

October 1972

Directory of Faculty Engaged in Water Research at Connecticut Universities and Colleges

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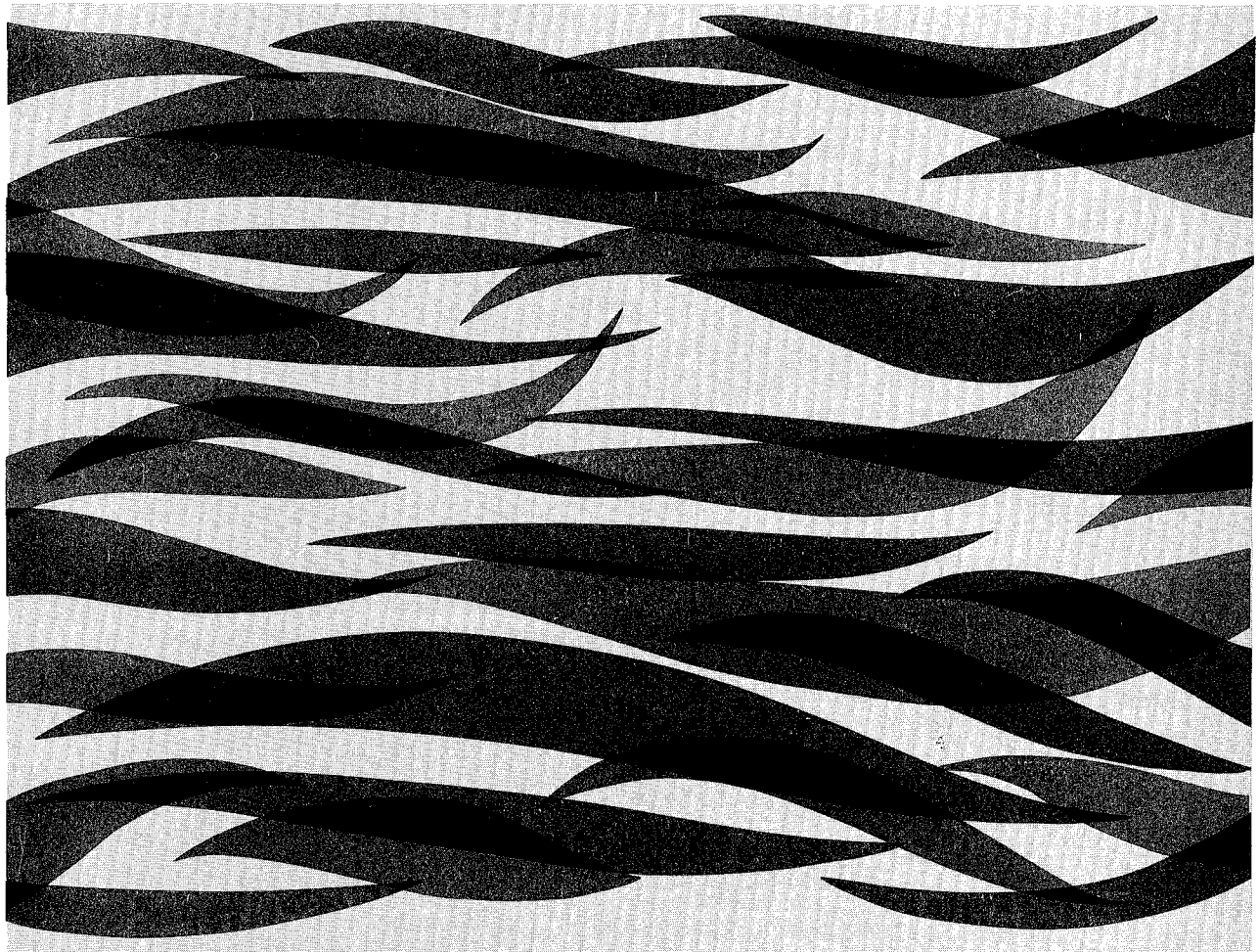
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DIRECTORY OF FACULTY ENGAGED IN WATER RESEARCH AT CONNECTICUT UNIVERSITIES AND COLLEGES

Report No. 17

October 1972



INSTITUTE OF WATER RESOURCES
THE UNIVERSITY OF CONNECTICUT

DIRECTORY OF FACULTY
ENGAGED IN WATER RESEARCH AT
CONNECTICUT UNIVERSITIES AND COLLEGES
by
William C. Kennard, Director
and
M. S. Williams, Research Assistant
INSTITUTE OF WATER RESOURCES
THE UNIVERSITY OF CONNECTICUT

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INTRODUCTION

Water resources research has become an increasingly broad and complex field, and since its establishment in 1964, the Institute of Water Resources at The University of Connecticut has had as its mission the stimulation of interest in water resources research and training, the sponsoring of a diversified program of water-related studies, and the coordinating of multidisciplinary approaches to water problems. Another part of that mission has been to keep the University community informed of activities concerning water resources. In keeping with this, the Institute published, in 1970, an inventory of staff members at the University who were engaged in research on, or interested in water-related problems. This was Institute Report No. 12.

The growing seriousness of Connecticut's water problems requires a more concerted State-wide approach and cooperative effort. Correspondingly, the Institute has recognized the need for identifying the many investigators who are concerned with the varied aspects of Connecticut's water resources, and has prepared this directory based upon a letter survey of all 21 institutions of higher learning in the State. Eighteen institutions reported a total of 186 faculty members who are directly engaged in water-related research or have an active interest in some facet of the use, management, nature, or preservation of water.

The 186 individuals listed represent more than 38 different academic departments and eleven different water concerns (see Tables I and II). More than one-fourth of the faculty members are in the biological sciences (50), followed by the engineering sciences (26), the earth sciences (23), and chemistry (21). The social sciences of law, economics, and political science are represented by less than ten percent of the listing. It is clear that greater specific effort must be made to involve more faculty in the social sciences in studies regarding these equally important areas of water resources.

Another area for special thrust is the developing of interdisciplinary studies. As water resources problems become more complicated there is a need to bring to such investigations the expertise of scholars in many fields of study. In the Addendum to the listing for The University of Connecticut there is shown a number of multidisciplinary studies and the range of the special fields of study of the researchers. There are, no doubt, such studies at other institutions, but information was obtained only for The University of Connecticut.

In Table I an effort has been made to reduce the broad extent of water concerns to eleven categories into which the variety of projects and interests reported would reasonably fall. Table II is a compilation by institution of faculty, departments, and the water concerns categories.

The purpose of this compilation has been to make as complete and useful a tool as possible for researchers, administrators, faculty, and the public. Names of faculty members and information about their research interests are given as received from the participating institu-

tions. Additional information may be obtained by contacting the individual listed.

It is hoped that with this publication will come a wider exchange of ideas, that common interests in water research and training will be discovered, and that inter-academic cooperation and communication will be enhanced.

FACULTY ENGAGED IN WATER RESOURCES RESEARCH
AT CONNECTICUT UNIVERSITIES AND COLLEGES

CENTRAL CONNECTICUT STATE COLLEGE
1615 Stanley Street, New Britain 06050

ART

Isabel Fairchild, Assistant Professor

Use of waterways, bodies of water, and water in environmental design

BIOLOGY

Herbert G. Anderson, Associate Professor

Parasites of bluefish

Richard A. Booth, Associate Professor

Ecology and development of larval fishes

Roberta L. Davis, Assistant Professor

The effects of pelecypods on their environment

Leon J. Gorski, Associate Professor

Animal and plant ecology as related to marshes and wetlands

D. Reed Ostrander, Instructor

Pollution effects on fish

Albert H. Tozloski, Professor

Animal and plant ecology as related to lakes and ponds

CHEMISTRY

Richard H. Groth, Associate Professor, Consultant, Pratt & Whitney

Control and measurement of industrial wastes added to rivers and other water bodies

Joyce L. Groth, Lecturer II, Member, Board of Health, Meriden, Connecticut

Analysis and quality of public water supplies

Adrienne W. Krause, Assistant Professor

Concentration and isolation of trace metals in water by the use of complexing reagents

Herbert Slotnick, Associate Professor

The identification, measurement, and control of pollutants in water in relation to industrial wastes

CENTRAL CONNECTICUT STATE COLLEGE continued

ECONOMICS

James C. Loughlin, Associate Professor

Studies related to the financing of water resource programs and the pricing of water resource outputs. Specific studies have been completed on interrelationships among government agencies and regional financing.

GEOGRAPHY

Allen R. Smith, Assistant Professor

Studies related to rainfall, runoff, and evapotranspiration in selected New England basins

PHYSICS-EARTH SCIENCES

Celia Chow, Assistant Professor

Mathematical modeling of mass displacement processes with respect to pollution control

William Forsyth, Assistant Professor

Flood potential; Hydrogeology; Rainfall and runoff

CONNECTICUT COLLEGE
Mohegan Avenue, New London 06320

BOTANY

Richard H. Goodwin, Professor

Survey of inland wetlands of U. S. for national landmark status: Wetlands preservation; Stream-belt land use planning

William A. Niering, Professor

Survey of inland wetlands of U. S. for national landmark status: Vegetation dynamics of wetlands; Wetlands preservation

EASTERN CONNECTICUT STATE COLLEGE
83 Windham Street, Willimantic 06226

BIOLOGY

William J. Jahoda, Professor

Ecology of estuarine and coral reef areas, with emphasis
on underwater photography

Barry L. Wulff, Assistant Professor

Structure and function of benthic communities, especially
estuarine

PHYSICAL SCIENCES

Raymond N. Smith, Associate Professor (Geology)

Ostracod ecology in estuarine and Long Island Sound waters

FAIRFIELD UNIVERSITY
North Benson Road, Fairfield 06430

BIOLOGY

S. L. Bongiorno, Assistant Professor

Studies of the water quality of the streams of Fairfield,
Connecticut

T. Combs, Associate Professor

Member of the Research and Planning Advisory Committee for
the Long Island Sound Regional Study (LISS)

CHEMISTRY

F. Lisman, Assistant Professor

Faculty advisor to National Science Foundation study of the
Housatonic River

QUINNIPIAC COLLEGE
Mt. Carmel Avenue, Hamden 06518

BIOLOGICAL SCIENCES

- Daryll C. Borst, Associate Professor
Human ecology; Pollution of the Naugatuck River
- Harvey R. Levine, Professor
Biology of aquatic immature stages of arthropod ectoparasites
- Kenneth McGeary, Assistant Professor
Marine invertebrate zoology; Gastrotricha ecology
- Arthur J. Repak, Assistant Professor
Protozoa and bacteria associated with water pollution
- Denise Van Hemert, Assistant Professor
Marine ecology; Algae

SACRED HEART UNIVERSITY
5229 Park Avenue, Bridgeport 06604

BIOLOGY

- Arliss Denyes, Associate Professor
Ecology of Great Meadows Salt Marsh; Ecology of Bridgeport Harbors; tidewaters
- Patricia McCabe, Assistant Professor
Microbial degradation of chitinous waste in sewage; Shellfish and sewage problems in Long Island Sound
- Joseph F. Moran, Professor, Director of Environmental Studies
Group of Higher Education Center for Urban Studies
Ecological parameters and water quality of the Bridgeport Harbors, their tidewaters and tributaries; Effects of sewage and oil on shellfish populations in Long Island Sound

CHEMISTRY

- Ronald Chriss, Assistant Professor
Chemical analysis of Bridgeport Harbors and Long Island Sound

ST. JOSEPH COLLEGE
1678 Asylum Avenue, West Hartford 06117

CHEMISTRY

Calvin B. Leman, Assistant Professor
Development of water test kits for use by high school students

SOUTHERN CONNECTICUT STATE COLLEGE
501 Crescent Street, New Haven 06515

BIOLOGY

Benjamin J. Cosenza, Associate Professor (Microbiology)
Septage disposal; Water quality; Microflora of snapper blues
(see also listing at The University of Connecticut)

Peter Pelligrino, Assistant Professor
Marine biology

Charles Steinmetz, Associate Professor
Freshwater biology

GEOGRAPHY

Charles B. Ferguson, Instructor
Desert water supplies

Peter J. Sakalowsky, Assistant Professor
Water erosion on beaches

GEOLOGY

John W. Drobnik, Professor
Recent sediments, Long Island Sound

Robert A. Radulski, Assistant Professor
Recent sediments, Long Island Sound

SCIENCE EDUCATION

Harry Haakenson, Assistant Professor
Environmental education

THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION
P.O. Box 1106, New Haven 06504

ECOLOGY

J.-Y. Parlange, Scientist
Water movement in soils

N. C. Turner, Assistant Scientist
Plant-water relations

P. E. Waggoner, Director
Evaporation and microclimate

ENTOMOLOGY

J. F. Anderson, Chief Scientist
Control of mosquitos and deerflies in marshes

PLANT PATHOLOGY

J. F. Ahrens, Scientist
Control of aquatic weeds and algae

SOIL AND WATER

C. R. Frink, Chief Scientist
Plant nutrient cycles in soil, water, and sediments

D. E. Hill, Associate Scientist
Renovation of sewage effluent by soils

W. A. Norvell, Assistant Scientist
Chemistry of lake sediments

THE UNIVERSITY OF CONNECTICUT
Storrs 06268

AGRICULTURAL ECONOMICS

A. W. Dewey, Professor

Soil injection of septage under quasi-public management
(see Addendum)

R. O. P. Farrish, Professor, Head of Department

Economic impact of marinas and boating in Connecticut

I. F. Fellows, Professor

The demand for State-administered salt-water recreation

M. W. Kottke, Professor

Associate in above study

R. L. Leonard, Assistant Professor

Efficient pricing for urban wastewater renovation (see Addendum); Soil injection of septage under quasi-public management (see Addendum)

C. D. Stern, Assistant Professor

Energy developments with special reference to environmental impacts. Member of Research Planning and Advisory Committee of LISS (Long Island Sound Study)

AGRICULTURAL ENGINEERING

B. J. Cosenza, Consultant

See listing for Southern Connecticut State College (see also Addendum)

J. J. Kolega, Associate Professor

Disposal and utilization of dairy and poultry manures by land application (see Addendum); Treatment processes for wastes from septic tanks; Soil injection of septage under quasi-public management (see Addendum)

E. L. Palmer, Associate Professor

Treatment of water with chemicals to determine effects on plants; Studies on water quality

R. P. Prince, Associate Professor, Head of Department

Agricultural waste pollution

THE UNIVERSITY OF CONNECTICUT continued

ANIMAL INDUSTRIES

W. A. Aho, Professor

Monitoring of poultry-manure-soil mixtures (aerobic and anerobic) for nitrates and ammonia in groundwater at North Westchester, Ashford, and Lebanon, Connecticut (see Addendum)

ANTHROPOLOGY

J. S. Aigner, Assistant Professor (Archeology)

Aleutian bio-mass adaptation to changes in tidal flats and reefs (see Addendum)

ART

R. E. Swibold, Associate Professor (Architecture)

Environmental design with water; Preservation of natural water bodies in construction

BEHAVIORAL SCIENCES AND COMMUNITY HEALTH (School of Dental Medicine,
Farmington 06032)

J. Werboff, Professor

Drinking water additives, fluorine and chlorine

BIOBEHAVIORAL SCIENCES

W. S. Laughlin, Professor

Aleutian bio-mass adaptation to changes in tidal flats and reefs (see Addendum)

BIOCHEMISTRY (School of Medicine, Farmington 06032)

J. A. Glasel, Assistant Professor

A nuclear relaxation investigation of water membranes

BIOLOGICAL SCIENCES

J. D. Buck, Associate Professor (Microbiology)

Ecological evaluation of primary treatment wastewaters; Biological and chemical observations in Palmer and Mumford Coves; Biotic changes in the Willimantic-Shetucket River associated with improvements in sewage treatment (see Addendum)

THE UNIVERSITY OF CONNECTICUT continued

BIOLOGICAL SCIENCES continued

R. P. Collins, Professor (Regulatory Biology)

Chemical analysis of earthy-musty odor in water; Microbiological examination of taste and odor problem at Crown Treatment Plant in Cleveland, Ohio

A. W. H. Damman, Associate Professor (Ecology)

Heavy metals concentrations in mosses as indicators of supply from atmospheric sources

S. Y. Feng, Associate Professor (Ecology)

Shellfish culture using heated effluent from power plants; Monitoring heavy metal traces in shellfish in Long Island Sound (see Addendum)

D. R. Franz, Assistant Professor (Ecology)

Ecology and life history of shallow-water marine invertebrates

H. Laufer, Associate Professor (Genetics and Cell Biology)

Studies of regulation of life cycle of aquatic midges (Chironomus), an organism frequently used as water quality indicator

W. A. Lund, Jr., Associate Professor (Ecology)

Investigation of life and fishery of river herrings

L. R. Penner, Professor (Systematic and Evolutionary Biology)

Parasites of vertebrates and invertebrates relating especially to the aquatic environment

J. S. Rankin, Jr., Professor (Ecology)

Wetlands delineation

C. W. Shaefer, Associate Professor (Systematic and Evolutionary Biology)

Ecology of rocky-shore snails with emphasis on adaptation to environmental changes

F. R. Trainor, Professor (Ecology)

Variation in diatom morphology; Diatoms as indicators of water quality; Use of organic compounds by algae; Biotic changes in the Willimantic-Shetucket River (see Addendum)

CHEMICAL ENGINEERING

H. E. Klei, Jr., Associate Professor

Rate of thermal regeneration of activated carbon; Chemical engineering training in water pollution control

THE UNIVERSITY OF CONNECTICUT continued

CHEMICAL ENGINEERING continued

D. W. Sundstrom, Professor

Associate in above studies; Air oxidation of organic compounds in aqueous solutions

L. F. Stutzman, Professor

Associate in chemical engineering training study, as above

CHEMISTRY

J. K. Dixon, Associate Professor (Torrington Branch, Torrington 06790)

Water quality control with synthetic polymeric flocculants (see Addendum); Relation of electrophoretic mobility to flocculation efficiency

R. M. Fitch, Professor

Homogeneous nucleation of polymeric colloids

J. F. Johnson, Professor

Chromatographic procedures, vapor phase and high-resolution liquid techniques for determining trace contaminants in water, quantitatively

W. L. Masterton, Professor

Water solubilities of non-electrolytes; Pesticides in water

J. T. Stock, Professor

Determinations of all kinds of solutes at low concentrations

J. D. Stuart, Assistant Professor

Analysis of persistent chemicals and study of their degradation in all matrices, including water

CIVIL ENGINEERING

P. Bock, Professor

Hydrological analysis using atmospheric vapor data

K. A. Healy, Associate Professor

Wastewater disposal systems for unsewered areas (see Addendum)

T. Helfgott, Assistant Professor

Associate in above study; Chemical analysis of constituents of wastewaters; Classification of dispersed organics in effluents by membrane process; Trace metals in water supplies and sewage treatment effluent

THE UNIVERSITY OF CONNECTICUT continued

CIVIL ENGINEERING continued

H. Kardestuncer, Associate Professor

Efficient pricing for urban wastewater renovation (see Addendum)

R. Laak, Associate Professor

Pollution strengths for undiluted household wastes; A covered domestic lagoon system for groundwater recharge; Efficient pricing for urban wastewater renovation (see Addendum)

J. D. Lin, Associate Professor

Air-water interfacial interactions; Pollution related turbulent-flow phenomena; Coastal and estuarine hydrodynamics

R. P. Long, Associate Professor

Electro-osmosis in soil pores

C. J. Posey, Professor

Measurement and analysis of natural-type surface roughnesses; Stability criteria for bound-rock erosion proofing

V. E. Scottron, Professor

Frictional effects in side channel spillways

J. E. Stephens, Professor, Head of Department

Design to control erosion in roadside drainage channels

W. J. Widmer, Associate Professor

Biotic changes in the Willimantic-Shetucket River associated with improved wastewater treatment (see Addendum)

ELECTRICAL ENGINEERING

Y. T. Chien, Associate Professor

Use of interactive computer graphics in planning

D. Jordan, Assistant Professor

Modeling and simulation of pollution and transportation

C. W. Schultz, Professor

Underwater communication

ELEMENTARY EDUCATION

T. B. Goodkind, Associate Professor

Developing a course at graduate level in environmental education

FOUNDATIONS AND CURRICULUM

A. D. Roberts, Assistant Professor

Conducting interdisciplinary workshops for elementary and secondary teachers in environmental education

GEOLOGY AND GEOGRAPHY

R. F. Black, Professor

Quaternary geology of Connecticut with respect to environmental problems; Aleutian bio-mass adaptation (see Addendum)

W. F. Bohlen, Assistant Professor (Physical Oceanography)

Investigation of turbidity in estuarine waters, a water quality survey of a sewage treatment plant near Stonington, Connecticut; Experimental studies of turbulence in liquid-solid flows; Effects of heavy metals in Long Island Sound (see Addendum)

P. Dehlinger, Professor, Director, Marine Sciences Institute

Effect of heavy metals in Long Island Sound (see Addendum)

J. J. Dowling, Associate Professor

Geophysical measurements to determine where freshwater leaks out of aquifer into Long Island Sound

W. E. Fitzgerald, Assistant Professor

Dredge spoils; Nuclear power plant effluent studies; Effects of heavy metals on Long Island Sound (see Addendum)

L. Frankel, Professor

Structure and trophic relationships of foraminifera communities in sandy estuarine sediments

T. L. Holzer, Assistant Professor

Hydrological investigation into a sanitary landfill; Pore water pressure behavior during undrained creep

A. J. Nalwalk, Associate Professor

Investigations along Block Island and Fishers Island

D. F. Paskausky, Assistant Professor

Numerical circulation models of Lake Ontario and the Gulf of Mexico; Effects of heavy metals in Long Island Sound (see Addendum)

G. R. Rumney, Professor (Climatology)

Dynamic integration of land-sea-air in coastal situations; Climatology

THE UNIVERSITY OF CONNECTICUT continued

INSTITUTE OF WATER RESOURCES

W. C. Kennard, Professor, Director, Institute of Water Resources
Legal and administrative practices relating to lake pollution in the Northeast; Water Research administration

JOURNALISM

E. Hill, Professor, Head of Department
Author of a book on the Connecticut River stressing environmental impacts on the river and need for preservation

LABORATORY MEDICINE (School of Medicine, Farmington 06032)

R. C. Tilton, Associate Professor
Water quality control with polymeric flocculants (see Addendum)

LAW (School of Law, Greater Hartford Campus, West Hartford 06117)

C. Davis, Professor
Property law and water allocation rules as affects competition between consumptive and in-place water users

C. C. Tait, Professor
Environmental law, including land-use controls on pollution and conservation of water

MECHANICAL ENGINEERING

W. W. Bowley, Associate Professor, Assistant Dean of Engineering
Wastewater disposal (see Addendum)

G. S. Campbell, Professor
Shellfish culture in effluents (see Addendum)

C. H. Coogan, Jr., Professor
Gamma ray measurements in a model of a free-surface seawater evaporator; Using an air model to determine thermal conditions in a seawater evaporator

E. K. Dabora, Associate Professor
Combined buoyancy and boundary effects on jets of water

R. W. Garvine, Assistant Professor
Studies of coastal upwelling; Effects of heavy metals on Long Island Sound (see Addendum)

R. L. Stoy, Associate Professor
Combined buoyancy and boundary effects on jets of water

THE UNIVERSITY OF CONNECTICUT continued

METALLURGY

N. D. Greene, Professor

Removal of metallic impurities in water by electrochemical methods

NUTRITIONAL SCIENCES

R. G. Jensen, Professor, Acting Head, Pesticides Research Laboratory

Pesticides in water; Biotic changes in the Willimantic-Shetucket River associated with improvements in sewage treatment (see Addendum)

PATHOBIOLOGY

C. N. Burke, Associate Professor

Water-borne viruses of fish

PHARMACY

R. A. DiCapua, Associate Professor (Immunology)

Comparison of serum changes in diseased and normal fish (with University of Rhode Island)

D. R. Flanagan, Assistant Professor

Kinetics and mechanics of hydrolysis

R. E. Lindstrom, Associate Professor

Structural aspects of amide-water systems; Solubilizing effects of amide-water solutions

C. H. Nightingale, Assistant Professor

Effects of surfactants (Tween-compounds) on fish membranes; Drug absorption in fish

D. M. Skauen, Professor

Analysis of tritium oxide in the Connecticut River

PHYSICS

T. I. Moran, Associate Professor

The interaction of water molecules with alkali atoms

E. Pollack, Associate Professor

Associate in above study

THE UNIVERSITY OF CONNECTICUT continued

PLANT SCIENCE

J. J. Brumbach, State Climatologist, Consultant

Atmospheric influences on ecosystems and satellite sensing
(see Addendum)

E. D. Carpenter, Associate Professor (Ornamental Horticulture)

Preservation and conservation of water in horticultural uses

F. H. Emmert, Professor (Plant Nutrition)

Ion interactions in plant tissues

M. D. Ferrill, Associate Professor (Natural Resources)

Remote sensing of water

G. F. Griffin, Associate Professor (Agronomy)

Nitrate quantity and movement in soil water; Monitoring
poultry-manure-soil mixtures (see Addendum)

A. J. R. Guttay, Professor, Head of Department

Administration of water research studies

B. E. Janes, Professor (Plant Physiology)

Dynamics and energetics of the soil-plant-atmosphere continuum;
Interrelation of morphology and physiology to water movement
in a plant; Atmospheric influences on ecosystems and satellite
sensing (see Addendum)

D. R. Miller, Assistant Professor (Natural Resources)

Micro-climate and energy transfer in the forest-urban interface

R. A. Peters, Professor (Agronomy)

Development of no-tillage corn technique in recycling nutrient
elements to prevent water pollution

R. J. Schramm, Jr., Associate Professor (Ornamental Horticulture)

Field tests to determine eutrophication as result of step-up
in soil nutrients with special reference to nitrogen

R. W. Wengel, Professor (Agronomy)

Nitrate quantity and movement in soil water; Disposal and utili-
zation of dairy and poultry manures by land application (see
Addendum)

W. R. Whitworth, Associate Professor (Freshwater Fisheries)

Effects of three environmental factors and a pollutant on
white catfish; Thames River anadromus fish; Biotic changes
in the Willimantic-Shetucket River associated with improved
sewage treatment (see Addendum)

THE UNIVERSITY OF CONNECTICUT continued

POLITICAL SCIENCE

D. Fox, Assistant Professor
The politics of water pollution

F. C. Turner, Professor
Politics and water resources, with special reference to
Latin America

STATISTICS

H. F. Smith, Professor
Biometric assistance in analysis and interpretation of water
resources experimental data and surveys

STORRS AGRICULTURAL EXPERIMENT STATION

J. J. Lucas, Professor (Biometrics)
Atmospheric influences on ecosystems and satellite sensing
(see Addendum)

THE UNIVERSITY OF HARTFORD
200 Bloomfield Avenue, West Hartford 06117

BIOLOGY

Jack Lylis, Assistant Professor
Heterotrophic nutrition of algae

CHEMISTRY

Donald E. Bracken, Assistant Professor
Water exchange reactions of transition metal ions

Thomas W. Sharpless, Assistant Professor
Chemical analysis of natural and polluted waters, especially
organics and trace metals

TRINITY COLLEGE
Summit Street, Hartford 06106

BIOLOGY

R. H. Brewer, Assistant Professor
Ecology of the benthic organisms of streams and rivers

CHEMISTRY

J. K. Heeren, Associate Professor
Plating industry waste control

ECONOMICS

W. E. Curran, Professor
Pricing of water utilities services and rate of return on investment in water utilities

A. Gold, Associate Professor; Director, Urban and Environmental Studies
Water pollution problems in general as they pertain to the environment

UNITED STATES COAST GUARD ACADEMY
Mohegan Avenue, New London 06320

PHYSICAL AND OCEAN SCIENCES

H. J. Costello, Associate Professor, Chemistry Section
Heavy metals in the marine environment

R. C. Kollmeyer, Associate Professor; Head, Ocean Sciences Section
Continuing, detailed study of the Niantic River to delineate the physical, chemical, and biological characteristics of this estuary

D. A. McGill, Professor
Associate in above study

D. S. Tolderlund, Assistant Professor
Environmental impacts on the Thames River

UNIVERSITY OF NEW HAVEN
300 Orange Avenue, West Haven 06516

BIOLOGY

D. L. Kalma, Assistant Professor
Effects of pollution on invertebrate fauna

D. C. Reams, Assistant Professor
Chemical characteristics of pollutants

UNIVERSITY OF BRIDGEPORT
380 University Avenue, Bridgeport 06602

BIOLOGY

Frank Barvenik, Assistant Professor
Biogeochemistry; Microbial ecology in coastal ponds

John Poluhowich, Associate Professor
Biochemistry and physiology of the eel; Estuarine biology

Robert Singletary, Assistant Professor
Marine bottom ecology

James VanGundy, Assistant Professor
Macroinvertebrate diversification in fresh water springs;
Aquatic entomology

WESLEYAN UNIVERSITY
High Street, Middletown 06457

CHEMISTRY

M. G. Burford, Consultant Supervisor, Hall-Atwater Laboratory,
Associate Provost

Testing water quality with reference to water pollution by
industrial waste for Connecticut Department of Environmental
Protection; Industrial waste pollution studies

J. W. Masselli, Research Chemist, Hall-Atwater Laboratory
Associate in above study

N. W. Masselli, Assistant Supervisor, Hall-Atwater Laboratory
Associate in above study

GEOLOGY

J. de Boer, Associate Professor

Studies on the relationship of joints to water movement;
Faculty advisor on National Science Foundation project to
study the feasibility of using abandoned quarries for solid
waste disposal, with regard to the possibility of ground
water pollution.

J. W. Peoples, Professor, Director

State geological and natural history survey of Connecticut;
Water problems in Connecticut

WESTERN CONNECTICUT STATE COLLEGE

181 White Street, Danbury 06810

EARTH SCIENCES

Katherine Caldwell, Instructor (Geology)

Groundwater movement and bedrock defects

Chin Chen, Assistant Professor

Limnology and oceanography

Melvin Goldstein, Instructor (Meteorology)

Air-water pollution

Donald Groff, Professor; Chairman, Earth Sciences Department

Associated with Brookfield Conservation Commission
monitoring quality of Still River waters

YALE UNIVERSITY
New Haven 06520

ADMINISTRATIVE SCIENCES

M. J. Sobel, Associate Professor

Mathematical models of rivers as aids in decision-making

BIOLOGY

Willard D. Hartman, Associate Professor, Curator in Invertebrate

Zoology, Peabody Museum

Systematics, ecology and the evolution of sponges

G. E. Hutchinson, Professor Emeritus, Senior Research Associate

Supervising graduate student's study of the effect of grazing
animal plankton on plant plankton, Lindsay Pond, North Branford

Daniel Merriman, Associate Professor; Director, Sears Foundation for
Marine Research and Oceanographic History

Ecology of the lower reaches of the Connecticut River with
special reference to the biological effects of heated water
effluents

Luigi Provasoli, Professor (Adjunct); Associate Director, Haskins
Laboratories

Nutrition and vitamin requirements of fresh water and marine
algae and protozoa

Joseph S. Ramus, Assistant Professor, Assistant Curator of Botany,
Peabody Museum

Developmental biology of marine algae

Keith Thomson, Associate Professor, Associate Curator of Vertebrate
Zoology, Peabody Museum

Vertebrate biology and evolution, with particular reference to
ichthyology; The nature and relationships of the lobe-finned
fishes; The transition between fishes and tetrapods; The problem
of the origin of the major groups.

Richard Vance, Assistant Professor

Aspects of the ecology of marine invertebrates

CHEMISTRY

Philip A. Lyons, Professor

Raman spectroscopic studies of H_2O , D_2O and H_2O

YALE UNIVERSITY continued

ENGINEERING AND APPLIED SCIENCE

Yves Parlange, Associate Professor

Theory of water movement in soils

C. A. Walker, Professor

Use of ozone in water treatment; Multidisciplinary studies in water supply and usage

P. P. Wegener, Professor

Lifting of bottom deposits by hemispherical cap bubbles

FORESTRY

Herbert F. Bormann, Professor (Forest Ecology)

Monitoring nutrient content of stream draining forests and watersheds

Thomas G. Siccama, Assistant Professor

Heavy metals in Connecticut salt marshes; Lead in a Connecticut salt marsh

PUBLIC HEALTH

Eric W. Mood, Associate Professor

Water quality standards

ADDENDUM

Multidisciplinary, Water-related Studies and Interests at The University of Connecticut

TITLE	FACULTY MEMBERS	DEPARTMENTS AND DISCIPLINES
Soil injection of septage under quasi-public management	J. J. Kolega, Leader A. W. Dewey R. L. Leonard B. J. Cosenza*	Agricultural Engineering (Water and Waste Disposal) Agricultural Economics (Land and Water Economics) Agricultural Economics (Resource Economics) Biology (Bacteriology)
Efficient pricing for urban wastewater renovation	R. L. Leonard, Leader R. Laak H. Kardestuncer	Agricultural Economics (Resource Economics) Civil Engineering (Environmental Engineering) Civil Engineering (Systems Analysis)
Disposal and utilization of dairy and poultry manures by land application	J. J. Kolega R. W. Wengel	Agricultural Engineering (Water and Waste Disposal) Plant Science (Soil Physics)
Monitoring of poultry manure-soil mixtures for nitrates and ammonia	W. A. Aho, Leader G. F. Griffin	Animal Industries (Poultry Science) Plant Science (Soil Fertility)

*Associate Professor at Southern Connecticut State College, New Haven

TITLE	FACULTY MEMBERS	DEPARTMENTS AND DISCIPLINES
Aleutian bio-mass adaptation to changes in tidal flats and reefs	J. S. Aigner, Leader W. S. Laughlin R. F. Black	Anthropology (Archeology) Biobehavioral Sciences (Biological Anthropology) Geology and Geography (Geomorphology)
Biotic changes in the Willimantic-Shetucket River associated with improvements in sewage treatments	W. J. Widmer, Leader J. D. Buck R. G. Jensen F. R. Trainor W. R. Whitworth	Civil Engineering (Environmental Engineering) Biological Sciences (Microbiology) Nutritional Sciences and Pesticides Research Laboratory (Biochemistry) Biological Sciences (Phycology) Plant Science (Ichthyology)
Shellfish culture using the heated effluent from electric power plants	S. Y. Feng, Leader G. S. Campbell	Biological Sciences (Molluscan Physiology and Pathology) Mechanical Engineering (Fluid Mechanics)
Water quality control with synthetic polymeric flocculants	J. K. Dixon, Leader R. C. Tilton	Chemistry (Colloid Chemistry) Laboratory Medicine (Microbiology)
Wastewater disposal systems for unsewered areas	R. Laak, Leader W. W. Bowley K. A. Healy T. Helfgott	Civil Engineering (Environmental Engineering) Mechanical Engineering (Fluid Mechanics) Civil Engineering (Soils Engineering) Civil Engineering (Environmental Engineering)

TITLE	FACULTY MEMBERS	DEPARTMENTS AND DISCIPLINES
Determination of budgets of heavy metal wastes in Long Island Sound	P. Dehlinger, Leader W. F. Bohlen S. Y. Feng W. E. Fitzgerald R. W. Garvine D. F. Paskausky	Geology and Geography (Marine Geophysics) Geology and Geography (Physical Oceanography) Biological Sciences (Molluscan Physiology and Pathology) Geology and Geography (Chemical Oceanography) Mechanical Engineering (Fluid Mechanics) Geology and Geography (Ocean Dynamics)
Atmospheric influences on ecosystems and satellite sensing	B. E. Janes, Leader J. J. Brumbach J. J. Lucas	Plant Science (Plant Physiology) Plant Science (Climatology) Storrs Agricultural Experiment Station (Biometrics)

TABLE I
WATER CONCERNS CATEGORIES TABULATION

CATEGORIES	NUMBER OF FACULTY*
1. Agricultural waters, movement, waste disposal	13
2. Aquatic life and ecology	38
3. Environmental protection and conservation	12
4. Industrial and municipal pollution effects and control	29
5. Legal, economic, and political aspects of water resources	9
6. Long Island Sound, estuaries and harbors	18
7. Marshes, wetlands, lakes and ponds	10
8. Rivers of Connecticut	8
9. Water nature and cycle	38
10. Water quality, health, and sanitation	40
11. Water resources planning, development, and management	33

*Some faculty members are represented in two or more categories.

TABLE II

SUMMARY TABLE

Number of institutions contacted.	21
Number of institutions responding	21
Number of institutions reporting faculty.	18
Number of faculty members reported	186

INSTITUTION	FACULTY REPORTED	DEPARTMENTS REPRESENTED	WATER CONCERNS REPRESENTED
Central Connecticut State College	15	6	9
Connecticut College	2	1	2
Eastern Connecticut State College	3	2	2
Fairfield University	3	2	3
Quinnipiac College	5	1	3
Sacred Heart University	4	2	4
St. Joseph College	1	1	1
Southern Connecticut State College	8	4	5
The Connecticut Agricultural Experiment Station	8	4	7
The University of Connecticut	98	30	11
The University of Hartford	3	2	3
Trinity College	4	3	5
United States Coast Guard Academy	4	1	3
University of Bridgeport	4	1	4
University of New Haven	2	1	2
Wesleyan University	5	2	5
Western Connecticut State College	4	1	4
Yale University	15	6	7

APPENDIX - Alphabetical Listing of Faculty

NAME	INSTITUTION	DEPARTMENT
Aho, W. A.	The University of Connecticut	Animal Industries
Ahrens, J. F.	The Connecticut Agricultural Experiment Station	Plant Pathology
Aigner, J. S.	The University of Connecticut	Anthropology
Anderson, H. G.	Central Connecticut State College	Biology
Anderson, J. F.	The Connecticut Agricultural Experiment Station	Entomology
Barvenik, F.	University of Bridgeport	Biology
Black, R. F.	The University of Connecticut	Geology and Geography
Bock, P.	The University of Connecticut	Civil Engineering
Bohlen, W. F.	The University of Connecticut	Geology and Geography
Bongiorno, S. L.	Fairfield University	Biology
Booth, R. A.	Central Connecticut State College	Biology
Bormann, H. F.	Yale University	Forestry
Borst, D. C.	Quinnipiac College	Biological Sciences
Bowley, W. W.	The University of Connecticut	Mechanical Engineering
Bracken, D. E.	The University of Hartford	Chemistry
Brewer, R. H.	Trinity College	Biology
Brumbach, J. J.	The University of Connecticut	Plant Science
Buck, J. D.	The University of Connecticut	Biological Sciences Group
Burford, M. G.	Wesleyan University	Chemistry
Burke, C. N.	The University of Connecticut	Pathobiology
Caldwell, K.	Western Connecticut State College	Earth Sciences
Campbell, G. S.	The University of Connecticut	Mechanical Engineering
Carpenter, E. D.	The University of Connecticut	Plant Science

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Chen, C.	Western Connecticut State College	Earth Sciences
Chien, Y. T.	The University of Connecticut	Electrical Engineering
Chriss, R.	Sacred Heart University	Chemistry
Chow, C.	Central Connecticut State College	Physics-Earth Sciences
Coogan, C. H., Jr.	The University of Connecticut	Mechanical Engineering
Collins, R. P.	The University of Connecticut	Biological Sciences Group
Combs, T. J.	Fairfield University	Biology
Cosenza, B. J.	Southern Connecticut State College	Biology
Costello, H. J.	United States Coast Guard Academy	Physical and Ocean Sciences
Curran, W. E.	Trinity College	Economics
Dabora, E. K.	The University of Connecticut	Mechanical Engineering
Damman, A. W. H.	The University of Connecticut	Biological Sciences Group
Davis, C.	The University of Connecticut	Law
Davis, R. L.	Central Connecticut State College	Biology
de Boer, J.	Wesleyan University	Geology
Dehlinger, P.	The University of Connecticut	Geology and Geography
Denyes, A.	Sacred Heart University	Biology
Dewey, A. W.	The University of Connecticut	Agricultural Economics
DiCapua, R. A.	The University of Connecticut	Pharmacy
Dixon, J. K.	The University of Connecticut Torrington Branch	Chemistry
Dowling, J. J.	The University of Connecticut	Geology and Geography
Drobnyk, J. W.	Southern Connecticut State College	Geology

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Emmert, F. H.	The University of Connecticut	Plant Science
Fairchild, I.	Central Connecticut State College	Art
Farrish, R. O. P.	The University of Connecticut	Agricultural Economics
Feng, S. Y.	The University of Connecticut	Biological Sciences Group
Ferrill, M. D.	The University of Connecticut	Plant Science
Fellows, I. F.	The University of Connecticut	Agricultural Economics
Ferguson, C. B.	Southern Connecticut State College	Geography
Fitch, R. M.	The University of Connecticut	Chemistry
Fitzgerald, W. F.	The University of Connecticut	Geology and Geography
Flanagan, D. R.	The University of Connecticut	Pharmacy
Forsyth, W.	Central Connecticut State College	Physics-Earth Sciences
Fox, D.	The University of Connecticut	Political Science
Frankel, L.	The University of Connecticut	Geology and Geography
Franz, D. R.	The University of Connecticut	Biological Sciences Group
Frink, C. R.	The Connecticut Agricultural Experiment Station	Soil and Water
Garvine, R. W.	The University of Connecticut	Mechanical Engineering
Glasel, J. A.	The University of Connecticut	Biochemistry
Gold, A.	Trinity College	Economics
Goldstein, M.	Western Connecticut State College	Earth Sciences
Goodkind, T. B.	The University of Connecticut	Elementary Education
Goodwin, R. H.	Connecticut College	Botany
Gorski, L. J.	Central Connecticut State College	Biology

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Greene, N. D.	The University of Connecticut	Metallurgy
Griffin, G. F.	The University of Connecticut	Plant Science
Groff, D.	Western Connecticut State College	Earth Sciences
Groth, J. L.	Central Connecticut State College	Chemistry
Groth, R. H.	Central Connecticut State College	Chemistry
Guttay, A. J. R.	The University of Connecticut	Plant Science
Haakenson, H.	Southern Connecticut State College	Environmental Education
Hartman, W. D.	Yale University	Biology
Healy, K. A.	The University of Connecticut	Civil Engineering
Heeren, J. K.	Trinity College	Chemistry
Helfgott, T.	The University of Connecticut	Civil Engineering
Hill, D. E.	The Connecticut Agricultural Experiment Station	Soil and Water
Hill, E.	The University of Connecticut	Journalism
Holzer, T. L.	The University of Connecticut	Geology and Geography
Hutchinson, G. E.	Yale University	Biology
Jahoda, W. J.	Eastern Connecticut State College	Biology
Janes, B. E.	The University of Connecticut	Plant Science
Jensen, R. G.	The University of Connecticut	Nutritional Sciences
Johnson, J. F.	The University of Connecticut	Chemistry
Jordan, D.	The University of Connecticut	Electrical Engineering
Kalma, D. L.	University of New Haven	Biology
Kardestuncer, H.	The University of Connecticut	Civil Engineering
Kennard, W. C.	The University of Connecticut	Institute of Water Resources

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Klei, H. E.	the University of Connecticut	Chemical Engineering
Kolega, J. J.	The University of Connecticut	Agricultural Engineering
Kollmeyer, R. C.	United States Coast Guard Academy	Physical and Ocean Sciences
Kottke, M. W.	The University of Connecticut	Agricultural Economics
Krause, A. W.	Central Connecticut State College	Chemistry
Laak, R.	The University of Connecticut	Civil Engineering
Laufer, H.	The University of Connecticut	Biological Sciences Group
Laughlin, W. S.	The University of Connecticut	Biobehavioral Sciences
Leman, C. B.	St. Joseph College	Chemistry
Leonard, R. L.	The University of Connecticut	Agricultural Economics
Levine, H. R.	Quinnipiac College	Biological Sciences
Lin, J. D.	The University of Connecticut	Civil Engineering
Lindstrom, R. E.	The University of Connecticut	Pharmacy
Lisman, F.	Fairfield University	Chemistry
Long R. P.	The University of Connecticut	Civil Engineering
Loughlin, J. C.	Central Connecticut State College	Economics
Lucas, J. J.	The University of Connecticut	Storrs Agricultural Experiment Station
Lund, W. A., Jr.	The University of Connecticut	Biological Sciences Group
Lylis, J.	The University of Hartford	Biology
Lyons, P. A.	Yale University	Chemistry
Masselli, J. W.	Wesleyan University	Chemistry
Masselli, N. W.	Wesleyan University	Chemistry
Masterton, W. L.	The University of Connecticut	Chemistry

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
McCabe, P.	Sacred Heart University	Biology
McGeary, K.	Quinnipiac College	Biological Sciences
McGill, D. A.	United States Coast Guard Academy	Physical and Ocean Sciences
Merriman, D.	Yale University	Biology
Miller, D. R.	The University of Connecticut	Plant Science
Mood, E. W.	Yale University	Public Health
Moran, J. F.	Sacred Heart University	Biology
Moran, T. I.	The University of Connecticut	Physics
Nalwalk, A. J.	The University of Connecticut	Geology and Geography
Niering, W. A.	Connecticut College	Botany
Nightingale, C. H.	The University of Connecticut	Pharmacy
Norvell, W. A.	The Connecticut Agricultural Experiment Station	Soil and Water
Ostrander, D. R.	Central Connecticut State College	Biology
Palmer, E. L.	The University of Connecticut	Agricultural Engineering
Parlange, J.-Y.	The Connecticut Agricultural Experiment Station	Ecology
Parlange, Y.	Yale University	Engineering and Applied Science
Paskausky, D. F.	The University of Connecticut	Geology and Geography
Pelligrino, P.	Southern Connecticut State College	Biology
Penner, L. R.	The University of Connecticut	Biological Sciences Group
Peoples, J. W.	Wesleyan University	Geology
Peters, R. A.	The University of Connecticut	Plant Science
Pollack, E.	The University of Connecticut	Physics

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Poluhowich, J.	University of Bridgeport	Biology
Posey, C. J.	The University of Connecticut	Civil Engineering
Prince, R. P.	The University of Connecticut	Agricultural Engineering
Provasoli, L.	Yale University	Biology
Radulski, R. A.	Southern Connecticut State College	Geology
Ramus, J. S.	Yale University	Biology
Rankin, J. S., Jr.	The University of Connecticut	Biological Sciences Group
Reams, D. C.	University of New Haven	Biology
Repak, A. J.	Quinnipiac College	Biological Sciences
Roberts, A. D.	The University of Connecticut	Foundations and Curriculum
Rumney, G. R.	The University of Connecticut	Geology and Geography
Sakalowsky, P. J.	Southern Connecticut State College	Geography
Schaefer, C. W.	The University of Connecticut	Biological Sciences Group
Schramm, R. J., Jr.	The University of Connecticut	Plant Science
Schultz, C. W.	The University of Connecticut	Electrical Engineering
Scottron, V. E.	The University of Connecticut	Civil Engineering
Sharpless, T. W.	The University of Hartford	Chemistry
Siccama, T. G.	Yale University	Forestry
Singletary, R.	University of Bridgeport	Biology
Skauen, D. M.	The University of Connecticut	Pharmacy
Slotnick, H.	Central Connecticut State College	Chemistry
Smith, A. R.	Central Connecticut State College	Geography

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Smith, H. F.	The University of Connecticut	Statistics
Smith, R. N.	Eastern Connecticut State College	Physical Sciences
Sobel, M. J.	Yale University	Administrative Sciences
Steinmetz, C.	Southern Connecticut State College	Biology
Stephens, J. E.	The University of Connecticut	Civil Engineering
Stern, C. D.	The University of Connecticut	Agricultural Engineering
Stock, J. T.	The University of Connecticut	Chemistry
Stoy, R. L.	The University of Connecticut	Mechanical Engineering
Stuart, J. D.	The University of Connecticut	Chemistry
Stutzman, L. F.	The University of Connecticut	Chemical Engineering
Sundstrom, D. W.	The University of Connecticut	Chemical Engineering
Swibold, R. E.	The University of Connecticut	Art
Tait, C. C.	The University of Connecticut	Law
Thomson, K.	Yale University	Biology
Tilton, R. G.	The University of Connecticut	Laboratory Medicine
Tolderlund, D. S.	United States Coast Guard Academy	Physical and Ocean Sciences
Tozloski, A. H.	Central Connecticut State College	Biology
Trainor, F. R.	The University of Connecticut	Biological Sciences Group
Turner, F. C.	The University of Connecticut	Political Science
Turner, N. C.	The Connecticut Agricultural Experiment Station	Ecology
Vance, R.	Yale University	Biology
Van Gundy, J.	University of Bridgeport	Biology

APPENDIX continued

NAME	INSTITUTION	DEPARTMENT
Van Hemert, D.	Quinnipiac College	Biological Sciences
Waggoner, P. E.	The Connecticut Agricultural Experiment Station	Ecology
Walker, C. A.	Yale University	Engineering and Applied Science
Wegener, P. P.	Yale University	Engineering and Applied Science
Werboff, J.	The University of Connecticut	Behavioral Science and Community Health
Wengel, R. W.	The University of Connecticut	Plant Science
Whitworth, W. R.	The University of Connecticut	Plant Science
Widmer, W. J.	The University of Connecticut	Civil Engineering
Wulff, B. L.	Eastern Connecticut State College	Biology

AVAILABLE PUBLICATIONS
OF THE INSTITUTE OF WATER RESOURCES

- Report Number 4 Connecticut Water Law: Judicial Allocation of Water Resources, Robert I. Reis, 1967, \$3.00, plus tax
- Report Number 7 Lectures on Water Conservation, ed. W. C. Kennard, October 1968
- Report Number 8 Connecticut's Administrative Control of Water Pollution - The Fluid Administrative Process, Theodore H. Focht, April 1969
- Report Number 9 A Limnological Study of the Lower Farmington River with Special Reference to the Ability of the River to Support American Shad, W. R. Whitworth and D. H. Bennett, February 1970
- Report Number 10 A Bibliography of Publications Relating to Water Resources in Connecticut, 1900-1970, W. C. Kennard and J. S. Fisher, May 1970
- Report Number 11 An Economic Evaluation of Connecticut Water Law: Water Rights, Public Water Supply, and Pollution Control, R. L. Leonard, July 1970
- Report Number 12 Water Resources Research Activities and Interests at The University of Connecticut, W. C. Kennard and J. S. Fisher, September 1970
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- Report Number 16 Water Research at The University of Connecticut, W. C. Kennard and M. S. Williams, July 1972