1755 Massachusetts Ave., N.W. Washington, D.C. 20036 Resources. Published 3 times a tal subject on which you seek' year; thoughtful conclusions from prestigious research.

for the address and the names of 475 Park Ave. South at 32nd St. ard federal region that includes Water in the News. Reports your state. The offices of public meetings, publications, people.

☐ Build a file of federal, state, and local laws and regulations.

☐ Get for yourself the name, address, and phone number of local, state, and regional offices and officials involved in monitoring, enforcement, and research in air, water, and solid waste. In a state with many local Leagues, your state League board may prefer to have the state chairman make contact with state officials and gather information for transmittal to all local Leagues. In many cases this approach will be efficient and will save officials' time. On the other hand, a local chairman needs to understand the state system and be prepared for the occasion when the local query is specialized and unusual. Moreover there are times when sheer numbers of contacts and queries alert state officials to the fact that people are truly concerned.

The United States is divided into ten standard federal regions, each with a federal regional council. Four federal departments— Housing and Urban Development, Interior, Agriculture, Transportation—and the Environmental Protection Agency (EPA) are now members; Commerce and the Federal Energy Administration (FEA) may be added soon. The people from these agencies and departments who are attached to the federal regional councils are good sources of information about the application of their federal programs in your region. Inquire from the agency or the department for the names and addresses of the federal officials in your region who deal with the program that interests you.

Talk with officials and organization leaders

How many informed men and women have you consulted since you became a local League environmental chairman? There's a lot of help out there for the asking: in the state League, in your own and neighboring Leagues, in other organizations, in the academic world, among government agencies. Everything is not in books. People are important. Each locality has its share of experts who can be of help in supplementing the committee's information or as resource people for League or community meetings. Interviewing is the best way to learn what people's interests and skills are. Only after you know each other can the telephone substitute adequately for face to face communication.

publications you'll learn a lot about things going on in your area and \Box Prior to the interview, learn at least a little about the subject you want to discuss, for it is not fair to waste a busy person's time. As you do your homework, think of questions you can ask to get the dialog started. You will be seeking information about the present situation and current problems, future outlook, desirable changes, and the obstacles that stand in the way. You'll want to ask each person you interview who else in the official family to see, what other citizen organizations have shown an interest in these problems, and where committee members can see the program or project functioning.

> ☐ Start with people in your community who are in charge of public services: solid waste removal and disposal, air quality control, drinking water supply and treatment, storm and sanitary sewers, waste water treatment, planning for tomorrow. Become acquainted with the agency heads and elected officials responsible for fields that touch EQ. Before going out to interview local department heads of your municipality, it is politic to get the approval and full cooperation of your mayor or village manager. But try to establish a friendly relationship with these city employees, for they often become good, albeit anonymous, sources of information.

> ☐ Build up a list of men and women in your community who are active leaders in other organizations. You can learn from them and share with them your information and ideas. Although working with other environmental organizations or participating in enthusiastic but unstructured coalitions can be quite a burden, because often there must be much explaining of League procedures and positions, such contacts are useful and important. There are times when another organization or a coalition can be of great help in providing materials and in moving ahead on a particular issue more forcefully than the League. Conversely, coalitions come to value League participation as a steadying hand in their activities.

Learn from other League chairmen

☐ Consult your state League's environmental chairman or offboard consultants about important state laws and issues on the front burner in your state now. Your state EQ chairman can give you more specific guidance and help. Be sure to keep the lines of communication open both ways. Your state chairman needs to know what you are doing locally, and you need to know what she is doing about state-related matters. If your state chairman is leading a workshop for local League chairmen, try to attend. It will be easier to write or telephone to someone you've met—and pleasanter too.

☐ Seek help on your own League board. Environment, land use, and energy are so interconnected that local League work on any one often involves the League's specialists in the other two. Publications, issues, organizational contacts, and action in these three natural resource programs overlap and intermesh. The division between them is artificial. Don't let it get in your way. If your local League has chairmen for land use and energy, try to share ideas and information and coordinate committees' study and action. If the committees are small, try having them meet together; it may make things more interesting. If large, try having some members from each of the natural resource committees and a few people from the human resources committee and/or the international relations committee work together on certain issues.

Get to know the environmental chairmen in nearby local Leagues. Pooling information and skills of the environmental chairmen and committees of several Leagues speeds up the work and makes it more stimulating. Working in an informal resource bank, each League can take maximum responsibility for research on one aspect of a problem you share. You'll find suggestions on ways to work together in "Program Management," The National VOTER, June-July of 1973, starting in column 2, page 6.

Is your League a member of a formal inter-League organization, i.e. an ILO, where an environmental issue has been adopted as part of the ILO's program? Is your League in an area where informal short-term or continuing inter-League work on some environmental issue is going on? Either kind of inter-League arrangement can be a great resource to a local League chairman and committee. For guidance in regional work by a group of Leagues, consult Guidelines for Inter-League Work on Regional Problems, (LWV-US pub. no. 563).

Invigorating the committee

Get it together—it's worthwhile

You'll be a more successful chairman if you have a strong committee! Try to form one that will continue to function longer than this League year. An ongoing committee can develop experts around individual interests while the committee as a whole keeps up to date on a wide range of environmental issues. Since there are sure to be opportunities to learn about and act on local and regional, state and national problems, this committee should prove attractive to members who already have environmental interests. The League offers them a way to use the experience they bring to the committee and a place to develop new skills. Working in the League may provide a more sight-stretching experience than participation in a single purpose organization.

Sometimes a committee chairman will feel life in the League would be simpler "if I could just do it by myself!" But beware of that symptom . . . you're in danger of becoming a one man band, and you know how obsolete they are. The major problem with oneperson committees is that they never tell anybody what they're up to, least of all the local League board. No League board likes to be surprised by its more free-wheeling members!

A committee spreads the work. It can be a sounding board and a support on controversial issues, an indicator and stimulator of member interest and knowledge. Its members can help in drafting League statements and press releases, in attending environmental meetings. Simplistic, emotion-based "environment-beneficial-tolife" attitudes will not sustain a League in its environmental work today and hereafter. The fact that a League EQ chairman needs to deal competently with complicated and detailed subject matter increases the value of building a competent committee.

Organize the committee for work

After developing some general understanding of spread, scope, and methods, specialization will come. Specialization is usually by issues, in one of two ways.

☐ In some Leagues, one committee member concentrates on water, another on air, another on solid waste. If interest in environment is strong in your League and you develop a large committee, each of these specialists may have several helpers. Or a number may concentrate on transportation, others on environmental-land use interrelations—in communication with the land use committee —while still others might follow energy supply proposals in relation to water adequacy and quality and to air quality-keeping in touch with those in your local League working on energy specifically.

☐ In some Leagues the environmental committee, with local board approval, concentrates its effort on one environmental issue of great importance to that community. To other issues the committee gives only the minimum attention necessary to be able to serve as a resource when an action alert or a special request for action comes from LWVUS or the state board.

Whatever plan of study and action you and your committee choose, the plan should be selected and developed as a good way to a) give each committee member some personally interesting task, b) participate in decisions of far-reaching, long-lasting import, c) draw in new League members. Developing a crisis-stimulated committee is good; developing a strong, aware, and steadily working committee prepared for crises as they come is better. For the background of knowledge and contacts that enables your League to exercise influence early in the decision process, steady ongoing. committee work is essential.

Never let yourself or your committee fall into the trap of those seven deadly words: "We've never done it that way before!" Dull committee meetings, like dull unit meetings, sorely try the patience of all League members, and a real effort needs to be made to develop more lively activities and programs for your committee. A chairman's goal is to make committee meetings a worthwhile, satisfying experience for all who attend. Including yourself.

Define the job

While there are many ways of doing your job and doing it well, you and your committee coworkers have four basic responsibilities:

☐ To maintain a League presence in the environmental affairs of your community

☐ To bring information to the members of your League—through the local League bulletin and, when feasible, at a League meeting or a special workshop—about developments of interest or about League action.

☐ To supply to your League president the substance for the League's response to action alerts, to special action requests from state and national when yours is a League selected because it can be particularly effective, and to local opportunities for action.

☐ To direct whatever environmental enterprise or interest your League wants to take up locally under vertical program or in cooperation with other Leagues.

Decide what to do

If no new area of agreement is being sought, new chairmen sometimes are at a loss about where to direct their efforts. So far as the local League as a whole is concerned, some local Leagues will have ongoing local environmental concerns that they want to work on, some local Leagues will be drawn into concerted study and action under state League programs or by state Leagues utilizing national environmental positions, and some local Leaguesbecause of other program priorities—will do little more on environmental matters than respond to action alerts from LWVUS or their

But whatever course the local board has chosen for the League, the environmental committee will be busy also on present and future options for fulfilling their four-point responsibilities.

One way for the committee to maintain the League's presence in environmental affairs in the community is to make that environmental interest visible. Has your committee thought about:

☐ informational articles in local papers (perhaps the weekly advertising freebie) on environmental topics (See Getting into Print, LWVUS pub. no. 484);

working with local committees of other organizations in your community in information-exchanging councils or action coalitions (See Getting It All Together: the Politics of Organizational Partnership, LWVEF pub. no. 674);

□ developing ideas to suggest to local radio/TV stations on environmental issues in the news (See Breaking into Broadcasting, LWVUS pub. no. 586);

□ observing or monitoring meetings with environmental overtones; watching for opportunities for your League board to recommend a citizen representative to environmentally-related boards and commissions in your community;

☐ supplying speakers for school and club programs (that oldie but goodie, the speakers bureau), perhaps with a slide show on a local problem or local manifestation of a national interest;

☐ distributing, preferably by personal visit, League publications and other environmental information to schools, libraries, elected officials, local agencies, candidates for office. Be known as a resource. There are voters service type opportunities for the environmental committee in the sense of citizen information using LWVEF publications that inform without overtly advocating League positions.

To bring information to members of your League, the committee might

prepare articles for your local League bulletin, drawing on national and state League publications and reports and on what the local League's environmental committee has learned from hearings, monitoring, interviewing, etc. (Be sure to honor limitations on confidential—"off the record"—information and be sensitive about possible effects of attribution.)

report on legislation to your members in your bulletin or in well-prepared three to five minute short talks at each League meeting, so that they will be prepared for response to action alerts.

☐ simplify the committee's work by persuading more members of your League to subscribe to REPORT FROM THE HILL and to buy LWVEF publications. Some Leagues purchase selected LWVEF publications, which they send out with local bulletins. If there is a League publication that you consider especially important for your members, suggest to your League board that it buy the publication in bulk at the League discount. You can't find a better bargain!

Arrange for League members to view the area. As was said in *The Music Man*, "You gotta know the territory!" Go-see tours are always popular with League members, and rightly so.

□ Adapt this technique to areas of environmental interest and concern in your community, for example, drinking water filtration plants, wastewater treatment plants, power generating facilities, floodplains with control structures and floodplains with non-structural controls, industrial plants with different types of air pollution controls, dumps, sanitary landfills, recycling plants, industrial installations burning solid waste as fuel.

☐ Why not try "Walking Your Stream?" Pick a specific length of stream bank, depending on accessibility and time, and examine the water for turbidity, oil, smell, debris, excess algae, live (or dead) fish, reptiles, insects. Do you see any septic tanks or small sewer lines discharging into the stream? Is there a permit for each and every one of these? Is there evidence the property owners are using the stream to dump grass clippings etc.? What is the condition of the stream bank and the stream bottom? Do they seem to be regularly maintained, or is there evidence of neglect and misuse? Who is responsible for maintenance?

During this entire stream walk, your committee should be *highly visible* (you'll be amazed at the interest this simple activity generates) . . . taking notes, pictures, tsk-tsking as you make your way. Once you've trekked your allotted stream length, it's fun to meet in a pleasant place for a picnic and talk about what you've seen and what you've learned. If you find conditions that need correcting, whom should you contact? Is anything done about the complaint? By keeping comparative records—notes, pictures, personal contacts— over at least a two-year period, you will develop research information that can become a baseline measure.

As you and your coworkers develop creative, original ways to publicize League environmental interests and carry on community activities, remember that

□ bringing people of different views into contact with one another continues to be an important League role. It is necessary to discuss points of conflict to clarify them, to examine their rational or irrational foundations, to consider whether they represent historic (traditional) fears or present dangers. "Dialog" is more than an in word; it is an essential step in breaking down barriers to understanding. Talking with people who agree is comfortable and is necessary to avoid duplication of effort and to plan strategy. Talking with people who disagree opens the door to confrontations, but it's also a way to rivet attention on the issue. If you are planning to organize an environmental workshop or seminar, consult *How to Plan an Environmental Conference*, (LWVEF pub. no. 695), free in any number on request to the national League office.

many community colleges and high schools have environmental clubs related to certain departments. Faculty and student leaders, though well versed in the subject matter, may not be knowledgeable about where and how club members' interest and skills are applicable to decisions facing the community's governmental bodies. The League can help to bridge this gap. Since many community college students continue to be local residents, this committee activity may bring long-term benefits.

Choosing a subject

Did your League let its environmental work lapse last year or perhaps longer, but now you want to make a fresh start with something that will actively involve League members? What interests the environmental committee? What seems most relevant to the needs of your community? Would you like to begin a new topic, or would it be more effective to continue a subject on which your League already has a good start?

Whether your community's problem is too much, too little, or too polluted water, new developments and new strategies await your consideration. The Safe Drinking Water Act of 1974 provides a fresh subject for many Leagues and an excellent launching pad for fledgling environmental committees and chairmen. Federally sub-

sidized flood insurance may be just the tool you need to save your floodplain. Possibilities for pollution control under the Federal Water Pollution Control Act of 1972 are enormous; is your area using them to full advantage?

If your water problems need no League attention, what about solid waste? The League believes in working to cut back the amount of solid waste Americans produce, to increase resource recovery and markets for recyclables, and to improve disposal practices until they are environmentally sound. Would your League like to concentrate on one of these three ways to maximize resource conservation and minimize pollution? Or must your area find a safe way to dispose of hazardous waste?

Perhaps clean air is your League's greatest environmental interest. Then the committee may decide to investigate how well the state implementation plan has worked and how close your area has come to achieving the clean air standards by the mid-1975 Clean Air Act deadline. What needs to be done now if your League is within an area that the U.S. EPA has identified as having potential for violation of specific national ambient air quality standards by 1985? Perhaps transportation controls are of special interest if your League is in one of the 27 air quality control regions that need them. Citizen education about transportation controls fits in well with the LWVUS energy conservation position.

Environmental Quality does offer an inviting smorgasbord. But the operative word is CHOOSE! The suggestions that follow are intended **to help the committee make a choice** and get started on its work. DON'T try to do many of these things simultaneously.

Drinking water

How safe is your drinking water? As the American public begins to stir out of years of complacency about U.S. drinking water, the local League can be an important source of public information and a stimulus to constructive, unhysterical action.

Start by seeking out information about the source, management, quality, and quantity of your community's drinking water. What does it cost the average family per year? Is this price in line with neighboring communities? How is the raw water treated? If yours is a surface supply, how well is the 1972 Federal Water Pollution Control Act being used to reduce pollution upstream from your water intake? If your drinking water comes from an underground aquifer, has the water table been dropping? What is being done to protect the aquifer from pollution and depletion? Has the water supply been threatened by saltwater incursions or by pollution from deep well injections? Is future water supply of concern to those charged with planning for the next 25 years?

Get acquainted with the major provisions of the federal Safe Drinking Water Act of 1974 (P.L. 93-523). A good place to start is with Federal Environmental Laws and You (LWVEF pub. no. 564). Ask EPA to send you a copy of the national standards and discuss them with your local health department in relation to your drinking water. Is the quality of your drinking water above EPA's requirements in some or all respects? Watch for notification that your local system fails to meet a primary national standard or has been granted a variance or an exemption. In what way is the quality substandard? How can its deficiencies be corrected?

Can the League build public support for improvement in water quality, convincing water users that health benefits from clean water are worth the cost? Will you need better trained operators? Where will the money come from?

If other Leagues get their drinking water from the same source, working on this issue will be a fine opportunity for inter-League sharing of research, programs, and finally, action. Because the federal law gives the states primary responsibility for supervision of systems and enforcement of drinking water standards if they request it, you will want to seek the advice of your state environmental chairman. What is your state's plan for enforcing the federal standards, for monitoring, for inspection? Will your state be ready to enforce the regulations by early 1977? Will it need new legislation before it can implement the federal act?

Working on drinking water can broaden the contacts of the environmental committee, put them in touch with the state government, other Leagues in the state, and a host of health and consumer-oriented organizations. With implementation of the na-

tional drinking water law beginning, now is a good time to start. You have two LWVEF publications listed in the League catalog to help you in ferreting out the information about your water system: *The Water You Drink: How Safe Is It?* (pub. no. 246) and *Safe Drinking Water for All: What You Can Do* (pub. no. 247).

Flood insurance

Is yours an area subject to floods? If so, why not concentrate on promoting the federal flood insurance program? An Environmental UPDATE, Flood Plain Management and the National Flood Insurance Program (LWVEF pub. no. 534) will help you, and so will Federal Environmental Laws and You (LWVEF pub. no. 564). Early in 1975, your League received a packet of information from HUD's Office of Flood Insurance. If you can't locate the FIA material, write to Federal Insurance Administration, HUD, 451 7th Street, N.W., Washington, D.C. 20410 for a replacement.

The first step is to find out whether your community is taking advantage of the federal flood insurance program. If not, why not? Has the initial flood hazard map been published? Are there errors on that map that need correcting? Has your community adopted the necessary land use, zoning, and building permit requirements to regulate future development? What provision is being made for floodproofing structures already on the floodplain?

The second step is to carry on a public information campaign to persuade citizens to vote "Yes" if a zoning referendum is necessary and to take out the insurance if they are eligible. Do they understand the penalties to the community of nonparticipation? Do people who now have structures on the floodplain understand why flood insurance is less expensive in the long run than disaster relief loans if they are flooded out?

The third step is to monitor enforcement of the floodplain regulations. Your local officials may be under heavy pressure to allow continued development on the floodplain. If regulations are ignored, the purpose of the federal flood insurance program—to guide development away from flood prone areas and reduce the mounting flood loss bill—will be defeated.

Water pollution

If there is a League that has not investigated its local pollution problem, this may be the time to do it. The water section of *Federal Environmental Laws and You* (LWVEF pub. no. 564) will help you start scrutinizing your wastewater management system in the light of the Federal Water Pollution Control Act of 1972 (P.L. 92-500).

Consider first your local wastewater facility. Is there a sewage treatment plant in operation in your jurisdiction? Is it a city or an area plant? What level of treatment does it provide? Does its effluent meet the P.L. 92-500 standards? Does it levy users' fees? Do industries discharge through the publicly-owned treatment plant? Do they pretreat? Do they pay a users' fee based on quality and quantity of their effluent? What happens to storm water runoff? Is there a local ordinance prohibiting connection of downspouts and storm drains to sanitary sewers? What happens if the treatment plant breaks down? Does the sanitary sewer load often bypass the plant? How is the sludge from your treatment plant managed? Where is the disposal site? Is the sludge used as a resource? Has the question of land disposal of sludge or of sewage effluent arisen in your area?

Is your community participating in Section 208 areawide planning for wastewater management? What agency has been named as the lead agency for 208 planning? Where do the plans for your area's treatment facility stand on the state priority list? If funding has been delayed, what seems to be the reason?

Is your state operating the water pollution permit program, the National Pollutant Discharge Elimination System (NPDES)? Are violations occurring? Have they been handled by enforcing the permit conditions or by modifying them? Is your state providing for and assisting public participation in the planning, grant, and permit programs as required by P.L. 92-500?

Are septic tanks still permitted in your community? Does your local health or sewage agency inspect them? Are there regulations for their installation? Has a timetable been set for their elimination?

To make people in your community more aware of their water-

way, the League environmental committee might want to promote the Izaak Walton League of America's "Save Our Streams" program. Some groups in your area might be attracted to this SOS activity, which is a plan for getting people interested in stream quality enhancement. Citizens "adopt" as much or as little of the length of a stream as they wish, register their adoption, and agree to care for their adoptee all year round. This continuing "TLC" is the core of Save Our Streams. If you're interested, write the Izaak Walton League, Inc., 1800 North Kent Street, Suite 806, Arlington, Virginia 22209 and enclose \$3.00 for the Save Our Streams kit.

Solid waste disposal

If your League made a local solid waste survey in 1971 or 1972, have you been monitoring local disposal sites? Has the situation improved or deteriorated? If your local League has never examined your community and state solid waste management practices, why not look into them now? The information in *Solid Waste—It Won't Go Away* (LWVEF pub. no. 675) is still good, and the questions suggested in *Study of Solid Waste Management* are still worth pursuing. This second publication is no longer available from LWVUS, but free copies can be obtained from Solid Waste Information Materials Control Section, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268.

Do League members monitor local disposal practices? Does your local agency inspect frequently and enforce its own regulations? Does it check for formation of leachate? Will changes be necessary now that the Safe Drinking Water Act requires prevention of groundwater contamination? To what extent does your agency follow the federal guidelines for disposal on land, now only recommendations to state and local governments? What expansion of the federal role in collection and disposal is supported in the LWVUS position (see *Documents*, LWVUS pub. no. 521) on solid waste management?

Does your state or your metropolitan region have a solid waste management plan? Is it sitting on the shelf or being used? Does your state have the authority to issue disposal regulations? to require a state permit for a disposal site? to set standards for disposal of nonhazardous waste? Does it utilize its powers and enforce its regulations? If your state does not have a comprehensive solid waste plan supported by the governor and the legislature, should this be the goal for your state League? Consult Federal Environmental Laws and You (LWVEF pub. no. 564) and Recycle? (LWVEF pub. no. 132).

Resource recovery

If your League's interest lies in resource recovery, look into the existence of and potential for large-scale waste recovery in your city, region, or state. (See Recycle? LWVEF pub. no. 132.) Is your city large enough? Does your state have the manufacturing centers and the concentrated city and suburban areas necessary for sophisticated resource recovery systems to be a realistic option? Are resource recovery facilities being constructed? Are any in operation? Have they been able to obtain a steady input of solid waste? Can they market the recovered materials competitively? Are private industries investing capital in recycling facilities in your city, region, or state? Where construction of resource recovery facilities has been delayed, is the cause institutional, financial, or technical? Have bonding companies had difficulty securing signatures of all local jurisdictions involved in the contract? Have local governments been reluctant to bind themselves to long term contracts for innovative processes? Have contracts included a "put or pay" clause to guarantee delivery of a given tonnage of waste to the recovery plant? Does your state have an agency or commission in charge of seeing that publicly financed resource recovery facilities will be located efficiently in relation to sources of waste and to potential users of recovered materials? Is your state helping to provide or arrange financing for resource recovery facilities and to develop markets for recyclables?

Reduction of waste at its source

The LWVUS solid waste position strongly supports preventing unnecessary waste (see *Documents*) as the most fundamental

way to attack the solid waste problem, and the LWVEF pamphlet Reduce? (pub. no. 576) explains the many ways in which source reduction can be brought about. Citizen education has top priority. Can the committee help League members and others see that generating less solid waste will save materials and energy? Can your League convince your community that unnecessarily large amounts of waste are an expense to every taxpayer? that generating less waste will lower the cost of collection and disposal and make the disposal site last longer? As the LWVUS supports federal legislation to require deposits on beverage containers as a first step in cutting down unnecessary waste, does your League want to work actively for state or local laws for mandatory deposits on both refillable and one-way beverage bottles and cans and for an adequate phase-in period?

Waste separation and separate collection

Since it will probably be a fairly long time before sophisticated resource recovery facilities will be operational, and then only in a limited number of places, the best national possibility for resource recovery from postconsumer wastes may be separation of recyclable materials at point of last use (source separation) followed by their separate collection. Did your community have local, voluntary collection centers to which paper, glass, and metals could be taken? Did these volunteer-run centers metamorphose into an official government program with separate house-to-house collection? Does the separate collection pick up fairly regular amounts of recyclables? Do they have a steady market? What tonnage is separately collected and sold? Does sale of recyclables yield a return above the extra cost of separate collection? What is the level of community participation in the program? of ongoing publicity about the program? What are neighboring jurisdictions doing? If a capital-intensive, mechanized resource recovery project is proposed for your area, how will the local source separation program fit into that larger system? LWVEF publications Recycle? (pub. no. 132), Reduce? (pub. no. 576) and Federal Environmental Laws and You (pub. no. 564) will supply background.

Hazardous wastes

Every year the question of what to do with hazardous wastes grows more difficult. (See *Environmental* UPDATES, "Controlling Hazardous Pollutants: In the Ocean," and "Controlling Hazardous Pollutants: In Inland Waters" (LWVEF pub. nos. 571 and 591). As regulations for disposal in rivers, oceans, and deep wells grow tighter, land disposal of sludges high in toxic metals and acids will pose an increasing danger to health.

Does your area have an existing or potential hazardous waste problem? Has your state agency surveyed industries that generate waste to learn what kinds they create and how they dispose of them? Does your state have authority to exercise some control over hazardous waste disposal? to establish separate sites for disposal of certain kinds of hazardous wastes? Or does your state solid waste management plan include ways to supervise such disposal at some future time? Are federal regulations adequate for controlling hazardous waste disposal in waterways, Great Lakes, and oceans? (See Federal Environmental Laws and You, LWVEF pub. no. 564.)

Effective hazardous waste management includes more than disposal. There may be need for regulation of generation, transport, labeling, and treatment of such wastes. Does the League committee see a need for developing these components of hazardous waste management? Could weak controls in another state place citizens of your state in jeopardy? What controls does the federal Clean Air Act place on emission of hazardous pollutants? What control does the Federal Water Pollution Control Act place on the hazardous pollutant content of effluents? Should the federal government have extensive authority over all hazardous wastes or should that power remain with the states?

Clean air implementation

When the LWVUS air position (see *Documents*) was announced in 1971, attention of Leagues was focused on state plans to imple-

ment air quality standards announced by the U.S. EPA for the six major air pollutants. Now, close to five years later, when the deadlines for most states to meet primary standards have just passed, how has your state's implementation plan fared? Has your state enforced its implementation plan strictly or has it allowed it to be riddled with variances? Is your own air quality region meeting the ambient air standards? What about the rest of the state? If not, what is the problem and the prognosis? Did your local or state air pollution control boards assume responsibility for enforcing the U.S. EPA standards for new stationary sources and for the three hazardous pollutants (asbestos, mercury, and beryllium) for which standards have been established?

Have any plants in your area been ordered by the Federal Energy Administration (FEA) to switch to coal as the Energy Supply and Environmental Coordination Act of 1974 authorizes FEA to do? If so, are they meeting the U.S. EPA conditions as defined by that act (ESECA)? What effect would allowing intermittent control systems and tall stacks in place of permanent emissions controls have on your area? (See Federal Environmental Laws and You, LWVEF pub. no. 564 and Clean Air: Costs and Trade-offs, LWVEF pub. no. 467.)

If your state's implementation plan included no-significant-deterioration provisions, how has your state reacted to the U.S. EPA's regulations? How do the members of your League view this issue? Which choice will they urge your state to make? (See *Environmental UPDATE*, "Nondegradation: How Clean Must We Keep The Air?" LWVEF pub. no. 547, Oct. 1974.)

Is your League in an air quality maintenance area (AQMA), designated by your state or the U.S. EPA as a place that has potential for violation of the specified national ambient air quality standards by 1985? Has your state's plan for air quality maintenance been approved? Disapproved? Is your state making a detailed analysis of the impact of projected growth on air quality? This is something you and the nearby Leagues may want to follow.

Transportation controls

Is your area's air pollution problem caused by automobiles? If your public transit system were better, could commuters be induced to give up using private cars? Your League might decide to undertake an investigation of ways to improve the public transportation system or participate in a campaign to increase car-pooling. If your community has a transportation system that is under-used, a campaign to increase its use will need to be combined with transportation control regulations that increase the cost and inconvenience of using private cars and with regulations that reduce the levels of emissions per mile. Support for resuscitation of an expiring transportation system or creation of a new one should be preceded by a study of community needs and how best to meet them, physically and financially, and agreement among all the Leagues whose areas will be served. This can be done under the air quality position plus the transportation position (see Documents), if your board approves. It will involve all the national program committees in your League and may need to be an inter-League enterprise.

Land use controls

If your local League was gung ho over federal land use legislation, the environmental committee might find it interesting to examine the regulations under National Environmental Policy Act, the Clean Air Act, the Federal Water Pollution Control Act, the Solid Waste Disposal Act, the Flood Disaster Protection Act, and the Coastal Zone Management Act that affect land use decisions. The U.S. EPA's regulations, for example, range from commenting on proposed sites for shopping centers and stadiums to attempting to minimize runoff at construction sites. A task force of people from environmental and land use committees might find it worthwhile to examine the relationship between environmental laws and regulations and land use. (See NATIONAL BOARD REPORT, Sept. 1975 and subsequent ACTION ALERT.)

Coastal zone management

The coastal zone and the Great Lakes' shores have special environmental values (see Where the Rivers Meet the Sea, LWVUS

pub. no. 367) but are also particularly vulnerable to manmade changes. Slowing down destruction of these marine and lake borders requires control of water quality, physical modification, and land use. Choices must be made, and the vehicle for selecting and adjusting uses is the Coastal Zone Management Act (P.L. 92-583), summarized in Federal Environmental Laws and You (LWVEF pub. no. 564). Which state agency is the lead agency for the CZM program development? How far has your state gone in this process? How well has your state met the approval criteria for the program development process? Has your state applied for an administrative grant? What has your state done to meet the law's Sec. 306 and 307 requirements for siting, consulting and coordinating, involving people, and controlling pollution? (See Coastal Zone Management Program, LWVEF pub. no. 572.) Has the League utilized the citizen participation provisions of the act and the regulations? Has the League carried on any citizen information activities in connection with coastal zone development? Are the environmental and land use committees working with the energy committee to keep up to date on developments-physical, legal, and administrative—in the coastal zone?

Preparing for action

Over the years, based on LWVUS positions on water, air, solid waste, and transportation (see *Documents*) the League has supported the passage of the Water Resources Planning Act, the Water Resources Research Act, many amendments to the Federal Water Pollution Control Act, the National Environmental Policy Act (NEPA), the creation of the Council on Environmental Quality (CEQ), the formation of the Environmental Protection Agency (EPA), the Resource Recovery Act, the Clean Air Act, the Coastal Zone Management Act, and the Safe Drinking Water Act.

During this time, too, the LWVUS positions have been the basis for opposition to legislative moves that threatened the League's environmental goals, and the League has voiced its objections, suggesting changes, additions, and deletions to bills.

As amendments to federal laws are suggested, administration and congressional proposals are considered in the light of the LWVUS positions, experience with the law's operation, changed conditions, and shifts in the climate of opinion over the years. LWVUS action on amendments, as on new legislation, is a matter for national board decision, which may be to continue, modify, or reverse an earlier stand.

Understand federal environmental laws

Chairman and committee members need to be acquainted with the major environmental laws enacted by Congress in the 70s. Some of them are so long and complex that only people who work day in and day out with one or another have its provisions fully in mind. So don't be thrown off by the feeling that you'll never master the whole of the Federal Water Pollution Control Act, for example. It is a feeling in which you have plenty of company.

Becoming familiar with environmental legislation is like learning foreign languages; after the first one, recognition of patterns and connections/contrasts makes it progressively easier to grasp succeeding ones. So try to fix in mind the basic aim of a law and the major devices it provides to move companies, municipalities, federal agencies, and states toward the law's objective. These devices may be direct rewards or penalties. They may be arrangements for better planning, demonstration of improved techniques, sticks or carrots for pushing or luring offenders to change their ways. Governments seem to have only a limited number of strategies and tactics at their disposal, and these are used again and again—modified somewhat in later laws in attempts to overcome problems that develop in connection with earlier laws.

You will notice that the federal law establishes the basic objectives and the devices or arrangements to be used to achieve these objectives. For example the Clean Air Act of 1970 and the Safe Drinking Water Act of 1974 provide for setting of national primary standards that are health-related and are to be reached by a given date. Because implementation of earlier environmental legislation had lagged, Congress set definite deadlines in the Clean Air Act Amendments of 1970 and the Federal Water Pollution Control Act

FOR HELP WITH ACTION . . . Read *In League*'s section on action . . . See LWVUS publication no. 161, *Action*, for ways to involve members; guidelines for taking legislative, monitoring, and litigative action; techniques for reaching the community. . . . Watch League catalogs for forthcoming publications on action. If your committee or board has some question about contact with your congressional delegation when there has been no ACTION ALERT, no special request from the national office, nor any suggestion in REPORT FROM THE HILL, or if you have a question about national League action, check with the Legislative Action Division of LWVUS before proceeding (see *In League* p. 40-41). Touching bases is simply to ensure League continuity in statement and to avoid surprises, not to tie you down with procedures.

Amendments of 1972 for promulgation of standards and regulations required by those laws.

To the agency responsible for administering a law is assigned the task of developing the specific standards, guidelines, and regulations required by that law. Each set is published in its proposed form in the *Federal Register*, and within a set time limit, any interested person or organization can send in comments. After reviewing the comments received, the agency publishes the final version, which then becomes binding unless a suit is filed.

You'll find Federal Environmental Laws and You (LWVEF pub. no. 564) a great help in understanding the principal recent national environmental laws. Remember though that the sections on "What You Can Do" were prepared for the general public; the LWVUS has already established positions on some of the issues expressed as questions in those sections.

Remember too that statements to congressional committees and support or opposition to federal legislation, though important, are only the first step. League action continues through watching for and commenting on standards, guidelines, and regulations to which League positions apply. If federal legislation will turn implementation and administration of a law and its regulations over to the state when it is prepared to handle the program, state Leagues usually work to have their states develop the legal and administrative structure necessary for this purpose.

Local League participation is important in both national and state League action. And only local Leagues can monitor how well or ill standards are enforced and regulations carried out. Monitoring is important, for the success of a law depends on its application, directly or indirectly, at the local level. Stating what you see happening or not happening can be significant. Your statements and letters need not all be for or against what is going on; asking questions is also effective League action.

Know your elected officials

To help your League board respond to environmental ACTION ALERTS and special action opportunities for selected Leagues, you and your committee coworkers will want to know the committee assignments of your senators and representatives in the Congress and the state legislature. If any of them are on committees to which environmental bills come, try to keep abreast of the issues before those committees and try to ascertain your representatives' attitudes. Be ready to respond more effectively to an ACTION ALERT or an LWVUS or state selective action request by being able to relate your response to your representatives' interests, if possible.

To be effective with your local governing body, try early to identify the environmental issues in your community. Attend a variety of hearings on environmental issues in your jurisdiction to become acquainted with the process and the personalities. Try to determine where the power lies within each hearing body. Recognize the politics of the situation and use it to your League's advantage.

Drafting statements and letters

As an environmental chairman you probably will be asked, sooner or later, to help your local League president by drafting testimony, statements, or letters. If you're not asked, volunteer your help. These communications are based on local, state, or national positions. ACTION ALERTS and requests for action by selected

Leagues come with explanations of the basis for the action as well as suggestions of what to do. REPORT FROM THE HILL not only helps you be prepared for action, but it also alerts you to action opportunities. Be sure your president is showing you the environmental section from REPORT FROM THE HILL if you don't receive a subscription directly, and try also to see the land use and energy sections.

When you draft statements or letters, carefully examine your local, state, and national positions to be sure you are on firm ground. In situations of more than local significance, check with your state environmental chairman, the president of your ILO, or the chairman of your inter-League group. A statement for a federal regional hearing should be compatible with the national position and with statements made by the LWVUS but related to and fleshed out by information and illustrations from your own area. Although it's well known that, quite legitimately, "some experienced Leaguers can manage to stretch a League position so far it resembles an old girdle, just to make it fit a particular current situation," it is best to leave that sort of activity to old hands.

Whatever you draft, have it tell what your League thinks about a specific issue not what the local, state or national position includes. Whether it is a statement for a local body or for a regional hearing scheduled in your town by a federal agency or a congressional committee, be direct. Local officials want to find a way to satisfy local voters. Federal regional hearings are held (usually in the bailiwicks of congressional committee members) to tap opinion away from Washington. Don't spend time reiterating the League position on air, water, or solid waste management. Tell whom you represent, what your League done about the issue under dis cussion, and the reasons for thinking this is the best course.

Knowledge gained under local planning, recreation, land use, health, fiscal, tax, and other studies, under state programs and action, under national programs and action can be used when it is appropriate and helps make the testimony convincing.

Speaking for your League

If your League president asks you to speak for the League at a hearing, prepare in advance, follow the suggestions under "Drafting Statements and Letters," and have your statement approved by your president. Take an extra, clearly legible copy for the hearing secretary or recorder. Work out with the League's public relations chairman whether extra copies or a short press release should be available so that the press will have a clear record of what the League is saying. Anatomy of a Hearing (LWVEF pub. no. 108) may be helpful.

Regardless of the motivations you perceive in a particular hearing procedure, always appear pleasant. It does no good to antagonize or harangue the hearing officers, even if you have all the angels and archangels on your side. If you are asked a question by a hearing officer, and you don't know the answer, promise him a prompt reply . . . and follow through.

Once in a while a local hearing may catch you by surprise, and you may feel compelled to say something right then and there. Keep in mind, however, that a well-reasoned piece of testimony, one that has your local board's approval, can nearly always be submitted a few days later. Decisions are seldom made at the time of the public hearing, and the hearing record usually remains open to receive additional written testimony for a reasonable period of time thereafter. In other words, "A closed mouth gathers no foot!"

Handling the EIS

You may already have encountered the Environmental Impact Statement; you may even have been asked to evaluate a few. This method of setting forth the environmental effects of whatever is proposed was introduced into the federal process by the National Environmental Policy Act (NEPA), P.L. 91-190, Sec. 102, and is described in Federal Environmental Laws and You (LWVEF pub. no. 564) under "A National Policy for the Environment." Many states have also adopted the concept of the EIS in relation to state activities, so there are state ones to consider also.

Because the EIS is usually long and detailed, it is often best approached as a group exercise so that the effort can be divided.

The special skills and interests of coalition members can be utilized in examining and preparing the response to an EIS. Your League may have members with special training and experience who can be helpful in these evaluations. Studying and commenting on the EIS is excellent preparation for later action on the project.

Going the litigation route

When laws or regulations are not enforced, litigation may be the only kind of action that will remedy the situation. More and more Leagues are using this action technique, as plaintiff, as plaintiff with other organizations, or as amicus (friend of the court). Leagues have gone to court over a variety of environmental issues. They have opposed, for example, commercial development in a floodprone area; urban development threatening the quality of the aguifer which supplies an area's drinking water; construction of dams, of multilane highways through residential and park areas, of a sewer interceptor; discharge of sewage into Lake Michigan and dumping of spoil into Long Island Sound. Leagues have brought suit to require environmental impact statements for highway construction, for a power plant contract, for areas planned for coal development. They have challenged in the courts the validity of guidelines for implementing a state environmental quality act and the sale of oil leases in the Gulf of Mexico. They have entered suits to protect water quality and prevent air pollution.

The League has two publications on litigation as action: Going to Court in the Public Interest (LWVEF pub. no. 244) and The Verdict Is In (LWVEF pub. no. 536). The foundation grant that supports the LWVEF's litigation department does not allow use of grant funds for environmental litigation, since the foundation also funds a number of environmental defense legal groups. The grant does permit litigation on land use issues if they are of national import and consequence, but the department's limited funds make it infeasible for it to fund amicus briefs. If your committee thinks your League could be effective through litigation on an environmental problem, but you lack the resources and are unable to find a local attorney who will handle the case pro bono publico, you may be able to get

some suggestions from one of the following:

Environmental Defense Fund 162 Old Town Road, East Setauket, NY 11733 1525 18th St., N.W., Washington, D.C. 20036 2728 Durant Ave., Berkeley, CA 94704 Suite 1130, Capital Life Center, 16th at Grant St., Denver, CO 80203

Natural Resources Defense Council, Inc.

15 W. 44th St., NY, NY 10036 917 15th St., N.W., Washington, D.C. 20005 664 Hamilton Ave., Palo Alto, CA 94301

Sierra Club Legal Defense Fund, Inc.

311 California St., Suite 311, San Francisco, CA 94104 209 16th St., Denver, CO 80202

The LWVEF's Litigation Department will be glad to hear from you and will give you what advice it can.

And finally

Every year is an action year for the League, so whatever environmental subject you and your committee concentrate on, take your environmental work beyond your committee to your members, beyond your members to the community. Get other organizations involved in action. Help the people in your community get ready for the tough national choices that must be made. Use a topic of local concern to show how closely local and national-yes, and globalinterests are entwined. And by all means ENJOY!

Planned and drafted by Betty MacDonald, chairman; Jean Anderson. Chris Carlson, Dana Duxbury, Tess McNulty, and Mary Lee Strang, members of the LWVUS committee on Environmental Quality.

Printed on paper recycled from 100% consumer scrap.

Order from League of Women Voters of the United States • 1730 M Street, N.W., Washington, D.C. 20036 • Pub. No. 562-50¢

federal environmental laws and you

Are you troubled by air pollution alerts . . . burning dumps . . . unsafe drinking water . . . property loss from floods . . . pollution from human and industrial wastes . . . unregulated industrial or residential development along ocean and Great Lakes shores? Does your city—does your region—face any of these problems? Can you grapple with them?

Have you ever said, "There ought to be a law?" Are you sure there isn't?

Over the last ten years there have been enormous numbers of newspaper, magazine, and television stories about environmental degradation. Conferences and workshops, speeches and books came in steady stream. Public awareness grew. Public concern spread.

ness grew. Public concern spread.

The Congress, responding to

The Congress, responding to this growing public demand, created a body of environmental legislation intended to check deterioration of our life support systems. The titles of these laws are ambitious—Clean Air Act, Safe Drinking Water Act—reflecting the high goals of their supporters. While the impact of these laws has been significant, U.S. environmental problems are far from solved.

Legislation is not enough. Change does not follow immediately on the heels of passage and signing of a bill into law. At the federal level the steps are many: guidelines and regulations for application of the law, standard setting, timetables by which certain stages of improvement must be reached, monitoring to see that there is good faith effort to meet standards and schedules, funding for staffs to carry on these functions. In our country, with its great diversity and its state/federal system, responsibilities under new environmental laws are usually shared between government levels, so there are delays while states and localities take steps to adjust to and apply the new federal standards, regulations, and timetables. Improvement seems to take forever. People grow depressed because the investment of time, effort, and capital accomplishes so little. Yet without the goals and requirements set and the tools supplied by the federal legislation of the last ten years, how much worse environmental conditions would

Legislation is not enough, but it is the underpinning of the U. S. effort for a better physical environment. Concerned citizens need to know about the major federal environmental laws and understand their important features designed to bring about change. This publication describes some of these laws. It tells what improvements each was intended to bring about in the management of the nation's physical environment.

To legislation must be added sustained public interest and broad-based public support.

Federal agencies alone cannot produce the changes needed—however many laws they may administer. If environmental degradation is to be checked, all branches and all levels of government must hear clearly that the public insists on preserving the health of the Planet Earth, that the public believes the benefits justify the cost

And so this publication goes beyond the laws themselves. It suggests what you can do to get more information on how the law covering the subject of your special interest is working, it suggests what to watch for (or monitor, in today's parlance), mentions where to express your opinion, tells of significant opportunities in relation to each law. You will find the material informative, but even more important, you will find it a useful key to increased participation.

A national policy for the environment

The National Environmental Policy Act, signed on January 1, 1970 as Public Law 91-190, formalized a growing conviction that environmental considerations must be incorporated in federal policies and activities. In the past five years NEPA, as this law is generally known, has had a major impact on a wide variety of programs, from housing and highway construction to leasing of oil drilling sites, and this influence is expected to increase.

The law made protecting and restoring the environment our national policy and directed all federal agencies to interpret and administer their programs in accord with these goals. It created the Council on Environmental Quality (CEQ) to advise the president on environmental problems and to work with Congress and executive agencies to solve them.

Environmental impact assessment

Section 102(2)(c) has had the most far-reaching effects of any of the law's provisions. To assure that all federal policies, regulations and actions incorporate NEPA's environmental protection goals, this section requires all federal agencies to prepare environmental impact statements on any of their major actions that may significantly affect the environment. While this section does not specifically prohibit any activities, it means that public officials must consider and publicly discuss the environmental consequences of proposed projects.

CEQ was given responsibility to monitor federal agencies' compliance with NEPA's requirements and to review environmental impact statements (EIS). These statements must include five elements: the positive impact of a proposed action, any possible adverse impact, alternatives

League of Women Voters Education Fund 1730 M Street, N.W., Washington, D. C. 20036 commission, headed by Vice-President Rockefeller, was established under Section 315 of the FWPCA to report to Congress in October 1975 on the costs and benefits of achieving or not achieving the law's 1983 goals. This will help Congress consider a mid-course correction in the law, incorporating any changes through amendments. The commission's final report is now expected early in 1976. You should be able to learn what the commission concludes both through press coverage and through copies of its report, which will be made available throughout the country.

Public participation

The FWPCA specifically requires EPA and the states to provide for, encourage, and assist public participation "in the development, revision, and enforcement of regulations, standards, plans and programs." EPA regulations have further spelled out the points at which citizen involvement is required.

The public—acting at the local, state, and national levels—has already played a major role in seeing that the program to clean up our nation's water follows the law's mandate. But continued progress will come only if you take full advantage of the opportunities the law provides.

Keep in mind the basic principle that the earlier you get involved the better. Opinions and ideas contributed during the early stages of the planning process will be of more value than objections to a completed plan.

What you can do

Citizens—acting individually or in organizations—can play a variety of roles in working for cleaner water.

- ☐ After becoming informed about the law and EPA's regulations for public participation (see *Recommended Reading*), contact your community water authority to learn what steps have already been taken toward reaching the law's goals. What permits have been granted? Is the community participating in areawide planning? Has it received funds for municipal wastewater treatment?
- ☐ Ask your regional EPA office and your state permit agency if your state has been granted NPDES authority—to place you on a mailing list to be notified of permit applications. If you are concerned about conditions of a permit—for example, if you think the compliance schedule is too lenient—you can request a public hearing to discuss specific objections. If there is significant public interest in any permit, a hearing will be held and people on the mailing list will be notified. Encourage people to attend and speak at these hearings.
- ☐ Participate in the public hearing held to determine if your state is qualified to assume responsibility for its permit system. Once your state has been granted NPDES authority, work for adequate staffing for the responsible state agency.
- ☐ Monitor industrial and municipal permit holders for compliance with their effluent limitations or compliance schedule. One way of checking is by requesting copies of the state's quarterly report to EPA listing each point source that has not met its specified compliance requirements. Another way is to request copies of permits and monitoring and compliance reports that dischargers must file with EPA or the state pollution control agency. Compare the point source's performance with its permit to see if requirements are being met. If you find violations, report this to the state agency.
- ☐ Participate in hearings—on your state's priority list for federal construction funds, on water quality standards set by the state, on basin plans, on the areawide water quality management plan affecting your community.
- ☐ Voice your opinion about the alternatives being considered in a municipal facilities plan, an areawide water quality management plan, the state's basin plans.
- ☐ Encourage local and state officials to keep the public fully informed about their planning activities. Encourage state

officials to keep local officials up to date.

- ☐ Build local and state public support for adequate funds and staff to accomplish the law's goals.
- ☐ If all else fails, be prepared to file a citizen suit against a company, community, state or EPA for failure to comply with the law's requirements.

Providing safe drinking water

The Safe Drinking Water Act, signed December 1974 (Public Law 93-523), has greatly expanded the requirements for health protection in water supplies. Before this law's passage, the federal government's program for protecting drinking water was primarily concerned with the spread of communicable diseases and applied only to water supplies used by interstate carriers, such as buses, trains, and commercial planes. Many communities, particularly small ones, have been providing water of poor quality. Over the next several years the 1974 law should improve this situation.

Any water system—whether public or privately owned—supplying water for 60 or more days during a year to 25 or more people or maintaining 15 or more connections is subject to the requirements of the law. Coverage thus applies to community water systems and to many motels, campgrounds, restaurants, schools, and factories that have their own water supply. All suppliers will be required to purify their water to meet uniform national standards.

Standards

EPA is to prescribe these "national *primary* standards" related to health protection, specifying maximum levels of contaminants—chemicals such as lead, mercury and pesticides as well as bacteria—and the intervals at which these must be measured. The requirements will protect public health "to the extent feasible" taking into account the cost and technological difficulties of meeting "ideal" drinking water standards. The agency will also set "national *secondary* standards" for removal of contaminants that affect the taste, odor, or appearance of water. Secondary standards will be enforced only if individual states choose to enforce them.

The act puts the primary responsibility for supervision of systems and enforcement of drinking water standards upon the states. However, before a state can assume this responsibility, EPA must determine that the state has the ability to enforce standards at least as stringent as the national primary standards, including procedures for monitoring and inspection, and has plans for providing safe drinking water under emergency circumstances.

By early 1977, eighteen months after they are finalized, the primary standards become law for every water supply system regardless of whether or not a state has assumed primary enforcement responsibility. In cases where a state does not have authority or fails to perform it properly, EPA's administrator may take an offending supplier or the state to court. Citizens can bring suit against a water supplier for failure to obey the law or against EPA for failure to enforce it, but no suit may be brought against a water supplier before February 1978.

The owner of a public water system must notify its consumers if it fails to meet a primary drinking water standard for maximum contaminant level or for monitoring, or if it has been granted an exemption from such requirements. The notice must be given to local communications media as soon as possible after discovery of a violation and must be published at least every three months in local newspapers and included with water bills.

Underground water protection

The Safe Drinking Water Act not only regulates the purity of water at the tap but also tries to protect underground sources of drinking water from contamination. (Theoretically, the 1972 FWPCA will eventually prevent contamination of sur-

face water.) The law requires EPA and the states to set up regulatory programs to control the underground injection of fluids that might affect ground water supplies.

To help assure continuing progress in drinking water purification and protection, the law provides for research, studies, and demonstration projects on health, economic, and technological problems of drinking water supplies and on underground water protection. Studies will be done on contamination by cancer-causing chemicals and by viruses and on the problems of reclaiming and reusing wastewater for drinking. Grants will also be made to help states train personnel to operate water supply systems.

Funding

While the law provides some money to be distributed to states for developing and improving their ability to supervise public drinking water systems, it authorizes no federal funds for upgrading local water systems. Thus, the major role for citizens concerned about improving their community's water supply will be to build public support for adequate state and local funding to provide safe drinking water—a service long taken for granted as virtually free. The notification requirements alerting consumers to a system's failings may help to arouse concern.

Improving water systems and assuring competent staffing will cost money, and these costs will be paid by consumers through either higher water bills or increased taxes. If funds collected through water bills are currently going into a town's general treasury, it may be possible to improve the water system significantly without raising rates by requiring that all such income be used only for supplying safe water. Of course, if all water revenues are applied to the water system, it may be necessary to increase the tax rate to pay for things water rates now cover.

What you can do

Citizens—acting individually or in organizations—can play an important part in getting healthful drinking water. Through community education on the current condition of local drinking water, on the significance of any failures included in public notices by the supplier, and on the costs of correcting deficiencies, citizen groups working with local suppliers can help assure that their system will meet highest possible standards.

- ☐ After obtaining a copy of EPA's primary drinking water standards from the regional EPA office, talk to local health officials about the importance of occasional and/or frequent failure to meet specific contaminant levels. Watch for notices of noncompliance by your system, and talk to representatives of the local system about the causes for these failures.
- ☐ If your system's shortcomings are due to inadequate funding, the type of public education outlined above may be necessary before money required to upgrade the system can be raised. To promote enforcement of the FWPCA, it would be useful to point out to citizens using surface water as a drinking water source that upstream pollution may be increasing their town's costs for water purification.
- ☐ The law gives persons served by a water system the right to petition EPA to hold a public hearing to gather information from government officials, technical experts and water consumers on ways in which the system can most quickly be brought into compliance with any provision of the act it is violating. Any recommendations resulting from such hearings will be released to the public and communications media as well as to the water supplier.
- ☐ Inquire whether your state has any program to monitor deep well injection of wastewater. Is planning for such a program underway?
- ☐ Before a state is given primary enforcement authority over either public water systems or an underground control pro-

gram, EPA will hold a public hearing on the state's capability to assume such responsibility if "any interested person" asks the administrator to hold one. Similar hearings are required before approval of a state program is withdrawn. After informing yourself about your state's problems and plans for water supply, you can be the "interested person" who calls for a hearing or you can express your opinion at such a hearing.

Petitions can also be used by citizens or groups concerned about protecting underground water supplies. You can ask the administrator of EPA to designate the aquifer supplying the groundwater as "the sole or principal drinking water source for the area... which, if contaminated, would create a significant hazard to public health." If such a designation is made, no federal funds will be available for any project that might contaminate the aquifer.

☐ Another vital role you can play will be in monitoring compliance with the law. Failings of the local water supply should be reported to the state; failings of the state, to the regional EPA office.

☐ Citizen suits are available as a last recourse; though they are expensive and time-consuming, the law does permit courts to award the actual costs of litigation to any party.

Controlling ocean dumping

To stem a growing trend by coastal communities to use the ocean as their dumping ground, a trend that seemed likely to intensify after the 1972 FWPCA limited disposal into streams and rivers, Congress in October 1972 passed the Marine Protection, Research and Sanctuaries Act (Public Law 92-532). This law, commonly known as the Ocean Dumping Act, regulates barging of wastes, including industrial chemicals and the residue of sewage treatment plants (sludge), for ocean dumping.

Marine protection, research, sanctuaries

The law has three major sections. The first establishes a permit system to strictly limit dumping of harmful wastes. Dumpers of dredged materials—sediments excavated from channels or harbors—must get a permit from the U. S. Army Corps of Engineers. All other wastes can be dumped only under permits issued by EPA, which regulates what substances can be dumped in ocean waters and specifies disposal sites. EPA allows communities or industries to use this disposal method only if their wastes will not endanger human health or the marine environment—beaches, fish or wildlife, or plants. EPA can also oppose the issuance of a Corps of Engineers dumping permit if such dumping would adversely affect human health, recreation, or marine life.

Before a permit is granted, a dumper must tell EPA what alternative disposal methods have been considered and why these are unsatisfactory. Ocean dumping is allowed if it is the least environmentally damaging alternative. Besides mandating consideration of other techniques, EPA requires dumpers to reduce the concentration of hazardous substances in their wastes to specified levels. Emphasis is also put on changing industrial practices to improve the quality and reduce the quantity of wastes to be disposed of—reclaiming metals from the waste stream, for example.

The second section of the Ocean Dumping Act directs the Department of Commerce, which includes the National Oceanic and Atmospheric Administration (NOAA), to work with EPA on research on the effects of disposal in oceans and Great Lakes. As a result, research is proceeding on effects upon marine life from past and present dumping and on identification of sites suitable for future dumping. The act also directs the Commerce Department to assist research for ways to minimize or end all dumping by 1978.

A marine sanctuaries program is established under the third title of the law. Under this provision, the Secretary of Commerce can designate areas that should be preserved or restored for their recreational, ecological, or aesthetic values

as marine sanctuaries. These may be in coastal waters seaward to the outer edge of the continental shelf or in the Great Lakes and their connecting waters. This program is run by the Office of Coastal Zone Management (OCZM), a part of NOAA. Thus far, only one designation—of the sunken U.S.S. *Monitor*—has been made.

A similar program to set aside estuarine sanctuaries along ocean and Great Lakes coasts was established by the Coastal Zone Management Act of 1972 (discussed in more detail below). An estuary is that part of a river or stream directly connected with the open sea, where sea water and fresh water mix. The Office of Coastal Zone Management can designate an estuary and adjacent land as a natural field laboratory for education and research; 50 percent federal funding is available to states to acquire, develop, and operate designated sanctuaries.

What you can do

As described earlier, effluent limitations under the water pollution act will become more stringent in second round permits, and something must be done with the industrial wastes formerly discharged into waterways. At the same time, construction of more sewage treatment plants handling larger volumes of waste is creating continuously greater amounts of sludge. These two growing disposal problems may lead to increased pressure to use the ocean as the ideal dump, since it is big, deep, and far away.

While the Ocean Dumping Act and EPA's regulations will help restrain such a trend, citizens in coastal areas can help assure that the program is not weakened under pressure from cities or industries with growing waste problems.

☐ If you want to monitor permit applications in your area, you can have your name put on a standing mailing list at the regional EPA office to receive copies of all applications.

☐ If you are concerned about the conditions specified in a potential permit—for example, the location of the dumpsite in relation to beaches—you can request a public hearing to discuss specific objections. People on the mailing list for permit applications will also be notified about all such hearings and can participate in them.

☐ Any individual or citizen group can petition NOAA to designate a local area of concern as a marine or estuarine sanctuary and can participate in the public hearing required by OCZM regulations to be held in the area most directly affected by such designation.

Where land and water meet

Two types of federal programs have major impacts on both water and the use of adjacent land: coastal zone management and flood plain management. Both attempt to control activities to assure that environmental and developmental demands are balanced in using these valuable and productive areas.

Planning coastal development

The Coastal Zone Management Act (Public Law 92-583), passed in October 1972, gives financial assistance to states and territories bordering the oceans and the Great Lakes to develop and administer plans for their coastal regions. The act is administered by the Office of Coastal Zone Management (OCZM), a part of NOAA.

States can be awarded up to three annual grants for developing a management program; the matching formula in providing this money is \$2 in federal funds for every \$1 in state funds. All thirty eligible states, Guam, Puerto Rico, and the Virgin Islands are utilizing program development grants. Once a management program has met the criteria set by OCZM, additional federal funds will be provided to help the state carry it out.

As an additional incentive to encourage state participation, the act stipulates that once a management program has been approved, all federal agencies conducting or supporting activities in the coastal zone must make them conform to the state plan as much as possible. However, in the interest of national security, the Secretary of Commerce and the Office of Management and Budget can allow land and water uses not consistent with a state program. Both of these provisions will be significant in future development of offshore oil and gas.

Amendments to the 1972 act have been introduced that would authorize substantial federal grants and loans to coastal states for planning and for ameliorating or compensating for impacts associated with coastal and offshore energy development and the cost of expanding public services to meet the needs. The funds would help states affected by offshore and onshore facilities (such as deepwater ports, power plants, refineries, pipeline terminals, and tank storage areas) and by prospecting for and developing oil and natural gas on the continental shelf.

What you can do

The Coastal Zone Management Act and OCZM's regulations include some of the most specific requirements and recommendations for public participation of any environmental law. The regulations require one or more public hearings to be held during development of a management program. These hearings must be announced at least 30 days in advance in community news media. They are to be held in the areas principally affected by decisions to be made, during seasons of the year when the most persons likely to be affected are present.

Crucial choices must be made in developing a program that will balance a variety of conflicting demands—for conservation, for industrial or residential development, for public recreation. Decisions must be reached on coastal zone boundaries, on areas of particular concern that should be developed or preserved for special uses, and on organizing and funding a state agency to implement the plan. As in all planning processes, the earlier you make your views known, the more chance you will have of influencing the outcome.

☐ Write the federal Office of Coastal Zone Management (See Recommended Reading for address) for the name of the state agency in charge of developing your state's coastal zone program.

☐ Urge the state agency to follow OCZM's recommendations to develop ways for citizens and officials to exchange information and views during the planning process and for the public to share in developing goals and objectives.

☐ Study your state's program, prepare a statement of your views on it, and encourage other citizens and groups to participate in the hearing.

Reducing flood losses

Through flood insurance

The National Flood Insurance Program was established to provide federally subsidized, low-cost insurance to homes and businesses that may be damaged by inland or coastal floods or mudslides. It also insures property owners against most losses due to sudden storm-related erosion, a major problem along the shores of the Great Lakes. The program requires that participating communities regulate future building on the floodplain to minimize flood losses and guide future construction away from locations threatened by flood hazards.

Originally set up on a voluntary participation basis under the National Flood Insurance Act of 1968, the program was substantially amended by the Flood Disaster Protection Act of 1973 (Public Law 93-234).

Under the 1973 law, flood insurance is required by any private or public property owner wishing to use loans or grants from federal agencies or federally regulated lending institutions to buy, construct, or substantially improve buildings on land that is subject to flooding.

National flood insurance has two major benefits. It allows communities with a flood hazard to enter the program (thus enabling its residents to purchase policies) only when they agree to regulate *future* development in the flood prone section. Once these controls are in effect, future needs for channelization, dams, and levees to protect lives and property will diminish, and the natural process of floodwaters recharging underground water supplies can occur without continually rising financial and human costs.

In addition, the law allows owners of buildings already in flood prone areas to buy insurance—not previously available through private agencies—against virtually any flood losses they may sustain. For existing structures the cost of this coverage is low because of federal subsidy. For new construction, the insurance rates depend on the risk of flood damage. Insurance payments are far better than disaster relief assistance, which is generally provided through loans requiring future repayment.

The program is run by the Federal Insurance Administration (FIA), part of the Department of Housing and Urban Development. FIA establishes national standards for flood-plain management control and provides each community with maps indicating hazard areas that will require regulation. Communities with identified hazard areas were given until July 1975—or until one year from the date the FIA maps

the hazardous area—to enter the program before becoming subject to the law's sanctions.

What you can do. The controls eventually must be adopted and enforced locally by the approximately 20,000 communities with flood hazards. This is where citizens can participate in making the national flood insurance program effective.

☐ If your community has been identified by FIA as one with a flood hazard, you can alert other citizens to the benefits of participation and the possible future costs—including environmental costs—of continued floodplain development.

☐ It may be necessary to convince the voters to vote YES on a referendum to allow local government control of floodplain development.

☐ When local officials are drafting ordinances to comply with FIA's criteria, you can urge them to make the regulations as comprehensive as possible.

With the law's sanctions beginning to take effect July 1, 1975, 75 percent of the 16,000 communities with identified hazard areas have chosen to participate rather than lose federal funding for construction or acquisition of buildings. But your efforts are needed even after the required regulations are adopted and your community enters the program. Enforcement will be the key to preventing unwise development of flood prone land. FIA regulations give communities some discretion in granting variances for building in restricted areas

☐ Since FIA will not be able to monitor 20,000 communities, the program's goals will be achieved only if people like you monitor local enforcement of structural requirements and variances. Publicity about violations often brings a remedial response from public agencies. If you find local officials are ignoring their ordinances, report this to FIA, which can suspend a community's eligibility and thereby impose the law's sanctions.

Through structural and nonstructural protection

Another approach to floodplain management is incorporated in the Water Resources Development Act of 1974 (Public Law 93-251). This law is one of a series (formerly known as the Omnibus Rivers and Harbors Acts) passed in each congressional session to authorize activities of the U. S. Army Corps of Engineers.

The Corps of Engineers, a part of the Department of the Army, is the nation's major builder of dams and levees and other water resources projects providing flood protection,

hydroelectric power, water supply, and recreation. Since 1824, its civil works program has been involved in improving navigation; in 1936 its responsibility was expanded by the Flood Control Act to include nationwide construction of flood control works. The dams and reservoirs constructed under this authority, as well as subsequent legislation, have drawn the Corps into virtually all aspects of water management. Activities of other federal agencies, notably the Soil Conservation Service and Bureau of Reclamation, also involve water resource development, but in terms of structural projects the Corps has been preeminent.

Until recently, saving lives and property from flood damage has been viewed as an engineering problem, with emphasis devoted to construction. Since 1936 some \$25 billion have been spent for this purpose. This money has come almost entirely from the federal government. Any other approach to minimizing flood losses required more local or state funding and was therefore uncommon.

In recent years, the channels, dams, and levees built by the Corps have been increasingly challenged because of the environmental damage they cause. Inundating large areas of farmland, fish and wildlife habitat, and scenic river gorges, Corps projects have been opposed in Congress and the courts. The Corps' argument that the economic benefits derived from a dam outweigh its construction costs and environmental damage (which is often difficult to quantify) have frequently resulted in a project's going forward despite opposition.

But Section 73 of the 1974 act marked a significant policy change in the federal approach toward flood protection. The law requires consideration of "nonstructural alternatives to prevent or reduce flood damages," including acquisition of floodplain lands for public purposes and relocation of residents. Thus, instead of considering the benefit/cost ratio only of building a dam or levees to protect a floodplain, the Corps must now consider the possibility of acquiring the hazardous area as open space and/or compensating a community's residents to build new homes outside the floodplain. Such a project would be eligible for 80 percent federal funding, which is approximately the average federal funding share in structural flood control projects.

What you can do A flood control project requires approval of every level of government—local, state and federal. If you are concerned about potential adverse effects of a structural approach to floodplain management in your community, there are many opportunities to participate in the decision-making process.

	Express	your	views	to	your	elected	officials	at every	level
of	governme	ent.							

☐ Request that your name be placed on the mailing list of the Corps' district engineer to be alerted of all public meetings about local Corps studies or projects.

☐ Encourage the district engineer to hold preauthorization hearings, informal meetings, and workshops where views can be exchanged before a decision is made.

☐ Marshall your facts and testify at these meetings to urge consideration of nonstructural approaches to floodplain management. Urge that the benefit/cost analysis of a project give adequate weight to environmental costs.

☐ Urge local media to publicize all sides of the issue so that residents can form a balanced view of alternative solutions.

☐ Above all, try to convince the governor of your state. The Corps carries out only those projects that have the governor's approval.

Air

Cleaning up the air

Although the Clean Air Act of 1963 and the Air Quality Act of 1967 had laid the foundation, the Clean Air Act Amendments

of 1970 (P.L. 91-604) provided the first comprehensive program for attaining and maintaining clean air nationwide. The 1970 act required:

- national ambient air quality standards
- state implementation plans to ensure compliance with these standards
- speed-up of deadlines for federal auto emissions standards
- performance standards for new or modified stationary sources
- · emissions standards for hazardous air pollutants
- · federal regulations for fuel and fuel additives.

National standards and state implementation plans

[Sections 109, 110] The Clean Air Act as amended in 1970 required EPA to set two levels of national ambient air quality standards—primary standards to establish a minimum level of air quality to prevent human death or illness and secondary standards to protect the public welfare. In April 1971, EPA issued primary and secondary standards for six major air pollutants—sulfur oxides, particulate matter, carbon monoxide, hydrocarbons, photochemical oxidants, and nitrogen oxides.

States were then required to submit plans outlining what activities would be regulated in their jurisdiction to achieve the national standards. Primary standards were to be met within three years from the date of plan approval by EPA and secondary standards within a "reasonable" period of time. The EPA administrator was given authority to waive compliance for two years if technology to achieve the goals was not vet available or suitably advanced. State plans were to include, among other things, limitations on emissions from stationary sources, timetables for compliance, monitoring procedures, review of new sources that would be subject to performance standards, and motor vehicle testing. To help them comply with national standards, states were expected to institute land use and transportation controls. EPA was given authority to revise any state plan that proved inadequate or to substitute another plan. The deadline for most states to meet primary air quality standards was set for mid-1975, a schedule that has not been met.

Performance standards for new stationary sources

[Section 111] EPA was given authority to establish uniform national performance standards for new or modified stationary sources of air pollution. (Stationary sources are sources of air pollution other than motor vehicles.) Performance standards are emissions limitations set directly at the federal level. Thus far EPA has set performance standards for 12 categories of new and modified stationary sources—among them fossil fuel steam generators, incinerators, cement plants, and sulfuric and nitric acid manufacturing plants.

National emission standards for hazardous air pollutants

[Section 112] Some pollutants are considered dangerous to public health but are not covered by existing ambient air quality standards. For these hazardous pollutants, EPA is empowered to issue standards that are binding for new stationary sources. Public hearings must be held prior to issuance of all final regulations. Thus far, standards have been established for asbestos, mercury, and beryllium.

Auto emissions

[Section 202] Although the federal government has been authorized to set standards for automobile emissions since 1965, the 1970 amendments speeded up all deadlines for compliance. By 1975, new cars were required to reach a 90 percent reduction in hydrocarbons and carbon monoxide

emissions over that allowed in 1970 models. By 1976, new cars were to show a 90 percent reduction in nitrogen oxide emissions over 1971 models. If technology was not available or suitably advanced, EPA could extend the deadlines for one year. These deadlines have been extended several times, as will be discussed later.

Fuel and fuel additives

[Section 211] The Clean Air Amendments of 1970 authorized EPA to establish regulations for fuel and fuel additives that endanger the public health or inhibit the operation of antipollution devices. Under this authority, EPA required one grade of nonleaded gasoline to be generally available to the public in 1974, on the basis that the presence of lead impairs the performance of catalytic converters, the antipollution device commonly used with internal combustion engines.

Enforcement

[Sections 113, 303, 304] The 1970 amendments established a joint regulatory system with air quality standards set by the federal government and actual emissions limitations set and enforced by the states or the federal government. (Those special emissions limitations established at the federal level were discussed earlier.) Most of the responsibility for enforcing air pollution requirements, including emissions limitations, remains at the state and local level. However, if a state fails to act, EPA itself may step in to enforce abatement. As penalties, a polluter may be denied federal contract awards, be fined up to \$25,000 per day, or be imprisoned.

The amendments allow citizens to bring legal action against polluters. Prior notice must be given to the polluter and to EPA. Citizens can also bring suit against EPA for non-compliance with the law.

Energy and air quality

With the advent of the Arab oil embargo and subsequent "energy crunch," the Clean Air Act Amendments came under close scrutiny. In order to comply with ambient air quality standards, many states had directed plants to use low sulfur fuels (oil, gas, and low-sulfur coal). However, with the limits on foreign oil imports, industry complained that sufficient quantities of these clean fuels were not available across the country and that deadlines in the Clean Air Act must be extended to permit the burning of dirty fuels. Various proposals were considered, some requiring drastic revisions of the 1970 amendments. In June of 1974, the Energy Supply and Environmental Coordination Act (ESECA) (P.L. 93-319) was passed.

Coal

ESECA authorizes the Federal Energy Administration (FEA) to direct plants to switch from oil or gas to coal in certain cases. Conversion must be practical, coal must be available, and plant reliability must not be impaired. However, before an FEA order becomes effective, EPA must be consulted to ensure that certain air pollution requirements will be met. Conditions under which EPA can extend compliance deadlines set by the amendments of 1970 are sharply defined. Those conditions are that

- the use of coal will not violate any primary air quality standard
- if a plant is located in an Air Quality Control Region where the primary standards for *any* pollutant are being violated, the plant must be able to meet state emissions limitations for that pollutant
- if the burning of coal will result in the increase of any pollutant for which no standards exist but which may threaten public health, EPA can force cancellation of the FEA order after the compliance date has been extended.

Any revision in state implementation plans necessitated by this act must be aired at public hearings. ESECA also requires that *all plants that converted to coal* comply with state emissions limitations no later than January 1, 1980—a step that may necessitate installation of expensive equipment.

Auto emissions

The Energy Supply and Environmental Coordination Act also revised deadlines for limiting auto emissions. The deadlines established by the 1970 amendments had already suffered a setback in 1973 when the EPA administrator extended for one year the 1975 deadlines for hydrocarbons and carbon monoxide and the 1976 deadlines for nitrous oxide. At that time, EPA imposed interim standards, as prescribed by law, that required some progress towards cleaning up emissions, although to a lesser extent than the statutory limits. One set of standards was set for 49 states while California was permitted to maintain more stringent interim standards. The ESECA authorized EPA to delay the hydrocarbon and carbon monoxide standards until 1977. The interim standards for these pollutants were to remain in effect for 1976. The nitrous oxide standard was postponed until 1978.

In March 1975, EPA did suspend the statutory standards for hydrocarbons and carbon monoxide, which were to apply in 1977, and set interim standards for that year equal to the 1975 standards for the 49 states. (California continues to maintain more stringent standards.) In explanation of its decision, EPA cited that catalytic converters may cause a serious pollution problem with sulfuric acid mists. Until further study was made, the agency concluded that it was unwise to force use of the catalytic converter to the extent required to meet statutory limits. Clean air advocates, while concerned about the sulfuric acid mist problem, did not believe that the standards should be further delayed. They suggested that the use of low-sulfur gasoline, available by blending existing stocks, would ameliorate the problem.

Ongoing issues in air quality

Significant deterioration controls

Primary and secondary air quality standards were set to mark the pollutant levels beyond which human health (primary) and welfare (secondary) will be endangered. Some areas of the country, however, enjoy better air quality than that required by these national standards. Since the passage of the 1970 amendments, there has been controversy over whether the Clean Air Act allows any deterioration of air quality in these clean air areas. In its review of state implementation plans, EPA approved several plans which did allow for the degradation of clean air. The Sierra Club filed suit against EPA for this action, and in June 1973 the Supreme Court ruled that no state plan could allow significant deterioration to take place. In accordance with the court action, EPA published regulations requiring states to establish procedures to prevent deterioration. Although officially effective in January 1975, these regulations will only allow review of sources for which construction began after June 1975. Clean air advocates believe that EPA regulations are not stringent enough to prevent significant deterioration, and the Sierra Club is challenging them in court. Others fear that nondeterioration regulations will limit growth and hold back energy production.

Intermittent controls

To meet national air quality standards, several utilities have suggested using intermittent controls systems (ICS) and tall stacks as opposed to permanent emissions controls (scrubbers and electrostatic precipitators). Intermittent controls refer to actions such as temporary plant shutdowns or switches to low-sulfur fuels during unfavorable atmospheric conditions. The use of tall stacks disperses pollutants over a large area so that pollution levels in the plant vicinity are kept down. However, since these measures disperse but do not limit pollutants, the pollutants do end up somewhere, still posing a potential threat to public health. Pollutants entering

clean areas may violate nondeterioration provisions. ICS and tall stacks also provide enforcement problems, as it is more difficult to pin down the source of pollutants when they are so widely dispersed. Elaborate monitoring equipment may be necessary to ensure compliance with the standards.

There has been much debate over whether the use of intermittent controls and tall stacks can be considered an acceptable means of meeting air quality standards. EPA has switched positions on this issue several times. In the court case, *Natural Resources Defense Council v. EPA*, the Fifth Circuit Court of Appeals ruled that these dispersion techniques did not constitute compliance with the Clean Air Act.

Indirect sources

Indirect or complex sources of air pollution are facilities such as shopping centers, sports arenas, airports, highways, or large parking lots that do not themselves emit pollutants but attract large numbers of motor vehicles that do pollute. Under the Clean Air Act, each state must provide for the maintenance as well as the attainment of air quality standards; since new indirect sources can affect a state's ability to maintain standards, states are required to review preconstruction plans. EPA has promulgated indirect source review regulations now due to go into effect January 1976. (They have been delayed several times by administrative and congressional action.) Indirect source review is a controversial issue, and the regulations are being challenged in court by both advocates and opponents of the Clean Air Act.

Transportation controls

To meet air quality standards, some areas—particularly large cities—need to regulate transportation. In these places, the volume of vehicle traffic is so high that enforcing auto emission standards for individual vehicles will not be enough to enable states to meet primary standards.

Transportation controls fall into two categories:

- 1. those that reduce the total number of miles driven—improved mass transit, parking restrictions, and carpooling incentives, for example; and
- 2. those that reduce the level of emissions per mile—installing pollution control devices in older cars, inspection, and maintenance, for example.

In all, 27 air quality control regions have been designated as needing some transportation controls to meet federal standards. These regions were required to submit transportation control plans for EPA's approval. If such a plan proved inadequate, EPA was authorized to substitute another plan. The Energy Supply and Environmental Coordination Act forbade EPA from requiring parking surcharges as part of these plans and invalidated all previously EPA-imposed parking surcharges.

What you can do

- ☐ The Energy Supply and Environmental Coordination Act extended the Clean Air Act through June 1975. Since that time, the law has remained in effect under a continuing resolution while Congress considers various amendments. Follow proposed revisions to the Clean Air Act and let your congressmen know what you think.
- ☐ Some metropolitan areas are required to develop air quality maintenance plans. Before these plans are adopted, public hearings must be held. Find out if your community must develop a maintenance plan. If so, participate in hearings.
- ☐ Mid-1975 was the deadline for most air quality control regions to attain national primary standards. According to EPA, progress has been made, but there is still a long way to go. Find out how much progress has been made in your state. Have your name placed on the mailing list of your state pollution control board or whatever agency handles air matters to receive all information concerning air quality.

☐ Many interstate regions have air quality advisory boards, usually under Councils of Governments (COGs). Attend meetings of your regional board. Try to be appointed to it.

☐ Support mass transit in your locality. Use mass transit whenever possible and form carpools. Ride bicycles. Drive cars with the lower emission levels and the best fuel economy. Your personal transportation patterns can affect air quality.

☐ Watch for and report infractions of regulations. Inform your local officials of your concern when infractions continue uncorrected. Consider litigating against polluters.

Managing solid waste

In 1970 Congress passed the Resource Recovery Act (P.L. 91-512) as an amendment to the Solid Waste Disposal Act of 1965 (P.L. 89-272). The amended act reiterates that "while the collection and disposal of solid wastes should continue to be primarily the function of State, regional and local agencies, the problems of waste disposal . . . have become a matter national in scope and in concern." Although not as comprehensive as the air and water pollution control laws, the Solid Waste Disposal Act as amended does provide the basis for some federal activity in managing solid waste.

The federal government provides leadership through

- grants to state, interstate and local solid waste agencies for planning and implementing programs
- demonstration grants for resource recovery and improved disposal facilities
- guidelines for solid waste recovery, collection, separation, and disposal
- financial and technical assistance (providing expertise) to public and private organizations in all aspects of solid waste management
- national research and development programs to improve methods of solid waste collection, disposal, recovery, and reduction
- training grants for organizations involved in management, supervision, design, operation, or maintenance of solid waste disposal or resource recovery systems.

Most federal solid waste programs are being developed and carried out by the Office of Solid Waste Management Programs (OSWMP) which is part of EPA. Solid waste problems closely related to mining and processing of minerals and fossil fuels were assigned to the Bureau of Mines in the U.S. Department of Interior. Some programs relating to energy recovery from solid waste are being conducted by the Federal Energy Administration and the Energy Research and Development Administration (ERDA).

Progress under the solid waste law

Under the Clean Air Act Amendments of 1970, the federal government is authorized to establish primary and secondary air quality standards. States are then required to develop implementation plans to ensure that these standards are met. In the case of solid waste, however, no such federal regulatory authority exists; EPA can only stimulate the regulation of collection, disposal, recovery, or reduction of solid waste by others.

Planning grants

To promote progress in sound waste management, EPA provides solid waste planning grants to state, interstate, and local agencies. With financial assistance from EPA, almost every state has developed a solid waste plan, although some states' plans have not been approved by their governors. Preparing these plans has led some states to develop qualified solid waste staffs and enact needed legislation. Some states have never put their plans into operation.

Using planning grant funds, states are now developing solid waste strategies designed to carry out the state role in solid waste management. As envisioned by EPA, states should

first establish positive controls over all land disposal sites and then set up programs in hazardous waste management, resource recovery, and waste reduction.

Demonstration program

EPA has awarded grants for the demonstration of new technology in many aspects of solid waste management, among them improved management systems, collection and transport, processing and resource recovery. In addition, funds are provided for studies and investigations that may lead to the demonstration of new technology.

Of these demonstrations, perhaps the resource recovery projects have received the most attention. Two projects are now in operation, a power plant in St. Louis that uses shredded waste as a supplemental fuel and a materials recovery facility in Franklin, Ohio. Other demonstration projects have faced delaying economic, technical, siting, and pollution problems, as in the case of energy recovery facilities located in Baltimore and San Diego. In Delaware an oil-fired power plant was to accept refuse-derived fuel; however an FEA order to burn coal has delayed operation. An incinerator residue recovery project in Lowell, Massachusetts (based on technology developed by the U. S. Bureau of Mines) has been cancelled due to unexpectedly high costs for air quality control.

To demonstrate another type of resource recovery, EPA has also funded separate collections of certain waste materials segregated at the place the waste was generated.

Guidelines

The Resource Recovery Act authorizes EPA to issue guide-lines for solid waste recovery, collection, separation and disposal. These guidelines are to serve as *recommendations* to state and local bodies. Federal agencies however are required to "insure compliance" with these guidelines. In 1974, with only proposed guidelines for land disposal and thermal processing (incineration) published, the Natural Resources Defense Council, the Sierra Club, and Environmental Action, Inc. filed suit against EPA for noncompliance with the law. As of mid-1975, EPA had published final guidelines for land disposal and thermal processing and proposed guidelines for source separation and collection and storage. Guidelines for resource recovery and beverage containers are still to come

EPA also plans to issue recommended procedures to states for hazardous waste treatment and disposal. Prior to final publication of these recommended procedures, public meetings will be held to obtain outside comment.

Technical assistance

EPA is authorized to provide technical assistance to public and private organizations involved in the solid waste field. Technical assistance includes providing expert advice in the planning, financing, and managing of solid waste systems. For example, cities interested in contracting for a resource recovery facility can call on EPA for advice in evaluating the different systems available. Or EPA can assist a community in planning and instituting a source separation/separate collection program. EPA also has an extensive range of publications available free on request. For other specialized information, EPA has established the Solid Waste Information Retrieval System (SWIRS) which can be used by the public.

Research and development

The Resource Recovery Act requires EPA to study and report to Congress on many topics including

- materials and energy recovery from solid waste in relation to existing and potential markets
- product or packaging redesign as a means to reduce solid waste

- federal procurement policies as means to increase demand for recovered resources
- effect of existing economic policies (such as subsidies and depletion allowances) on recycling and reuse of materials
- creation of a system of national disposal sites for hazardous waste storage and disposal.

Thus far EPA has submitted three extensive reports to Congress on resource recovery and source reduction and a study of national hazardous waste disposal sites. Numerous other studies in solid waste have been prepared or funded by EPA.

Training grants

EPA is authorized to provide training grants for organizations involved in the management, supervision, design, or operation of solid waste disposal or resource recovery systems. Under this authority, EPA has also funded projects to further citizen education in all aspects of solid waste management—enabling groups to hold educational seminars, produce films, and sponsor separate collection programs, for example.

What you can do

Citizen interest and effort is vital to improvement in managing solid waste and especially so because this aspect of environmental protection has lagged behind air and water.

Under the present law

To assist in the improvement of solid waste management policy citizens can begin immediately on the following activities.

- ☐ Follow the progress of guideline publication. Talk to state and local officials about how these guidelines and recommended procedures can be applied to solid waste management practices in your area. Submit comments on proposed guidelines and on recommended procedures for state management of hazardous wastes. Participate in public meetings relating to these procedures.
- ☐ Find out the status and content of your state's solid waste plan. Has your state developed a solid waste strategy? Does your state have a hazardous waste treatment and disposal problem? What is the potential for resource recovery in your state? Should your state consider methods to reduce waste generation at the source?
- ☐ Monitor the local disposal site through surprise visits over a significant period. Keeping records of the observations of two or more observers may give you or your organization the data needed to get your local government's attention. Publicize violations and inadequate enforcement of regulations.
- ☐ Inform yourself on present problems and future issues on which legislation may be needed by sending for and reading the publications recommended at the end of this publication. Talk to your state and local officials about what should be done in waste disposal on land (especially of hazardous wastes), in recycling and reuse. What attitude do industries in your area take? What do they do with their solid waste? When you travel, notice what is going on in other states.
- ☐ Discuss common solid waste problems with citizens in neighboring communities. Are there regional solutions?
- ☐ Take part in meetings where solid waste management matters are discussed. Suggest that your local paper, radio or TV station report on solid waste meetings and issues.
- ☐ Find out the committees in your state legislature and Congress that handle solid waste legislation. Ask to have your name put on the mailing list to receive copies of bills and committee hearing reports.
- ☐ Let your local, state and national representatives know how important you think solid waste management is and what you think should be done about it.

In the future

When compared to laws that regulate the entry of wastes into the air, oceans, and inland waters, the amended Solid Waste Disposal Act provides for relatively little direct federal regulatory authority. Because federal laws reflect citizen concern, people need to make up their minds about how much and what kind of regulation is needed to promote recovery of resources from waste, to reduce the amount of waste produced, and to ensure safe land disposal, especially for hazardous wastes. Think about the following frequently discussed possibilities for enlarging the federal part in solid waste management.

Improving disposal Should the federal government

- require that all dumps be closed or upgraded into sanitary landfills?
- be given extensive regulatory authority over hazardous wastes? (Actually, it is impossible to draw a fine line between hazardous and nonhazardous waste, as many wastes can be hazardous if disposed of improperly. As used here, the term refers to wastes—among them toxic metals and acids—that pose a substantial danger to human and animal health and therefore require special handling and disposal.) Should the federal authority include direct supervision of disposal sites for most hazardous wastes and federal standards for less hazardous wastes with implementation carried out by the states?

Resource recovery Should the federal government encourage resource recovery by

- continuing to provide grants for projects that demonstrate new technology?
- offering financial support for statewide resource recovery planning?
- offering low cost loans and other incentives to industry and governments to develop methods and set up recovery systems?
- revising economic policies such as freight rates, tax treatment and labeling requirements which discriminate against recyclable materials (and if so, should this be done by abolishing existing subsidies or by creating comparable incentives for recycling industries)?
- revising federal procurement policies to allow greater use of recycled goods?

Reduction of waste at source Should the federal government take steps that will cut down the amount of solid waste accumulated in the United States each year? If so, how?

- by placing mandatory deposits on beverage containers
- by curbing excess packaging
- by requiring redesign of products so that they use less materials and energy in manufacture or are longer-lived?

Keeping up to date

It is important to remember that these federal environmental laws, recent as they are, will be changed. Some may be modified during the course of the 94th Congress, which is in office until December 30, 1976. As amendments are suggested and discussed, newspapers, magazines, and news commentators often furnish only the current highlights. Federal Environmental Laws and You supplies the background against which to examine proposals for changes in the laws discussed.

Having your name put on the mailing list for the reports from your local, regional, state, and federal agencies and from environmental organizations will bring you a host of informational materials to help you keep up to date. As new criteria, guidelines, and regulations come out, you'll see references to them. There will be discussions of how programs are working or not working and whether laws should be amended.

Some of the changes that will be suggested are scarcely more than trial balloons, launched to see how they fare. Others are well-considered suggestions for fine-tuning programs to make a law work better. Some will strengthen a law, enlarge its scope, or expand its application. Still others are intended to gut a law by making compliance voluntary, reducing funding authorization to a pittance, or modifying the goal. Watch for proposed changes in an environmental law; think whether each change will accomplish something you do or do not want done. Keeping up to date is up to you.

Recommended reading

Materials marked with an asterisk (*) are available FREE when ordered in limited quantity from the indicated source. Orders for materials available from U. S. EPA should be addressed to: Environmental Protection Agency, Office of Public Affairs (A-107), 401 M Street, S.W., Washington, D. C. 20460, EXCEPT for solid waste materials, where a special address is listed.

Orders for LWVEF publications should be sent, with payment enclosed, to the League of Women Voters of the U.S., 1730 M Street, N.W., Washington, D. C. 20036.

NEPA

*National Environmental Policy Act, P.L. 91-190 and *Guidelines for Preparation of Environmental Impact Statements*. Available from Council on Environmental Quality, 722 Jackson Place, N.W., Washington, D. C. 20006.

Water

*Federal Water Pollution Control Act, P.L. 92-500.

*Safe Drinking Water Act, P.L. 93-523.

*Marine Protection, Research and Sanctuaries Act, P.L. 92-532.

*Guidelines for Public Participation in Water Pollution Control. 38 Federal Register, pp. 22756-22758, August 1973.

*Izaak Walton League of America, A Citizen's Guide to Clean Water. 95 pp., June 1973.

*EPA. Toward Cleaner Water—The New Permit Program to Control Water Pollution. 33 pp., January 1974.

*EPA. Operations and Maintenance—Making Wastewater Treatment Work in Your Community. 3 pp., May 1974.

*EPA. Areawide Waste Treatment Management Planning. 13 pp., November 1974.

*EPA. State Continuing Planning Process. 12 pp., January 1975.

*EPA. A Drop to Drink. 13 pp., August 1975.

All the above available from U.S. EPA

LWVEF. Controlling Hazardous Pollutants: In the Ocean. Pub. No. 571., 4 pp., April 1975, 25¢.

LWVEF. Controlling Hazardous Pollutants: In Inland Waters. Pub. No. 591., 4 pp., June 1975, 25¢.

LWVEF. The Water You Drink: How Safe Is It? Pub. No. 246, 4 pp., 1973, 25¢.

LWVEF. Safe Drinking Water For All : What You Can Do. Pub. No. 247, 4 pp., $1973, 25 \phi$.

The Conservation Foundation. *Water Quality Training Institute Manual.* 475 pp, 1973. \$4.00 for postage & handling. Order from Conservation Foundation, 1717 Massachusetts Ave., N.W., Washington, D. C. 20036. Attention J. Brinch.

Where land and water meet

*Coastal Zone Management Act, as amended, P.L. 92-583. *OCZM. It's Your Coast... Get Involved. 13 pp, June 1975.

Both available from Office of Coastal Zone Management, Page Building #1, 3300 Whitehaven St. N.W., Washington, D. C. 20235.

*Flood Disaster Protection Act of 1973, P.L. 93-234. From Federal Insurance Administration, HUD, 451 Seventh St., S.W., Washington, D. C. 20410.

*LWVEF. Where Rivers Meet the Sea. Pub. No. 367, 8 pp., February 1970. Free if self-addressed stamped envelope is enclosed with order.

LWVEF. Coastal Zone Management Program. Pub. No. 572, 6 pp., April 1975, 35¢.

LWVEF. Flood Plain Management and the National Flood Insurance Program. Pub. No. 534, 4 pp., January 1975, 25¢.

Air

*The Clean Air Act, as amended, June 1974.

*EPA. Transportation to Reduce Automobile Use and Improve Air Quality In Cities. The Need, the Options and Effects on Urban Activity. EPA-400/11-74-002. 69 pp., November 1974. Both the above available from U. S. EPA

*Ayres, Richard and Cullen Phillips. What's Happening to the Clean Air Act Now? American Lung Association Bulletin, January-February 1975. Available from the Natural Resources Defense Council, 917 15th St., N.W., Washington, D. C. 20005.

LWVEF. Clean Air—Costs and Trade-offs. Pub. No. 467, 12 pp., 1974, 60¢.

Solid waste

*Solid Waste Disposal Act., P.L. 89-272, as amended by the Resource Recovery Act, P.L. 91-512.

*Third Report to Congress on Resource Recovery and Waste Reduction (No. 448).

*Available Information Materials—a catalog of all solid waste materials distributed by the Office of Solid Waste Management Programs.

All the above available from Solid Waste Information Materials Control Section, U. S. EPA, Cincinnati, Ohio 45268. If you would like to receive copies of new OSWMP publications, send your request to this Cincinnati address.

LWVEF. RECYCLE? In Search of New Policies for Resource Recovery. Pub. No. 132, 39 pp., 1972, 75¢.

LWVEF. REDUCE? Targets, Means and Impacts of Source Reduction. Pub. No. 576, 48 pp., 1975, \$1.00.

LWVEF. Solid Waste—It Won't Go Away. Pub. No. 675, 12 pp., 1971, 50¢.

General

Cannon, James. A Clear View: Guide to Industrial Pollution Control. An invaluable tool providing techniques for obtaining, evaluating, and using data on industrial air and water pollution. 246 pp., 1975. Order from INFORM, 25 Broad St., N.Y., N.Y. 10004. \$4.50 includes postage and handling.

Fanning, Odom. *Man and His Environment: Citizen Action*. Recounts some successful citizen actions of the last decade to protect the environment; includes case studies, suggestions of future possibilities for action, and extensive discussion of organizations. 240 pp., 1975, Harper & Row, N.Y., N.Y., \$4.95 (paper).

Researched and written by Carol Jolly and Gail Allison, Staff Specialists, Environmental Quality Department.

Order from League of Women Voters of the United States • 1730 M Street, N.W. • Washington, D.C. 20036 Publication No. 564, 75¢



memorandum

The League of Women Voters of the United States

4 December 1975

TO: State League President

(copy directly to state Land Use and Environmental Quality chairmen and

to Energy Task Force members)

FROM: Ruth C. Clusen, President

RE: Guidelines for inter-League work on regional problems under shared land

use, energy, and environmental positions

The new guidelines you are receiving with this memo develop two themes. 1) In each local and state League, committees on land use, energy, and environment should work with one another. 2) Many Leagues will find it rewarding to cooperate with neighboring Leagues on joint problems involving geographic areas beyond a single League's boundaries. The new guidelines describe how to start, finance, reach agreement, and take action as an inter-League group.

These guidelines are not intended for the most formal inter-League arrangement, the ILOs. Nor are they intended for simple, short term inter-League cooperative efforts such as resource banks, which can continue to be completely informal. But with a growing number of national and state laws being implemented through regional arrangements and regional bodies, more and more Leagues are finding how important it is to work with neighboring Leagues, sometimes across state lines and sometimes for a number of years. These new guidelines are designed for such on-going inter-League groups.

As local or state Leagues come into closer association, certain questions always arise. The advice in these guidelines is distilled from years of LWVUS experience with inter-League groups' questions and procedural problems. Some recommendations have been modernized to fit today's League.

THIS PUBLICATION IS BEING MAILED ONLY TO STATE LEAGUE PRESIDENTS AND TO STATE EQ AND LU CHAIRMEN AND ENERGY TASK FORCE MEMBERS. We are depending on you state leaders to bring these guidelines to the attention of your local League counterparts. We are sure you know of Leagues that could profit by working together. You also get questions from Leagues about how to arrange to work on regional issues. In both these situations you will now have this publication to recommend. And you can use these guidelines at your regional meetings—along with LWVUS committee guides—to stretch the sights of local League leaders. Although this publication deals only with inter-Committee and inter-League work under shared EQ, LU, and Energy positions, the methods suggested are adaptable to any League subject or combination of subjects.

Working across committee and League lines is the modern League way, suited to today's conditions and present governmental structure. We believe you can help to expedite and simplify both processes for your Leagues if you get these new guidelines in the hands of your League leaders at the point when they need them.

DUTCH ELM DISEASE - THE BATTLE WITH THE BEETLE

THE PROBLEM - Dutch elm disease threatens to destory nearly all of Minnesota's elms, those stately shade trees arching over the streets in most of the state's older communities. The disease occurs in most parts of the state with the southern portion, especially the metropolitan area, most heavily infested. A recent inventory of shade trees in the Twin Cities area showed more than 4 million elms in the seven metropolitan counties, nearly half of them within municipal boundaries. Minneapolis' trees are about 90% elm, St. Paul's about 85%. In 1975, metropolitan cities lost a total of 27,000 elms, with the 1976 figure expected to exceed 50,000. Projected metropolitan area losses for 1977 are 80,000 elms and for 1978 they are 120,000. The incidence of the disease tends to expand geometrically as more and more elms are infected because the bettles which spread the disease breed only in dead and dying elm wood.

Dutch elm disease in caused by a fungus which chokes off the tree's vascular system. The disease spreads by two means: 1) A small beetle, which breeds only under the bark of dead elm wood and winters there, emerges in the spring and feeds on growing, healthy elm trees. If the dead elm wood was infected, the beetle carries the fungus to the healthy trees. 2) The natural root grafts connecting elm trees growing close together spread the fungus from infected trees to adjacent healthy ones.

WHAT CAN BE DONE? While the number of affected trees has increased sharply, most Minnesota elms are still healthy. And, while there is still no proven cure for Dutch elm disease, tree losses can be kept to manageable levels by proper control measures, permitting orderly efforts to plant different species of trees before the elms are gone. Proven elm disease control measures consist of:

- 1) Identifying all diseased elms during the growing season.
 2) Removing all dead or diseased elms as quickly as possible.
- 3) Disposing of dead elm wood properly.
- 4) Preventing diseased elms from infecting healthy trees through the root system.

It is important to remove dead branches from healthy trees by regular trimming to destroy beetle breeding sites. Chemical injection treatments (such as Lignasan) offer limited protection but must be repeated every year.

Control programs must be both long-range and on-going. In Syracuse, New York, the control program was so effective that citizens ceased to be concerned and stopped funding the program—and the city lost its elms within a few short years.

WHAT IF WE DO TOO LITTLE, TOO LATE? Incredibly, the stark reality is that it will cost much more to give up and allow the trees to die than it will to maintain an effective control program. It costs from \$150 to \$400 or even more to remove a large elm. At an average of \$200 per tree, removing the 170,000 elms in Minneapolis alone would cost \$34,000,000—and the trees would be gone. Indirect but even greater costs would result. Shade trees improve the landscape, cut heating and air—conditioning costs, and reduce air and noise pollution.

THE MINNEAPOLIS PROCRAM - The Minneapolis Park and Recreation Board has adopted a 1977 Forestry Budget that illustrates the magnitude of the problem. In 1976 about 6,000 public and 1,293 private trees were removed. The Park Board predicts that between 10,000 and 12,000 public and between 2,400 and 3,000 private trees will have to be removed in 1977. It has therefore jumped the Forestry Budget from \$1,700,000 in 1976 to \$5,161,757 in 1977. The increase will provide the following additions:

Tree inspectors will be increased from 6 to 24, enabling them to cover smaller areas and to follow up elm watch reports more rapidly.

Field personnel will be increased from 46 to 92, to allow trimming public trees on a 3-year rather than a 4-year cycle, to help ensure removal of diseased trees within 20 days, and to continue the planting of 10,000 trees annually through 1978.

Office and administrative personnel will be increased to include a coordinator for volunteer activities such as the elmwatch and a Dutch elm disease coordinator in charge of notifying the public about diseased trees and the homeowners' subsidy. Equipment rental and purchase is budgeted at \$1,021,000, about triple the 1976 sum.

PRESENT LAW - State legislation enacted in 1974-75, administered and enforced by the Department of Agriculture, requires all municipalities in the seven metropolitan counties to employ qualified tree inspectors, to develop Shade Tree Disease Control programs which must be approved by the Commissioner of Agriculture, to inspect all shade trees annually, and to remove diseased trees within 20 days. The legislation also applies to oak wilt disease. Municipalities may apply for a matching subsidy program for the removal of private residential diseased trees, whereby the state subsidy may be less but not more than the matching subsidy paid by the municipality. (Minneapolis has not taken part in this program.) Grants-in-aid up to 50% of the cost are available for wood disposal systems. St. Paul and Minneapolis are sharing the cost of a disposal plant expected to be perational by March, 1977. The law also provides for some public education and some research, and non-metropolitan municipalities may take part in the programs. \$1,545,000 was appropriated to fund the law between July 1, 1975 and June 30, 1977.

PROPOSED LEGISLATION - Control of Dutch elm disease is expected to be a high priority for metropolitan legislators. Several bills will be introduced, based largely on recommendations from the Minnesota Shade Tree Advisory Committee. The St. Paul and Minneapolis City Councils and the Minneapolis Park Board are united in support of a proposal to: 1) extend the subsidy program for tree removal to public trees, requiring the state to pay half the cost of municipal disease control programs; 2) provide for a more flexible residential subsidy program; 3) require that a municipality receive 75% of its matching funds before spending control program funds, and 4) allow for a special tax levy to pay for control programs.

They estimate that at least \$49 million will be needed to fund this proposal for the biennium. The Shade Tree Advisory Committee's estimate was \$5 million less, based on its lower estimate of the cost of tree removal. However, many trees in both cities are large and close to buildings making them very expensive to remove. Proposals are expected also for control and reforestation on state lands; for training, research, and public education; and for subsidies for homeowners who treat trees with chemicals such as Lignasan.

WHAT CAN YOU DO? Individual citizens can help battle the beetle in a number of ways:

Write or call your legislators and the Governor in support of bills and appropriations for adequate control programs. You can keep abreast of bills by calling the Governor's Dutch Elm Disease Office, 296-8581.

Encourage out-state friends and relatives to contact their legislators in support of effective Dutch elm disease legislation. Legislators from areas not yet seriously affected may not give it high priority unless they hear from their constituents. Become involved with one of the community groups working on this problem, such as the Citizens League, the CUE Shade Tree Task Force, or the Save Our Elms Committee. You can get more information from Jan Midtbo, Chairman, LWVMpls Park Committee, 926-0954. Learn to identify elm wood. Backyard firewood is a serious source of infection and one of the most difficult to detect and monitor. In Minneapolis it is illegal to store elm wood with the bark intact, and violations should be reported to the Trees and Horticulture Department, 822-2126.

DON'T GIVE UP. The Dutch have been fighting the disease since 1919, and their control programs are so effective that they still plant elms!

Are Jobs Really the Price of a Clean Environment?

Could relaxing environmental standards help relieve the nation's unemployment? Or are pollution control programs a help rather than a hindrance to the job market? Several years of high unemployment coupled with economic recession and energy shortages have brought the tough pollution control laws of the early 1970s under attack.

Critics charge that the costs of cleanup overburden our already lagging economy. Capital spent for pollution control earns no profits, they say; instead it eliminates jobs by leading to plant shutdowns and by inhibiting industrial expansion. Those who want environmental standards lowered claim that job openings are delayed because so much time must be spent considering environmental impacts of new projects. They recommend that environmental goals be postponed until economic conditions improve.

Supporters of environmental laws contend that the employment impacts of pollution control have been exaggerated. While acknowledging that some jobs are lost—many in marginal plants already on the verge of shutdown—they point to case after case in which predicted shutdowns and job losses did not, in fact, occur. They also note that a new industry is developing in conjunction with pollution control efforts and cite figures showing a net gain in employment. In addition, they offer examples of industries that have actually saved money by modifying operations to meet environmental standards.

In response to a growing public awareness of the health effects of pollution, Congress passed many ambitious environmental laws in the early seventies. For example:

- ☐ The Clean Air Act Amendments of 1970 gave the Environmental Protection Agency (EPA) authority to set national standards for air quality and allowed states to limit pollutant emissions from industrial plants.
- ☐ The 1970 Occupational Safety and Health Act set up a federal program for in-plant cleanup by limiting emission of certain chemicals in the workplace and requiring use of special safety equipment.
- ☐ The Federal Water Pollution Control Act Amendments (FWPCA) of 1972 (PL 92-500) set a 1983 goal for making all waters in the country fishable and swimmable. EPA was authorized to set in motion a massive program for water cleanup.

(For more information on environmental legislation see Federal Environmental Laws and You, LWVEF publication #564, 75%).

© 1977 League of Women Voters Education Fund

Since passage of these and other pollution control laws, some progress has been made in cleaning up the nation's environment. But buying control equipment and modifying operations to meet environmental standards means considerable financial investment by industry and government. Although it is too early to know the full effect of these costs on employment, there is information that sheds light on the effects so far and makes possible some projections for the future

Some jobs are affected

Both supporters and opponents of environmental controls agree that some jobs will be affected. In recent years when plants have shut down or curtailed operation, owners in some instances have attributed the decision, in whole or in part, to the costs of compliance. Is it possible to get at the facts behind such assertions?

In 1971, EPA set out to do so by creating an Economic Dislocation Early Warning System (EDEWS) that collects information on actual industrial plant closings or cuts in operation and keeps track of jobs that may be affected in plants in danger of closing. EPA gets this information from the enforcement agencies and, whenever it can, from the companies themselves. By interagency agreement, when the EDEWS identifies a plant that may have to lay off employees, the proper regional office of the Department of Labor (DOL) is notified. This office then assesses the situation, to determine whether job search assistance or job training programs are needed in addition to unemployment compensation

As of September 1976, EDEWS had tracked closings or production curtailments in 90 plants, resulting in the dislocation of 19,508 employees. (It should be pointed out that this figure is small when compared to the more than 88 million working Americans.) In each of the cases recorded by EDEWS, environmental regulations were said to have played a significant part in management's decision to cut back. But in almost every case, other factors, such as declining profitability, also contributed to the decision.

In addition to these closings, 25 more plants may close, affecting another 30,732 employees. But, may is a significant word: the EDEWS staff says that so far two out of three threatened plants have resolved compliance difficulties and continue to operate. Though EPA's warning system does not pick up all instances of environmentally related job losses, the staff estimates that their data represent the most significant





League of Women Voters Education Fund 1730 M Street, N.W. Washington, D.C. 20036 closures. Because so much staff time would be required, EPA makes no attempt to locate closings involving fewer than 25

Relatively few plants, then, have closed because of pollution abatement requirements, and even in these cases, not all employees lose their jobs. Many find employment elsewhere in the company. DOL follow-up efforts reveal that this reemployment rate is approximately 40 percent. For example, the Ohio Power Company, facing pollution abatement costs estimated at \$20 million for one of two power plants in Brilliant, Ohio, shut down one facility and expanded capacity at the other. Of the 210 employees from the closed plant 85 will work in the expanded facility. Yet, the 210 figure remains in EPA's job-loss tally.

On the other hand, sometimes when a new facility is built to replace an older one shutting down, the newer plant may use more sophisticated equipment and therefore require fewer employees.

Is pollution control the cause?

It requires a very close reading to determine exactly what part the added cost for pollution abatement plays in a company's decision to close or cut back operation. A plant that doesn't pass muster on pollution control is often facing difficulties on other scores as well. A review of plant closings reported by the EDEWS shows that declining profitability, increased operating costs and obsolescing equipment frequently underlie the decision. Two examples:

- ☐ The Rockwell International Corporation closed an automobile bumper manufacturing plant in Newton Falls, Ohio that employed 920 people. A declining demand for large automobile bumpers, a trend in auto companies to make bumpers in-house, and high costs to meet water standards all brought about the decision.
- ☐ The Packaging Corporation of America closed a plant in Berkeley, California that had employed 103 people in the manufacture of egg cartons from recycled paper. The plant was marginally profitable, and the parent company had considered closing it down for some time. Rising waste treatment costs tipped the balance.

A Department of Commerce sample survey of plant closings produced similar findings. Representatives from three out of four plants surveyed cited at least one factor besides pollution control costs which added to the decision to shut down; almost half cited two additional factors.

According to the 1975 draft study of the National Commission on Water Quality (NCWQ), "Water pollution controls are one of many factors forcing industry toward greater capital intensity, economies of scale, and modernization."

The impacts are uneven

Although the number of job losses that can be linked to pollution control is relatively small, the impact of these losses or dislocations is magnified when a closed plant has been a large employer in a community or when many plants close in the same geographical area. The problem is compounded when the area is already experiencing high unemployment. And, of course, an individual who loses a job and has difficulty finding another may suffer badly. The chart shows the breakdown of plant closings by federal regions. Region V, including Indiana, Illinois and Ohio, and Region II, including New York and New Jersey account for over half the total 19,058 dislocations reported by the EDEWS.

According to data compiled by the NCWQ, the Northeast will be the region hardest hit by job losses related to water pollution control. The NCWQ cited six industries with a high number of "endangered" plants (plants with particularly high abatement costs): pulp and paper, textiles, petroleum refining, electroplating, iron and steel, and nonferrous metals. From 1967 to 1974 the Northeast had 24.5 percent of the total employment in these industries and over half of the employment loss due to environmentally related plant closures. Heaviest impacts were in New York, New Jersey and

Finding new jobs in neighboring plants has become more difficult for affected employees, since overall manufacturing employment in New England and the mid-Atlantic states has been on the decline. Between 1969 and 1973, manufacturing employment in New England dropped by 135,000 and in the mid-Atlantic states by 410,000. When these job losses are set alongside the less than 20,000 related to pollution control, it

Jobs affected—actual and (threatened) closings where pollution control costs were alleged to be a factor¹ ² January 1971 thru September 1976

Jobs	Primary Metal Industries	Food and Kindred Products	Chemicals and Allied Products	Paper and Allied Products	Stone, Clay, Glass G Concrete Prods.	Fabricated Metal Products	Other Industries ³	
Regions								Totals
I						30	700 (74)	730 (74)
п	44	252	1,505	1,677		750	924	5,152
III	166	105 (204)	610 (38)			30	1,021 (503)	1,932 (745)
IV	942			217				1,159
v	670 (24,250)	165	2,230 (435)	500	210 (228)		1,560 (3,100)	5,335 (28,013)
VI	1,440		(400)					1,440 (400)
VII	70	200 (25)						270 (25)
VIII								
IX	1,138 (1,310)	(165)		103	148		35	1,424 (1,475)
x		190		833		83	510	1,616
Total: Actual (Threatened)	4,470 (25,560)	912 (394)	4,345 (873)	3,330	358 (228)	893	4,750 (3,677)	19,058 (30,732)
Grand Total	30,030	1,306	5,218	3,330	586	893	8,427	49,790
Percent	60	3	10	7	1.	2	17	100

- 1. Economic dislocation information is compiled and reported by the EPA Regional Offices
- 2. Dislocations involving less than 25 jobs are NOT reported.
- 3. "Other industries" includes all dislocations where the combined "Actual" and "Threatened" plants amount to less than five.

Source: U.S. EPA

pollution control costs.

In two cases, local impacts of potential shutdowns have been widely publicized - steel plants in Ohio's Mahoning Valley, and the Reserve Mining Company in Minnesota.

The Mahoning Valley

In 1973, several steel plants in the Mahoning Valley employed 24,000 people, and accounted for 15 percent of total employment and 20 percent of total payroll in a two-county area. The plants—owned by U.S. Steel, Republic Steel, and the Youngstown Sheet and Tube Company — had trouble meeting both federal and state air and water standards. Air quality in the valley was violating national standards for particulates, and the plants themselves were failing to meet emissions limitations set by the state. But water cleanup was the biggest problem, since the plants were dumping significant quantities of cyanides, oil, heavy metals, phenols and ammonia daily into the Mahoning River, a source of drinking water for the downstream community of Beaver Falls, Pa.

EPA, foreseeing economic problems in the Mahoning Valley when setting effluent guidelines for the steel industry, in 1974 commissioned a study of the probable effects in the valley. The study found that a number of factors made the steel plants already marginally profitable before pollution control costs were added: distance from raw materials and markets, age and size of production facilities, and type of technology used. Since costs for pollution abatement would be still another drain on low-profit operations, they could be cited as contributing to any decision to curtail production. Moreover, this was not the first time that the Mahoning plants had been cited for dangerous pollution levels. The plants had been put on compliance schedules under earlier federal water legislation, but the companies had made no significant progress toward improvement.

Although it was impossible to know what the companies would do this time, the EPA study did make some predictions. The U.S. Steel facilities, employing 6,500 people, would be most likely to shut down for purely financial reasons. The plants accounted for only 5 percent of U.S. Steel's total production and the company would still be in a relatively good position to meet market demands. The Republic and Youngstown plants, however, produced 25 percent and 45 percent respectively of those companies' output, so management would be more likely to make every effort to stay in operation. But both might have trouble raising capital.

EPA concluded that the Mahoning Valley might suffer greater economic setbacks due to environmental regulations than any other area of the country. Since PL 92-500 specified that regulations could be relaxed if the EPA Administrator deemed that recourse appropriate, in 1976 EPA did just that. EPA's ruling exempts the plants from meeting the 1977 industry-wide interim requirements for water cleanup and allows them to continue current practices until 1983. But the 1983 requirements remain in effect. Individually, the plants may apply for further relief under PL 92-500. (EPA specified that, in all cases, Pennsylvania's water quality standards except water temperature standards — must be met by 1983.) Although costs for air and water pollution control were roughly the same, cleaning up the air is EPA's priority, so the agency allowed no relaxation of air standards.

Environmentalists have warned that granting relief to these plants allows a serious health threat in the Mahoning Valley to continue. Furthermore, they fear that these exceptions for economic reasons set a dangerous precedent and encourage other polluting plants to apply for similar relief.

is apparent that other factors eliminate far more jobs than do The Sierra Club, as well as the State of Pennsylvania, has filed suit against EPA in an effort to overturn the decision.

> To date, compliance with existing environmental standards in the Mahoning Valley has been slow. Primary air standards for particulates and sulfur dioxides are still being violated, almost two years after the original deadline set by the Clean Air Act.

The case of Reserve Mining

For several years, the Reserve Mining Company, located in northern Minnesota, has been seeking relief from having to meet water standards. The company, which mines taconite and makes taconite pellets for use in steel manufacture, has threatened to close down if forced to comply with cleanup procedures specified by the state pollution control agency. The company employs some 3,300 people, approximately 80 percent of the work force in Silver Bay, Minnesota and neigh-

For the last 20 years, Reserve, owned jointly by the Republic and Armco steel companies, has been dumping 67,000 tons of taconite tailings daily into Lake Superior. The lake supplies drinking water for shore communities, including Duluth. Fibers found in this drinking water are similar to those known to cause cancer when breathed by asbestos

After long court battles, Reserve is now under a federal court order to stop dumping in Lake Superior by July 1977 and to locate a land disposal site. Now the fight is over the choice of a site acceptable to the company, the federal EPA and the Minnesota Pollution Control Agency (MPCA). To keep transport costs low, the company has chosen a site seven miles from the plant. But a hearing officer for the MPCA and the State Department of Natural Resources found that, among other problems, use of this site would allow a significant amount of taconite dust to blow into the lake. Therefore, the MPCA did not approve use of the companyselected site and instead recommended a location 20 miles from the plant. Reserve argues that the high costs of using this site would force them to shut down the plant.

In February 1977, a Minnesota state court ordered the MPCA to allow Reserve to use the seven-mile site. In the decision the judges cited the economic hardships that would ensue if Reserve were to shut down. This decision will probably be appealed to the state supreme court. While the battle to find a disposal site continues. Reserve Mining continues to dump tailings into Lake Superior. Could Republic and Armco afford the costs of environmental cleanup without taking drastic measures? According to an editorial of July 19, 1976 by the Washington Post, "Reserve...is not a marginal, small business and under pressure has proven ability to invest money in cleaning up."

Claims of environmental blackmail

Environmentalists and some labor union members believe that industry has over-reacted to environmental regulation. They claim that industry irresponsibly threatens massive layoffs in attempts to avoid the expense of meeting environmental standards. They accuse industries of using environmental regulations as a scapegoat for other problems, such as declining profitability.

For example, in 1974 when the Department of Labor issued a new standard for vinyl chloride, a known carcinogen, chemical manufacturers protested that compliance would be impossible. But in a December 28, 1975 New York Times

article, Steven Ratner wrote, "They offered dire warnings of plant closings, job losses, price increases, and massive economic dislocation....But one year later not one of the doomsday predictions has proved accurate."

According to Leonard Woodcock, President of the United Auto Workers of America:

"The idea that businesses will be driven to bankruptcy and massive numbers of jobs will be lost if strict safety and environmental standards are adopted is the same tired line that has been brought up again and again by companies down through the years. They tried that argument when child labor was eliminated, when the minimum wage was introduced, when Social Security and Unemployment Insurance were developed.... We share the opinion of Senator Muskie that the industry has been trying to use the livelihoods of hundreds of thousands of workers as a huge bargaining chip in this struggle with the government."

Several unions have made proposals to Congress that would prevent "environmental blackmail." One suggestion is that employees whose jobs are threatened be given the right to ask for a public hearing, at which EPA could subpoena corporate records to help determine what the actual impacts of environmental regulations would be. The United Steelworkers of America has proposed that civil or criminal penalties be set if jobs are threatened without basis in fact.

A look at the economics

The employment impacts of environmental programs are dependent on how much it costs to control pollution and how well individual industries and the economy as a whole are able to bear these costs.

In 1974 the Ford administration began a practice aimed at gauging in advance the full effects of a new regulation on the economy. It requires federal agencies to submit to the Council on Wage and Price Stability an economic impact statement covering prices, balance of trade, and community effects (including jobs). The agency could modify a proposed regulation, if necessary, in light of this statement. President Carter is expected to continue this policy.

Critics, often from organized labor, mistrust this procedure. They believe that the economic impact statements can be used to delay further the issuance of regulations, particularly badly needed safety and health standards. They charge that although the statements do a thorough, often exaggerated job of quantifying costs, they don't do nearly as well on tabulating the benefits of these regulations, which are harder and sometimes impossible to put into monetary terms. For example, what is the dollar value of the health of an individual worker, or of an entire community?

Analyzing the costs . . . and benefits

In 1976, the Council on Environmental Quality (CEQ) estimated that the cost of compliance with environmental requlations (air, water, solid waste and noise) will reach \$258.8 billion over the 1975-84 period in constant 1975 dollars. This estimate takes into account costs for new equipment, interest charges on investment, depreciation of equipment, and operating and maintenance costs.

Breaking these costs down by sector, CEQ calculates that government will spend \$51.7 billion; industry \$156.8 billion and consumers \$50.3 billion. This last sum will go largely for auto emission controls and solid waste management. Consumers will, of course, also pick up most of industry's share through higher product prices. CEQ figures that costs per person for pollution control are now about \$82 a year.

Dr. Robert Miki, director of the Commerce Department's Bureau of Environmental Economics, warns that these cost projections may be set too low, inasmuch as the full costs of some regulations, particularly the FWPCA's pollutant discharge limitations, are not yet known. On the other hand, the United Steelworkers notes that normal modernization costs, which improve productivity, are often counted in as pollution control costs.

But cleanup costs are only half the story. CEQ predicts that pollution control programs will result in a marked net economic gain, since the value of reduced damage costs will outweigh abatement costs. To illustrate, NCWQ calculated that measurable economic benefits of clean water will total \$36.4 billion by 1985, primarily through increased values of property near certain water bodies and through boosts to commercial and recreational fishing and boating. Benefits from lessening human health hazards, increasing aesthetic enjoyment and other nonquantifiable or hard-to-measure pluses of pollution control were not part of this estimate.

According to the National Academy of Sciences, improved air quality should bring savings of \$15-20 billion per year. Again, this figure reflects only tangible benefits, such as a lessening of property damage; no attempt is made to measurable aesthetics or freedom from respiratory illness.

The macroeconomic picture

EPA and CEQ commissioned Chase Econometrics Associates to study the effect of pollution control spending on the economy as a whole. Chase measured the rate of economic growth, unemployment, investment and inflation over the 1970-83 period, first with and then without pollution control spending. Historical data were used for 1970-75, showing what effects actually occurred during this time, and CEQ's projections were used to predict effects for 1976-83. The 1976 report labels these effects for the whole 1970-83 period "noticeable but modest." The report found that with pollution control spending the following changes would occur:

- ☐ Inflation Although pollution control costs would cause some price increases. Chase found that these were relatively modest. For example, from 1970 to 1983 pollution spending should raise the Consumer Price Index an average of 0.3-0.4 percent above what it would have been without such spend-
- ☐ Economic growth During a period of recession, pollution control investment can make use of labor and resources that otherwise would not have been utilized, causing an increase in economic growth. Chase found that this occurred from 1970-76. But higher prices due to pollution control spending will have a slightly depressing effect on the economy by
- ☐ Unemployment As with economic growth, during a recessionary period pollution control programs can have a positive effect on employment. Chase figured that the unemployment rate in 1976 was 0.4 percent lower with pollution abatement spending than it would have been without. But by 1983, as the economy recovers from recession and price increases linked to pollution control spending have a dampening effect on growth, unemployment should rise slightly above the rate it would be in the absence of pollution abatement spending.
- ☐ Investment Chase predicted that companies faced with pollution control costs would tend to cut back somewhat on other types of plant and equipment expenditures. But they

figured that other sectors of the economy more susceptible to interest rates (such as the housing market) would feel the effects of pollution control spending more than would other industries.

How will costs affect industry?

As noted earlier, plant closings can be a direct indication of the effect that pollution control costs have on employment. But these costs can also affect employment in less direct ways. By cutting into a company's available capital they may inhibit capacity expansion or even force an industry to cut back on production.

Six industries will be paying about three-quarters of total (air and water) abatement costs to be borne by the private sector: electric utilities, steel, copper smelting, pulp and paper, petroleum refining, and the chemicals industry. About 13 percent of 1975 capital investment by these industries went for pollution control. EPA commissioned a separate study on each of the six to ascertain what effect pollution control cost requirements will have, preliminary results of which appeared in EPA's transition papers for the Carter administration.

Electric utilities: If certain modifications in requirements are granted by rate commissions, utilities will be able to finance pollution control and capacity expansion. If not, existing capital problems will be further aggravated. To offset control costs, electricity prices will go up 6.6 percent by 1985.

Steel and copper smelting industries: For both industries, air pollution requirements have made it hard to find sites for new plants or to expand old ones. Both have some marginal plants that may be forced to close and a number of these plants are large enough to cause significant local economic impact if they do close down (e.g. the Mahoning Valley). EPA's study also expresses a significant concern about capacity expansion in these industries.

Pulp and paper and petroleum refineries: These industries also have a number of marginal facilities and considerable capital demands. EPA found that enough capital could be raised and that plant closings could be minimized.

Chemicals: This industry is so diverse that predicting impacts is difficult. Regulations issued under the Toxic Substances Control Act and the Federal Insecticide, Fungicide and Rodenticide Act may keep the industry from production of some chemicals found to be a health threat.

Though these six industries will bear the brunt of total industry costs for pollution control, other industries with many marginal plants or with extremely toxic wastes may be severely impacted. For example, EPA has predicted that the electroplating and foundry industries may have serious problems.

EPA's Early Warning System found that job dislocations reported thus far have been concentrated in four industries: primary metals, pulp and paper, chemicals and foods. In the 1971-1976 period these industries accounted for 62 percent of the actual job dislocations and 68 percent of projected dislocations.

... and U.S. trade?

Some opponents of pollution control predict adverse effects on international trade. They warn that the costs of abatement will force price increases that will make American goods less competitive than before. They further warn that businesses may relocate in countries where regulations are less stringent.

But according to Dr. Miki, there is little evidence that environmental regulations have adversely affected the balance of trade. Although admitting that data on international trade and abatement costs are scarce, Dr. Miki states that "in recent years international monetary affairs, cartel energy policies, labor cost differentials, materials availability and costs, and locations' specific characteristics have been considerably more significant than environmental regulations."

Pollution control creates jobs

According to Russell Peterson, former chairman of CEQ:

"We are looking for jobs in America. Thus it is important that we stimulate activities to create jobs. The clearly expressed desire of our fellow citizens for clean air, clean water, less noise, and less waste provides such a stimulus. Enterprises that fill these needs can be among the most productive in our economy, protecting our health and our prosperity, saving valuable resources and adding aesthetic qualities to our lives."

Bottle bills and jobs

The jobs-versus-environment debate has heated up in the controversy over mandatory deposit laws (bottle bills). These laws, which require deposits or minimum refunds on beer and soft drink containers (including cans, throwaway and refillable bottles) are aimed at reducing resource and energy use, litter and the volume of solid waste headed for disposal sites. But critics, largely from industry and organized labor, claim that if sales of cans and throwaway bottles go down jobs will be lost.

At present, Oregon and Vermont have bottle bills in operation, and in 1978 similar laws will go into effect in Maine and Michigan. The Oregon experience can provide useful information on job impacts since the law has been in effect there since 1972. A study by Drs. Gudger and Bailes found that in Oregon, although 350 jobs were lost in production labor, 575 new jobs were added in warehouse and handling and 140 more in truck driving — making a net gain of 365 jobs. Another study by Applied Decision Systems (ADS) estimated the net job gain at a lower figure, somewhere between 55 and 116. These figures are lower partly because ADS found that retailers tended to increase the workload of existing employees rather than hire new ones.

The Federal Energy Administration (FEA) commissioned a study of the economic and energy effects of instituting a mandatory deposit law nationwide. FEA found that by 1982, without a mandatory deposit law, 369,000 people will be employed in the manufacture and handling of beverage containers for a total labor income of \$4.1 billion. The capital requirement for industry will be \$7.3 billion. These figures were compared to two 1982 "scenarios" with a bottle bill in effect. In the first scenario, can sales remained at 1976 levels and both cans and bottles were returned at current rates for refillable bottles. The study predicted a net job increase of 118,000 and an \$879 million hike in labor income, with a slight reduction of salary per employee. Industry's capital requirements would increase by \$824 million. In the second scenario, both can sales and average return rates were decreased to one-half of the 1976 levels. The study predicted for this situation a net job gain of 117,000 with an increase in labor income of \$936 million. Industry's capital requirements would go up \$2 billion.

Pollution abatement efforts have created jobs in several ways:

- \Box through development of a pollution control equipment industry,
- ☐ through establishment of federal, state and local environmental agencies and public interest environmental groups,
- ☐ in the operations and maintenance of control equipment,☐ through the construction of sewage treatment plants, and
- ☐ in the pollution control-related jobs of lawyers, designers, planners, engineers and researchers.

A Bureau of Labor Statistics (BLS) study (based on 1970 data) to determine how many jobs were created by federal outlays for pollution control shows that each billion dollars spent on research and development programs created 76-,700 jobs; on abatement and control programs, 78,400 jobs; on radiation programs, 84,100 jobs; and on wastewater treatment plant construction, 53,600 jobs. On average, 66-,900 jobs were created for each billion dollars spent for pollution control.

EPA's figures for construction grant employment are not as high as those of BLS. In 1976, 46,005 people were employed on-site in federally funded projects for the construction of wastewater treatment plants. EPA's latest data show that 15,000 person-years of on-site employment and 19,500 person-years of off-site employment (suppliers, planners, transporters) are generated from each \$1 billion. Still more jobs are created by the stimulus of the spending generated by this investment — for wages, profit, interest and rent.

And some of these jobs are created where they are most needed. Though the construction industry accounts for only about 5 percent of the U.S. workforce, it has approximately 9-12 percent of all unemployed workers in the country. At times, unemployment in this industry has been double the national average. Federal Regions II and III are areas of particularly high construction-industry unemployment. As of July 1976, Federal Regions II, III and V (including New York and New Jersey, the mid-Atlantic states and the Great Lakes area, respectively) had over half of the jobs in sewage treatment construction.

New jobs in wastewater treatment cannot be created overnight. Before funding can be accelerated, more trained EPA personnel are needed to monitor the construction grants. And once a project is started, it takes about three years to move from planning to actual building.

In the pollution control industry

CEQ has called the pollution control industry, with over 600 manufacturing firms, "one of the relatively few areas of job strength during the recent recession." A CEQ study estimated that employment in pollution control as a result of government and private spending reached 1.1 million. (This number was arrived at by rounding off the BLS figure of 66,900 jobs/billion to 70,000 and multiplying that by \$15.7 billion, the approximate pollution control expenditures for 1975.) The figure has been attacked by the Department of Commerce as being too high. But while admitting it is a rough estimate, CEQ says it can be crosschecked by another means of measurement. Since one percent of the GNP goes for pollution control, these dollars should mean jobs for one

Printed on paper recycled from 100% consumer scrap.

percent of the labor force—about 1 million people. Of course, these are not all new jobs. Some of these people would have been employed anyway in other fields. CEQ figured that in 1976 pollution control programs provided jobs for 400,000 people who would otherwise have been unemployed.

Industry can benefit

Abatement measures need not all be set on the expense side of a company's ledger. Sometimes industry saves through pollution control. The Department of Commerce and EPA have sponsored several conferences to discuss some of industry's innovative approaches. According to former Commerce Secretary Elliot Richardson, "It has been the recent experience of some firms that elimination of pollution at the source prevents the need for costly cleanup operations later, and results in substantial dollar and resource savings." A few examples:

- ☐ The 3M Corporation set up 19 projects under a Pollution Prevention Pays program that now eliminates a total of 73,000 tons of air pollutants and 500 million gallons of polluted waste annually. These projects should bring savings of \$11 million over the next few years.
- ☐ Seven pollution control projects installed by Dow Chemical Company's latex plants at a capital cost of approximately \$2 million are expected to cut operating costs by almost that much each year.
- ☐ A \$2.7 million capital investment by Dow Corning for equipment to recover chlorine and hydrogen previously lost to the atmosphere cut operating costs by \$900,000 a year.
- ☐ A Gold Kist poultry plant modified operations to reduce water use by 32 percent and reduce wastes by 66 percent. It saved \$2.33 for every dollar spent on the modification.

In conclusion

In 1974, the Congressional Joint Committee on Economics undertook an emergency study to help it recommend legislation to improve the economy. Among many other possibilities, the study considered the value of relaxing environmental standards but concluded:

"There should be no general relaxation of environmental standards for the sake of reducing inflationary pressures because: (1) the benefits of this investment clearly exceed the costs, (2) their contribution to inflation has been and will continue to be minimal, (3) delays will only increase the ultimate cost of environmental cleanup, and (4) the stimulative effect of these expenditures on employment in the near future will be beneficial to the economy. Relaxation of any individual standard should occur only when economic analysis has clearly indicated an unfavorable cost-benefit ratio or severely adverse economic consequences."

Although some industry representatives have called for the delay of environmental goals, the American public still supports cleaning up on schedule. For example, in a January 1977 poll conducted by the Opinion Research Corporation, 68 percent said they wanted pollution control programs to continue, even if it meant higher prices. It is true that some jobs have been lost, with costs for pollution partly to blame, but this number is small when compared to the number of jobs ended for other reasons. And the long-term, nationwide benefits of environmental improvement, both in dollars and in such intangibles as reducing health hazards and improving the quality of life, outweigh the dislocations.

Researched and written by Gail Allison, Staff Specialist, Environmental Quality Department, LWVEF.

Order from League of Women Voters of the United States, 1730 M Street, N.W., Washington, D.C. 20036. Pub No. 400, 40¢

League of Women Voters of the United States 1730 M Street, NW Washington, D.C. 20036 Day and makeny Cals , was bulled measure to J

State League Natural Resources (NR), Environmental Quality (EQ), Air (A), Water (W), Solid Waste (SW), Land Use (LU) and Energy (EG) Chairmen---1977-1978.

STATE

Alabama NR, EG -- Jean Tune (also EG), Route 4, Box 832, Decatur, Alabama 35603 (205) 353-3977

- Virginia Blunt (also EG), 1312 Doyle Avenue, Mobile, CO-Chairs Alabama 35603 (205) 476-2979

> EQ--Verda Horne (former EO chairman), 708 Fairhope Avenue, Fairhope, Alabama 36532 (205) 928-5889

LU--Verda Horne (same as above)

Alaska

NR--Ann Swift, SR Box 30498, Fairbanks, Alaska 99701 (907) 479-2524

LU--Arlayne Klein, SR Box 20059, Fairbanks, Alaska (907) 479-6376

Arizona

NR,EG -- Jayne McNeill (also EG), 11360 Conestoga Place, Tucson, Arizona 85715 (602) 749-4790

W---Sue Lofgren, 2411 S. Newberry Road, Tempe, Arizona 85282 (602) 967-0181

A---Muriel Beroza, 5416 E. Palo Verde Drive, Scottsdale, Arizona 85253 (602) 959-8912

LU--Eva Patten, 333 E. Geneva Drive, Tempe, Arizona 85282 (602) 966-6529

Arkansas

NR--Lois Imhoff, 224 W. Cleburn, Fayetteville, Arkansas 72701 (501) 442-9948

LU--Peg Anderson, 1599 Holsell Road, Fayettesville, Arkansas 72701 (501) 521-1687

California

EQ--Eleanor Shimeall, 7028 Leesburg, Stockton, California 95207 (207) 478-6318

SW--Tibby Lanzer, 4229 Pasea do las Tortugas, Torrance, California 90505 (213) 378-5136

A---Judy Orttung, 1228 Monte Vista Drive, Riverside, California 92507 (714) 686-4711

NR.EG--Mignon Bowen (also EG), 2290 Mob Hill Drive, Carlsbad, California 92009 (714) 729-1021

Colorado EG.NR.SW -- Clara Lou Humphrey (also SW and EG), 1407 So. Yank Street, Boulder, Colorado 80228 (303) 986-8571

-2- state that will odd to grate" memo! To sunge Colorado cont. W---Hester McNulty, 2160 Vassar Drive, Boulder, Colorado 80303 (303) 494-0852 LU--Darleen Ekland, 860 Newport, Denver, Colorado 80220 (303) 322-2659 Connecticut NR--Muriel Lightfoot, 112 Meeker Road, Westport, Connecticut 06880 (203) 227-8271 SW--Kathy Golas, 145 Ballard Drive, West Hartford, Connecticut 06119 (203) 523-7395 A---Peggy Brown, 253 Valley Road, New Canaan, Connecticut 06840 (203) 966-3466 LU--Judy Singer, 357 Hope Hill Road, Wallingford, Connecticut (203) 265-0772 EG--Patricia Smith, 374 Valley Road, Cheshire, Connecticut 06410 (203) 272-9980 Delaware EQ--Carole Walsh, 25 The Horseshoe, Covered Bridge Farms. Newark, Delaware 19711 (302) 731-5487 SW--Pat Todd, 1221 Evergreen Road, Wilmington, Delaware 19803 (302) 762-5995 LU--Rita Smith, 712 Severn Road, Wilmington, Delaware 19803 (302) 478-1478 EG--Myrna Bair, 2303 Mousley Place, Hilmington, Delaware 19810 (302) 475-1526 Florida NR--Lolly Kempton, 9 Merritt Way, Jupiter, Florida 33458

(305) 746-6307

LU--Carol Rist, 341 East Tropical Way, Ft. Lauderdale, Florida 33317 (305) 584-8006

EG--Fran Boudolf, 111 Yacht Club Court, Ft. Walton Beach, Florida 32548 (904) 243-4436

Georgia

NR--Kay Hoffman(also EG, LU)321 Milledge Heights, Athens, Georgia 30601 (404) 548-5335

> EQ--Mildred Worthy, 2328 Overton Road, Augusta, Georgia 30904 (404) 736-7674

Hawaii

EQ--Anna Hoover, 605 Papalani Street, Kailua, Hawaii 96734 (808) 262-6205

W---Jean Roberts, 3038 La Pietra Circle, Honolulu, Hawaii 96815 (808) 922-3736

LU--Patricia Hunt, 1232 Waimanu Street, Honolulu, Hawaii 96813 (808) 531-7448

EG--Judy Collins, 1231 Waimanu Street, Honolulu, Hawaii 96813 (808) 422-4544

Idaho

- NR--Ann Hansen (also SW and A), 270 East Pennsylvania, Boise, Idaho 83702 (208) 344-1476
- W---Katrina Berman, 1304 South Main, Moscow, Idaho 83843 (208) 882-4785
- LU--Sallee Glaser, 420 South 12th, Pocatello, Idaho 83201 (208) 232-6285
- EG=-Lorraine Green, Route 3, Box 351, Pocatello, Idaho 83201 (208) 232-3364

Illinois

- NR--Joanna Hoelscher (also W, A, EG), 240 Highview, Elmhurst, Illinois 60126
- SW--Elinor Faulstich, 3208 Rosemont Drive, Joliet, Illinois 60435 (312) 833-7361 (ALSO LU)

Indiana

- NR--Nancy J. Doemel (also LU, EG), 3711 Parkview Drive, Bloomington, Indiana 47401 (812) 336-4954
- EQ--Susan Free, R.R. 2, Windsor Court, Columbus, Indiana 47201 (812) 372--716

Iowa

- EQ--Sandra Huston (also LU), 1500 Oak, Muscatine, Iowa 52761 (319) 263-6428
- EG--Mona Martin, 1504 W. 29th, Davenport, Iowa 52804 (319) 391-7350

Kansas

- W--Jean Lee, 1513 Nichols, Manhattan, Kansas 66502 (913) 537-9462
- SW--Mary Ann Bradford (also A), 1809 Webster, Topeka, Kansas 66604 (913) 354-1646
- LU--Miriam Cone, 6140 Granada, Shawnee Mission, Kansas 66205 (913) 384-4879
- EG--Enell Foerster, 1123 Pioneer Lane, Manhattan, Kansas 66502 (913) 537-0977

Kentucky

- EQ--Cathy Nixon, 935 Vickers Village, Richmond, Kentucky 40475 (606) 623-6130
- LU--Karen Collins, 632 S. Ashland, Lexington, Kentucky 40502 (606) 895-4960
- EG--Pat Stewart, 2103 Starmont Road, Louisville, Kentucky 40207 (502) 895-4960

Louisiana

- EQ--Sue Oppliger, 322 College, Shreveport, Louisiana 71104 (318) 424-4879
- LU--Charlottee Fremaux, 305 Cuddihy Drive, Metairie, Louisiana 70005 (504) 833-0816

Louisiana (cont.) EG--Janet Burt, 11493 Millburn, Baton Rouge, LA 70815 (504) 275-8330

Maine EQ--Barbara Alexander, RFD 1, Box 343, Readfield, ME 04355 (207) 293-4691

EG--Nancy DeWick, Days Ferry, Woolwich, ME 04579 (207) 443-3611

NR--Merilyn B. Reeves (also W, EG), 16506 Forest Mill Ct., Maryland Laurel, MD 20810 (301) 725-2496

> A-- Fran Flanigan, 6304 Blenheim Rd., Baltimore, MD 21210 (301) 377-2532

W-- Flora Epstein, 51 Bailey Rd., Watertown, MA 02172 Massachusetts (617) 924-6117

SW--Dana Duxbury, 151 Hidden Rd., Andover, MA 01810 (617) 475-8881

> EG, A -- Mary Dawson, 21 Cumberland Av., Brookline, MA 02146 (617) 731-2454

LU--Roberta Leary, 96 Elm St., Cohasset, MA 02025 (617) 383-1735

NR--Marge Duane, 738 Oakridge Dr., Jackson, MI 49203 Michigan (517) 783-4112

W-- Kay Cushman, 23633 Elmwood Ct., Dearborn, MI 48124 20200 (313) 561-3318

SM--Leona Good, 3061 Sandhill Rd., Mason, MI 48854 (517) 337-7531

A-- Judy Gorham, 1830 Antisdale, Muskegon, MI 49441 (616) 798-2848

LU--Terry Barnes, 4212 Robinhood Terrace, Midland, MI 48640 27 ANN WHOMEN AND (517) 631-6927

> EG--Lola Dodge, 319 North Bowen, Jackson, MI 49202 (517) 784-3838

MR--Co-chair Minnesota

- Mary Poppleton (Also LU), 11009 London Dr., Burnsville, MN 55337 (612) 890-4486; and

- Sally Foley (also SW), 212 Yoho Dr., Anoka, MN 55303 (612) 421-3033

W-- Joyce Lake, 2442 Jansen, White Bear Lake, MN 55110 (612) 777-3426

(cont.)

Minnesota (cont.) A-- Peggy Watson, 900 Partenwood Rd., Long Lake, MN 55356 (612) 471-8267

> EG--Carol McLean, 1754 Lydia, Roseville, MN 55113 (612) 636-4354

Missouri

MR--Co-chair - Suzanne Pogell (Also W, SW, and A), 2138 Woodson Rd., St. Louis, MO 63114 (314) 429-6161, and - Betty Woodruff (Also W, SW, A, LU), 910 Mayne Rd.,

Columbia, MO 65201 (314) 449-7797

EG--Lenore Loeb, 24 Deerfield Rd., St. Louis, MO 63124 (314) 962-1044

Montana

NR--Harriet Marble (Also W, A, LU), Box 649, Chester, MT 59522 (406) 759-5211

SW--Eva Spaulding, 236 S. Roberts, Helena, MT 59607 (406) 442-8293

EG--Grace Edwards, 140 s. Crestwood, Billings, MT 59102 (406) 656-4100

Nebraska

W-- Alice Hamilton (Also A), 2114 So. 118 St., Omaha, NE 68144 (402) 333-1664

SW--Elaine Hammer (Also EG), 5000 No. 7th, Lincoln, NE 68521 (402) 432-2070

LU--Mardi Anderson, Old Cottonmill Pl., Box 423, Kearney ME 68847 (308) 234-1021

Nevada NR--Mary Breitlow, 1905 Camille, Dr., Carson City, NV (702) 883-3600

New Hampshire NR--None

LU--Mary Sloat, Lost Nation Rd., Lancaster, NH 03584 (603) 788-4777

EG--Lucile Allen, RFD #5, Box 42, Laconia, NH 03246 (603) 524-3328

New Jersey

NR--Cameron Boehme, 411 Thornden St., South Orange, NJ 07079 (201) 762-1912

> W-- Kay Rippere, 934 Navesink River Rd., Locust, MJ 07661 (201) 291-1808

SW--Jean Clark, 6 Seneca Pl., Upper Montclair, NJ 07043 (201) 744-1538

A-- Betty Gerst, 141 Tekening Dr., Tenafly, NJ 07670 (201) 569-0018

(Cont.)

New Jersey (cont.) EG--Madeline Urken, 20 Cedar Pkwy. So., Livingston, NJ 07039 (201) 992-2635

New Mexico

NR--None 1741600 (815 44 ABT) (16940) 16180--03

W-- Mally Ribe, 1053 Gov. Dempsey Dr., Santa Fe, NM 87501 (505) 988-3268

LU--Marjorie Burr, 2025 O'Donnell Dr., Las Cruces, NM 88001 (505) 522-2528

EG--Anne Dunning, 64 Isleta, Los Alamos , NM 87544 (505) 672-9039

New York

NR--Bea Friedman, 15 Deepwood Rd., Roslyn Heights, NY 11577 (516) 484-2569

North Carolina

NR--Lynne Gottlieb, 654 Pineridge Rd., Raleigh, NC 27609 (919) 782-1920

W-- Marion Nichol, 1508 Ward St., Durham, NC 27705 (919) 489-4439

SW--June Kimmel, P.O. Box 488, Davidson, NC 28036 (704) 892-8918

A-- Carol Schroeder, 3407 Angus Rd., Durham, NC 27705 (919) 489-5943

LU--Phyllis Budd, 809 Forbes St., Greenville, NC 27834 (919) 752-0385

EG--Joyce Anderson, 404 Vernon Terrace, Raleigh, MC 27609 (919) 781-4229

North Dakota

NR--Inez Orthmeyer (Also Co-chairman of EG), 3106 South 10th St., Grand Forks, ND 58201 (701) 775-2687

EQ--Mary Jenkins (Also M, SW, A and Co-chairman of EG), 1542 S. 9th St., Fargo, ND 58102 (701) 232-8457

LU--Lorraine Smith, 1000 17th St., Grand Forks, ND 58201 (701) 838-4481

EG--3 Co-chairs: Orthmeyer, Jenkins (above) and Deanna Hill, 2700 Domino Dr., Bismark, ND 58501

Ohio

NR--Edith Chase, 5731 Caranor Dr., Kent, OH 44240 (216) 673-1193

LU--Lotus Young, 412 W. Second St., Perrysburg, OH 43551 H-(419)874-3320; Off-(419) 243-8217

EG--Phyllis Strayer, 275 Elmwood Dr., Centerville, OH 45459 (513) 433-2133

0klahoma

NR--Katherine McCollom, 1107 W. Knapp, Stillwater, OK 74074 (405) 372-5356 (Also EG)

W-- Sherrill Nilson, Star Rt. South--Box 30Y3, Locust Grove, OK 74352 (918) 479-8566

SW--Lois Chiles, 1810 Westbrook Terr., Norman, OK 73069 (405) 321-4592

A-- Helen Gorin, 1302 S. Western, Stillwater, OK 74074 (405) 377-2238

LU--Anne Million, 2530 Beaurue St., Morman, OK 73069 (405) 364-2898

EG--Katherine McCollom, see address above

Oregon of attack

EQ--Mary Sherriffs (Also W, SW, A, EG), 137 W. 37th Av., Eugene, OR 97405

LU--Audrey Jackson, Rt. 2, Box 123, Hillsboro, OR 97123 (503) 628-1071

Pennsylvania

EQ--Rita E. Reves, Box 284, Malvern, PA 19355 (215) 644-6270

LU--Jeanette Ross, 729 Pine Ridge Rd., Media, PA 19063 (215) 566-7962

EG--Joan Ghiselin, 1252 Woodcrest Dr., Kenhorst, PA 19607 (215) 777-8221

Rhode Island

W-- Anna Louise Mestmann (Also A), P.O. Box 5617, Weybosset Hill Station, Providence, RI 02903 (401) 274-4130

SW--Margaret Koster, 41 Westford Av., Warwick, RI 02809 (401) 737-7709

LU--Elisabeth Head, 603 Angell St., Providence, RI 02906 (401) 861-2685

EG--Pearl Pitterman, 151 Brettonwoods Dr., Cranston, RI 02906 (401) 942-9026

South Carolina

NR--Katherine Gilbert, 14 So. Washington St., Sumter, SC 29150 (803) 773-5989

LU--Ada Lou Steirer, 104 Carolus, Clemson, SC 29631 (803) 654-4515

> EG--Dida McMurray, 826 Arbutus Rd., Columbia, SC 29205 (803) 787-7978

South Dakota NR--A.P. Schenk, 1913 Whiting Dr., Yankton, SD 57078 (605) 665-5470

South Dakota (Cont.) LU-A.P. Schenk, address above

EG--Mary Berkebile, 1717 West Blvd., Rapid City, SD 57701 (605) 343-4026

Tennessee

NR--Shirley Patterson, 4505 Harding Rd., Apt. 167, Nashville, TN 37205 (615) 292-0544

EG--Gina Albrecht, 1701 21st Ave. So., Nashville, TN 37212 (615) 297-7134

Texas

MR--Jan Wilbur, 10130 Whiteside Dr., Houston, TX 77043 (713) 465-7289

W-- Catherine Perrine, 7616 Royal Pl., Dallas, TX 75230 (214) 368-7889

SW--Joyce Klein, 7709 Shoal Creek Blvd., Austin, TX 78757 (512) 454-6306

A-- Meg Titus, Rt. 2, Box 116-C, Parker Rd., Plano, TX 75074 (214) 424-4993

> LU--Bobette Higgins, 1712 Highland Park Rd., Denton, TX 76201 (817) 387-3004

EG--Laura Keever, 10515 Laneview, Houston, TX 77070 (713) 469-0036

Utah NR--Gigi Brandt (Also EG), 2059 East 9th So., Salt Lake City, UT 84108 (801) 582-1102

W-- Emily Hall, 2652 East 6200 South, Salt Lake City, UT 84121 (801) 277-1555

Vermont A,W-- Janet Binkerd, 106 Stokes Lane, Shelburne, VT 05482 (802) 985-8775

LU,SW--June Carmichael, Box 314, Jericho Rd., Essex, VT 05450 (802) 878-8360

EG--Nancy Grucza, 180 Laurel Hill Dr., South Burlington VT 05401 (802) 863-6185

Virginia LU, NR--Lillian Throckmorton, Box 30%-B, Route 14, Richmond, VA 23231 (804) 795-1268

> EG--R.B. Neustadt, 2751 S. Ives St., Arlington, VA (703) 684-7417

NR, A, SW--Carla Hansmann, 3 Ponce de Leon Terrace, S.W., Washington Tacoma, WA 98499 (206) 582-5049

> W-- Carol Warren, 7026 31st N.E., Seattle, WA 98115 (206) 522-2300 (Cont.)

Washington (Cont.) EG--Nadine Anderson, 16441 15th Ave., S.W., Seattle, MA 98166 (206) 243-3498

West Virginia EG, EQ--Ann Rick, 1639 Greystone Rd., Charleston, MV 25314 (304) 346-1936

> LU--Terri Haid, 68 Oakwood Estates, Route 1, Parkensburg, WV 26101 (304) 485-3413

Wisconsin NR--Nancy Stabb, 1200 S. River Rd., Janesville, WI 53545 (608) 752-2778

> W-- Cora Stencil, 536 La Plant St., Green Bay, WI 54302 (414) 432-7185

SW--Jo Boucher, 1920 W. Woodbury Lane, Glendale, WI 53209 (414) 352-8526

A-- Helen Jacobs, 2220 E. Newberry Blvd., Milwaukee, WI 53211 (414) 962-9141

LU--Alice Altemeier, 226 Parkcrest Dr., Thiensville, WI 53092 (414) 242-2627

EG--Jeanne Kitazaki, 1041 Richards, Watertown, WI 53094 (414) 927-3282

NR, SW, EG-Judy Knight, 5317 Bill Nye, Laramie, WY 82070 (307) 745-4536

> W,A-- Vicky Huntoon, 501 Rangeview Rd., Laramie, WY 82070 (307) 742-2217

EU--Ann Sutton, 1708 Mitchell, Laramie, WY 82070 (307) 742-7909

District of EQ--Eileen Jacobson, 4400 Albemarle St., NY, Washington, Columbia DC 20016 (202) 244-6745

> EG--Co-Chair - Mary Drob, 3238 Chestnut St., NW, Washington, DC 20015 (202) 244-3369

Phyllis Reasoner, 201 Eye St., SW, Washington, DC 20024 (202) 544-3300

Send all mailings to the LMV office: LMV of Puerto Rico, GPO Box 3724, San Juan, PR 00936

W-- Blanca Arce Rivera, address above, (809) 726-8837

SW--Doreen Reus, address above, (809) 761-1672

LU--Peggy Madsworth, address above, (809) 769-3507

EG--Dr. Knud Petersen, CEER, College Station, Mayaguez, PR 00708 H-(809)832-9622; Off-(809) 832-1414, ext.253

EQ--Ana Elisa Lavandero, (809) 725-5140, ext.241

Wyoming

Puerto Rico

NATURAL HAZARDS: Can planning avert disaster?

Johnstown, Pennsylvania, July 1977. In a sevenhour period, 81/2 inches of rain fell on Johnstown and neighboring communities. Surrounded by mountains and close to a river and creek, Johnstown is an easy target for floods. Major floods occurred there in 1936 and 1889. The 1977 disaster left 72 dead and 2.696 injured. Early estimates set property damages at \$200 million. The Red Cross alone has poured in \$1.5 million for relief-food, clothing and medical care. Delivery of such essentials as water and electricity has been disrupted, in some cases discontinued indefinitely. In the affected areas, one million pounds of food and drugs, ruined by the flood, has been heaped on sidewalks, awaiting disposal. "We have reports of scavenging and that's very dangerous because this contaminated material can cause food poisoning," said Pennsylvania Rep. John Murtha.

Floods are the nation's most widespread natural hazard, and Johnstown, Pa. is but one of some 20,000 flood-prone communities. Hurricanes, earth quakes, landslides and tornadoes-to name only a few-are other natural hazards that strike in the United States. Their impacts were recently assessed by University of Colorado researchers in consultation with government officials and other academics. The study, funded by a grant from the National Science Foundation's RANN Program (Research Applied to National Needs), revealed that although the number of persons left dead or injured has decreased (due largely to improved warning systems), property damages and costs for disaster relief have continued to rise. The researchers pointed out several factors that contribute to an ever-growing potential for catastrophe, with rising population and burgeoning development in hazard zones heading the list.

When hazard-related damages rise, costs to the taxpayer increase accordingly. After disaster strikes, the federal government, at a state's request, may provide relief aid and services. According to the Federal Disaster Assistance Administration (FDAA), the price tag for such aid, from 1953 to the present, approaches \$2.5 billion, with over \$420 million spent in 1976 alone. And this is only the federal portion; states also pay a share. If federal funds are used to rebuild in the same hazard-prone location without thought to future disasters, the taxpayer may end up footing the bill for the same structure to be rebuilt in the same place time and again. A 1973 report by the National Bureau of Standards sums up the fear of many hazards experts: "Individuals and communities have come to rely on governmental help after a disaster rather than to develop an awareness of disasters and take feasible preventive measures.'

Even some preventive measures—structural controls such as dams, levees and seawalls, for example—are rarely foolproof. Seawalls are often "washed over" or destroyed during hurricanes. Flood control works, for which the United States has spent \$10-12 billion since 1936, can sometimes actually increase hazard potential. For example, when the \$400 million Teton Dam collapsed in 1976, property damages totalled \$1 billion. The cause: poor siting on unstable foundations.

What's more, such protective works can encourage increased development of a floodplain and often create a false sense of security. According to some estimates, 40 percent of the property damage done by Hurricane Agnes occurred in areas "protected" by structural controls that failed to control. They had been designed for lesser floods.

Little can prevent natural hazards from occurring. But anticipating these "acts of God" can reduce their potential for destruction. Natural hazards are inevitable: natural disasters are not.

This CURRENT FOCUS looks at federal and state efforts to forestall disaster through careful land use planning and sound building practices, lists some pointed questions that citizens should be asking their local/state/regional officials and offers sources for further information.

Reducing the effects of natural hazards

In the past few years Congress and some state and local governments have attempted to reduce the effects of natural hazards by adopting programs of effective land use and building practices. Such measures can reduce the size of the population and amount of property in danger, cut costs for such disaster activities as evacuations and warnings, and decrease dependence on structural controls. Planning can avoid such potentially dangerous practices as placing high rise buildings directly on beach fronts or siting essential facilities too near to active earthquake faults.

In floodplains

The National Flood Insurance Program (NFIP) is a good example of land use planning for natural hazards. It is designed to promote sound floodplain management, spread the burden of losses if flooding does occur and thus cut disaster relief costs. Begun in 1968, the program got off to a slow start: only 2,856 of some 20,000 flood-prone communities had voluntarily joined by the early seventies. As a result Con-



current focus



League of Women Voters Education Fund 1730 M Street, N.W. Washington, D.C. 20036 gress in 1973 passed several amendments that made the program virtually mandatory. One amendment requires a community identified as flood prone to participate in the flood insurance program in order for individuals and businesses to be eligible for financing from federally-backed lenders (most banks and savings and loan institutions). That this restriction provided a needed stimulus is evident: Since 1973 the program has grown to include some 15,605 communities, a million insurance policies (three times the total under the voluntary program) and \$30 billion in damage coverage.

The Federal Insurance Administration (FIA), the agency in charge of the program, has made some projections that gauge future savings in flood damages. *Without* the insurance program, FIA predicts that flood damages by the year 2000 would have reached \$3.2 billion, with taxpayers picking up \$1.3 billion of the tab in disaster relief costs. *With* the program, predicted losses should total only \$1.3 billion. Costs to the taxpayer will be \$300 million with the remaining \$1.1 billion covered by insurance premiums.

What's the secret? FIA points to the land use and building requirements that are the cornerstone of the insurance program. To qualify for the emergency or first phase of the program, a community must pass minimum requirements for all new construction and development. Building permits must be secured, and local governments must review proposed construction to make sure sites are largely free from flooding. Special anchoring and construction techniques are required for new buildings in the flood-prone area. During this emergency phase of a community's participation in the program all buildings, old and new, are eligible for federally subsidized insurance, with prices set at 10 percent of the actual cost.

Once a flood hazard rate map has been completed and detailed flood elevation data and hazard area delineation provided, the community must enter the regular program. At this point more stringent requirements must be adopted. For example, all new buildings must be elevated above the level of the 100-year or base flood. (This standard represents the flood level that has, on the average, a one percent chance of being equaled or exceeded in any given year.) In addition, actuarial insurance rates (as opposed to the subsidized ones) take effect for all new or substantially improved existing structures. (For a more detailed discussion of the flood insurance program see the LWVEF's ENVIRONMENTAL UPDATE, #534, 25¢.)

As of mid-1977, 14,428 communities were in the emergency program and 1,172 in the regular. While the latter figure seems disproportionately small, it actually represents 20 percent of the population in the nation's floodplains since FIA sets a priority on preparing rate maps for larger communities with a significant flood hazard.

It takes time for a program involving land use planning to show results, and FIA believes that the flood insurance program is just beginning to work. However, both the House and Senate have voted to take away part of the "stick" in the program by repealing the ban on federally-backed loans in nonparticipating communities. (All direct government loans will still be prohibited, such as those from the Small Business Administration, Farmers Home Administration and the Veterans Administration.) Supporters of the move believe that the program's land use controls may be overly restrictive and interfere unnecessarily in local affairs. Some advocates of the flood insurance program fear that the amendments will substantially reduce its effectiveness. For example, a community could drop out of the emergency program, permit new development in its floodplains, then reenter and get first-phase subsidized insurance for recent construction. Without the floodplain management prerequisites the NFIP may become nothing more than a program of government subsidy for development in flood areas, these advocates fear. The amendments do attempt to avoid this outcome by prohibiting federal disaster relief to nonparticipating communities. But in reality, public sentiment following a flood disaster would make it difficult to enforce such a provision.

In coastal zones

Coastal areas are especially vulnerable to many hazards, from

beach erosion, subsidence and landslides to hurricanes and earthquakes. To compound problems, coastal populations have grown three to four times as fast as other parts of the country. Coastal development is correspondingly on the rise, especially for coveted shorefront properties. Such development frequently requires the leveling of dunes, thus diminishing the natural protection they provide against water influx. What's more, mobile homes, increasingly popular in coastal areas, probably will not survive a hurricane without special anchoring.

The Coastal Zone Management Act of 1972 (PL 92-583), which provides grants to states for coastal planning, recognizes the threat of natural hazards in coastal areas. Regulations issued under the act require planners to consider such factors as floods, erosion, land stability, climate and weather. The "regs" also call for designating areas of particular concern—those subject to severe storms or erosion, for example. The states must then determine how development should be regulated in these areas. The 1976 amendments to the act, which deal primarily with siting of energy facilities, also mandate protection of public beaches and an assessment of shoreline erosion.

In earthquake-prone areas

In the RANN-funded study "Earthquake and Tsunami Hazards in the United States: A Research Assessment," Robert Ayre reports that 70 million people live in the nation's two highest seismic risk zones. If a major earthquake struck, particularly in a highly urbanized area, the devastation could be enormous. Researchers estimate that if a 1906-sized quake hit San Francisco today, deaths and damages would be multiplied many times over.

Although California is commonly considered the most likely future site for earthquakes, the U.S. Geological Survey's maps also categorize Seattle, Boston, Charleston, S.C., and the area north of Memphis, Tenn. as highly earthquake-prone. And since these communities are less aware of the threat and take few precautions, their potential for earthquake catastrophe may actually be greater than California's.

How can earthquake damages be reduced? Robert Ayre cites seven ways, all currently in use: earthquake reduction per se, a technological solution aimed at inducing several small earthquakes rather than allowing a big one to build up; earthquake resistant construction; land use management; forecasts and warn-

Voluntary insurance: who will buy?

How do people decide whether to protect themselves from low-probability events? That was the key question in an RANN-funded study, "Reducing Losses from Selected Hazards—The Role of the Public and Private Sectors," conducted at the University of Pennsylvania. The study explored the reasons why some people in hazard areas buy insurance and others do not. Two thousand people in flood areas and 1,000 in earthquake-prone areas were interviewed; in each category half carried insurance and half did not. Those without insurance tended to have limited knowledge both of the hazard itself and of the availability and terms of insurance policies. Often they did not see buying insurance as an opportunity to transfer risk but tended to view payments as money spent with no return. One surprising finding: In general the uninsured had not considered the probability of federal aid should a disaster occur.

Two factors appeared to carry the greatest weight in the decision to buy insurance: seeing the hazard as a serious problem (by having previous hazard experience, for example) and knowing people who had already purchased policies. On the whole, people were more likely to insure themselves against hazards with medium probability and relatively minor losses than against events with low probability and high losses.

To make voluntary insurance effective, the researchers recommended that more information be circulated on the probability of hazards, the losses they can inflict and the terms of insurance policies.

Clearing the floodway

Five years after the 1972 flood that took 237 lives and racked up \$150 million in damages, Rapid City, S.D. has become a model for preventing future flood disasters. With federal assistance, the city acquired most of the land in the flood path, relocated businesses and residences and turned the area into parks and playing fields. The city decided on the plan after rejecting more traditional recovery routes of rebuilding in about the same place and constructing new dams and other structural controls. The only drawback: the plan cost more than \$400 million in federal funds. Still, relocation may prove to be the most economical use of the taxpayer's money, as suggested in the RANN study "Land Use Management and Regulation in Hazardous Areas." The Water Resources Development Act and HUD's Community Development Block Grants could provide possible sources of funds for relocation.

ings; insurance; efforts to prevent related (e.g. fire) hazards; and public education.

An earthquake hazards reduction bill, earmarking \$210 million over the next three years for research and development, has been passed by both houses of Congress. The bill would set up an ambitious program to develop earthquake prediction capability; study the social consequences of prediction; develop model codes for considering seismic risk in land use and building decisions; and improve earthquake engineering techniques.

Predicting quakes: Good news and bad news

Prediction could, of course, help reduce earthquake devastation, if people used the lead time to protect life and property. Acceptance of the "plate tectonics" theory about the composition of the earth's outer shell has helped make earthquake prediction a possibility for the near future. Very simply, according to this theory, the earth is covered with crustal plates, and earthquakes most often occur when two plates rub together. Seismologists are watching phenomena that might indicate coming quakes, including crustal strains, crustal tilt, and gravity measurements. The greatest successes in quake prediction around the world thus far have been in China, where seismologists claim to have made at least 18 accurate predictions between 1970 and 1972, though they failed to predict accurately the most recent disaster.

But earthquake prediction may carry risks of its own. Researchers Eugene Haas and Dennis Mileti, who used another RANN grant to study the probable socioeconomic impact of prediction on various segments of the community, came up with some dismaying results. They found that a community might suffer severe economic decline from the time the prediction is issued until the date set for the quake. For example, new construction could slack off, bringing high unemployment to the building trades. Many people might move away, some permanently. Property values might decline. Estimating the effects of a prediction on a community is highly speculative. But considering these potential problems, scientists, as well as some local officials, are concerned about who is liable for the damage done if a prediction turns out to be incorrect.

Building codes

Enforcement of special building codes is another way to reduce earthquake damage. California has had a construction code for public school buildings since 1933. This law has been broadened to include other facilities and strengthened as new technology developed, so that California probably has the most comprehensive code in the nation. But unfortunately, codes are not always enforced and, even when enforced, may not prevent destruction. The 1971 San Fernando Valley earthquake leveled some of the buildings constructed in conformity with up-to-date code requirements.

Most estimates set the costs for earthquake-proofing new structures at about six percent of total construction costs. Existing

buildings are another story: costs may be much higher, and owners may not be interested in investing additional money for strengthening. On the other hand, condemning older buildings may produce other problems, such as eliminating one source of low-income housing.

Siting requirements

Siting structures such as dams or nuclear power plants near active faults may be especially risky. During the San Fernando earthquake, shaking of the ground caused soil to liquify at the Van Norman dam above the valley, threatening to release the contained water. Although the dam did not break, some 80,000 people were evacuated as a precautionary measure.

More recently, the risk connected with building nuclear power plants near earthquake faults has been a bone of contention, so much so that President Carter in his energy message called for a complete overhaul of siting regulations to prevent locating any future plants near earthquake faults.

A nuclear plant is a delicate operation to maintain. Not only must buildings and equipment remain intact, but the delicate systems of the plant have to be kept operating. The greatest risk from a quake is the possibility of damage to the plant's cooling system, essential for controlling the high levels of radioactivity in the nuclear core. If the large pipes carrying water to and from the reactor were damaged by earthquake ground motion, the core—if left without its emergency cooling system—would heat up very rapidly and begin to melt within a few minutes. This could cause a pressure explosion, spewing highly radioactive material into the environment.

The Nuclear Regulatory Commission (NRC) does have licensing procedures that discourage utility companies from building plants near potentially hazardous faults. NRC requires extensive investigation of the geological makeup of any site under consideration. Once the site is chosen, the plant must be built in accordance with design standards set to make the structure sturdy enough to withstand the maximum possible earthquake that could occur at the site.

But the ability to predict and locate faults is not infallible; new faults are being discovered all the time. (At Diablo Canyon in California, a large fault was discovered only three miles from a newly constructed nuclear plant; the fault was unknown when the plant site was chosen. The plant is not in operation.) In addition, it is not known from firsthand experience whether the design standards are adequate. There has never been a sizeable earthquake near a nuclear plant, so engineers can only estimate design based on past experience with other structures. Whether our nation's nuclear plants will stand the test of an earthquake remains to be seen.

Some questions to ask

Citizen participation is important to ensure that proper planning is done to mitigate the effects of future natural hazards. Get the facts from your officials.

At the state/regional level

State Disaster Plans—The Disaster Relief Act of 1974 provides for grants of up to \$250,000 for state disaster plans. Though all

Making the buyer aware

Many people may unknowingly purchase homes and property that are exposed to natural hazards. Some laws have attempted to make hazard disclosure mandatory. For example, the Interstate Land Sales Full Disclosure Act (PL 90-448) requires developers selling land on an interstate basis to file a statement listing the hazards a piece of land is exposed to. California requires that natural hazards be covered in real estate buyer reports and Environmental Impact Reports. Other states have made unsuccessful tries at passing disclosure laws.

states have received these grants, only a few plans are completed. The plans are supposed to determine how a state will carry out federal disaster *assistance* programs, but some states are including plans for hazard *mitigation*, as well. Some plans include promoting the National Flood Insurance Program, developing sample land use ordinances and building codes, and conducting hazard vulnerability studies.

How comprehensive is your state's plan? Has hazard mitigation been considered?

Coastal Zone Management Plans. Is your state giving adequate consideration to natural hazards in developing a coastal plan?

The booklet *Natural Hazards Management in Coastal Areas* may be helpful. Copies are available from the Office of Coastal Zone Management, U.S. Department of Commerce, 3300 Whitehaven, N.W., Washington, D.C. 20235.

Flood Insurance Program. What are the existing state, regional and local programs for flood hazard mitigation in your area?

Which communities are participating in the program? (Your EPA regional office or your state coordinating agency for flood insurance should have this information.)

Knowing that flooding does not respect political boundaries, what can you do to make neighboring communities aware that their actions affect your community's flood hazard?

Are existing flood mitigation programs being adequately enforced? Do people in your area know whether they are vulnerable to flood hazards? Are existing FIA maps generally available?

At the local level

Are natural hazards considered when plans are made for siting new structures in your community, particularly essential facilities such as hospitals and utilities?

What kind of building codes does your community have? Has the code been updated in recent years? How strictly is it being enforced?*

Have hazard vulnerability studies been done for your community? If they have, is the information available to people purchasing new property?

Could it happen?

The following scenes have been drawn from descriptions by experts in the natural hazards field. These events could happen at any moment.

San Francisco. With the intensity of the 1906 tremor, the earth-quake strikes. With one massive convulsion the sidewalks seem to bolt in one direction as if a carpet were being jerked out. Dozens of parked cars bounce free of the curb and careen down the streets, knocking down confused pedestrians. Violent shaking continues for some two to three minutes. More than 50 persons are killed within the first 30 seconds. Of the 8,750 persons who die, about one-third are killed by collapsing buildings or falling debris. Most of the others die from the heat, smoke and fumes of the fires that burn out of control in most instances. The toll of 22,000 injured is staggering.

Miami, Florida. The National Hurricane Center in Coral Gables issues an evacuation warning for residents of Key Biscayne, Virginia Key and south Miami. The warning is made with 12 hours of daylight remaining before the predicted landfall of the hurricane. If all goes well, it will require nine hours to evacuate the approximately 10,000 inhabitants of the Keys. But a number of events preclude successful evacuation. Six hours before the landfall of the slow-moving hurricane, storm surge causes the tides to begin rising, thereby flooding some low points on roadways used for evacuation and bringing automobile traffic to a halt. Even before the storm surge hits its peak at the coast, traffic is snarled. Those

*Earthquake engineering has been a major research focus for the National Science Foundation. By the end of 1977, NSF and the National Bureau of Standards are due to publish recommendations for consideration by building code organizations. Check your local library for copies or order one from the U.S. Government Printing Office, Publications Department, Washington, D.C. 20402.

not promptly heeding the warning are trapped by the time the magnitude of the hurricane becomes visibly apparent. Mainlanders also experience difficulties in their attempts to evacuate. Since a large proportion of Florida's population has never witnessed a severe hurricane, there is a warning response of less than 50 percent.

These scenes are not pure fiction. Although some conjecture is involved, they are based on close examination of current conditions

In Acts of God, Acts of Man author Wesley Marx offers some advice to avoid future disaster. "We must see beyond the scenic views and sales potential of hazardous lands and recognize the ultimate rent due for intensive development. . . . We must recognize the limits—fiscal as well as technical—of attempting to control hazards. . . . We must treat hazards as a group rather than "solve" one by chancing others (such as building flood control dams that risk seismic perils and induce beach erosion). We must learn that in the long run the best disaster readiness plan is not a detailed warning and evacuation system that crumbles with one traffic accident or bridge washout but land use and building controls that reduce the need to evacuate in the first place."

Sources

National Science Foundation RANN studies

Ayre, Robert S. Earthquake and Tsunami Hazards in the United States: A Research Assessment. 1975, University of Colorado. Publication #PB261756. \$6.75.

Baker, Earl J. and Joe Gordon McPhee. Land Use Management and Regulation in Hazardous Areas: A Research Assessment. 1975. University of Colorado. Publication #PB261546. \$6.00.

(These are available from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA, 22161.)

Haas, J. Eugene, Tobert W. Kates, Martyn J. Bowden, eds. *Reconstruction Following Disaster*. 1977. MIT Press, Cambridge, MA.

White, Gilbert F. and Eugene Haas. Assessment of Research on Natural Hazards. 1975. MIT Press, Cambridge, MA.

(Order from MIT Press, 28 Carleton St., Cambridge, MA 02142)

Related materials

Federal Insurance Administration. *Don't Gamble*. 1977. An information packet available free from the U.S. Department of Housing and Urban Development (HUD), Federal Insurance Administration, Information Office, 451 Seventh St., Washington, DC 20410.

Marx, Wesley. Acts of God, Acts of Man. 1977. Coward, McCann & Gohegan, Inc., New York.

Office of Coastal Zone Management. *Natural Hazard Management in Coastal Areas*. 1976. Available free from the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration (NOAA), 3300 Whitehaven St., N.W., Washington, D.C. 20235, Attn: Linda Sadler.

Natural Hazards Research and Applications Information Center. *Natural Hazards Observer*, Vol. #4, June 1977. A quarterly newsletter available from the Center. IBS#6, University of Colorado, Boulder, CO 80309.

For More Information

HUD's Federal Insurance Administration has a toll-free number you can call for answers to questions about flood insurance: (800) 424-8872.

The Army Corps of Engineers. Flood Plain—Handle With Care! Explains flood plain management, includes a list of local Corps offices that have maps and information on local topography, flood plain management services. Publication #EP1105-2-4. 1974. Available free from Public Affairs Office; Office, Chief of Engineers; Washington, D.C. 20314.

This CURRENT FOCUS is the first in a series of four on Natural Resources issues made possible by grant ISP76-80983 from the National Science Foundation. Any opinions, conclusions, or recommendations expressed in this publication are the LWVEF's and do not necessarily reflect the views of NSF. Coming next: a CURRENT FOCUS on transportation.

Researched and written by Gail Allison, LWVEF natural resources staff specialist.

Printed on paper recycled from 100% consumer scrap

League of Women Voters of the United States 1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 296-1770



memorandum

March 3, 1978

TO: State NR or EQ Chairman (memo only to state presidents)

FROM: Betty MacDonald, NR Coordinator, and Jean Anderson, EQ Chairman

This mailing brings another collection of resource-related odds-and-ends that we thought would be of interest to you and the specific NR program chairmen in your state. We trust that you do pass on the items of particular interest to your solid waste or water or energy chairman, as the case may be, when you receive them; it is virtually impossible for us to prepare individual packets with the appropriate contents since each state has a different combination of program chairmen. Because we view you as the link between the LWVUS and local League environmental leaders, we hope that you also try to communicate the key information we send you to your local Leagues.

We want to alert you to what is likely to be an expanding opportunity for local and state Leagues to obtain federal grants from EPA. There is every indication that EPA is instituting an effort to give far more of its public education/public participation funds directly to local and state organizations rather than to national groups. Local and state Leagues, with their established records of expertise and competence in almost every EPA program area, are in an ideal position to seek and obtain these "grassroots grants." We would recommend that after you've gotten the approval of your board, you contact the regional EPA Administrator to explore possible projects that would be mutually beneficial. If there is an EPA program in which your League is particularly interested and the regional office is not in a position to fund a project, write or call U.S. EPA and see whether the specific program office has money available for public participation projects.

If your state League or the local Leagues in your state do receive such grants, we would greatly appreciate your notifying the national office (Attention: Environmental Quality Department).

Leagues are in an ideal position to apply for another type of federal grant-from the National Science Foundation's Science for Citizens program. In the words of NSF, Science for Citizens seeks "to make scientific and technical information and expertise available to citizens at the times and in the ways most useful to them, and to increase the knowledgeable participation of scientists and citizens in resolving major issues of public policy that involve science and technology." Toward these ends, SFC offers grants for forums, conferences and workshops on public policy issues in which science and technology play an important part.

The program is quite small—only 19 projects were funded in 1977. But League experience and procedures lend themselves well to this type of project and it would be worth your board's consideration. While it is too late to apply for a 1978 grant, your League could begin now to consider a proposal for 1979. For information about the SFC program, including descriptions of selected projects funded in '77, request a copy of the "Guide for Preparation of Proposals and Operation of Projects" from the Program Manager, Science for Citizens,

National Science Foundation, Washington, D.C. 20550.

In connection with these opportunities for local and state League grants, we would like some information from you. Leagues often ask the national office staff about other Leagues that have done or are doing grant-funded projects which could provide ideas for projects the requesting League wishes to apply for. But for the most part, the national office does not have this information available.

Therefore this mailing contains a form asking you to list all the natural resource-related projects (privately or governmentally funded) in which local Leagues within your state or your state League is participating. If you all cooperate and return the forms by April 1, we will in turn compile a master list and distribute it to you.

In this mailing you will also find:

- o Copies of two letters from the LWVUS to the President's Reorganization Project group working on natural resource/environment functions of the executive branch. Some of the points made in these comments were discussed in January's Report from the Hill.
- o Jean's testimony to the Senate Commerce Consumer Subcommittee on S.276, the Beverage Container Reuse and Recycling Act; that bill has still not been acted on by the subcommittee.
- o An announcement about two upcoming conferences on sewage treatment facilities—one in D.C. and one in Denver—sponsored by the Environmental Policy Institute and the Clean Water Fund (and supported, by the way, by NSF's Science for Citizens program).
- o A copy of the Institute of Scrap Iron and Steel's "Phoenix Quarterly" containing an informative article on ferrous scrap and its underutilized recycling potential. The back cover contains order information if you'd like to receive this publication regularly.

We presume you've already received the four most recent NR publications: Energy 23 "New Price Tags for Home Appliances", "Natural Hazards: Can Planning Avert Disaster?", "Curbing Trash", and "Growth and Water: Can We Maintain the Pressure?". These have all been sent to League presidents and DPM subscribers—each relevant program chairman should have at least one copy of each . . . and should be encouraging their purchase and use by League members and the public.

If you have any comments on the contents of this packet, please feel free to write either of us at the national office. We welcome your comments, questions or suggestions.

League of Women Voters Education Fund •1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 659-2685



memorandum

THIS IS GOING ON DPM

May 1, 1978

TO: State and local League and ILO Presidents

FROM: Jean Anderson, Environmental Quality Chairman

RE: The latest word in environmental law

Two new Environmental Quality publications are included in this mailing. The first is the long awaited revised edition of "Federal Environmental Laws and You"; the second a brief on the new Clean Water Act.

League and public reaction to the 1975 edition of "Federal Environmental Laws and You" far exceeded our expectations; the publication was hailed as a concise, understandable presentation of the key federal laws affecting the environment and a guide to opportunities for citizen action so essential in making laws effective. Since that earlier edition, virtually every major law discussed has been significantly amended, and an important new act—the Toxic Substances Control Act—has been added to the network of legal controls over environmental hazards.

The 1978 edition of "Federal Environmental Laws and You" (Pub. No. 564, 75¢) will bring you—and the members of your League—up—to—date on the current provisions of the principal laws regulating air and water quality and solid waste management. It also provides a handy guide to additional sources of information for those who want to learn more, or get involved in the programs described.

This CURRENT FOCUS can serve as another link between your League and your community. It should be welcomed by environmental organizations and libraries, by colleges and high schools, even by municipal officials who so often have to carry out the functions the laws establish. We hope you will see to it that all the members of your League interested in environmental quality get copies and that they in turn pass on the word that this new and improved League product is now available.

Also enclosed is the first in a new series of League publications—Letter of the Law. This series is designed to keep League members and the public abreast of key issues by offering capsule versions of significant federal laws. "The Clean Water Act of 1977," the initial offering in the series, highlights the main provisions of the December '77 amendments to the Federal Water Pollution Control Act. This brief explains in greater detail than "Federal Environmental Laws and You," the changes made by the new act in the major water clean-up programs: permits, pollutant discharge limitations, municipal wastewater treatment. It is designed for people familiar with the basic structure of the Water Act who want to know the new "rules of the game."

We hope your League's clean water enthusiasts will find it helpful and would welcome comments on the usefulness of the format and suggestions of specific laws you'd like included in the series.

Federal Environmental Laws and You

Are you troubled by air quality alerts ... beaches closed by pollution ... burning dumps ... unsafe drinking water ... streams fouled with human and industrial wastes ... unforeseen environmental impacts of federal projects? Does your city—does your region—face any of these problems? Can you grapple with them?

Have you ever said, "There ought to be a law?" Are you sure there isn't?

Over the last ten years there have been enormous numbers of newspaper, magazine, and television stories about environmental degradation. Conferences and workshops, speeches and books came in steady stream. Public awareness grew. Public concern spread.

The Congress, responding to this growing public demand, created a body of environmental legislation intended to check deterioration of our life support systems. The titles of these laws are ambitious—Clean Air Act, Safe Drinking Water Act—reflecting the high goals of their supporters. While the impact of these laws has been significant, U.S. environmental problems are far from solved—

Legislation is not enough. Change does not follow immediately on the heels of passage and signing of a bill into law. At the federal level the steps are many: guidelines and regulations for application of the law, standard setting, time-tables by which certain stages of improvement must be reached, monitoring to see that there is good faith effort to meet standards and schedules, funding for staffs to carry on these functions. In our country, with its great diversity and its state/federal system, responsibilities under new environmental laws are usually shared between government levels, so there are delays while states and localities take steps to adjust to and apply the new federal standards, regulations, and timetables. Improvement seems to take forever. People grow depressed because the investment of time, effort, and capital accomplishes so little. Yet without the goals and requirements set and the tools supplied by the federal legislation of the last ten years, how much worse environmental conditions would be!

Legislation is not enough, but it is the underpinning of the U.S. effort for a better physical environment. Concerned citizens need to know about the major federal environmental laws and understand their important features designed to bring about change. This publication describes some of these laws. It tells what improvements each was intended to bring about in the management of the nation's physical environment.

To legislation must be added sustained public interest and broad-based public support. Federal agencies alone cannot produce the changes needed—however many laws they may administer. If environmental degradation is to be checked, all branches and all levels of government must hear clearly that the public insists on preserving the health of the Planet Earth, that the public believes the benefits justify the cost.

And so this publication goes beyond the laws

themselves. It suggests what you can do to get more information on how the law covering the subject of your special interest is working, it suggests what to watch for (or monitor, in today's parlance), mentions where to express your opinion, tells of significant opportunities in relation to each law. You will find the material informative, but even more important, you will find it a useful key to increased participation.

A national policy for the environment

The National Environmental Policy Act, signed on January 1, 1970 as Public Law 91-190, formalized a growing conviction that environmental considerations must be incorporated in federal policies and activities. In the past five years NEPA, as this law is generally known, has had a major impact on a wide variety of programs, from housing and highway construction to leasing of oil drilling sites, and this influence is expected to increase.

The law made protecting and restoring the environment our national policy and directed all federal agencies to interpret and administer their programs in accord with these goals. It created the Council on Environmental Quality (CEQ) to advise the president on environmental problems and to work with Congress and executive agencies to solve them. Some procedural changes were made by Executive Order in 1977, but the basic features of the act remain unchanged.

Environmental impact assessment

Section 102(2)(c) has had the most far-reaching effects of any of the law's provisions. To assure that all federal policies, regulations and actions incorporate NEPA's environmental protection goals, this section requires all federal agencies to prepare environmental impact statements on any of their major actions that may significantly affect the environment. While this section does not specifically prohibit any activities, it means that public officials must consider and publicly discuss the environmental consequences of proposed projects.

CEQ was given responsibility to monitor federal agencies' compliance with NEPA's requirements; the Environmental Protection Agency (EPA) has been charged with reviewing environmental impact statements (EIS). These statements must include five elements: the positive impact of a proposed action, any possible adverse impact, alternatives to the proposal, a comparison of short-term use of natural resources versus the maintenance and enhancement of long-range productivity, and any irreversible commitment of resources if the proposal is implemented.



League of Women Voters Education Fund 1730 M Street, N.W. Washington, D.C. 20036 Under CEQ regulations to agencies on EIS preparation, a draft statement must be circulated among other federal agencies and made public for both official and citizen comment at least 90 days before a decision is made on the proposed action. Any comments made must be considered in the final statement, which must be similarly circulated at least 30 days before action is taken.

This requirement to open the decision-making process to the public is considered by many to be one of the two most significant features of the assessment process. The second major impact of NEPA has been in the courts. Close to 800 suits have been filed by groups and individuals demanding that projects be postponed or halted until adequate impact analyses are made. The most publicized of such suits was the Trans-Alaska Pipeline case, in which the court, on behalf of several conservation groups, delayed the start of the pipeline four years while environmental effects were thoroughly studied. This study led to several modifications of the pipeline design, minimizing its adverse environmental effects.

Twenty-five states and Puerto Rico have followed the federal pattern in adopting the principle of environmental impact assessment, either by legislation or administrative order. Some cities, including New York, also require impact statements for specific types of activities.

As NEPA's requirements have been clarified by CEQ and court decisions, most federal agencies have accepted the law's mandate and now attempt to integrate an environmental perspective into their decision-making process. Impact assessments have led the U.S. Army Corps of Engineers, for example, to modify about one-third of their active projects. Adverse assessments have led other agencies to drop plans for bridges, airports, and pesticide uses. For such agencies, major emphasis is now on improving the quality of their environmental analysis, including prediction of secondary impacts—land use patterns resulting from construction of a sewage treatment plant, for example. Some agencies, while complying with CEQ's procedural regulations, view impact statements merely as mechanical paperwork exercises, justifying conclusions already reached, rather than as an integral part of decision making.

NEPA creates many opportunities for informed citizen participation in policy formulation and decisions on particular actions.

What you can do

Using NEPA's impact assessment process you can:

- ☐ get your name on the mailing list of a particular federal agency to receive draft EISs of all projects in your locality or program statements of overall policies; or
- \square ask for a draft EIS on a specific project of concern from the federal agency proposing it;
- $\hfill \square$ submit specific substantive comments on the adequacy of the EIS or on the environmental impacts of any action, particularly as contrasted with the impacts of alternative courses of action.
- $\hfill \square$ speak at public hearings held by many agencies to discuss draft impact statements
- □ bring suit—working with other concerned citizens in your area or, if the case has national implications, with one of the public interest law organizations—to assure that an adequate EIS is prepared and considered by the agency
- □ ask your state environmental agency whether your state has an effective environmental assessment law; if so, participate in its implementation as with NEPA; if not, work for its enactment.

Table of contents	
NEPA	
Water	
Toxic substances control	6
Air	7
Keeping up to date	

Water

Eliminating water pollution

In 1972, Congress passed the Federal Water Pollution Control Act (Public Law 92-500 or FWPCA)—a comprehensive, complex law that refuted the long-held notion that wastes could be dumped into our rivers, lakes and streams. The prime mission of the law, which is administered by EPA, is uniform, enforceable regulation of discharges. The FWPCA called for **restoration and maintenance** of the integrity of our waters and established some specific goals: by 1983, water quality sufficient to protect fish, shellfish, and wildlife and to provide for water recreation; by 1985, no discharge of pollutants.

In 1977, Congress amended the 1972 act after assessing its effectiveness to date and problems of implementation at the local, state and federal levels. Despite a number of significant changes, the basic structure and overall objectives of the law remain the same.

Effluent limitations

Sections 301-309, 316 EPA sets effluent limitations—the maximum amounts of specific pollutants that can be discharged into waterways—based on varying levels of technology and related costs. Precise limitations are applied to municipal wastewater treatment plants and to specific industrial categories.

Under the 1972 law, municipal sources should have attained effluent limitations for secondary treatment by July 1977; only about one-third met this requirement. By the same date, industrial sources were to be using Best Practicable Technology (BPT) to limit effluents; approximately 90 percent of the major industrial dischargers met this requirement. For those industries that made "good faith" efforts to comply, the deadline for BPT is now April 1, 1979. For municipal sources, it is July 1, 1983.

If effluent limitations do not reduce pollution enough to protect or restore water quality, more restrictive limitations are applied. These are based on water quality *standards* which designate the use for a river or stream segment—such as public water supply, industrial or agricultural—and on water quality *criteria* based on these uses. The standards specified by a state or EPA also serve as a measure of the effectiveness of pollution control.

The 1977 amendments establish different requirements for three separate categories of industrial discharges: conventional pollutants including suspended solids, certain bacteria, and those affecting biological oxygen demand and alkalinity-acidity; toxic pollutants such as chemicals and pesticides; and nonconventional pollutants—those that are neither toxic nor conventional.

- ☐ Effluent limitations for conventional pollutants require best control technology (BCT) by July 1, 1984. The exact nature of BCT remains unclear at this time, but it is technology that is considered economically reasonable for an industry; that is at least as stringent as BPT and less than or as stringent as BAT; and that does not violate water quality standards.
- ☐ EPA must issue effluent limitations for 65 toxic substances by July 1, 1980. These effluent limitations will require best available technology (BAT) by July 1, 1984. For toxics not included on the list, BAT is required within three years after EPA establishes applicable effluent limitations.
- ☐ For nonconventional pollutants, BAT is required no later than July 1, 1987. ÉPA may modify the BAT requirement, however, if a facility has complied with the BPT and is meeting water quality standards, if no additional burden on other dischargers will result and if no public health or environmental risk is anticipated.

BAT is thus applicable to both toxic and nonconventional pollutants, though the deadlines differ depending on the type of discharge being regulated. Those industries that propose to meet BAT by replacing existing production processes with an innovative process or control technique that results in significant effluent reduction or lower costs and that may have industrywide application will have the longest timetable available.

In addition to setting effluent limitations, EPA must now publish regulations to control plant site runoff, leaks, waste disposal, spillage and drainage from raw material storage of toxic and hazardous pollutants associated with an industrial manufacturing or treatment process. Called best management practices (BMPs), these controls must be included in any permit issued under Section 402 (explained below).

For municipal treatment works that discharge into marine waters, requirements less stringent than secondary treatment may be set, if the municipality can prove that it will not be discharging toxic pollutants and that the discharge will not interfere with reaching and maintaining water quality. This amendment is intended to help cities on the Pacific coast.

Permits

Section 402, 404 The FWPCA sets up two permit systems to assure that water quality standards are met.

- □ For every point source (that is, each discharge from a pipe or other manmade or natural conduit) EPA or the states issue permits under the National Pollutant Discharge Elimination System (NPDES). These permits specify maximum permissible levels of each pollutant that can be discharged, a compliance schedule for reaching these limits, and requirements for monitoring and reporting discharges to the state and EPA. The first set of permits specified the conditions to be met by July 1977. Additional permits will be issued to meet the 1984 and 1987 requirements.
- ☐ For the disposal of dredged or fill material, the Army Corps of Engineers (COE) or states issue permits which specify disposal sites that meet guidelines established by EPA or the COE. A disposal site may be prohibited if the discharge will have an adverse environmental impact on municipal water supplies or on fish, wildlife and recreational areas.

To ease administrative burdens and concentrate available personnel and money on major problems, the COE may issue general permits for groups of activities that it determines are similar in nature and have minimal adverse environmental impact. In 1977, the Corps issued its first general permit regulations for certain types of waters, such as small lakes located beyond headwaters, and for specific categories of discharges such as backfill or bedding.

Normal farming, forestry and ranching activities such as plowing, or construction and maintenance of ponds, irrigation ditches, dams and levees do not require dredge and fill permits. Federal activities (including Corps projects) are also excluded, if an EIS is submitted to Congress before construction. Any dredge and fill activity involving toxic pollutants, however, does require a permit.

Authority for both the 402 and 404 permit programs rests with the specified federal agency until assumed by a state. EPA must approve a state point source or dredge and fill program if the state demonstrates that its program conforms to the law's requirements and EPA regulations and is as stringent as the federal one. EPA monitors the adequacy of each state program; if it objects to a proposed state permit and there is an impasse between the state and EPA, the federal agency is authorized to issue the permit.

A discharger that fails to obtain a permit or violates its conditions can be fined up to \$10,000. Willful, negligent or repeated violations can bring higher fines or prison terms. Enforcement of each permit's specifications is the key tool in the FWPCA.

Construction grants

Sections 201-207, 211-217 The FWPCA requires communities to treat their sewage adequately before releasing it. To help communities comply, the federal government is authorized to pay 75 percent of the costs of improving existing plants or planning and building new publicly owned treatment works (POTWs) that provide secondary or more stringent treatment if necessary to meet water quality standards. Projects eligible for funding include: wastewater treatment plants, major sewer rehabilitation, combined sewer overflow and infiltration/inflow corrections, and new collector or interceptor sewers.

Federal funding is also available for privately owned alternative or unconventional treatment works such as septic tanks and wastewater recycling and waterless devices, if a public agency certifies that public ownership is not feasible and that the treatment works will be properly operated and maintained, will be less expensive and will have less environmental impact than a POTW. New residences, commercial establishments and second homes are not eligible for these funds, however. To encourage communities to use innovative or alternative wastewater treatment techniques, an even higher federal portion—85 percent—is available.

Construction grant authorizations total \$4.5 billion for Fiscal Year (FY) 1978 and \$5 billion annually for FY 1979 through 1982. The 25- or 15-percent nonfederal share is paid with combined state and local funding.

The 1977 amendments enlarge the state role in managing the program and allow some 2 percent of each state's annual allotment for construction grants to be used to cover administrative costs. Each state establishes an annual priority list of eligible projects from which it selects the recipients of federal funds. EPA may intervene, however, and remove a project from the list if, after a public hearing, it determines that a project does not meet the law's requirements.

At least 25 percent of a state's allotment must go for construction and rehabilitation of sewer systems. In the past, generous federal aid for municipal sewage facilities has been identified as a growth stimulant, leading to what is often called "suburban sprawl." The 1977 amendments attempt to minimize this effect by specifying that these sewer system funds should address existing needs rather than encourage growth; new sewer construction is permissible only where there are existing communities. Rural states in which 25 percent or more of the population live in communities of 2,500 or less must direct at least 4 percent of their allotment towards unconventional or alternative systems for small municipalities.

Construction funds are generally awarded in three separate steps. The Step I facility plan includes an assessment of alternative waste treatment techniques that reclaim and reuse water and a determination of what technique is best suited to the community. The plan must decide what project design is most cost effective. analyze potential recreation and open space opportunities, assess the social and environmental impacts of the selected project, determine the best method for disposing of the residue of sewage treatment (sludge), and assure that the facility will comply with effluent limitations and water quality standards. Step II funds are for the construction drawings and specifications; Step III covers construction of the treatment works. Steps II and III may be combined where the treatment works serve a community of 25,000 or less and the total cost is either under \$2 million or, in cases where construction costs are unusually high, under \$3 million. A community must get on the priority list separately for each step in the grant process.

Planning

Section 208 Regional and state planning agencies are currently assessing water quality problems from point and nonpoint sources of pollution (e.g., runoff from streets, farm fields and forest lands) and projecting future growth, development and land use. The plans that result—required by section 208 of the act—will propose programs to prevent and control pollution and recommend management agencies to implement them. Planning agencies have three years during which to complete their 208 plans. All agencies that started before October 1, 1977 are authorized to get 100 percent federal funding for the first two years of planning, 75 percent for the third year. The only federal funding available to implement approved 208 plans is a Department of Agriculture cost-sharing program that will begin in 1978. It will provide 50 percent federal funding to rural land owners and operators to institute agricultural practices that will reduce soil erosion and improve water quality.

Section 303 Under this section, each state must develop a continuing planning process (CPP). The CPP produces state plans

that include effluent limitations, water quality standards and schedules of compliance, applicable elements of 208 and 209 plans, maximum daily waste loads, sludge disposal controls, and an inventory and ranking of POTW construction needs. Without an approved CPP, a state cannot assume NPDES authority.

Section 209 The water quality information gathered by a state is to be organized around river basins—areas drained by a river and its tributaries. Interstate basin plans required by Section 209 identify and measure the pollution discharged into basin waters, rank each segment of water in order of priority for improvement, and determine how and under what timetable water quality will be improved and maintained. The U.S. Water Resources Council is coordinating the development of these plans, which are to be completed by January 1, 1980 and will incorporate state 208 plans.

Public participation

The FWPCA requires EPA and states and interstate agencies to provide for, encourage and assist public participation "in the development, revision, and enforcement of regulations, standards, plans, and programs." In 1973, EPA issued regulations for fulfilling this requirement; they apply to all sections of the FWPCA. EPA will develop revised regulations based on its evaluation of the effectiveness of the 1973 rules.

The past five years have confirmed—if there was any doubt before—that public participation is a key element in making our rivers and streams cleaner. Citizens are needed to monitor programs as well as to speak to policy decisions. And the need will continue and even grow. If toxics are to be prohibited, permits enforced, necessary treatment works funded, and 208 plans implemented, you must be involved. Take advantage of the law's mandate.

What you can do

Citizens—acting individually or in groups—can play many roles at various levels of government to help clean up our water.

After becoming informed about the law and EPA's regulations for public participation (see Recommended Reading), contact your local water authority to learn what steps it is taking toward reaching secondary treatment. Has it received funds for wastewater treatment? If it is still planning its POTW, is it considering innovative and alternative treatment methods? What permits have been granted? What industries discharge into the treatment works? How is sludge being disposed of or used?

- ☐ Determine who is doing 208 planning for your community—a regional or state agency. What is the status of the plan? What efforts are being made to inform and involve the public? Participate in public meetings and hearings on the plan.
- Ask your regional EPA office and state permit agency—if your state has been granted NPDES authority—to place you on the mailing list to get notification of permit applications. If you are concerned about the conditions of a permit—for example, if the compliance schedule is too lenient or potentially toxic materials are not included—you can ask for a public hearing to discuss specific objections.
- ☐ Take part in the public hearing to determine if your state is qualified to assume responsibility for the NPDES or the program to control dredge and fill disposal. Ask beforehand for a copy of the proposed state program. Once authority has been granted, work to insure strict state enforcement and necessary staff and funding.
- ☐ Monitor the state priority list for construction grants. Encourage your state to fund projects that address existing problems, not those that encourage growth; urge consideration of innovative and alternative treatment methods, not solely traditional technology. Participate in hearings to establish or revise water quality standards.
- ☐ Monitor industrial and municipal permit holders for compliance with their effluent limitations or compliance schedule. You can compare performance records with copies of permits, both of which must be filed with your state agency and EPA. Or you can review

your state's quarterly report to EPA listing the point sources not meeting compliance requirements. Violations should be reported to your state agency or to EPA.

☐ If all else fails, you may want to file a citizen suit to force a company, municipality, state or EPA to comply with the law.

Providing safe drinking water

The Safe Drinking Water Act (Public Law 92-523, or SDWA) which regulates most of the nation's drinking water supplies and underground fluid injection, has done much to encourage improvement of the quality of our drinking water since its passage in 1974. The goal of the SDWA is protection of public health "to the extent feasible . . . taking costs into consideration." All public water systems—privately or publicly owned—that regularly supply water to more than 24 people or that have more than 14 connections are subject to the requirements of the law. All suppliers in these categories (which include most community water systems and many noncommunity systems such as motels, campgrounds, restaurants and factories) are subject to the act's provisions.

The SWDA establishes two regulatory systems:

- □ All public water suppliers must comply with EPA primary regulations to keep impurities in drinking water below a quantitative level (known as Maximum Contaminant Level, MCL) or use a treatment technique that would restrict the impurities to an acceptable level. EPA will also issue regulations setting secondary standards for removal of contaminants that affect the taste, odor or appearance of the water but that do not have health effects. Unlike the primary standards, these will be enforced only if individual states choose to do so.
- ☐ The underground injection of fluids that might contaminate drinking water supply sources is controlled by a permit and/or rule system established by EPA. Other causes of groundwater pollution are theoretically regulated by FWPCA and RCRA—the latter described below. States can administer the permit program if they meet EPA guidelines. 1977 amendments to the law prohibit any federally established permit system from unnecessarily disrupting state injection control programs; when a state and federal control program are in conflict, the state control program will prevail. The act also precludes EPA regulations from interfering with underground injection in connection with secondary or tertiary recovery of oil.

Recognizing that proper operation and maintenance of water systems is essential for safe drinking water, Congress included provisions in the SDWA for technical training of drinking water plant operators. The act also calls for studies on potential public health hazards and methods for dealing with them. In addition, a special study of rural drinking water problems and needs was required. Funding to support these training and research programs is authorized by the act.

Because there were delays in implementing and enforcing the standards, 1977 amendments extended deadlines for state compliance and made funds available for state planning costs incurred in FY 1978 and 1979. They provide for grants to water systems to deal with emergencies that might endanger public health and require periodic studies to determine if unregulated contaminants require monitoring.

Regulations and enforcement

The law outlines a three stage implementation process to be overseen by EPA. In Stage 1, EPA issued interim primary regulations (effective June 1977 and subject to periodic revision) setting MCLs. Based on a review and updating of the 1962 Public Health Service Act, they deal primarily with drinking water contamination linked to spread of communicable diseases.

To ensure that the MCLs are met, drinking water must be regularly monitored to see that contaminants are below the prescribed level. Monitoring frequencies vary according to the type of pollutant and the source of drinking water. If the MCLs are not maintained, local health officials and EPA must be notified by the drinking water

supplier. The supplier must also publicly notify its consumers of MCL violations. This public notification, generally inserted in the water bill or given to the news media, must describe the problem and its seriousness, what is being done to remedy the situation, and what action, if any, citizens should take to protect themselves.

Public notification of possible health hazards is unique to federal laws and EPA sees it as the main enforcement tool in the act, reasoning that if citizens know about problems with their drinking water they will pressure officials to rectify the situation. With a sound understanding of drinking water problems, consumers can respond more intelligently to the sometimes emotional issues of the tax increases and bond referendums that may be necessary to cover costs of improving the system.

To date, the most significant revisions to the interim regulations are those for the control of organic pollutants in drinking water. These regulations will require the first major shift since the turn of the century in drinking water treatment. Due to be finalized by EPA in mid-1978, they will limit the levels of certain organic chemicals—of which chloroform is the best known—and will require areas that take water from sources known to be polluted to find another drinking water source or (in the case of cities over 75,000) install carbon filtering equipment.

Stage 2 of SDWA implementation was a 1977 study by the National Academy of Sciences to reexamine maximum acceptable levels of contaminants; its results will be the basis of the third stage—final, comprehensive regulations due to be proposed by EPA in the summer of 1978.

EPA must enforce the act for all public water systems until a state shows that it meets federal requirements for maintaining safe drinking water, at which point EPA will grant primary enforcement authority (or **primacy**) and allow it to administer and enforce its drinking water program. Before a state can assume primacy, it must show that: its regulations are at least as stringent as EPA's; it has an adequate enforcement program; it maintains necessary records and reports; it has established provisions for granting exemptions and variances; and it has established a plan for providing drinking water in an emergency.

Funding

Many states are reluctant to assume primacy, fearing the increased costs that might result. While the law authorizes some federal assistance for states to plan for the act's implementation, it does not authorize federal funds for the actual compliance costs. However, a number of federal financial assistance programs could provide funding for upgrading public water systems; sources include the Small Business Administration, the Farmers Home Administration, the Economic Development Administration, and the Department of Housing and Urban Development, as well as some regional commissions (such as the Appalachian Regional Commission). There may be other programs in your state or region that could help water suppliers to meet the law's requirements.

What you can do

The weight of public opinion can play an important role in ensuring that our drinking water becomes and remains as safe as possible.

- ☐ Get a copy of EPA's primary drinking water standards or your state's (if it has assumed primacy) and talk to local health officials about the importance of occasional and/or frequent failure to meet specific contaminant levels. Watch for notices of noncompliance by your system, and talk to representatives of the local system about the causes for these failures.
- ☐ The law gives persons served by a water system the right to petition EPA to hold a public hearing to gather information from government officials, technical experts and water consumers on ways in which the system can most quickly be brought into compliance with any provision of the act it is violating. Any recommendations resulting from such hearings will be released to the public and communications media as well as to the water supplier.

- ☐ Inquire whether your state has any program to monitor deep well injection of wastewater. Is planning for such a program underway?
- ☐ Before a state is given primary enforcement authority over either public water systems or an underground control program, EPA will hold a public hearing on the state's capability to assume such responsibility if "any interested person" asks the administrator to hold one. Similar hearings are required before approval of a state program is withdrawn. After informing yourself about your state's problems and plans for water supply, you can be the "interested person" who calls for a hearing or you can express your opinion at such a hearing.
- ☐ Petitions can also be used by citizens or groups concerned about protecting underground water supplies. You can ask the administrator of EPA to designate the aquifer supplying the groundwater as "the sole or principal drinking water source for the area . . . which, if contaminated, would create a significant hazard to public health." If such a designation is made, no federal funds will be available for any project that might contaminate the aquifer.
- ☐ Another vital role you can play will be in monitoring compliance with the law. Failings of the local water supply should be reported to the state; failings of the state to the regional EPA office.
- ☐ Citizen suits are available as a last recourse; though suits are expensive and time-consuming, the law does permit courts to award the actual costs of litigation to any party.

Controlling ocean dumping

As Congress moved to restrict the use of the nation's inland waterways as disposal sites for human and industrial wastes, many looked to the oceans for dumping alternatives. In October 1972, the Marine Protection, Research and Sanctuaries Act (Public Law 92-532) was passed "to prevent or strictly limit the dumping into ocean waters of any material which would adversely affect human health . . . or the marine environment." This law, commonly known as the Ocean Dumping Act, regulates the barging of wastes—including dredged materials, industrial chemicals and sewage sludge—for ocean dumping. The regulatory program is established by Title I of the Act; Title II mandates a research effort and Title III provides for the protection of valuable coastal areas.

Title I establishes a permit system to strictly limit the dumping of harmful wastes. Dredged materials—sediments excavated from channels or harbors—which comprise more than 90 percent of all ocean dumping, require a permit from the Corps of Engineers (COE). All other wastes can be dumped only under permits issued by EPA, which regulates the quantities and types of substances that can be dumped in ocean waters and specifies disposal sites.

Before a permit is granted, a dumper must tell EPA what alternative disposal methods it has considered and why these are unsatisfactory. Ocean dumping is allowed only if it is the least environmentally damaging alternative. In addition, EPA requires dumpers to reduce the concentration of hazardous substances in wastes to specified levels and encourages industries to improve the quality and reduce the quantity of their wastes. The agency has, for example, encouraged processes that reclaim metals from the waste stream, because heavy metals are known to bioaccumulate in marine life.

The 1977 amendment to Title I set a December 31, 1981 dead-line for ending sludge disposal in ocean waters, unless the sludge can meet the strict environmental criteria for "special permits." This will bring an end to the one-year "interim permits"; under these permits, sludge can be dumped without having to comply with EPA's restrictions for hazardous wastes. Sludge was specifically targeted because, although the amount of industrial wastes and dredged materials has been declining in recent years, sludge dumping has increased. More and more sludge is being generated as the FWPCA promotes the construction of more sewage treatment facilities, and Congress felt that a statutory deadline was needed to curb the use of the oceans for sludge disposal.

Title II directs the Department of Commerce, which includes the National Oceanic and Atmospheric Administration (NOAA) to work with EPA to study the effects of disposal in the oceans and Great Lakes and to investigate alternatives to ocean dumping. The act set 1978 as the research goal for finding ways to minimize or end all ocean dumping. For several reasons this goal will not be met. Some feel that the act fragments the responsibilities for research among different federal agencies leading to confusion; others believe that NOAA lacks the scientific expertise to conduct this type of technical research and think that the responsibility should be transferred to EPA.

Title III establishes a marine sanctuaries program under which the Secretary of Commerce can designate areas that should be preserved or restored for their recreational, ecological or esthetic values. These areas may be in coastal waters as far seaward as the outer edge of the continental shelf, in other coastal waters where the tide ebbs and flows, or in the Great Lakes and their connecting waters. The program, previously administered by the Office of Coastal Zone Management, was recently transferred to NOAA's Office of Ocean Management. To date, there are only two designated marine sanctuaries—the site of the sunken U.S.S. Monitor and the Key Largo Coral Reef. Many other areas have been nominated and await designation.

Under the Coastal Zone Management Act of 1972 (Public Law 92-583 or CZMA), estuarine sanctuaries may also be preserved. An estuary is that part of a river or stream directly connected with the open sea, where sea water and fresh water mix. The CZMA provides financial assistance for states and territories bordering the oceans and Great Lakes, with up to 50 percent funding available for states to acquire, develop and operate estuarine sanctuaries.

What you can do

While the Ocean Dumping Act and EPA's regulations help restrain the use of oceans for waste disposal, the problems of implementing and monitoring the act are many. For example, dredged materials often contain harmful wastes from industrial and sewage plants, but under the law the COE issues its own permits, monitors its own programs, and enforces the law's regulations. Citizens in coastal areas can help assure that the Ocean Dumping Act is administered properly by closely following the Corps' permit applications and investigating possible infractions of the law.

☐ To monitor permit applications in your area, have your name put
on a standing mailing list at the regional EPA office and the district
COE office to get copies of all applications.

☐ EPA, the Corps, NOAA and the Coast Guard (which is responsible for enforcing the Ocean Dumping Act) must all report annually to Congress on their ocean dumping activities. Ask for copies of each of these reports.

☐ If you are concerned about the conditions specified in	a poten-
tial permit—for example, the location of the dumpsite in re-	
beaches-you can ask for a public hearing to discuss	
objections. If your name is on the EPA and COE mailing	
permit applications, you will also be notified of public hear	ings and
can participate in them.	

Any individual or citizen group can petition NOAA to designate a local area as a marine or estuarine sanctuary and can participate in the public hearings required to be held in the area most directly affected by such a designation.

☐ Under recent EPA regulations for enforcement of the act, EPA may suspend or revoke ocean dumping permits if the terms of the permit are violated. Unfortunately, most ocean dumping activities occur far offshore, making citizen monitoring difficult. However, if you have followed a permit application and question whether a dumper has lived up to the permit requirements, don't hesitate to contact the relevant EPA or COE office and report any possible violations to the Coast Guard.

Toxic substances control

In response to the urgent need for more comprehensive control of chemicals, Congress passed the Toxic Substances Control Act (Public Law 94-469, or TSCA) in late 1976. Until then, few of the more than 30,000 chemicals in commerce had been subject to any preventive regulation. Incidents of chemical pollution could only be dealt with piecemeal and after the fact, using whatever single-purpose laws seemed to apply. Spurred by such recent incidents as the contamination of the Hudson River and Great Lakes with persistent PCBs (polychlorinated biphenyls), Congress designed TSCA to close the many serious gaps in existing regulatory authorities.

TSCA significantly broadens EPA's authority to control production, use and disposal of any toxic substance not adequately controlled under existing federal or state laws. A "toxic" substance, as defined in the act, is any chemical or mixture that, because of its harmful characteristics and/or great quantities, may present an "unreasonable risk to human health or the environment." This "unreasonable risk" includes risk of causing cancer (carcinogenesis), birth defects (teratogenesis), or gene mutations (mutagenesis) and risks from long-term exposure to small amounts of the chemical (chronic effects).

In support of EPA's broad regulatory authority, TSCA:

□ puts the "burden of proof" of safety and the costs of testing on the chemical manufacturer;

□ seeks to prevent hazardous use of chemicals by requiring the manufacturer of any new chemical to give EPA 90 days notice of intent and background information on the chemical before beginning production; and

improves our understanding of chemicals and their effects by empowering EPA to collect information on new and existing chemicals and set up a thorough information system for agency and public use.

Testing for safety

Testing is a critical component of the law. Once EPA finds that a proposed or existing use of a chemical may be hazardous to health or the environment or that there is inadequate information available to believe otherwise, it can require the manufacturer to conduct further testing of the risks of the chemical at its own expense. The chemical is, in a sense, guilty until proven innocent—that is, it is not EPA's responsibility to prove that the substance is hazardous, it is the chemical manufacturer's responsibility to show that the substance is not.

The testing must consider not only acute—or immediate—toxicity of a chemical, but also any long-range effects from constant exposure to small amounts, or exposure to two or more substances that in combination are toxic. (The effects of a chemical when combined with other substances are called the *synergistic* effects.)

Since TSCA does not automatically subject all chemicals to testing requirements, EPA must decide which chemicals are to undergo testing. To help with this awesome task, an interagency committee was set up to list top priority chemicals for EPA's consideration—its first such listing was issued in October 1977.

Of great concern is the possibility of conflict of interest when chemicals are tested by the very companies that want to market them. To ensure reliable testing, TSCA authorizes EPA to set the rules for testing standards and procedures. Our experience with testing is limited and the practice of testing standards and requirements is really in its infancy. As more data are made available and expertise improves, it is expected that a comprehensive and systematic testing program will emerge. EPA will also need thorough monitoring and inspection capabilities to ensure that testing standards are followed and that the test results reported are accurate.

Prevention

Inventory TSCA requires EPA to inventory all chemicals presently being manufactured in order to establish a data base and to define the difference between new and existing chemicals. EPA started the process by issuing the inventory reporting rules in late 1977. They require all of the country's 5,400 chemical producers and petroleum refiners plus an undetermined number of chemical importers to report what substances they made during 1977. Large producers (those with sales of \$5 million or more) must also report the volume and location of production. The inventory is scheduled to be completed by late 1978. Any substances not on this inventory will be considered to be new substances subject to premarket notice requirements.

Premarket notices More than 1,000 new chemicals are introduced into the environment each year. The premarket notice requirement is an attempt to prevent misuse of potentially toxic chemicals before they're manufactured. Any manufacturer planning to produce a new chemical or use an existing chemical in a significant new way must give EPA at least 90 days notice and submit data to EPA showing that the production, use and disposal of the new chemical will not pose an unreasonable risk to health or the environment. The notice must include estimates of the amount to be produced, byproducts, number of people (both workers and users) exposed to the chemical, intended uses, disposal, and any available data on toxicity and health and environmental effects. If the chemical is also subject to a testing requirement, the test results must be included with the notice. EPA will then evaluate this information and can require another 90 days for further consideration. If within this time EPA does not find cause for further testing or regulation, the manufacturer can automatically begin producing the chemical.

Reporting While the premarket notices should give EPA enough information about new chemicals, our knowledge about existing chemicals and their effects is, for the most part, inadequate for evaluating risks. To improve our understanding of these existing chemicals, TSCA requires manufacturers to maintain records and submit reports that will give much of the same information that is required in the premarket notices, plus any other data necessary for the "effective enforcement" of the act. The records will be kept in industry files and will be submitted to EPA only as required. Small businesses, because of their limited resources, are generally exempted from these reporting requirements. EPA must, however, be notified at once if a "substantial risk of injury" from any substance is discovered by any producer.

Regulation and enforcement

Depending on the circumstances, EPA can intervene via order, regulation or the courts to control the fate of a dangerous chemical at almost any point in its life cycle. For example, if EPA can show that a proposed new chemical or new use of a chemical is likely to be hazardous to health or the environment, the agency can issue an order to prohibit or limit the production of the chemical until further studies are made. If there is enough evidence to conclude that a chemical, new or old, does present "unreasonable risk," the agency can prohibit or limit production, particular uses or disposal of the chemical. Other controls include strict record-keeping and monitoring, product labeling, and limiting concentrations of the chemical in a product. TSCA also specifically mandates phasing out the manufacture of PCBs (used largely in electrical products) by October 1978.

The choice of a control strategy will be based on an evaluation of the adverse effects of the chemical, its benefits, any available substitutes, and the probable effects of the regulation on industry and the economy. While the regulations must ensure adequate protection, they must also be economically feasible. The goals of not overburdening industry economically, protecting industry "trade secrets," and not hampering "technological innovation" are stressed throughout the act.

What you can do

Because TSCA focuses on technical aspects of chemical production and use and deals primarily with manufacturers, processors, distributors and disposers, it is difficult for citizens to participate in implementing the act. But precisely because TSCA is so complex and wide in scope and because EPA will be inundated with an enormous amount of information and many new tasks, attentive oversight from the outside is essential. The act does include provisions to encourage citizen participation, and you can help assure that TSCA will be effective in preventing future incidents of chemical pollution.

☐ Participate in rule-making hearings on TSCA; because the act is so technical, it allows reimbursement of fees for expert witnesses and attorneys you may call.

☐ Keep up with any new bills in Congress that may affect TSCA—new appropriations, authorizations, bills on compensation for pollution victims, etc.—and keep informed about any new EPA regulations, any premarket notices on new chemicals, and any new health or environmental studies.

☐ Contact groups who may know about chemicals that aren't being properly considered—environmental groups, university research centers, public health organizations. Be sure that their findings have been reported to EPA.

☐ If you learn about any chemicals that may pose a hazard, you can petition EPA to require premarket notices, further testing or regulation of the chemicals. Any petition denied can be taken for judicial review.

 \Box If all else fails, you can sue for injunctive relief against violators of the act or against the EPA administrator for not properly enforcing the act.

Air

Cleaning up the air

Although the Clean Air Act of 1963 and the Air Quality Act of 1967 had laid the foundation, the Clean Air Act Amendments of 1970 provided the first comprehensive program for attacking air pollution nationwide. Some energy-related provisions were added in 1974 by the Energy Supply and Environmental Coordination Act (ESECA). Further amendments in 1977 (Public Law 95-95) modified some compliance deadlines, set penalties for noncompliance and clarified some controversial growth-related air quality provisions.

Some major provisions of the amended Clean Air Act include:

□ national ambient air quality standards;

□ state implementation plans to ensure compliance with these standards;

□ automobile emission standards;

☐ performance standards for new or modified stationary sources and penalties for noncompliance;

□ prevention of significant air quality deterioration in areas cleaner than required by federal standards; and

☐ methods for cleaning up nonattainment areas.

National standards and state implementation plans

Sections 109, 110 For the purposes of the Clean Air Act, an ambient air quality standard is the minimum safe concentration of a pollutant in the general air around us. The 1970 amendments required EPA to set two levels of national ambient air quality standards—primary standards to protect human health and stricter secondary standards to protect public welfare (i.e., prevent damage to crops, livestock, buildings, etc.). EPA has issued primary and secondary standards for six major air pollutants—sulfur oxides (SOx), total suspended particulates (TSP), carbon monoxide (CO),

hydrocarbons (HC), nitrogen oxides (NOx) and photochemical oxidants. Lead later became a seventh "criteria" pollutant and a standard is expected by mid-1978. The 1977 amendments specified that all areas of the country must meet primary standards by December 31, 1982, with a possible five-year extension for those areas having a particular problem with CO and oxidants. Secondary standards are to be met in an unspecified "reasonable" time period.

Each state's implementation plan (SIP) is to provide enforceable means of achieving the standards. The SIP is to include, among other things, limitations on emissions from stationary sources, a preconstruction review procedure for new sources, timetables for compliance by new and existing sources, pollution monitoring procedures, and auto emission inspection and maintenance programs and transportation controls in nonattainment areas. The SIPs were supposed to have exacted compliance by 1975 (1977 at the latest). However, when it became obvious that this deadline was not going to be met, Congress extended it to the end of 1982. To ensure that states are moving toward compliance, revised SIPs are due by January 1, 1979. Failure to submit this revision can result in a cutoff of federal highway funds.

Performance standards for stationary sources

Section 111 EPA must establish uniform national performance standards (i.e., maximum allowable pollutant emissions) for new or substantially modified stationary sources that are major polluters. As the term implies, stationary sources are fixed installations such as power plants, ore smelters, cement plants and oil refineries. By 1982, performance standards must be set for all currently unregulated major source categories. The law requires that all major stationary sources use the best available control technology (BACT) to substantially reduce emissions. This directive will, however, be administered by the states on a case-by-case basis.

In one particular case—that of coal-fired power plants—the law narrowly defines BACT as the best *continuous* emission control available. A controversy had arisen prior to 1970 over the use of dispersion methods (such as tall stacks and cutbacks in operation during adverse weather conditions) instead of emission reduction technology. The 1977 amendments reaffirmed that dispersion methods alone cannot be used as final compliance measures.

Auto emission standards

Section 202 One of the most controversial issues in the act has been the setting of "light duty" motor vehicle emission standards. In many urban areas, automobiles are the prime source of such major pollutants as CO, NOx, HC and lead. The original intent of the 1970 amendments was to reduce these emissions by 90 percent over 1970- and 1971-model cars.

But administrative delays and legal extensions have become the rule rather than the exception. One extension was granted to automakers based on their claim that adequate control technology was lacking. ESECA—the congressional response to the OPEC oil embargo—further delayed compliance in the name of fuel economy. An additional delay was granted based on what has now been recognized as a phantom issue: the possibility of health-damaging sulphuric acid mist emissions from catalytic converters.

1977 Clean Air Act Amendments Auto emission standards

Model Year	Hydrocarbons (HC)	Carbon Monoxide (CO)	n Oxides of (CO) Nitrogen (NOx)		
1978-79 , 1.5 gpm		15 gpm	2 gpm		
1980	.41	7			
1981	.41	3.4	1		

gpm=grams of the pollutant emitted per mile of operation

The latest emission deadline modifications came in the 1977 Clean Air Act amendments. Although the auto industry was producing cars for California that met or exceeded statutory standards, the automakers claimed that they could not meet the nationwide deadline by the 1978 model year deadline. Rather than risk substantial fines, they claimed that they would shut down. Congress reacted by conceding more time to meet all standards. They relaxed (but did not eliminate, as the industry had demanded) the NOx standard but set interim standards to force progress by the industry.

Transportation controls

Individual auto emission controls alone will not be enough to cure the air pollution ills of many large cities. For one thing, it will be quite a few years before the total auto fleet is equipped with the best controls. Areawide transportation controls are an additional approach, basically focusing on reducing vehicle miles traveled (VMT). Strategies may include creating preferential bus and carpool lanes on freeways, improved mass transit, bicycle lanes, improved traffic patterns, and parking restrictions. Congress carefully avoided using the term "land use," but a key to reducing VMT will undoubtedly be the encouragement of settlement patterns that make mass transit a reasonable alternative to the car. Another facet of transportation controls may be required periodic inspections of auto emission systems conducted much like current state safety inspections.

Enforcement

Sections 113, 120, 303, 304 The 1970 amendments established a joint regulatory system, with air quality standards set by the federal government and actual emissions limitations set and enforced by the states or the federal government. (Those special emissions limitations established at the federal level were discussed earlier.) Most of the responsibility for enforcing air pollution requirements, including emissions limitations, remains at the state and local levels. However, if a state fails to act, EPA itself may step in to enforce abatement. As penalties, a polluter may be denied federal contract awards, be fined up to \$25,000 per day or be imprisoned. The 1977 amendments added a new noncompliance penalty to be levied against major stationary sources. The amount of the penalty will be equal to the amount it would cost for the facility to meet emission standards. This is designed to cancel out any economic benefit a facility might derive from delaying compliance.

Citizens may bring legal action against polluters. Prior notice must be given to the polluter and to EPA. Citizens may also bring suit against EPA for improper administration of the law.

Growth and air quality

Like land and water, clean air has come to be recognized as a finite natural resource. The airshed of an area can only absorb so much pollution from human activities before ambient standards are violated. But the goals of bringing dirty areas up to standard and preserving the pristine air quality of other areas can conflict with another national goal—economic growth.

Prevention of significant deterioration

Much of the nation's air was already cleaner than the ambient standards that were set under the act. Industry and EPA interpreted he law to mean that new pollution sources could enter such areas so long as total emissions did not violate the ambient standards. Environmental groups argued that this was not the law's intent: one of the stated purposes of the act as amended in 1970 is to **protect** as well as to enhance air quality, and that cleaner-than-standard areas should therefore be protected from degradation. The Sierra Club brought suit and in 1973 the Supreme Court decided in their favor, ordering EPA to develop regulations to prevent significant air quality deterioration. What emerged was an area classification system in which varying amounts of additional pollution would be allowed based on the nature of the area.

The 1977 amendments codified this interpretive regulatory ap-

proach with some modifications. Initially, particulates and SO₂ are the only pollutants to be considered, but EPA must develop rules for CO, HC, NOx, lead, and photochemical oxidants.

The system is based on what is termed a "maximum allowable increase" over an area's baseline concentration of the pollutants in question. The smallest increase is allowed in Class I areas, more in Class II and the most in Class III; however, no area may exceed the national ambient standards. Mandatory Class I areas include those international parks, national memorial parks and national wilderness areas greater than 5,000 acres, and national parks of more than 6,000 acres in existence at the time of the legislation. All other areas are initially designated Class II. Certain federal areas may be redesignated Class I; states have the authority to either upgrade other areas to Class I or downgrade them to Class III. However, certain federal areas of 10,000 acres or more may not be redesignated as Class III.

This section of the law does not rule out growth in cleaner-thanstandard areas but requires major new sources to get a preconstruction permit, for which a modeling study must be carried out at the applicant's expense, showing the projected impact of the new source emissions on the air quality of the area.

Nonattainment areas

How will it be possible for economic growth to continue in areas that violate national ambient air quality standards for one or more pollutants? To deal with this problem, EPA in late 1976 established what has been termed its offset policy. In short, before any new pollution source can be built in a nonattainment area, that area must take steps to more than offset the new emissions by further reducing emissions of the same pollutants from existing sources. The objective is to continue to reduce a nonattainment area's emissions until standards are achieved and still allow some growth in the interim.

The 1977 amendments essentially embraced the offset policy. However, a state can get a waiver from implementing such a policy if it can demonstrate that its own SIP will achieve the same goal. States that want to take advantage of this waiver must revise their implementation plan by 1979 to include a permit program for new and substantially modified stationary sources. In order to issue an individual permit, the state must show that offset provisions have been followed or that emissions from the source will not interfere with the annual incremental reductions in total emissions required by the act.

Another potentially significant nonattainment amendment allows a state to adopt the more stringent California auto emissions standards if it is experiencing a particular problem with auto-related pollutants.

Ongoing issues in air quality

Using more coal

All indications are that government energy and economic policies will push the nation toward the use of more coal, with the aim of displacing some of our foreign oil imports. But here again a conflict of national goals arises. Can we double our yearly coal use (from a current 665 million tons to 1.2 billion tons by 1985) and still comply with ambient air quality standards? Industry claims that SO_x standards are much more stringent than necessary for adequate public health protection and that some loosening of clean air rules is needed if we are to use more coal. Environmentalists feel that current coal use is already damaging health and welfare and that any increase in coal use must comply with nonattainment and significant deterioration rules.

The 1974 ESECA gave the federal government power to order existing oil- and gas-fired facilities to convert to coal. Such conversions were not to cause air quality violations, although the 1977 Clean Air Act amendments did loosen this requirement somewhat. But three years after ESECA's enactment, not a single facility has converted to coal that did not already want to. New energy legislation may succeed in forcing conversion of existing plants while

maintaining air quality values. But controlling pollution from increased coal use is more than likely to hinge on how well states deal with siting and operation of *new* sources, especially in the nation's new population growth areas, which currently use little coal.

New and different standards

Under the Clean Air Act, standards for the well-defined criteria pollutants must be reviewed at least every five years. Changes in any of these allowable levels could, of course, be of great significance, because actions under many sections of the law hinge upon the standards, but those who drafted the most recent amendments do not foresee any major changes. Attention in the near future will probably focus on developing three new standards: one for fine particulates, one for sulfates, and a short-term one for nitrogen dioxide.

Fine particulates In essence, fine particulates are minute particles that can penetrate to the deepest recesses of the lungs. They may be generated in a number of ways, but the most common is the burning of fossil fuels. To date, this pollutant has been included in the broad category of total suspended particulates. There is growing concern, however, that fine particulate matter contributes significantly to respiratory disease, including lung cancer, and should be regulated separately. Of special concern are volatile toxic substances, such as the highly carcinogenic organic chemical benzopyrene, which may condense on fine particulate matter after being emitted from smokestacks.

Sulfates Research reveals that certain ill effects originally attributed to SO_2 may be due to chemical compounds called sulfates. They are formed in the smokestack and in complex atmospheric reactions, with SO_2 as a starting ingredient. One major sulfate, sulfuric acid aerosol, is the predominant acid in the acid rain phenomenon—acids dissolving in rain or snow to cause a general lowering of soil and water pH. This increase in acidity in turn has detrimental ecological effects, such as the leaching of soil nutrients, damage to crops and forests, and reduction of fish populations. The Northeast has a special problem with acid rain because this area receives the long-range transport of sulfates from the industrial Midwest and the Ohio Valley.

Short-term NO₂ The primary source of NO₂ in urban areas is automobile exhaust, especially during peak traffic periods, when NO₂ at street level may be inordinately high. Yet current air quality standards consider only the annual average NO₂ measurements as an indicator of air quality. A short-term NO₂ standard would recognize the detrimental health effects of relatively brief exposure to high levels of this pollutant and may call for further modifications of transportation control strategies.

What you can do

- ☐ Follow the revision of your SIP and urge completion of an adequate plan by the 1979 deadline.
- ☐ Put your name on the mailing list of your state agency handling air pollution control to get all information concerning air quality.
- ☐ Follow the "prevention of significant deterioration" (PSD) proceedings and work for the maximum protection of clean air areas. States can reclassify certain clean air areas for greater or lesser protection. You should be aware that your local area may at the same time be both a clean air area for some pollutants and a nonattainment area for others.
- ☐ Watch for and report infractions of regulations. Inform your local officials of your concern when infractions continue uncorrected. Consider litigation against polluters.
- $\hfill\Box$ Attend meetings of your regional air quality advisory board. Try to be appointed to it.
- ☐ Your personal transportation patterns can affect air quality. Support mass transit in your locality. Use mass transit whenever possible and form car pools. Ride bicycles. Drive cars with lower emission levels and best fuel economy.

Solid waste

The Resource Conservation and Recovery Act of 1976 (Public Law 94-580 or RCRA) is built upon, but essentially replaces, two previous pieces of solid waste legislation—the Solid Waste Disposal Act of 1965 and the Resource Recovery Act of 1970. This new law substantially increases federal involvement in solid waste management, with most responsibility assigned to the deputy assistant administrator of the Office of Solid Waste (OSW) in EPA.

OSW has put together a comprehensive strategy document on its plans for implementation of RCRA. It sets forth two broad goals, which the office views as "essential to an efficient national program of solid waste management":

☐ to assure that solid and hazardous wastes are managed in a manner that will protect public health and the environment, and

☐ to conserve natural resources directly and through the management, reuse or recovery of solid and hazardous wastes.

The federal/state/local approach

The 1976 act recognizes for the first time that land is just as important an environmental medium as air and water and therefore needs to be protected by comprehensive legislation. RCRA provides for:

☐ federal/state regulation of hazardous wastes,

☐ the elimination of open dumps,

☐ financial assistance to state and local governments,

☐ increased technical assistance to states and regions on solid waste management.

☐ the involvement of citizens, industry and government in planning and implementation, and

☐ new approaches to resource conservation and recovery.

Hazardous waste management

The provision for federal/state regulation of hazardous wastes is one of the strongest and most important in the act. By April 1978 EPA must:

develop criteria for determining which wastes are hazardous and issue a list of hazardous wastes.

☐ promulgate standards for hazardous waste management from "cradle to grave"—from generation through disposal,

☐ require permits for hazardous waste treatment, storage and disposal facilities, and

☐ issue guidelines for state programs.

States are encouraged to manage their own hazardous waste programs—which must meet federal requirements—and to set up a permit system. Should states choose not to play an active role in either of these areas, federal regulations will apply. To help states develop and implement these programs, the law authorizes \$25 million in grants for FYs 1978 and 1979. In addition, 30 percent of funds appropriated for general administration of the law must be used to implement the hazardous waste program.

Land disposal

The act required EPA to issue guidelines by October 1977, describing the level of performance attainable from various solid waste management practices. These were to help states and regions develop solid waste management plans. By this time EPA was also required to publish criteria for distinguishing between open dumps and sanitary landfills. While criteria were proposed in February 1978, the guidelines have not yet been published. One year after the publication of criteria, EPA, in conjunction with the Bureau of Census, must publish a listing of all open dumps in the United States. Five years after the completion of this inventory, all dumps in the nation must be closed or upgraded to the status of sanitary landfills

State/local program development

RCRA also required EPA to establish guidelines identifying regional areas with common solid waste management problems. Six months after publication of these guidelines, state governors, in consultation with affected local officials, should designate the boundaries of solid waste management planning units within each state. State and local officials then have six months to identify both an agency to develop a state solid waste management plan and one or more agencies to implement the plan. They must specify which solid waste functions will be planned for and carried out by regional and local authorities and which by the state. Whenever possible, existing areawide water planning agencies (established under Section 208 of the FWPCA) are to be considered as the designated solid waste planning agency.

If a state's plan is approved by EPA, then that state will be eligible for financial help in developing and implementing it. Approval is, however, contingent upon the plan's meeting such requirements as:

☐ prohibiting the establishment of new open dumps and providing for the closing or upgrading of existing open dumps;

 $\hfill \Box$ disposing of nonhazardous wastes in an environmentally safe manner, e.g., in a resource recovery facility or in a sanitary landfill; and

 $\ \square$ identifying state, local and regional responsibilities in carrying out the plan.

EPA is also authorized to give grant assistance to rural areas and "special" communities (areas with population less than 25,000 whose disposal facilities receive 75 percent of their solid waste from outside their own boundaries) to help them meet the land disposal requirements of the act.

Technical assistance

The law states that EPA must provide technical assistance teams—Resource Conservation and Recovery Panels—to states and regions that ask for help on solid waste management techniques and on resource conservation and recovery systems. At least 20 percent of EPA's budget for the Office of Solid Waste is to cover the cost of these experts.

Information/public participation

RCRA requires EPA to carry out public and technical information programs. These include: public education through such tools as TV spots and press releases, grants to public interest groups, publications and exhibits; the collection and distribution of technical information on nine specified subjects; and a central reference library.

In addition, the act mandates a high degree of public participation in the development and implementation of the required criteria, guidelines and regulations. To encourage citizen involvement in RCRA, EPA has outlined three major public participation techniques:

☐ meetings, hearings, conferences and workshops to inform the public and promote participation in the act;

☐ advisory committees (or review groups) to review and comment on major plans and regulations; and

 $\hfill \Box$ public education programs to help citizens understand the need for environmentally sound solid waste management practices.

Resource conservation and recovery

RCRA mandates special studies on a variety of resource conservation issues, including sludge management, source separation, waste reduction and incentives for recycling. An interagency committee—chaired by EPA's administrator and including various cabinet members—is charged with studying the "economic, social and environmental consequences of resource conservation"; this committee will investigate the feasibility of such conservation-promoting techniques as disposal charges on consumer products.

The act authorizes research, development and demonstrations in resource recovery and in new and unproven solid waste disposal facilities. EPA is also required to work with the Department of Energy on the recovery of materials or energy from solid waste. The Secretary of Commerce is directed to encourage new uses for recovered materials by identifying markets for such materials and to adopt standards that will result in substituting recovered for virgin materials. These standards will be used by federal agencies, which must—by October 1979—procure items containing the highest practicable percentage of recycled materials.

Problems and prospects

When compared to environmental legislation such as the FWPCA, the RCRA is modest in its regulatory provisions. Apart from the hazardous waste regulation program, federal control is minimal. EPA's major job is to encourage states, with the support of local governments, to take a leadership role in solid waste management. By assuming responsibilities, states can get financial aid to carry out solid waste management plans and avoid federal intervention in hazardous waste management. Whether states will be able and willing to perform their major tasks, however, will probably depend upon how much money they get from the federal government.

The amount of federal funding authorized in RCRA is well below that spent on air and water quality. And even though sufficient funds are *authorized* in certain areas of the new law, whether they will actually be *appropriated*—that is, made available—remains to be seen. In addition, there is no provision in the act for funding after FY 1979. State and local governments—whose budgets are already strained—may be reluctant to assume long-term responsibilities in light of these financial uncertainties.

What you can do

Despite these modest beginnings, RCRA is a major step forward. Citizen interest and continuing involvement are necessary to ensure that this law is effectively implemented.

☐ First, make yourself familiar with the major provisions in the act (see Recommended Reading). Pay special attention to the expanded definition of solid waste, which includes sludges for the first time.

☐ Then, find out what steps state officials involved in waste management have taken and are planning to take, to reach the law's goals. Encourage state officials to implement the act fully.

☐ The act requires a lot from states; taking on responsibilities may be difficult because of staff and budget limitations. You can get in touch with your state's representatives and senators, as well as members of the House and Senate Appropriations Committees, to encourage them to work for full funding at both the state and federal levels

☐ Get involved in the federal waste management program. To solicit public participation in all aspects of RCRA, EPA is required to publish advance notice of proposed rulemaking and proposed guidelines in the *Federal Register* (available at most university or large metropolitan libraries). Be on the lookout for these and take time to respond with comments if you feel strongly about something. Make your views known early—before final regulations are issued.

☐ Even after final regulations are published, you can still have a say. You can petition EPA to develop, change or repeal any regulation under the act. And if you feel that the listing of hazardous wastes prepared by EPA is incomplete, tell your governor, who can petition EPA to add a particular waste to the list. If necessary, you

The act authorizes research, development and demonstrations resource recovery and in new and unproven solid waste disposal government) in violation of the act.

☐ Ask state and regional EPA offices to place you on a mailing list to be notified of any upcoming events affecting solid waste management. Take every opportunity to attend and participate in relevant meetings and public hearings and encourage others to do the same. Suggest that your local paper, radio or TV station report on solid waste meetings and issues.

☐ Become familiar with state and areawide planning agencies. These agencies will determine the kinds of techniques that will be used to solve the solid waste management problems in your community. Get to know local officials and encourage them to take an active role in the planning and implementation of state solid waste plans. Make sure that there is an adequate examination of resource conservation issues during the planning process. Above all, tell local officials what you would like to see included in the state plan

☐ Citizens in your community may be reluctant to pay for the improved disposal practices which are required under RCRA. Closing dumps by the law's 1983 deadline may be costly to your community. Your role can be to explain the benefits of acceptable disposal practices.

☐ If you live in a rural or "special" community, check out whether your area may be eligible for special financial assistance under the law

☐ Continue to examine the feasibility of waste management practices not included in the act, e.g., a national deposit system on beverage containers.

☐ Find out if your community has a source separation program. If not, you can help cut down on the amount of solid waste accumulated in your neighborhood by separating your own trash—into cans, glass and newspapers—and taking it to the nearest recycling center.

 $\hfill\Box$ Encourage others to buy less and to buy and use recycled materials whenever possible.

Keeping up to date

It is important to remember that these federal environmental laws, recent as they are, will be changed. As amendments are suggested and discussed, newspapers, magazines, and news commentators often furnish only the current highlights. Federal Environmental Laws and You supplies the background against which to examine proposals for changes in the laws discussed.

Having your name put on the mailing list for the reports from your local, regional, state, and federal agencies and from environmental organizations will bring you a host of information materials to help you keep up to date. As new criteria, guidelines, and regulations come out, you'll see references to them. There will be discussions of how programs are working or not working and whether laws should be amended.

Some of the changes that will be suggested are scarcely more than trial balloons, launched to see how they fare. Others are well-considered suggestions for fine-tuning programs to make a law work better. Some will strengthen a law, enlarge its scope, or expand its application. Still others are intended to gut a law by making compliance voluntary, reducing funding authorization to a pittance, or modifying the goal. Watch for proposed changes in an environmental law; think whether each change will accomplish something you do or do not want done. Keeping up to date is up to you.

Recommended reading

Materials marked with an asterisk (*) are available FREE when ordered in limited quantity from the indicated source. Orders for materials available from U.S. EPA should be addressed to: Environmental Protection Agency, Office of Public Awareness (A-107), 401 M Street, S.W., Washington, D.C. 20460, EXCEPT for solid waste materials, where a special address is listed.

NEPA

*National Environmental Policy Act, P.L. 91-190 and *Proposed Regulations to Implement the Act.* Available from Council on Environmental Quality, 722 Jackson Place, N.W., Washington, D.C. 20006.

Water

*Federal Water Pollution Control Act, as amended.

*Safe Drinking Water Act, as amended, P.L. 93-523.

*Marine Protection, Research and Sanctuaries Act as amended, P.L. 92-532.

*Guidelines for Public Participation in Water Pollution Control. 38 Federal Register, pp. 22756-22758, August 1973. (Note: these will be revised during 1978.)

*EPA. Is Your Drinking Water Safe?, March 1977.

All the above available from U.S. EPA

LWVEF. Turning the Tap: Think Before You Drink. Pub. No. 342, 2 pp., January 1977, 15¢.

LWVEF. Controlling Hazardous Pollutants: In the Ocean. Pub. No. 571, 4 pp., April 1975, 25¢.

LWVEF. Update on Section 208: Doing Something about Polluted Water. Pub. No. 413, 2 pp., 1976, 15¢.

LWVEF. Update on Section 208: Putting the Pieces Together. Pub. No. 182, 2 pp., 1977, 20¢.

LWVEF. Update on Section 208: Grime in the Streets: The Problems of Urban Runoff. Pub. No. 189, 2 pp., 1977, 20¢.

LWVEF. Getting in the Swim: How Citizens Can Influence Water Quality Planning. Pub. No. 188, 6 pp., 1977, 40¢.

LWVEF. Land Application of Wastewater: a New Look at an Old Idea. Pub. No. 378, 8 pp., 1976, 50¢.

LWVEF. Municipal Sludge: What Shall We Do with It? Pub. No. 627, 8 pp., 1976, 50¢.

The Conservation Foundation. *Toward Clean Water: A Guide to Citizen Action*. 328 pp., 1976, \$8.80 prepaid. Order from The Conservation Foundation, 1717 Massachusetts Ave., N.W., Washington, D.C. 20036.

National Wildlife Federation. Setting the Course for Clean Water. 64 pp., 1977. Single copies free from the National Wildlife Federation's Education Division, 1412 16th St., N.W., Washington, D.C. 20036. Additional copies, \$2.00 each.

Toxic substances control

*Toxic Substances Control Act, P.L. 94-469. Available from U.S. EPA.

LWVEF. Of Mice and Men: Health Risks and Safety Judgments. Pub. No. 341, 4 pp., 1977, 30¢.

Air

*The Clean Air Act as amended, P.L. 95-95. U.S. EPA.

*Trends in the Quality of the Nation's Air. 16 pp., March 1977. U.S. EPA.

LWVEF. Controlling Hazardous Pollutants: In the Air. Pub. No. 385, 2 pp., November 1976, 15¢.

National Clean Air Coalition. *Briefing Summary for NCAC Workshops on the Clean Air Act Amendments of 1977.* 11 pp., 1977. Single copies free from NCAC, 620 C Street, S.E., Washington, D.C. 20003.

Natural Resources Defense Council. It's 1977. Why Don't We Have Clean Air? 20 pp., June 1977. Single copies free from NRDC, 15 West 44th Street, New York, NY 10036.

Solid waste

*Resource Conservation and Recovery Act of 1976, P.L. 94-580.

*Strategy for the Implementation of the Resource Conservation and Recovery Act of 1976, in preparation, expected April 1978. SW-645.

*Available Information Materials—a catalog of all solid waste materials distributed by the Office of Solid Waste.

The above available from Solid Waste Information Materials Control Section, U.S. EPA, Cincinnati, OH 45268. If you would like copies of new OSW publications, write to this Cincinnati address.

LWVEF. RECYCLE? In Search of New Policies for Resource Recovery. Pub. No. 132, 39 pp., 1972, 75¢.

LWVEF. REDUCE? Targets, Means and Impacts of Source Reduction. Pub. No. 576, 48 pp., 1975, \$1.00.

Environment Comment, February 1977 issue, 24 pp., A series of articles on RCRA by federal, state and local officials. Available for \$2.00 prepaid from the Urban Land Institute, Publications Order Division, 1200 18th St., N.W., Washington, D.C. 20036.

General

*Council on Environmental Quality. *Environmental Quality*—1977. The eighth annual report of CEQ, 445 pp., December 1977. Single copies free from CEQ at the address given above.

LWVEF. Cleaning Up the Nation's Cities. Pub. No. 135, 12 pp., 1978, 75¢.

Cannon, James. A Clear View: Guide to Industrial Pollution Control. An invaluable tool providing techniques for obtaining, evaluating, and using data on industrial air and water pollution. 246 pp., 1975. Order from INFORM, 25 Broad St., N.Y., N.Y. 10004. \$4.50 includes postage and handling.

Fanning, Odom. *Man and His Environment: Citizen Action.* Recounts some successful citizen actions of the last decade to protect the environment; includes case studies, suggestions of future possibilities for action, and extensive discussion of organizations. 240 pp., 1975, Harper & Row, N.Y., N.Y., \$4.95 (paper).

Researched and written by the staff of the Environmental Quality Department, LWVEF.

Printed on paper recycled from 100% consumer scrap.





Environment & Jobs:

Must We Trade Clean Air and Water for Employment?

In the past, various critics of tough pollution control laws have asserted that environmental regulations are shutting down industrial plants, driving Minnesotans out of work, and damaging the economy as a whole. Environmentalists have been called the "birds and bunnies crowd", dedicated to "environmental puritanism" at the cost of jobs. Industries that once vehemently resisted environmental clean-up efforts, now grudgingly admit that pollution control is a worthwhile endeavor, but insist regulatory efforts have gone too far.

Are these allegations true, or are they a form of "environmental blackmail" — that is, an attempt to discourage tough enforcement of pollution control laws by threatening workers with unemployment? What are the facts?

First, in any discussion of jobs and the environment, critics of clean-up efforts often neglect to mention that hundreds of thousands of jobs have been *created* in the pollution control field.

Second, these same critics often gloss over the fact that many plants claiming to shut down because of inability to meet pollution standards would have closed anyway because they are old and inefficient, making it not profitable to bring them up to standards. In many of these cases, a new plant is built to replace the old one or workers are transferred to a more efficient facility.

And third, critics of pollution control often inaccurately portray environmental agencies as being concerned with cosmetics and aesthetics. This ignores the fact that pollution standards were enacted to prevent threats to human health and welfare.

A study conducted by the President's Council on Environmental Quality in 1976 looked at employment in the period from 1971 to 1976. The study found that during those 5 years, about 17,000 workers were affected by shutdowns of plants that were closed at least partly for environmental reasons. However, the study notes that many of those workers were reallocated to other facilities. "The production lost from losing one facility," said the report, "is likely to be made up by increasing production at another facility."

On the other hand, the study, and others like it, have indicated an overall employment gain of at least 300,000 workers due to environmental regulations, for a net gain of 283,000.

Finally, consider the following: Minnesota, a state that prides itself on its clean and healthy environment and has one of the nation's most comprehensive pollution control programs, also happens to have one of the nation's lowest unemployment rates.



Fair Visitors Will Get Free Hearing Exam

The Air Quality Division's Noise Section plans to conduct free hearing-screening sessions at this year's Minnesota State Fair. Audiograms will be given in sound-insulated booths at the MPCA's display in the State Exhibits Building (next to Machinery Hill) from 10 a.m. to 8 p.m. every day of the Fair. Participants will be asked to fill out a brief questionnaire, and will then be given a hearing test lasting about 10 minutes. Professionals from the Noise Section, the American Speech and Hearing Association, and the Minnesota Acoustical Society will be on hand to answer questions about the tests.

The exams will not only give an estimated 2,000 people a chance to have their hearing checked, the Noise Section will also be able to collect data on types and amounts of hearing loss among a cross-section of Minnesotans. Data from the study can be used to assess the effectiveness of noise standards and the effects of various types of occupations, activities, and geographic locations (urban, rural, etc.).

Data collected from other studies have shown that substantial numbers of Americans have some type of hearing loss, often undetected by the victim, even though the hearing loss can frequently make human speech sound garbled or mumbled. Those whose audiograms indicate a significant hearing loss will be referred to their physicians.

The Inside Report is mailed monthly to approximately 4,500 Minnesota schools, libraries, businesses, media, organizations, and individuals. We keep costs down by using our one folded page format, but we'd like to cut waste if we can. If you are receiving the Inside Report and don't read it, or if you can share someone else's copy, please send us a postcard indicating that you would like to be removed from the mailing list. Or, if you don't now receive this newsletter and would like to, please send us a card:

> **Public Information Office** MPCA 1935 W. County Rd. B2 Roseville, MN 55113

Please note that we share the same mailing list with the "208 Bulletin".

Animal Feedlot Regs: Planning Underway A Change for the Better

New proposed changes to the MPCA's animal and poultry feedlot regulations will eliminate unnecessary paperwork and resultant delays to feedlot owners and at the same time will strengthen the Agency's agricultural pollution control program.

The proposed changes are geared to cut the paperwork and "red tape" now involved in the feedlot permit process, by giving more review authority to the counties where Minnesota's 90,000 feedlots are located. Besides making the program more responsive to local concerns, it will also allow the MPCA staff to concentrate its efforts on the feedlot operations which seem to present a greater potential for pollution problems.

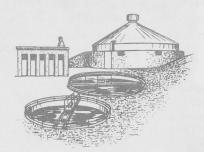
The public may submit written comments to the MPCA until August 31, 1978.

For more information or a copy of the proposed regulations, please call Terry Huntrods at (612) 296-7327.

Rochester **Phosphorus** Variance Denied

The MPCA Board has denied an application from the City of Rochester for a relaxation of phosphorus limitations for the city's wastewater effluent. A discharge permit issued in September 1977, specified that phosphorus in Rochester's treatment plant effluent could not exceed 1 milligram per liter. Presently, the plant's phosphorus discharge ranges between 10 and 14.5 milligrams per liter. The city is constructing a new treatment facility, and requested the variance because of the cost of installing and maintaining the phosphorus removal equip-

However, MPCA testimony before a state Hearing Examiner indicated that Rochester discharges approximately 248,000 pounds of phosphorus every year, or about 75 percent of the phosphorus entering Lake Zumbro downstream from the plant. Phosphorus, combined with other nutrients, has created an extreme algae problem on the lake, resulting in numerous complaints from lakeshore residents and lake users.



for Clean Air Deadline

The 1977 Clean Air Act Amendments extended the target date for health air to Dec. 31, 1982, after many areas of the U.S. missed previous deadlines in 1975 and 1977. But the amendments also toughened penalties for violations and require extensive planning efforts by states so that healthy air will be achieved by and maintained after the new

Minnesota must have a revised State Implementation Plan approved by the U.S. Environmental Protection Agency (EPA) by July 1, 1979. The plan must outline control strategies the state will use to bring each non-attainment area back into compliance with allowable health levels by Dec. 31, 1982. Nonattainment areas are those designated by EPA (based on MPCA recommendations) to be in violation of federal standards for any of five major pollutants: carbon monoxide, ozone (smog), particulates (dust), sulfur dioxide, and nitrogen oxides. There are eight non-attainment areas in Minnesota for particulates, six for ozone, four for carbon monoxide, and two for sulfur dioxide. No areas currently violate nitrogen oxide standards.

Failure to have an EPA-approved plan by July 1, 1979, could result in severe federal sanctions against the state. Federal highway, sewage treatment and air quality funds may be withheld, and construction of new air pollution sources forbidden in non-attainment

The MPCA Air Quality Division's first step in this enormous planning process was to locate all nonattainment areas. Now, staff is gathering information that will identify exactly where pollutants in each area are coming from.

Carbon monoxide and ozone originate primarily from cars and other mobile sources. For particulates and sulfur dioxide data, the MPCA will rely on an emissions inventory and an area source inventory.

Described in last month's Inside Report, the emissions inventory provides detailed data on amounts and compositions of all sources emitting 25 tons or more of any of the five major pollutants annually. The area source inventory roughly estimates the amount of pollutants generated by smaller sources, which together can contribute significantly to air quality violations. These include pollutants from heating, electricity generation, dusty roads, open burning, and fugitive industrial emissions (pollutants which escape through windows and vents). Population distribution, land-use, and energy consumption records are used in making these estimates.

Computers will be used to combine the data from the inventories with air quality monitoring data and weather records. The result will be a set of air pollution forecasts that will enable the MPCA to identify sources which need to be further controlled in order to meet health standards by Dec. 31, 1982.



PCI Must Clean Up **Shakopee Facility**

At its regular June meeting, the MPCA Board approved a stipulation agreement that could cost Pollution Controls Inc. (PCI) \$1 million if the company does not properly clean up the approximately 26,000 barrels of hazardous wastes accumulated at its now-defunct Shakopee facility.

For almost a decade, the facility collected hazardous wastes from Minnesota industries for disposal, but was finally shut down by court order in 1976 after a number of pollution violations, including a spectacular fire and explosion in 1973.

The new agreement requires the company to remove and properly dispose of all leaking barrels and all sludge and ash by the summer of 1979. All remaining barrels must be removed by June 1, 1980, and the company must also undertake an immediate soil and groundwater study to determine the extent of any pollution problems.

The agreement also calls for a \$100,000 penalty for past violations, although PCI will be required to pay only \$37,500 if the new clean-up agreement is not violated. Additionally, PCI would be required to pay the state up to \$900,000 for final clean-up if the company does not meet the agreement's deadlines.

Western Iron Range **Meets Particulate Standard**

About 500 square miles of the western Mesabi Iron Range were designated "attainment" by the MPCA Board last month, meaning the air meets federal health standards. The area previously had been designated non-attainment for exceeding particulate (dust) standards. The change was requested by Hanna Mining Co., after further study showed health levels were met. Under the non-attainment designation, industrial air pollution can be added to the area only if an offsetting reduction in pollution is made from somewhere else in the area. Attainment areas must still meet strict emission limits, so that clean air is not allowed to deteriorate. In May, the MPCA Board similarly redesignated four Iron Range townships near Aurora.

Del Monte Pays Penalty

On June 11, the MPCA Board approved a stipulation agreement with the Del Monte Corp. (of Sleepy Eye), which included a \$1,500 penalty for violations of its water quality discharge permit during last year's canning season. In July 1977, an investigation by the Department of Natural Resources and MPCA revealed that polluted wastewater was being discharged from a spray field collection pit near the company's canning facility. The discharge was made without notification of or approval from the MPCA. In addition to the penalty, the company will make a number of improvements in its wastewater disposal and spray irrigation systems to prevent recurrences of the violation.

Environment & Jobs:

Must We Trade Clean Air and Water for Employment?

In the past, various critics of tough pollution control laws have asserted that environmental regulations are shutting down industrial plants, driving Minnesotans out of work, and damaging the economy as a whole. Environmentalists have been called the "birds and bunnies crowd", dedicated to "environmental puritanism" at the cost of jobs. Industries that once vehemently resisted environmental clean-up efforts, now grudgingly admit that pollution control is a worthwhile endeavor, but insist regulatory efforts have gone too far.

Are these allegations true, or are they a form of "environmental blackmail" — that is, an attempt to discourage tough enforcement of pollution control laws by threatening workers with unemployment? What are the facts?

First, in any discussion of jobs and the environment, critics of clean-up efforts often neglect to mention that hundreds of thousands of jobs have been *created* in the pollution control field.

Second, these same critics often gloss over the fact that many plants claiming to shut down because of inability to meet pollution standards would have closed anyway because they are old and inefficient, making it not profitable to bring them up to standards. In many of these cases, a new plant is built to replace the old one or workers are transferred to a more efficient facility.

And third, critics of pollution control often inaccurately portray environmental agencies as being concerned with cosmetics and aesthetics. This ignores the fact that pollution standards were enacted to prevent threats to human health and welfare.

A study conducted by the President's Council on Environmental Quality in 1976 looked at employment in the period from 1971 to 1976. The study found that during those 5 years, about 17,000 workers were affected by shutdowns of plants that were closed at least partly for environmental reasons. However, the study notes that many of those workers were reallocated to other facilities. "The production lost from losing one facility," said the report, "is likely to be made up by increasing production at another facility."

On the other hand, the study, and others like it, have indicated an overall employment gain of at least 300,000 workers due to environmental regulations, for a net gain of 283,000.

Finally, consider the following: Minnesota, a state that prides itself on its clean and healthy environment and has one of the nation's most comprehensive pollution control programs, also happens to have one of the nation's lowest unemployment rates.



August

August 1 MPCA Board meeting, 1935 W. County Rd. B2, Roseville, 9 a.m. For agenda details call (612) 296-7283.

August 10 Regular Environmental Quality Board meeting, 9 a.m., Auditorium, State Office Bldg., St. Paul. For agenda details call (612) 296-2723.

August 11 "Solid Waste Resource Recovery Seminar," 9:30 a.m. — 3:00 p.m., Northland Community College, Highway 1 West, Thief River Falls. Cosponsored by the MPCA Region III Office and the Region I Regional Environmental Education Council. For more information, contact Willis Mattison at (218) 847-2164.

August 15 Public meeting on Vehicle Inspection/ Maintenance, Community Room, Rosedale Shopping Center, 2-5 p.m. For more information, call (612) 296-7283.

August 22 Regular MPCA Board meeting, Rochester, MN, The Little Theater, Rochester Community College, 2 and 7 p.m. For agenda details call (612) 296-7283.

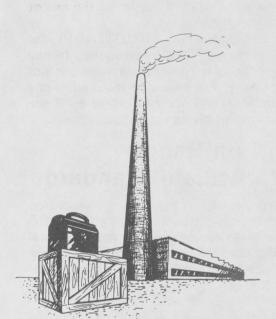
August 22-24 "National Conference on Lake Restoration," Sheraton Ritz Hotel, Minneapolis. For more information, call (612) 296-7256.

MPCA INSIDE REPORT July 1978 Vol. 2 No. 7 Published monthly by the Minnesota Pollution Control Agency, 1935 W. County Road B2, Roseville, MN 55113. All questions and comments should be sent to the Public Information Office at the above address, or call (612) 296-7284.

Minnesota Pollution Control Agency 1935 W. County Road B2 Roseville, MN 55113

Bulk Rate U.S. Postage PAID Permit No. 171 St. Paul, MN

Ms. Mary Ann McCoy, President (N) League of Women Voters of Minnesota 555 Wabasha St. Paul, Minnesota 55102



Improving the Environmental Impact Statement Process

During the 1960s, public concern over environmental deterioration steadily increased, but government agencies were slow to respond to the new national outlook. Federal actions generally emphasized economic objectives rather than the fuller range of social and environmental values. And because of the fragmentation of agency decision making, the cumulative impact of federal decisions on the environment was often overlooked.

The National Environmental Policy Act (NEPA) of 1969 made environmental protection a national goal. It was designed to incorporate environmental concerns into agency decision making and to encourage comprehensive planning and coordination of federal activities.

One of the most controversial and far-reaching provisions of NEPA is the requirement that federal agencies prepare detailed statements for all major proposals that might have "significant" impacts on environmental quality.

The Environmental Impact Statement (EIS) requirement was intended to provide full public disclosure of all significant environmental effects of a proposed federal action and to improve the analysis and comparison of alternative courses of action. NEPA's proponents hoped that if decision makers were given information on the environmental effects of alternative proposals, they would choose the action with the least adverse impact.

But, nearly a decade later, the effectiveness of EISs in federal agency performance is a hotly debated issue. Some agency personnel and applicants for federal permits claim that EISs are costly to prepare, cause delays and create mountains of paperwork. Others defend the EIS process, saying it has opened up governmental planning and decision making to public review and has led agencies to reconsider environmentally damaging projects.

This publication describes the EIS process, explores its influence on agency decision making and outlines recommendations for improvement from citizens and officials.

Implementation of the EIS process

Council on Environmental Quality

Although NEPA requires EISs on all major federal actions, the law does not provide any specific administrative means for enforcing agency compliance. In 1970 President Nixon issued an Executive Order that gave the Council on Environmental Quality (CEQ) the responsibility for issuing guidelines on the preparation of EISs. CEQ issued guidelines in 1971 and revised them in 1973; however, it did not have authority to compel agencies to adopt its rules.

In May 1977, President Carter amended the earlier Executive Order and authorized CEQ to issue legally binding regulations implementing NEPA's procedural provisions. CEQ published proposed requlations in the Federal Register on June 9, 1978. Revisions will be made after a two-month period for public comment. The final regulations will probably go into effect the summer of 1979, although some agencies may implement them earlier.

Meanwhile, over the last eight years, environmental litigants and the courts have been instrumental in enforcing the EIS requirement.

Judicial review

Public interest organizations have filed hundreds of court suits against federal agencies for failure to comply with NEPA provisions. Judicial decisions have helped shape the EIS process by resolving such questions as:

- ☐ whether a "major federal action" is involved;
- ☐ whether the action will significantly affect the environment;
- ☐ when the statement must be filed;
- □ who must prepare the statement: and
- □ what the statement must contain.

Although courts have helped make agency compliance with the EIS requirement more uniform and consistent, judicial activism has also led to the "overproceduralization" of NEPA. Agencies have reacted to many court decisions by simply adding more paper to the EIS. They have found that longer, datacrammed statements can meet the judicial tests for adequacy. Meanwhile, as the EIS drowns in a sea of minutiae, its usefulness to the public and decision makers diminishes.

However, several circuit courts of appeal have adopted the position that NEPA was intended to affect the substance of agency decisions-not merely procedures. Under this interpretation, the courts' role is not only to see that government agencies comply with the procedural requirements but to determine if an agency's decision was arbitrary and capricious when reviewed in light of the data and information supplied in the environmental impact statement. For example, in Sierra Club v. Froehlke (Trinity River-Wallisville Dam), a federal district court found that the cost-benefit analysis of the Wallisville impact statement was "arbitrary" and "clearly gave insufficient weight to environmental values." court ordered the Corps of Engineers to conduct a more thorough analysis of the proposal and alternatives.

This CURRENT FOCUS is the third in a series of four on natural resources issues made possible by grant ISP76-80983 from the National Science Foundation. Any opinions, conclusions or recommendations expressed in the publications are the LWVEF's and do not necessarily reflect the views of NSF. Coming next: a CURRENT FOCUS on agricultural land preservation.





League of Women Voters Education Fund 1730 M Street, N.W. Washington, D.C. 20036

Major steps in the process

methods for identifying actions "significantly" affecting the environ-governmental agencies and private organizations that commented ment and thus likely to require an EIS. In ambiguous cases, CEQ on the draft. They should not proceed with a proposed action until 30 suggests that an agency prepare an environmental assessment—a days after the final EIS has been released. If public or private groups brief analysis of the proposed action and alternatives and their believe that the EIS is inadequate and that the agency is irresponsive potential environmental impacts. After completing the assessment, to their concerns, they may seek a court review. the agency should inform interested public and private groups of its intention to prepare or not to prepare an EIS.

Scope Once an agency has decided that a certain action requires an impact statement, it must choose either to prepare an individual Since the passage of NEPA, many government officials and aca-(site-specific) or broad EIS. Broad-scale EISs may cover several projects within a geographic area, basic agency policy or generic agency planning and decision making. Some of the impacts they (resource-life cycle) activities.

Timing The environmental assessment process should start as Increased awareness of environmental issues The EIS process

federal agency with overall responsibility for a proposal must inde-statements. pendently evaluate and verify all information. A 1975 amendment to Increased opportunities for public involvement in agency plan-NEPA also allows state agencies to prepare EISs on federally funded projects, if the appropriate federal agency participates in the have given citizens an opportunity to suggest changes and alternapreparation and agrees to use the statement. Congress has autives that must be considered in the final impact statement. Some thorized local governments to prepare EISs in only one case: the agencies have invited citizens to help identify impacts and alterna-Community Development Block Grant Program administered by the tives even earlier in the planning process. If citizens are dissatisfied Department of Housing and Urban Development (HUD). Cities can prepare impact statements on proposals for these grants since The threat of judicial intervention has been a powerful bargaining they-not HUD- approve how the funds are spent.

Content The major components of the EIS are descriptions of public participation programs. alternative proposals and their positive and negative impacts. Agen- A more balanced approach to agency planning The impact cies must use an interdisciplinary approach to ensure that relevant statement procedure has helped achieve a better balance between economic, social and environmental factors are considered.

Interagency review Draft EISs must be circulated among federal, state and local governmental agencies at least 90 days before a project is started. Agencies have 45 days to comment on the statement and may request a 15-day extension. EPA is the only agency with a statutory responsibility, through section 309 of the Clean Air through the process of evaluating alternatives, agencies have rede-Act, to review all draft EISs and to comment on them in writing. If EPA or any other agency finds a proposed federal action environmentally unsatisfactory, it refers the action to CEQ, which works with the agencies consider in the future. sponsoring agency to help find a solution.

Public review Most agencies publicize the availability of the draft

Exemptions from NEPA

Court rulings have made it clear that NEPA applies to all federal agencies; nevertheless, certain federal actions have been exempted from the law's requirements.

☐ The Federal Water Pollution Control Act of 1972 and the Clean Air Act of 1970 have provisions that exempt EPA from having to file EISs on environmental standards and regulations. Many members of Congress felt that EPA was already implementing the environmental protection mandate of NEPA and that the time-consuming EIS requirement would slow progress in meeting many of the deadlines spelled out in the clean air and water acts.

EPA does prepare EISs on nonregulatory actions, including new source water discharge permits, wastewater treatment works, construction grants, research and development projects (excluding water), building construction and legislative proposals. The agency also prepares EISs voluntarily on certain requlatory actions such as designating ocean dumping sites and limiting the use of a pesticide. EPA administrators feel that EISs on these regulatory actions and others are useful to decision

☐ Projects funded with revenue sharing funds are also exempt from NEPA. And, in rare cases, courts have exempted "emergency" actions and "sensitive" military operations.

EIS and give citizens 45 days to comment on the statement. Some conduct public meetings, workshops or hearings.

Environmental assessment Each federal agency should develop Final EIS Agencies file the final EIS with EPA and send it to all

Impact of the EIS process

demicians have tried to determine the effects of the EIS process on have identified are described here.

soon as federal officials begin to contemplate an action and should has forced federal agencies to give the general public information be conducted along with preliminary economic and technical about the environmental consequences of government actions. Many environmental issues, such as nuclear power and the Trans-Preparation Although private consultants can prepare EISs, the Alaska pipeline, have also been publicized as a result of impact

> ning and decision making Hearings and meetings on draft EISs with an agency's final EIS, they can challenge the statement in court. tool for citizens, causing agencies to put increased emphasis on

> economic, environmental, social and other public interest considerations in agency planning. Many federal agencies have established interdisciplinary teams to evaluate projects and conduct im-

> More analysis and consideration of alternatives By going signed or relocated projects to minimize environmental impacts. Examining alternatives has also expanded the range of actions that

> Improved interagency coordination The EIS process has improved coordination and communication among federal, state and local agencies. By consulting with other government agencies early in the planning process, an agency proposing a project can avoid conflicts or duplication.

> Delays Critics of NEPA have complained that the EIS process slows decision making and delays important projects. In the early years of NEPA implementation, delays sometimes resulted from a backlog of pre-NEPA proposals subject to EIS requirements and from agency failures to conduct environmental analyses along with other necessary studies. However, CEQ's 1977 Annual Environmental Report indicated that serious delay problems have now diminished. The General Accounting Office also reported in 1977 that proper administration of NEPA did not cause delays.

> Increased costs Actual costs vary with the scope of a project and are sometimes difficult to determine because EIS preparation is often combined with other planning analyses. Critics believe that preparing EISs has added too much to the costs of federal activities. For example, when a court decision forced the Bureau of Land Management (BLM) to prepare 212 EISs for capital improvements on 150 million acres of public rangeland in the West, the agency put the total costs at more than \$100 million—an amount equal to 10 times the annual BLM expenditures for such capital investments during an average year in the early 1970s. Some Interior officials maintained the money could have been better spent on the range improvements themselves. Other officials, however, felt that planning studies, including environmental assessment, were needed before the projects could proceed.

A 1976 CEQ study shows that EIS costs usually account for only about one percent of project costs.

Overall impact on federal decision making

Whether or not the EIS process has significantly influenced substantive programs and policies of federal agencies is difficult to assess. An early 1973 study of NEPA implementation by the Corps of Engineers and the Soil Conservation Service reported that the EIS process had some effect upon only six percent of each agency's authorized projects between 1970 and 1973. In 60 to 70 percent of these cases, the effect was simply postponement rather than cancellation or significant change. Survey results also indicated that public opposition and judicial decisions were the most significant reasons for all project changes attributed to the EIS process; agency review and evaluation of the environmental consequences of these projects played a minor role by comparison. The researchers concluded that the EIS procedure had produced some negotiated reduction in environmentally controversial activities but little change in the agencies' programs and priorities as a whole.

In a more recent study funded by the National Science Foundation, social scientists focused on how the EIS process has influenced the communication of environmental information among major decision makers and interested citizen groups in the Lake Powell region of the Southwest. After conducting a detailed analysis of the EIS prepared for the Kaiparowits power project, researchers concluded that the EIS process had not fostered environmentally sensitive decisions on energy development in the region. While many public interest groups participated, the electric power industry and other development-oriented interests dominated the process. Because citizen groups lacked the resources and expertise to counter their influence, these companies were able to use the EIS process to legitimatize and promote their energy projects. The scientists concluded that the EIS is more an instrument that political actors can use to achieve their own goals than an instrument for providing decision makers with information that will improve their decisions.

A 1976 CEQ report gave a more favorable analysis. This study, which systematically analyzed the experience of 70 agencies over six years, described many major federal projects that were modified or dropped because of environmental impacts identified through the EIS process. For example, the environmental review of the 800-mile Trans-Alaska pipeline prompted important design changes and improvements in routing and construction techniques. Two major radioactive waste disposal proposals of the former Atomic Energy Commission were cancelled because of uncertain environmental impacts identified by AEC and public groups through the environmental assessment process. The CEQ analysis also stated that most federal agencies with major EIS responsibilities have reported that the process is an important aid in planning and decision making.

While the EIS process has certainly affected many federal activities, it has not thoroughly succeeded in superimposing an overall policy framework of environmental values on agency decisions. Why hasn't the EIS reformed agency planning and decision making to a greater degree?

- ☐ First, the EIS process presumes that there is a range of reasonable alternatives to any proposal, which an agency can identify and rationally analyze. But an unbiased and timely analysis of alternatives is difficult to achieve. Proposals are indicators of agency commitments as well as statements of agency skills and potentials. Agencies have little motivation or capability to analyze alternatives they cannot or do not want to carry out.
- ☐ Second, judicial enforcement of the EIS process has caused many agencies to emphasize procedure over substance. Agencies are often more concerned about preparing EISs that will stand up in court than statements that are useful to decision makers.
- ☐ Finally, the lack of support for NEPA's mandate by high level agency officials, the Executive and Congress, has limited the effectiveness of the EIS process. For example, top administrators have often been unwilling to ask for additional funds or reallocate resources to ensure full compliance with EIS requirements.

Assessing environmental impact

Professionals use a variety of analytical techniques to assess the economic, social, political and environmental impacts of a proposed government program or new technology. Below are four of the impact assessment techniques described at a National Science Foundation (NSF) conference.

Delphi or consensus forecasting is a method used to obtain the collective judgment and opinion of a panel of experts on alternative futures. For example, a researcher selects a panel of experts to estimate the year when U.S. coal reserves will be depleted. Instead of having the experts meet in a group, where psychological and social pressures might influence their options, the researcher gives each expert a series of individual questionnaires. After each questionnaire, the researcher summarizes the responses of the panel and sends these results to each member. He or she then asks the experts to make new estimates based on the feedback and to give reasons for their judgments. Through this process, the panel arrives at a collective judgment on what year the country will run out of coal. They may also be asked to develop a list of prospective consequences that might result from such a forecast

Matrix displays summarize the actions and the related impacts associated with a program; they provide a checklist and guide to preparing and reviewing environmental impact statements. For example, the U.S. Geological Survey (USGS) has developed a matrix to analyze in detail the impact of typical agency activities on water quality. Activities are listed across the top of the matrix; potential impacts are listed under each activity; and below each mpact are written numbers indicating the magnitude and importance of that activity's impact on water quality. In general, matrices can present a large number of individual impact evaluations in a short and comprehensible form.

Modeling is a method of establishing mathematical or physical relationships among key variables in an environmental system. For example, NSF-funded scientists at the University of Wisconsin developed a model to quantify the environmental impacts associated with alternative electrical demand and generation forecasts. The model provided an understanding of the environmental consequences of a regional energy system and served as a tool for long-range planning by private and government organi-

Survey procedures are used to collect public views on proposed government projects. For example, scientists have obtained public reactions to environmental impacts through mail questionnaires and cable TV.

Improving the EIS process

In its February 1977 report, Environmental Impact Statements, the Commission on Federal Paperwork made recommendations on how to improve the EIS process, including a recommendation that the President should require all federal agencies to develop consistent regulations and definitions and assure coordination among federal agencies in EIS preparation. One month later, President Carter issued Executive Order 11991, requiring agencies to conform with new CEQ regulations and stressing CEQ's coordinating responsibili-

Before issuing new regulations CEQ held public hearings in June 1977 to solicit suggestions on how to improve implementation of NEPA. The League of Women Voters and other concerned organizations, individuals and public officials testified on ways to make the EIS process more useful to decision makers and the public, to reduce paperwork and to emphasize the need to focus on real environmental issues and alternatives.

CEQ's June 9, 1978 draft regulations on NEPA incorporated many of the public's suggestions, including these major innovations:

Format and content Old CEQ guidelines on EIS preparation outlined eight subject areas to be covered in an impact statement. The new regulations suggest a briefer format covering three major topics: alternatives, including the proposed action; environmental consequences; and the environment that will be impacted. The EIS should present the proposed action and the alternatives in comparative form and identify the environmentally preferable alternatives. Each EIS should also include a summary outlining major conclusions, areas of controversy and the issues to be resolved. Statements are to be "analytic" rather than "encyclopedic," normally running less than 150 pages (300 pages for proposals of unusual scope or complexity).

Scoping After an agency decides to prepare an environmental impact statement, it begins a "scoping" process, which may include a meeting with affected federal, state and local agencies and interested members of the public to determine the scope of the EIS and to differentiate between issues requiring in-depth analysis and those meriting little discussion. At this meeting the agency proposing the action may set time limits for the EIS process.

Tiering Agencies are encouraged to prepare broad EISs on major policy matters and then, once the basic policy choice has been made, prepare more detailed site-specific impact statements on separate actions. Issues discussed in the broad impact statement do not have to be repeated in specific project statements. Such tiering eliminates redundancy and unnecessary paperwork.

Joint EISs Where states and localities have environmental impact statement requirements in addition to those in NEPA, federal agencies must cooperate with state and local agencies to produce a joint impact statement that will satisfy all applicable laws.

Record of agency decision At the time a program or project is adopted, an agency must produce a public record showing how the EIS was considered and used by the agency in its decision making. If an alternative other than the environmentally preferable one was chosen, the agency must explain why. The record must also state what measures were adopted to minimize environmental harm and specify a monitoring and enforcement program to ensure implementation of these measures.

More public participation The draft regulations mandate greater agency efforts to assure public involvement in the EIS process. These include multiple public notice procedures, public attendance at the scoping meetings, and public hearings when substantial controversy surrounds a proposed action.

Delaying action An agency considering a permit or funding application from a nonfederal entity must maintain the environmental "status quo" until it makes a decision on the application. If the agency has not yet issued a decision and is aware that the applicant is planning to take preparatory action or limit the choice of reasonable alternatives, it must notify the applicant that its application may be rejected if the preparatory action is taken before a decision has been made.

Environmental groups, state and local governments and many federal officials, have praised CEQ's efforts to streamline and improve the EIS process and generally support the new regulations. However, some federal agencies believe that they are too inflexible and that certain requirements, such as scoping, should be optional. They are also concerned about the requirement to explain to the public their reasons for not selecting an environmentally preferable alternative in certain cases. Other government officials are worried that the shortened EIS may not be sufficiently detailed to meet a court test for adequacy.

After CEQ receives additional comments during the 60-day public review period, modifications will be made in the regulations. The Council will then issue final regulations and agencies will have 6 to 8 months to develop procedures for implementing them. Future court cases will help clarify the exact meaning, legality and authority of the regulations once they are in effect.

Plugging into the EIS process

If a housing complex, highway, power plant or other major development is planned for your community, an EIS may be required under federal or state law. To determine if an EIS is required, find out if a federal or state agency must grant a permit or approval or will provide financial assistance. Then inquire whether that agency plans to assess the potential environmental impacts of the project.

If you think the project will have significant impact on your community, you should request that the federal or state agency involved do an FIS

Through the EIS process citizens should have opportunities to comment on the proposed project and suggest alternatives. An agency may have public meetings, workshops or hearings (public interest groups may want to work with agency officials to help structure the citizen participation program). When an agency circulates the draft EIS for public review, citizens have 45 days to submit written comments. An agency must consider these comments in the final FIS

Sources

National Science Foundation Studies

Cortner, Hanna J., A Case Analysis of Policy Implementation: The National Environmental Policy Act of 1969, Institute of Government Research, University of Arizona, May 1975.

Buehring, W. A. and Foell, W. K., "A Model of Environmental Impact of Wisconsin Electricity Use," *Energy Systems and Policy Research Report No. 6,* Institute for Environmental Studies, University of Wisconsin, Madison, Wisconsin, November 1974.

Environmental Impact Assessment, edited by Marlan Blissett, Engineering Foundation, 1975.

Ingram, Helen, et. al., *Institutional Framework for Environmental Assessment and Planning*, a final report in a series from the Lake Powell Research Project funded by the National Science Foundation, November 1977.

Related materials

Anderson, Frederick R., *NEPA in the Courts: A Legal Analysis of the National Environmental Policy Act,* The Johns Hopkins University Press, Baltimore, 1973.

Andrews, Richard N. L., *Environmental Policy and Administrative Change*, Lexington Books, D.C. Heath and Company, Lexington, Massachusetts, 1976.

Environmental Impact Statements: An Analysis of Six Years' Experience by Seventy Federal Agencies, Report of the Council on Environmental Quality, March 1976.

Environmental Quality—1977, Eighth Annual Report of the Council on Environmental Quality, U.S. Government Printing Office, Washington, D.C., December 1977.

The Environmental Impact Statement, (CEQ-77-99), Report to the Committee on Environment and Public Works, U.S. Senate, from the U.S. General Accounting Office, August 9, 1977.

The Environmental Impact Statement Process Under NEPA. A manual prepared by the Environmental Law Institute for a conference held in Washington, D.C., November 7 - 8, 1977.

Researched and written by Marjorie Beane, LWVEF natural resources staff specialist.

Printed on paper recycled from 100% consumer scrap.

The promises and perils of weather modification

By Fitzhugh Green

Washington
On July 12, 1946, Vincent
Schaefer, a General Electric Co.
laboratory assistant, exhaled deliberately into a three-cubic-foot
deep-freeze unit that he had lined
with black velvet. His breath made

ing silver iodide into the sky from long-barreled rifles and rockets the Russians and Americans have a similar technique - to cause additional hailstones to form so none will become so large as to inflict crop breakage, of which \$1 billion worth occurs annually worldwide.

gy conversion program. This is a new unperfected method to obtain energy by exploiting the temperature difference between surface and deep water. Man-generated pollutants such as carbon dioxide and dust may be inadvertently changing weather and climate. The former may be building up



Partially Scanned Material

The remainder of this page/item has not been digitized due to copyright considerations. The original can be viewed at the Minnesota Historical Society's Gale Family Library in Saint Paul, Minnesota. For more information, visit www.mnhs.org/library/.

League of Women Voters of the United States 1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 296-1770



memorandum

September 1, 1978

TO: State NR or EQ Chairmen (Memo only to State Presidents)

FROM: Tess McNulty, Natural Resources Coordinator

For several years now, national EQ chairmen have tried to assist state EQ leaders by periodic mailings of pertinent information—both League and non-League. I am happy to continue this custom because I know from my years as Colorado NR and Water chairman how important it is for Leagues at all levels to keep in touch with one another. Let me take this opportunity to invite you—and the local League NR chairmen within your states—to let me know your suggestions for improving the flow of information within the League "EQ network"; please feel free, too, to offer ideas about how the NR Committees and the staff can best assist you in handling your responsibilities.

First, let me bring to your attention an opportunity for Leagues to comment on one of our longest-standing concerns—public participation. Last March, my predecessor on the Board, Jean Anderson, sent you a memo and a "concept paper" developed by EPA's Office of Water and Hazardous Materials on public participation in OWHM programs. From the many comments submitted on that concept paper, OWHM has prepared proposed public participation regulations. These appeared in the Federal Register on August 7 (the wheels of bureaucracy grind slowly). Comments on these proposed regulations can be submitted through October 6. And, in a special effort to accommodate public response, EPA has established a toll—free telephone number to enable citizens to obtain further information on the regs or to submit oral comments. Details on this service are on page 2 of the enclosed rules.

The other enclosures in this mailing are FYI. They include:

- --A discussion of the highlights of the 1977 Clean Water Act, the LWVEF's Letter of the Law. Make sure you check the spring 1978 catalogs (For members and leaders) for other recent additions to the MR publication listings.
- -- The list of state and local League natural resources projects (not funded through the LWVEF) developed from your responses to our questionnaire.
- --The LWVUS's comments to the Council on Environmental Quality on proposed regulations for preparing Environmental Impact Statements. In connection with this, you should all have received by now the recent LWVEF publication, Improving the Environmental Impact Statement Process.
- --An EPA press release and fact sheet explaining the final regulations on Prevention of Significant Deterioration, issues in response to the 1977 Clean Air Act Amendments.

and

--A clear, concise explanation of our nation's hazardous waste problems and the available legal remedies, prepared by the Environmental Action Foundation.

If you have any comments on the content of this packet—or suggestions about inclusions in future mailings—please drop me a line. I look forward to working with all of you in the years ahead.

M TO: Mary P. LEAGUE OF WOMEN VOTERS OF MINNESOTA 555 WABASHA E FROM: HELENE ST. PAUL, MINNESOTA 55102 PHONE: 224-5445 DATE 12/11/78 SUBJECT Did a Diana Lyuch (?) call you about a cont. on amviron. regulations ? Chamber of Commerce I think, Helene - yes she diel - she is going to send me info as they formulate it. Mary P