

A. A. P. S. E. NEWSLETTER

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Vol. 5, No. 3

April, 1970

Message from the President	2
Editor's Comments	2
AAPSE Activities at Purdue	3
University of Texas Appointments	3
5th Annual AAPSE Workshop	4
Hearings Set for Pollution Program	5
Nelson Broadens Pesticide Attack	7
DDT Plant Contaminates	8
Environmental Health Service	9
5th International Conference	10
Benefit Risk Analysis for DDT	10
GAO Comments on FWPCA	12
Selected References in Ecology	12
Programming in Water Resources	13
Nixon Appoints Environmental Council	13
Industrialist Doubts Willingness	14
Conflicts in Water Resources	14
Conspiracy Pollutes Air	15
Florida Power & Light Case	16
Environmental Center at Georgia Tech	16
\$20-Billion per Year & Population	17
Move at a Reasonable Pace	17
Real World Decisions Stressed	18
Coastal Zone Management Symposium	19
Position Sought	19
Urban Water Systems	19
AAPSE Committees for 1970	20

A MESSAGE FROM THE PRESIDENT

As the NEWSLETTER is rushing to press prior to the Purdue Conference, my message will be quite brief. I will have more to say at Purdue.

First, remember the meetings AAPSE has scheduled at Purdue: (1) the Board Meeting at 1:00PM Monday at the Campus Inn, (2) the Seminar at 8:00AM Tuesday in Room 311 of the Purdue Memorial Center, and (3) the General Meeting at 8:00PM Tuesday in Room 214 of the Purdue Memorial Center. [More details are given elsewhere in the Newsletter.]

You will recall that I contacted you in early March regarding the Bureau of Water Hygiene budget hearings. These hearings were scheduled for early March. The FY 1971 request was 13% less than this year. I suggested that you contact your representative, especially if he was on the House Appropriations Subcommittee, and request a 100% increase!

These hearings were postponed and are now scheduled for early May. I have been invited to testify before the Subcommittee regarding this matter of great importance to AAPSE and the public. As there is some time left before these hearings, I feel that it is urgent that you contact your congressman. Call him and follow up with a letter. My appearance and testimony will certainly be more effective if it is clear that the AAPSE membership is behind me.

H.R. 4148 has passed and been signed into law. There is quite a bit of money involved for activities in which AAPSE is very much interested. Suggestions and ideas are being solicited from us; AAPSE can and must have a significant input in this matter. This will probably be discussed at Purdue. Your comments are needed.

And finally, don't forget the Fifth Annual AAPSE Workshop to be held in June. The topic is "Consulting Sanitary Engineering Practice" and should be of interest to many of us.

EDITOR'S COMMENTS

I would like to thank the various officers, directors, committee chairmen, and members of Newsletter Committee who contributed items for this issue. In addition to the AAPSE membership the A.A.P.S.E. NEWSLETTER is distributed rather widely to many individuals and agencies that are vitally concerned with our profession. If you have items of interest, announcements, new programs, publications available, personnel additions and changes, positions open, positions sought, new ideas, or whatnot, let me know. Whatever is appropriate and deemed to be of wide interest and service to AAPSE and its members will be considered for inclusion in the newsletter. The depth and breath or coverage will depend on your continued assistance and cooperation. I will accept hand-written notes, neatly typed releases and announcements, Xerox copies of items from other sources, newspaper clippings, or anything else. I would appreciate your sending these in as they are encountered to prevent the last-minute fight to meet a deadline. I solicit your comments as well as your contributions.



B. C. Dysart, Editor

A.A.P.S.E. ACTIVITIES AT PURDUE

Please plan to attend the Purdue Industrial Wastes Conference, and mark your calendar now for the following important AAPSE meetings:

BOARD MEETING

(Monday, May 4, 1970, 1:00 PM)

Meeting of board of directors and committee chairmen will start at 1:00PM in the Junior Senate Room of the Campus Inn, 1920 Northwestern Avenue, Lafayette, Indiana [317 743-3886]. Lunch will be at noon. Board members are requested to contact your committee chairmen and arrange for a written or oral report at the Board Meeting. It is desirable that as many committee chairmen as possible be present to become better acquainted with AAPSE activities and to discuss their own committee's activities.

A.A.P.S.E. SEMINAR

(Tuesday, May 5, 1970, 8:00 AM)

Seminar is under the direction of Dr. Larry Canter and will meet from 8:00 - 9:30 AM in Room 311 of the Purdue Memorial Center. The topic is "Content and Preparation of an Operations and Processes Laboratory Manual Sponsored by AAPSE." Dr. J. H. Austin will moderate the panel discussing this matter. The fourth draft of the "Sanitary Engineering Graduate Education Training Needs and Policy Recommendations" will also be discussed.

A.A.P.S.E. GENERAL MEETING

(Tuesday, May 5, 1970, 8:00 PM)

The general meeting of AAPSE will be from 8:00 - 10:00 PM in Room 214 of the Purdue Memorial Center. All members, prospective members, and guests are invited to attend this session. The speaker will be Mr. James H. McDermott, P.E., Director, Bureau of Water Hygiene, U.S. Public Health Service. His topic will be "Research and Training and the Bureau of Water Hygiene." This should be very interesting and informative. It is hoped that you will be present for this session.

UNIVERSITY OF TEXAS APPOINTMENTS

As of April 1, Dr. Earnest F. Gloyne accepted the Deanship, College of Engineering, of the University of Texas, Austin. Dr. Gloyne has also recently become a member of the National Academy of Engineering.

Dr. Joe Malina, Jr., of the Civil Engineering Department, the University of Texas, Austin, Texas, has been named Program Director of the Environmental Health Engineering Program. Dr. Gus Fruh will be the Graduate Advisor for the EHE Program.

UNCOMPLICATOR

When you dump 732,000 zillion tons of slime and glug into a shallow depression, you get Lake Erie.

(Conservation News)

Another fine A.A.P.S.E. workshop has been scheduled by Ray Kipp, Wes Pipes and their committee for June 24 - 26, 1970 at Brown's Lake Resort, Burlington, Wisconsin. The theme of the workshop is "CONSULTING SANITARY ENGINEERING PRACTICE." Cooperating with AAPSE are The Technological Institute of Northwestern University and the College of Engineering at Marquette University.

A social hour will be held Tuesday evening the 23rd. Participants and their topics are presented below. For more information, contact Professor Raymond J. Kipp, Department of Civil Engineering, Marquette University, Milwaukee, Wisconsin 53233.

(Wednesday, June 24)

Session I LEGAL AND FINANCIAL ASPECTS OF CONSULTING PRACTICE

Roy F. Weston, "Legal Aspects of Engineering Practice in Different States"

Harvey F. Ludwig and Robert White, "Organization, Financing, and Ownership of an Engineering Firm"

Lorin E. Woodman, "Problems of a Small Consulting Firm"
Discussion

Session II ORGANIZATION AND MANAGEMENT OF A CONSULTING FIRM

William O. White, "Management of a Consulting Firm"

D. H. Lillard, "Effective Use of the Time of Engineers and Technicians"

C. I. Harding, "Communications with the Client"

Discussion

(Thursday, June 25)

Session III TECHNICAL ASPECTS OF TREATMENT PLANT DESIGN

Clair N. Sawyer, "Basis for Treatment Plant Design"

John L. Mancini, "Use of Laboratory Data in Treatment Plant Design"

James P. Naismith, "Practical Considerations in the Design of Water and Wastewater Treatment Plants"

Discussion

Session IV MEETING STATE AND FEDERAL STANDARDS

M. D. R. Riddell, "Designing on the Basis of the Ten State Standards"

Blutcher A. Poole, "Water Quality Criteria and Effluent Standards"

D. W. Ryckman and George M. Barsom, "Performance Standards for Treatment Plants"

Discussion

(Friday, June 26)

Session V THE PROFESSOR AS A CONSULTANT

H. S. Smith, "Consulting Experience as a Background for Teaching"

Philip H. Jones, "What is an Academic Question?"

John L. Cleasby, "Application of Research Results to Design"

Discussion

Session VI THE ACADEMIC-CONSULTING RELATIONSHIP

B. B. Ewing, "Education for Engineering Practice"

Paul H. Woodruff, Conference Summary

LENGTHY HEARINGS SET FOR PRESIDENT'S 14-POINT WATER POLLUTION PROGRAM

Lengthy and thorough hearings on the 14-point water pollution control program proposed by President Nixon as part of his Environmental Message to Congress last month have been promised by Sen. Edmund S. Muskie (D-Me.), chairman of the Subcommittee on Air and Water Pollution. The hearings will begin during the last two weeks of April, and will include testimony on counter proposals expected to be introduced before then by Muskie and others concerned particularly with the funding aspects of waste treatment plant construction. Summary of the President's proposals follows:

President's 14-Point Water Pollution Control Program

(1) Financing. Provides \$4-billion in Federal funds to help finance a 4-year, \$10-billion program for construction of municipal waste treatment plants. Total of \$1-billion in Federal dollars would be provided under grant agreement for each of four fiscal years starting July 1, 1970. This is \$200-million more than proposed by Nixon in his FY 1971 budget request, but \$250-million less than already authorized by Congress in existing legislation. There would be reassessment in 1973 of further needs for subsequent years.

(2) Environmental Financing Authority would be established to help cities and states finance remainder of \$6-billion program. President said that "condition of the municipal bond market is such that, in 1969, 509 issues totaling \$2.9-billion proved unsalable. If a municipality cannot sell waste treatment plant construction bonds, EFA will buy them and will sell its own bonds on the taxable market. Thus, construction of pollution control facilities will depend not on a community's credit rating, but on its waste disposal needs."

(3) Statutory formula governing allocation of grants for treatment plant construction should be revised "to permit construction of plants where need is greatest and where greatest improvements in water quality will result." Existing formula penalizes high income states as California, Maryland, New York, and Ohio, which also have large population concentrations and related sewage loads. Under proposed Nixon formula, 60% of Federal money would continue to be distributed under present formula based on population and financial need. However, allocated but unused funds would be redistributed to other states more quickly. Interior Secretary would distribute another 20% on basis of relative severity of pollution problems of the various states and their ability to use such money to fulfill a basin-wide abatement plan. Remaining 20% would be distributed on states' agreements to pay 25% of cost of all projects receiving construction grants during fiscal year. To encourage states to obligate funds allocated to them, the formula would be amended to provide that a state not receive more Federal grant funds than were obligated in the state in the previous fiscal year, unless the state filed an acceptable plan requiring greater financial assistance in the current year.

(4) Federally-assisted treatment plants must be built to prescribed design, operation and maintenance standards, and operated only by state-certified operators.

(5) Municipalities receiving Federal assistance must impose users fees on industrial users sufficient to meet costs of treating industrial wastes.

(6) Projects receiving Federal aid must be part of comprehensive river basing or regional water pollution abatement plan to ensure that the treatment plants will in fact contribute to effective cleanup of entire river systems. Collection of existing data on pollution sources and development of effluent inventories will permit systems approaches to pollution control, the President stated.

(7) Construction of large-scale, regional treatment facilities should be encouraged to provide economies of size and give more efficient, more thorough waste treatment.

(8) Federal-state water quality standards should be amended to impose precise effluent requirements on all industrial and municipal sources. These would be based on an "expeditious timetable, with the limit for each based on a fair allocation of the total capacity of the waterway to absorb the user's particular kind of waste without becoming polluted."

(9) Violation of established effluent requirements would be considered "sufficient cause for action."

(10) Secretary of Interior would be empowered to proceed more swiftly in enforcement actions, and given "new legal weapons including subpoena and discovery power."

(11) Failure to meet established water quality standards or implementation schedules would be made subject to court-imposed fines of up to \$10,000 per day.

(12) Secretary of Interior would be authorized to seek immediate court injunctions through Attorney General "where severe water pollution threatens imminent danger to health or irreversible damage to water environment."

(13) Federal pollution control authority would be extended "to include all navigable waters, both inter- and intra-state, all interstate ground waters, U.S. portion of boundary waters, and waters of the Contiguous Zone." Latter extends 9 miles beyond the 3-mile limit. Interior Secretary Walter J. Hickel has also asked that Federal jurisdiction be expanded to cover "the high seas when they are contaminated by U.S. discharges."

(14) Federal operating grants to state pollution control enforcement agencies would be tripled over next 5 years -- from \$10-million now to \$30-million in fiscal 1975 -- to aid them in meeting the new responsibilities that stricter and expanded enforcement will place upon them.

(Clean Water Report)

NELSON BROADENS PESTICIDE ATTACK

Faced with the painful reality that nothing short of a legislative demand will force the Department of Agriculture and the pesticide industry into pumping the persistent pesticides in favor of safer chemical and nonchemical controls, Wisconsin Senator Gaylord Nelson introduced a package of eight bills to prohibit the interstate sale and shipment of eight insecticides in the chlorinated hydrocarbon insecticide family--aldrin, chlordane, DDD/TDE, dieldrin, endrin, heptachlor, lindane and toxaphene. These proposals are similar to a bill he sponsored last year to ban DDT.

"The long-term toxicity of chlorinated hydrocarbon pesticides presents a deadly threat to fish, wildlife and the overall quality of the environment," Nelson said. "Evidence of environmental damage caused by hard pesticides has been found in nearly every part of the globe. Yet no significant action has been taken to stop pesticide pollution."

"The Agriculture Department's plan to cancel certain uses of DDT never even got off the ground before the pesticide industry initiated a complex series of appeals that could delay final action for years," he charged.

Under the Agriculture Department's regulations, manufacturers who appeal a cancellation order can continue to produce and sell pesticides until the appeal is resolved.

"It looks like the Department played right into the industry's hands by failing to use its statutory authority to suspend certain uses of DDT before starting the cancellation proceedings," Nelson added. "If the Department is serious about protecting the quality of our environment from pesticide poisoning, it should move without further delay and immediately suspend all nonessential uses of DDT."

Nelson said that the pesticide industry's "continued resistance to reform coupled with the Agriculture Department's historical hesitancy to act makes it mandatory that legislative deadlines be set for banning persistent pesticides."

Seven years ago, a Presidential Science Advisory Committee concluded that the goal of all national efforts should be the "elimination of the use of persistent toxic insecticides."

This recommendation was confirmed by the recent Department of Health, Education and Welfare Commission report which urged restrictions on persistent pesticides hazardous to human health or environmental quality.

Nelson said that neither the Agriculture Department nor industry appears willing to mount an all-out effort to improve alternative means of pest control. "The Agriculture Department has admitted that its programs to develop better nonchemical means of pest control were underfunded by at least \$4 million last year," he said.

There is no indication in the Department's budget for the coming year that any substantial increase in funds will be available for expanded research in the fields of biological pest control, hormonal techniques, natural plant resistance and cultural control, Nelson said.

(CONSERVATION NEWS)

DDT PLANT CONTAMINATES NATIONAL WILDLIFE REFUGE

The National Wildlife Federation condemned contamination of Wheeler National Wildlife Refuge by DDT from the Olin-Mathieson Chemical Corporation's plant at the Army's Redstone Arsenal near Huntsville, Alabama. Operating in public facilities leased from the Department of the Army, the plant is responsible for a substantial portion of the total U.S. production of DDT. Its DDT-laden effluent is discharged into a small stream and eventually finds its way into the Wheeler Refuge, an important wintering area for more than 100,000 ducks and geese.

The Federation's staff investigators unearthed a little known 1964 study by the U.S. Bureau of Sport Fisheries and Wildlife which found wildlife on the Refuge containing up to 199 parts per million DDT in muscle tissue and 1,603 parts per million in fat. Recent attempts by the Federal Water Pollution Control Administration to force the plant to eliminate all DDT discharges received strong support from the BSFW, the State of Alabama and, reportedly, even from the Commanding Officer at the Redstone Arsenal. These recommendations were apparently rejected by high Washington officials of the Department of the Army, its real-estate agent the Corps of Engineers, or both, and the DDT keeps pouring into the Refuge.

In a letter of protest to Assistant Secretary of the Interior for Water Quality and Research Carl L. Klein, Federation Executive Director Thomas L. Kimball said, "In the face of the Administration's supposed concern about DDT and the other persistent pesticides and pollution from Federal facilities in general, it is somehow macabrely ironic that a public facility managed by the Department of the Army continues to contaminate one of the public's National Wildlife Refuges."

'BOY, YOU HAD ME WORRIED FOR A MOMENT THERE—I THOUGHT YOU SAID THREE TO FIVE YEARS!'



ENVIRONMENTAL HEALTH SERVICE ORGANIZED AT HEW

The new Environmental Health Service at HEW has finally been created, effective February 1. Air pollution retains essentially the same status.

At the top is the Administrator (C.C. Johnson), Deputy Administrator (Dr. John Hanlon) and Associate Administrator (Albert H. Stevenson). Below that level is an associate administrator for air pollution control (Dr. John T. Middleton) and an associate administrator for environmental programs now in the Environmental Control Administration, although an exact title has not yet been designated (Chris Hansen, until his retirement March 1).

Four programs are retained: radiological health, occupational safety and health, solid waste management and water hygiene. The Bureau of Community Environmental Management headed by Robert Novick has been abolished and its programs and personnel will be transferred to other programs in EHS.

All of the current Assistant Administrators -- Joseph Lieberman, Jerrold Michael and Edwin R. Lannon -- retain those offices in EHS, as does Alvin F. Meyer, Jr., for legislation. Field operations remain essentially intact, reporting directly to the Administrator as at present, although it has not been decided whether the successor agency to ECA will have its own reps in all regions. The policy may vary.

In general, it is the same organization minus FDA. But one important change puts all staff services of the categorical programs (radiological, occupational, etc.) at the EHS level. For example, a public information or legislative rep for those programs will henceforth be reporting directly to the chiefs in EHS rather than to the Bureau chiefs as at present.

Johnson and his staff made a strong pitch for inclusion of the National Institute of Environmental Health Sciences in North Carolina as part of EHS, but this was rejected by HEW. Now the Task Forces must get to work on the organizational details.

Meanwhile, HEW announced the organization of the Office of Dr. Roger Egeberg, Assistant Secretary for Health and Scientific Affairs. In addition to Surgeon General Jesse L. Steinfeld, it provides for six deputy assistants, including one for Environmental Health and Prevention of Disease Problems. Others are for research and development, health manpower, health services, family planning and child health, and regional activities and intergovernmental relations.

Dr. Paul Q. Peterson has been designated Acting Deputy Surgeon General. The announcement was made by Dr. Steinfeld at a retirement party for Dr. Leo Gehrig, whom he succeeds.

(Environmental Health Letter)

HOW TO USE THE TUBE

Metromedia's WTTG-TV channel 5, operating in the Nation's Capitol, has implemented an interesting public service worth exporting. Viewers call the station to report pollution sightings and cameramen go film the incident for a special Pollution Report that runs three times a week during the 10 o'clock news. (Conservation News)

FIFTH INTERNATIONAL CONFERENCE ON WATER POLLUTION RESEARCH FEATURES PAPERS
FROM 280 WORLDWIDE AUTHORS

With five U.S. organizations serving as national host, the Fifth International Conference on Water Pollution Research will feature 137 technical papers, authored by 280 engineers, scientists and technicians from 21 nations around the world.

Recent Selection Committee sessions in London and Honolulu chose the speakers for what is already shaping up to be the world's major environmental meeting for 1970, as scheduled for July 26-Aug. 1 in San Francisco with reconvened sessions slated Aug. 2-5 in Hawaii.

As the U.S.A. National Committee for this event, the five organizations welcoming the world visiting delegations include: American Chemical Society, Water Pollution Control Federation, American Society of Civil Engineers, American Institute of Chemical Engineers and the American Association of Professors in Sanitary Engineering.

Every world population area is represented on the Conference program by speakers for the three concurrent program sessions which are labeled "Fresh Water Problems," "Waste Treatment," and "Lake, Estuarine and Coastal Problems."

The 137 papers deal with such widely varied areas of the world as Germany's Ruhr Valley, the Gothenberg Region of Sweden, Jamaica Bay near New York City, marine areas of Rio de Janeiro, and certain River Areas selected by the State Oceanographic Institute of Moscow, USSR.

For further information, contact Dr. Erman A. Pearson, Conference President, Room 635, Davis Hall, University of California, Berkeley, California 94720.

BENEFIT RISK ANALYSIS APPLIED TO D.D.T.

The following two brief items concerned with pesticides are from Chemical and Engineering News and are passed on to you for information.

Pesticides: Risk-Benefit Ratio

"Man can no longer enjoy the luxury of avoiding things toxic to his environment. Scientists must face reality and evaluate the risk-benefit ratio of pesticides and other compounds more realistically than we have in the past." Thus did Dr. Dale R. Lindsay of the Food and Drug Administration charge scientists at Michigan State University's Symposium on Pesticides in Soil.

Most toxicology research includes the use of very high rates of compounds on very sensitive animals, he points out. "Under these conditions, scientists are almost always able to show some detrimental effects." The tendency is to interpret these experiments to mean that the compounds are always going to be detrimental to the health of man, he says. "But this is not always the case."

"There are no toxic chemicals, just toxic uses of them. Even table salt can kill you, if you use too much of it." In cleaning up the environment, Dr. Lindsay says, new, potentially hazardous compounds should be banned whenever feasible before they become

widely used. However, he adds, "We should expect to continue using some potentially harmful compounds because their benefits far outweigh their detrimental effects."

For example, DDT is still the best material for controlling malaria mosquitoes in underdeveloped countries, he says. Use of DDT should be continued, because the potential danger of DDT in these areas is small, while the malaria hazard is high.

Dr. Lindsay urged large-scale "mega-mouse" experiments over long periods of time to really evaluate the risk-benefit problem as it relates to man. "This problem has more significance to man than his ability to explore space," he says, "and I doubt that it will cost nearly as much."

Another scientist who asks for reason in the face of the current emotional antiagricultural chemical campaign is Dr. C.R. Harris, head of the soils and pesticides section of the Canadian Agriculture Department's research institute. Substitution of new "nonpersistent" pesticides may compound the pollution problem rather than ease it, he notes.

These materials are, in most instances, broad-spectrum poisons that stay in the soil for a moderate length of time, he explains. Most are more soluble in water than the insecticides they replace, he says, thus increasing the risk of contaminating water.

Also, Dr. Harris adds, "a few of these new materials for use as soil insecticides appear to be as persistent in the soil as DDT or dieldrin. Although restrictions on the use of the old insecticides, such as DDT, are well justified, they should not be haphazardly replaced with materials which may have equally serious environmental side effects."

The second item is a letter to the editor and proposes a basic approach to DDT and most pollution problems.

DDT "benefit-risk equation"

Dear Sir:

We can never solve any "benefit-risk equation" without first writing down the equation. For the DDT "benefit risk equation" we would write: $A=B+C$
where

A=savings derived by use of DDT (\$)

B=damages caused by use of DDT (\$)

C=overall benefit (\$)

First solve for B. If necessary, use established legal procedures with each side presenting its proof and arguments. Next divide B by the number of pounds of DDT used and add the quotient to the price of DDT. The equation becomes simply: $A' = C$

If using DDT is still profitable to the user, there will be a positive overall benefit. But if the savings are wiped out, the user most certainly would switch to a more economical pesticide.

The public and our Government should not allow themselves to be confused by the economic advantage that the farmers and industry

derive if allowed to pollute our environment, because that part of the equation will work itself out. However, we must ascertain a realistic evaluation of damages which we must pass on to the users before they can determine if, or when the equation balances in favor of use of the chemical.

Such an approach could be used to solve this and most pollution problems. While arbitrary prohibitions and restrictions do not lead to fair or economical solutions, this does; it requires answering only answerable questions and returns the burden to the ones causing the problems in the first place.

This Word from AWWA'S Willing Water.

"Fluoride is now being added to the water supplies of over 75,000,000 Americans, according to figures supplied by the American Dental Association. The group also reports that every \$100,000 spent for fluoridation results in \$600,000 in cavities prevented."

Does this seem to indicate a benefit cost ratio of 6.0 ?

LESS THAN A PAT ON THE BACK: GAO COMMENTS ON FWPCA

The federal government's long and costly effort to clean up the nation's rivers has been hampered by poor planning, inadequate funds, and unchecked industrial pollution. So says a report on the federal water pollution program by the General Accounting Office.

It further states that little or nothing has been accomplished despite the expenditure of \$5.4 billion on waste treatment facilities since 1957, \$1.2 billion of this being federal money, and that present funding levels are inadequate to meet the problem of polluted rivers.

The agency recommends that before more money is spent, a new basis for awarding grants be developed, and calls for improved planning involving systems analysis techniques to determine the requirements for controlling pollution in a particular area, the alternatives available, and the establishment of priorities.

The report is based on a study of eight rivers through the country where federal, state, and local forces have been battling pollution for some time. The rivers studied were chosen because they were regarded as typical of the water pollution problems throughout the country. They were the Willamette River in Oregon, the Nashua and Ten Mile Rivers in Massachusetts, portions of the Mississippi and Pearl Rivers in the South, and the Saco River and the Presque Isle Stream in Maine.

(A.W.R.A. Newsletter)

SELECTED REFERENCES IN ECOLOGY

A booklet entitled "Selected References in Ecology and Environmental Conservation" by George Darrow contains approximately ninety up-to-date references. This has been issued as a public service by The Montana Conservation Council and can be obtained from Dr. Wilson F. Clark, Montana Conservation Council, c/o Eastern Montana College, Billings, Montana 59101.

APPLIED MATHEMATICAL PROGRAMMING IN WATER RESOURCES

A two-week short course is being offered July 26 - August 7, 1970 at the University of Nebraska, the title of which is "APPLIED MATHEMATICAL PROGRAMMING IN WATER RESOURCES." The course is organized to present the basic theory underlying linear programming, non-linear and dynamic programming, and simulation. The techniques will be developed through the use of numerous examples which are not only realistic but can be followed and understood by the audience.

For further information, contact Dr. Warren Viessman, Jr., 212 Agricultural Engineering, Lincoln, Nebraska 68503. Telephone (402) 472-3307.

NIXON APPOINTS ENVIRONMENTAL COUNCIL, WILL SPEND \$800 MILLION

With a flourish appropriate to the occasion, President Nixon appointed the three members of the Council on Environmental Quality whose formation he originally opposed, and said he was overruling the advice of the Budget Bureau and would spend the full \$800 million appropriated for construction of water pollution treatment plants.

To the surprise of nobody, Russell E. Train, who resigned last week as Under Secretary of Interior, was named chairman. The other two members are Dr. Gordon MacDonald of the University of California at Santa Barbara and a key figure in the investigation of the oil spill, and Robert Cahn, a Pulitzer Prize winning reporter on conservation and natural resources for the Christian Science Monitor, a newspaper highly esteemed by several of the President's key advisers.

The Council will parallel the functions of the Council of Economic Advisers and will prepare for the President a report that will be made annually. It will also have responsibility for examining the factors on the environment, for setting up an early warning system and set up programs for legislation as well as programs for the Federal agencies which may not require legislation, to deal with environmental problems.

Next item on the news-every-minute environmental agenda is President Nixon's environmental message to Congress February 10, when he is expected to spell out his Administration's programs and intentions.

Even before then, however, it is increasingly apparent that the bipartisan approach to national environmental problems in Congress is fast coming apart. This is entirely understandable, of course, because Republicans in Congress must assert some commitment to the President's programs and can no longer join the Democratic Administration's plan or even when the Administration position is unknown.

It is quite possible, however, that the bipartisan approach may reassert itself behind closed doors in executive sessions of the committees, when positions of individual Congressmen and Senators need not be expressed in public.

(ENVIRONMENTAL HEALTH LETTER)

INDUSTRIALIST DOUBTS SOCIETY WILLING TO ACCEPT AUSTERITY FOR SAKE OF ENVIRONMENTAL QUALITY

Speaking as an industry representative at the recent conference on "Environment: The Quest for Quality," Louis H. Roddis, Jr., president of Consolidated Edison Company of New York, Inc., said that American industry should "make no decision, take no action, without due regard for the effect of its action on the quality of the environment."

At the same time, he added, "society cannot 'cop out' of its responsibility to create a climate conducive to salutary change in industry technology."

Alluding to the planned nationwide observance of "Earth Day" on April 22, Mr. Roddis said that the event "will have real meaning only if it begins transforming our laws and their enforcement, our system of taxes and incentives, and our whole educational process."

"Environmental concern must become an integral part of the ongoing functions of production and consumption. For so long as this concern remains only an adjunct to business as usual, whether by producers or consumers, industry or government, we will not get the result we seek."

On the subject of reordering national priorities, specifically demands by some that there be a moratorium on construction of new electric power plants, Mr. Roddis said:

"I am certain that in electric generation, the need for new capacity (now doubling every ten years) could not be significantly delayed even if, we supplied energy only to meet those demands generally agreed as 'essential' by a contemporary citizenry."

"I think society is unready to accept slower economic growth through self-denial of goods and services. But it is ready to be shown how sound conservation principles can be applied while still meeting legitimate aspirations for a rising material standard of living."

(Clean Air and Water News)

CONFLICTS IN WATER RESOURCES PLANNING TO BE THEME OF CONFERENCE

Conflicts in Water Resources Planning - What Are The Remedies? will be the theme of the fifth Water Resources Symposium sponsored by the Center for Research in Water Resources November 19-20, 1970. All sessions of the two-day Special Lecture Series will be held at the Chariot Inn Motor Hotel in Austin.

Papers will be presented by leading authorities on pertinent aspects of the following important areas: Water, Land, and People; Government's Role in Water Resources Planning; and Ecology as a Planning Parameter. The proceedings of the conference will be published as Volume V in the Center for Research in Water Resources Series.

Further information and registration forms may be obtained from the Center for Research in Water Resources, Balcones Research Center, Route 4, Box 189, Austin, Texas 78757.

(CRWR News)

The above headline introduced an AP news release from Durham, North Carolina. It is reproduced here so that you can have one man's answer to the often-asked question "Just who is behind the air pollution problem?"

Industrial and criminal elements are conspiring with the United States government to "poison the planet" with automobile exhaust fumes, hippie poet Allen Ginsberg said Thursday during an appearance at Duke University.

Ginsberg, long active in antiwar movements, said the Vietnam War "and our war on mother nature" are producing conditions in which "it is literally a question of trying to stay alive."

He blamed the "establishment" which he said consisted of the Pentagon, the Mafia and the oil, auto, construction and banking industries.

Ginsberg, addressing a news conference before speaking at a student-sponsored meeting, said: "there is a conspiracy, consisting of the Mafia with its connections in the oil and construction business, combined with the automobile industry, working hand-in-hand with banks that fund all these industries. There is a conspiracy to poison the planet with automobile exhaust smoke.

Ginsberg, a user and advocate of drugs, said marijuana should be legalized and LSD "institutionalized in universities by putting it in a safe place where a student could take a trip."

The Pill to end all pills



FLORIDA POWER & LIGHT CASE A POTPOURRI OF POLITICS AND POLLUTION

If you want a classic example of how politics and pollution mix, consider the landmark case of Florida Power & Light Co. and Biscayne Bay south of Miami.

At the request of Gov. Kirk, Florida's first Republican Governor, the Federal Water Pollution Control Administration was called in to consider thermal pollution of Biscayne Bay by the utility, considering the prospect that the waters could be heated beyond 95 degrees when its nuclear reactors are fully operative.

The company refused the Government's request to halt construction of a cooling canal and invited the possibility of action by the Justice Department to obtain an injunction. But don't bet on it; a lot can happen, and that's where politics enters.

Consider the cast of characters in this little drama. Chairman of the Board is McGregor Smith, a self-made millionaire who didn't have a dime when he came to New York as a youngster but who now contributes handsomely to the Republican Party. Then there is Gov. Kirk, who draws most of his political strength from north and central Florida, relatively little from South Florida.

Then there is Rep. William Cramer (R-Fla.), from the St. Petersburg area, ranking minority member of the House Public Works Committee which passes on all water pollution legislation. Cramer is seeking the Republican nomination for the Senate seat being vacated by the retirement this year of Democrat Spessard Holland. But Cramer is no great buddy of Kirk, whose lieutenant governor, Ray Osborne, is opposing Cramer for the Republican nomination for the Senate.

Politics aside, the ecological factors make the case equally interesting. Turkey Pointe, site of the facility, is considered to be an ecological borderline of tropical and sub-tropical areas and the location of the plant ten miles or so could make a big difference.

At any rate, the outcome of the case is being watched closely by other states confronted with similar retrospective reviews of nuclear plant siting.

(Environmental Health Newsletter)

ENVIRONMENTAL RESOURCES CENTER AT GEORGIA TECH

Regents' Professor Carl E. Kindsvater recently announced the establishment of the Environmental Resources Center at Georgia Tech. Effective immediately, the new Center will assume the responsibility for all functions formerly carried out by the Water Resources Center. It will, in addition, coordinate Georgia Tech programs concerned with air resources, coastal and marine resources, and related environmental resources.

The purposes of the Center is to foster activities which bring the full competence of the Institute to bear on all facets of environmental resources education and research. For off-campus organizations and individuals, the Center will serve as a point of contact with relevant Georgia Tech programs and individuals.

The Environmental Resources Center will be directed by Professor Kindsvater.

\$20-BILLION PER YEAR & POPULATION CONTROL SEEN U.S. PRICE FOR QUALITY ENVIRONMENT

A stabilized population and expenditure of \$20-billion per year minimum were projected as the price of attaining a quality environment in the U.S., as experts of Western World's establishments discussed man's ability to reverse environmental degradation at widely separated meetings in Paris and Washington, D.C. last month.

In Paris, experts at the Organization for Economic Cooperation and Development conference, which included the non-Communist world's 22 richest nations, underscored belief that the present worldwide public demand for environmental reform is based on "blissful lack of knowlege" -- and the same idea surfaced in Washington at a 3-day science-industry-government conference co-sponsored by the U.S. National Committee for the International Biological Program and the Public Affairs Council, representing more than 200 corporations with public and urban affairs programs.

Experts at the OECD meeting projected their best guess at a continuing outlay of 2% of Gross National Product just to ensure that environmental deterioration in highly industrialized countries is gradual rather than rapid. This would add up to nearly \$20-billion annually in the United States, compared with the \$1.1-billion outlay in fiscal 1971 proposed by President Nixon for major environmental quality programs.

Cost of holding the line was pegged at about 4% of GNP, while actively cleaning up past degradation and preventing future pollution would cost 3-4 times as much.

OECD Secretary General Emile van Lennep said that the organization for the first time is taking environmental reform into account as it develops economic growth target figures for the present decade. He predicted the cost of pollution cleanup would show up in greatly increased consumer costs-- higher than the estimates in terms of GNP -- since much of industrialized nations' GNP involves services rather than production.

The organization, which is seeking to stake out its claim to international anti-pollution leadership in competition with United Nations and NATO, announced its intention to develop international tolerance levels for pollutants. Under proposed program, countries exceeding the limits would pay indemnities. OECD, which includes the U.S., Canada, Japan, and 19 Western European countries, functions through voluntary compliance, since it has no authority for enforcing rules on independent governments. Removal of lead from gasoline is one recommendation expected to be forthcoming shortly.

(Clean Water Report)

MOVE AT A REASONABLE PACE

American Oil Company spokesman, Richard E. Newman, speaking before the National Engineers' Week Banquet in Fort Wayne, Indiana, said his company has been studying water pollution for 50 years and air pollution for 20 years, but hopes the federal government will "wait until the results are in" before imposing stringent anti-pollution controls on the petroleum industry.

(Fort Wayne Journal-Gazette)

REAL WORLD DECISIONS STRESSED AT MEETING

The need for practical answers and information usable for planners and engineers making real-world decisions as a product of research was stressed at the Annual Conference of Water Resource Directors held in Washington, D.C., February 3-4.

A panel session on systems engineering concluded that researchers would have to expand their efforts considerably in applying these techniques to realistic systems. The panel recognized the need for integrated planning of regional broad-based economic systems on one hand, but on the other hand, more thought will have to be given to interpreting results of systems analysis for decision-making purposes at all levels, the panel concluded.

The importance of ecology in water resource planning was debated by another panel and the usual broad spectrum of views was expressed, ranging from strong developmental needs to meet population and growth needs to the ideals of preservation and undisturbed nature.

Highlights of some Maryland projects covering thermal loading, thermal mixing, and accommodation of agricultural processing plant waste water by forages and soil were given. The possibilities for beneficial uses of heated water discharges were also discussed along with possibilities of recycling of nutrients for animal and human food production.

Warren Hall, Water Resources Assistant in the President's Science Advisor's Office, pointed out the need for research of which will yield usable answers in the near future. He also discussed the future goals and relationships of the Water Resources Council, the National Water Commission, and the Committee for Water Resources Research of which Dr. Hall is chairman.

The Administration's budget for the Office of Water Resources Research for 1971 Fiscal Year calls for an increase of \$2 million bringing the budget up to \$13.3 million for next fiscal year. The budget includes an increase of \$1.5 million for Title II research plus increases for support in the Water Resources Scientific Information Center. No increases were included for Title I research.

It is anticipated that, if Congress approves the funds, more research effort will be channeled into metropolitan and urban programs and evaluation of benefits resulting from water resource investments. More emphasis will also be given to the exchange of information and dissemination of research results to the ultimate user.

COASTAL ZONE MANAGEMENT SYMPOSIUM

A symposium entitled "MANAGEMENT SYSTEMS FOR THE RESOURCES OF THE COASTAL ZONE" will be held June 8-9, 1970, at the Sheraton-Fort Sumter Hotel in Charleston, South Carolina. The symposium is being jointly sponsored by Clemson University and the Agricultural Policy Institute of North Carolina State University at Raleigh in cooperation with the South Carolina Water Resource Commission and the South Carolina Wildlife Resources Commission.

Program participants include E. Jack Schoop, chief planner with San Francisco Bay Conservation and Development Commission; Dr. David A. Adams, vice president of Ocean Data Systems, Inc.; Dr. Frederick C. Marland, research associate at the University of Georgia's Sapelo Island Marine Institute; Milton S. Heath, Jr., associate director to the Institute of Government, University of North Carolina, Chapel Hill; Dr. Jack L. Knetsch, director of the Natural Resources Policy Center, George Washington University; G.F. Mutscher, speaker of the Texas House of Representatives; James A. Lee, Consumer Protection and Environmental Health Service, Dept. of Health, Education & Welfare; Dr. Maynard M. Hufschmidt, University of North Carolina, Chapel Hill; and Christopher DeMuth, staff assistant to President Nixon.

For additional information, contact Coastal Zone Symposium, 107 Long Hall, Clemson University, Clemson, South Carolina 29631.

POSITION SOUGHT IN WATER RESOURCES

Mr. G. Roy Elmore, Jr., expects to complete the requirements for his Ph.D. in Civil Engineering at Georgia Tech this summer. His major is water resources planning and management; his minor, operations research and statistics. He has an M.S. in sanitary engineering from University of North Carolina and a B.S. in civil engineering from Duke. He has served as an Assistant Research Engineer and Instructor in the Environmental Resources Center at Georgia Tech, Project Engineer with Black, Crow and Eidsness, Inc., and put in five years as a Sanitary Engineer in the Commissioned Corps of the USPHS. If you desire further information, contact Mr. Elmore at 1220 University Drive, N.E., Atlanta, Georgia 30306. Phones are: home (404) 872-6075 and office (404) 873-4211, ext. 5398.

COLORADO STATE SUMMER INSTITUTE

Colorado State University's Department of Civil Engineering has announced a summer institute entitled "Urban Water Systems Institute." to be held June 15-26, 1970 at Fort Collins. The purpose is to familiarize urban water resource specialists with the concepts and application of current systems analysis and optimization techniques such as linear and dynamic programming, and to provide for the development of skills in their use. This may be of interest to professional level personnel from fields such as, but not restricted to, engineering, planning, architecture, politics, law, economics, and management, who are concerned with the study, planning, design and operation of any or all aspects of urban water facilities. A minimum of a B.S. degree or equivalent level of education will be assumed for participants. The fee is \$350 per person plus room and board. For additional information, write to: Dr. Maurice L. Albertson, Professor of Civil Engineering, Engineering Research Center, Colorado State University, Fort Collins, Colorado 80521.

A.A.P.S.E. COMMITTEES FOR 1970

A.A.P.S.E. has a number of committees which perform many functions and services for the Association as well as the profession. It is felt that many of you may not be familiar with the various committees and their makeup. Therefore, our committee assignments for 1970 are presented below. The officers and directors are listed on the NEWSLETTER cover.

Arrangements

F. G. Pohland (Chm.), N. B. Hanes, D. E. Bloodgood, R. J. Kipp.

Audit

R. L. Sanks, (Chm.), E. L. Thackston, D. M. Wells.

Awards

R. O. Sylvester (Chm.), P. H. McGauhey, D. J. O'Connor, D. A. Okun, W. Kaufman, W. Weber.

Education

D. Carlson (Chm.), B. Ewing.

Educational Resources

R. W. Christman (Chm.).

Eligibility

B. H. Kornegay (Chm.),

Legislative Analysis

W. Kaufman (Chm.), J. H. Austin

Membership

J. T. Pfeffer (Chm.),

Newsletter

B. C. Dysart (Chm.), C. E. Burkhead, R. F. Christman, R. I. Dick, W. F. Eichelberger, M. W. Hall, K. D. Kerri, W. M. McLellan, M. E. Stephenson, E. L. Thackston.

Nominating

W. Kaufman (Chm.), J. Borchardt, R. Sylvester, J. T. O'Connor, J. F. Andrews.

Research

W. J. Weber (Chm.), D. J. O'Connor, D. Jenkins, W. F. Echelberger,
R. M. Jordan, T. M. Keinath.

Relations with U.S.A. National Committee

P. A. Krenkel (Chm.), E. A. Pearson, W. J. Weber, E. F. Gloyna, R. O.
Sylvester, D. J. O'Connor.

Visiting Lecturers

D. R. Washington (Chm.), J. Malina, J. F. Andrews.

Seminar

L. W. Canter (Chm.), R. R. Dague, W. Kaufman, W. M. McLellon.

Workshop

W. O. Pipes and R. J. Kipp (Co-Chm.), W. M. McLellon, G. W. Heinke,
J. L. Cleasby, K. H. Mancy, F. G. Pohland, R. T. Skrinde, R. L. Sanks.

Publications

J. F. Malina (Chm.).

Government Agency Liaison

E. R. Baumann (Chm.), R. Loehr, J. H. Austin, R. S. Engelbrecht,
B. B. Berger, W. Kaufman.

A NOTE OF APPRECIATION

To Lynn Zepf who did most of the real work in getting this issue of the AAPSE Newsletter, her last and my first. Her assistance to the present editor is truly appreciated. Her considerable experience with AAPSE newsletters has been gained since the previous editor and the Newsletter moved to Clemson.