

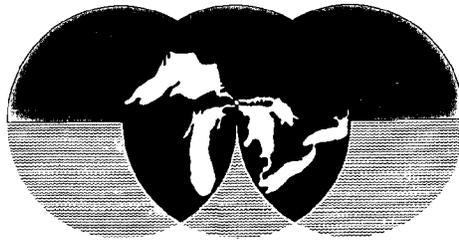
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Great Lakes Basin Commission

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Annual Report

FISCAL YEAR ENDING JUNE 30, 1969



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GREAT LAKES BASIN COMMISSION

Executive Order 11345. April 20, 1967

ESTABLISHMENT OF THE GREAT LAKES BASIN COMMISSION

WHEREAS the Water Resources Planning Act (hereinafter referred to as the Act, 79 Stat. 244, 42 U.S.C. 1962 *et seq.*) authorizes the President to declare the establishment of a river basin water and related land resources commission when a request for such a commission is addressed in writing to the Water Resources Council (hereinafter referred to as the Council) by the Governor of a State within which all or part of the basin or basins concerned are located and when such a request is concurred in by the Council and by not less than one-half of the States within which portions of the basin or basins concerned are located; and

WHEREAS the Council, by resolution adopted March 7, 1966, concurred in the requests of the Governors of the States of Indiana, Michigan, Minnesota, Ohio, and Wisconsin, which have been concurred in by the Governors of Illinois, New York, and Pennsylvania; and did itself request that the President declare the establishment of the Great Lakes Basin Commission under the provisions of section 201 of the Act; and

WHEREAS the requests of the Governors of the States of Indiana, Michigan, Minnesota, Ohio, and Wisconsin, and the resolution of the Council of March 7, 1966, together with written concurrences by the Governors of the States of Illinois, New York, and Pennsylvania, satisfy the formal requirements of section 201 of the Act; and

WHEREAS it appears that it would be in the public interest and in keeping with the intent of Congress to declare the establishment of such a Commission:

NOW, THEREFORE, by virtue of the authority vested in me by section 201 of the Act, and as President of the United States, it is ordered as follows:

SECTION 1. *Great Lakes Basin Commission.* It is hereby declared that the Great Lakes Basin Commission is established under the provisions of Title II of the Act.

SEC. 2. *Jurisdiction of Commission.* It is hereby determined that the jurisdiction of the Great Lakes Basin Commission referred to in section 1 of this order (hereinafter referred to as the Commission) shall extend to those portions of the eight Great Lakes States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin that are drained by the St. Lawrence River system, including the Great Lakes, their tributaries, and tributaries to the St. Lawrence River which reach that river

within the United States, in accordance with the requests of the Governors of Indiana, Michigan, Minnesota, Ohio, and Wisconsin, concurred in by the Governors of Illinois, New York, and Pennsylvania, and in accordance with the resolutions of the Council.

SEC. 3. *Membership of the Commission.* It is hereby determined that, in accordance with section 202 of the Act, the Commission shall consist of the following:

(1) a Chairman to be appointed by the President,

(2) one member from each of the following Federal departments and agencies: Department of Agriculture, Department of the Army, Department of Commerce, Department of Health, Education, and Welfare, Department of Housing and Urban Development, Department of the Interior, Department of Justice, Department of Transportation, and the Federal Power Commission, such member to be appointed by the head of each department or independent agency he represents,

(3) one member from each of the following States: Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin, and

(4) one member from each interstate agency created by an interstate compact to which the consent of Congress has been given and whose jurisdiction extends to the waters of the area specified in section 2.

SEC. 4. *Functions to be performed.* The Commission and its Chairman, members, and employees are hereby authorized to perform and exercise, with respect to the jurisdiction specified in section 2 of this order, the functions, powers, and duties of such a Commission and of such Chairman, members, and employees, respectively, as set out in Title II of the Act.

SEC. 5. *International coordination.* The Chairman of the Commission is hereby authorized and directed to refer to the Council any matters under consideration by the Commission which relate to the areas of interest or jurisdiction of the International Joint Commission, United States and Canada, and the Great Lakes Fishery Commission. The Council shall consult on these matters as appropriate with the Department of State and with the International Joint Commission and the Great Lakes Fishery Commission through their United States Sections for the purpose of enhancing international coordination.

SEC. 6. *Reporting to the President.* The Chairman of the Commission shall report to the President through the Council.

LYNDON B. JOHNSON

The White House
April 20, 1967

[Filed with the Office of the Federal Register, 1:23 p.m., April 20, 1967]

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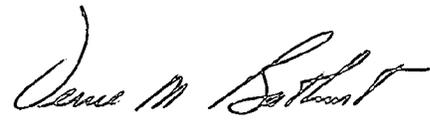
To Their Excellencies, the Governors of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin; and to the Water Resources Council for transmittal to the Congress through the President of the United States:

This is the Second Annual Report of the Great Lakes Basin Commission, which was created on April 20, 1967, at your request, by the President of the United States under authority of the Water Resources Planning Act of 1965.

Significant progress has been made in Fiscal Year 1969 toward the development of a comprehensive, coordinated, joint plan for Federal, State, interstate, local and nongovernmental development of water and related land resources in the Great Lakes Basin.

Federal, State and local agencies and individuals are working together with the Commission's small and highly competent professional staff in the investigation and analysis of the urgent water and related land resources problems. Practicable solutions to these problems are being sought. Numerous contacts have been established with planning groups within the Basin to achieve the best possible coordination under existing authorities. The work is well underway. With your continued support, substantial contributions will be realized over the years ahead toward solving urgent current problems and anticipating and avoiding potential future crises.

Sincerely,



Verne M. Bathurst
Alternate Chairman

1969 1003 22 1969

FOREWORD

The Great Lakes Basin Commission, authorized under the provisions of Title II of the Water Resources Planning Act, was established by Executive Order 11345 on April 20, 1967. The Commission was created for several reasons. First, the gravity of the problems of the Great Lakes Region was becoming awesome. Second, those problems related to navigation, flood control, water pollution, lake levels, and others associated with water management could not be solved independently by any one State. Thus there was need to mobilize and coordinate the talents and resources of government at all levels to deal effectively with these critical problems. This action was an important step toward forming a partnership among all levels of government for improved comprehensive planning of the water and related land resources in the United States portion of the Great Lakes Region. The Commission is designed by the Act to be the principal coordinating agent for the Federal, State and local agencies and nongovernmental entities having planning responsibilities in these fields.

In presenting this second annual report on the activities of the Great Lakes Basin Commission, we wish to extend our appreciation and that of the other Commissioners to all who have contributed their energy and attention to solution of the most immediate and pressing problems in the Great Lakes Basin. Here is a tremendous opportunity to plan and schedule development of our water and related land resources of the Great Lakes Basin in an appropriate

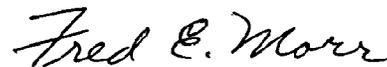
way to meet the needs and aspirations of its citizens.

The increasing population and rapidly expanding commerce and industry require further development and increased utilization of Great Lakes resources. Demands, problems and conflicts are becoming more numerous, complex and frequent. The rapidly expanding population requires, on one hand, more industrial goods and services, more power and energy, more food and fiber, more homes and highways—and at the same time more clean water, air, open space, recreational facilities, and the opportunity for individual expression. All these represent the desire for a chance to live a quality life in a quality environment. Mistakes of the past must be corrected and future errors avoided. The time for good planning is now!

Members of the Great Lakes Basin Commission join with the Commission Staff in the pledge that future reports will further document a record of responsible progress toward the development of a plan of substance, providing for the improvement, protection and careful use and management of our valuable heritage of natural resources in the Great Lakes. It is hoped that all local entities will join with all Federal and State Members in concerted action to achieve and enhance those basic goals which our society holds so dear. It is incumbent upon us to press for such progress and results in our future planning.



Verne M. Bathurst
Alternate Chairman



Fred E. Morr
Vice-Chairman

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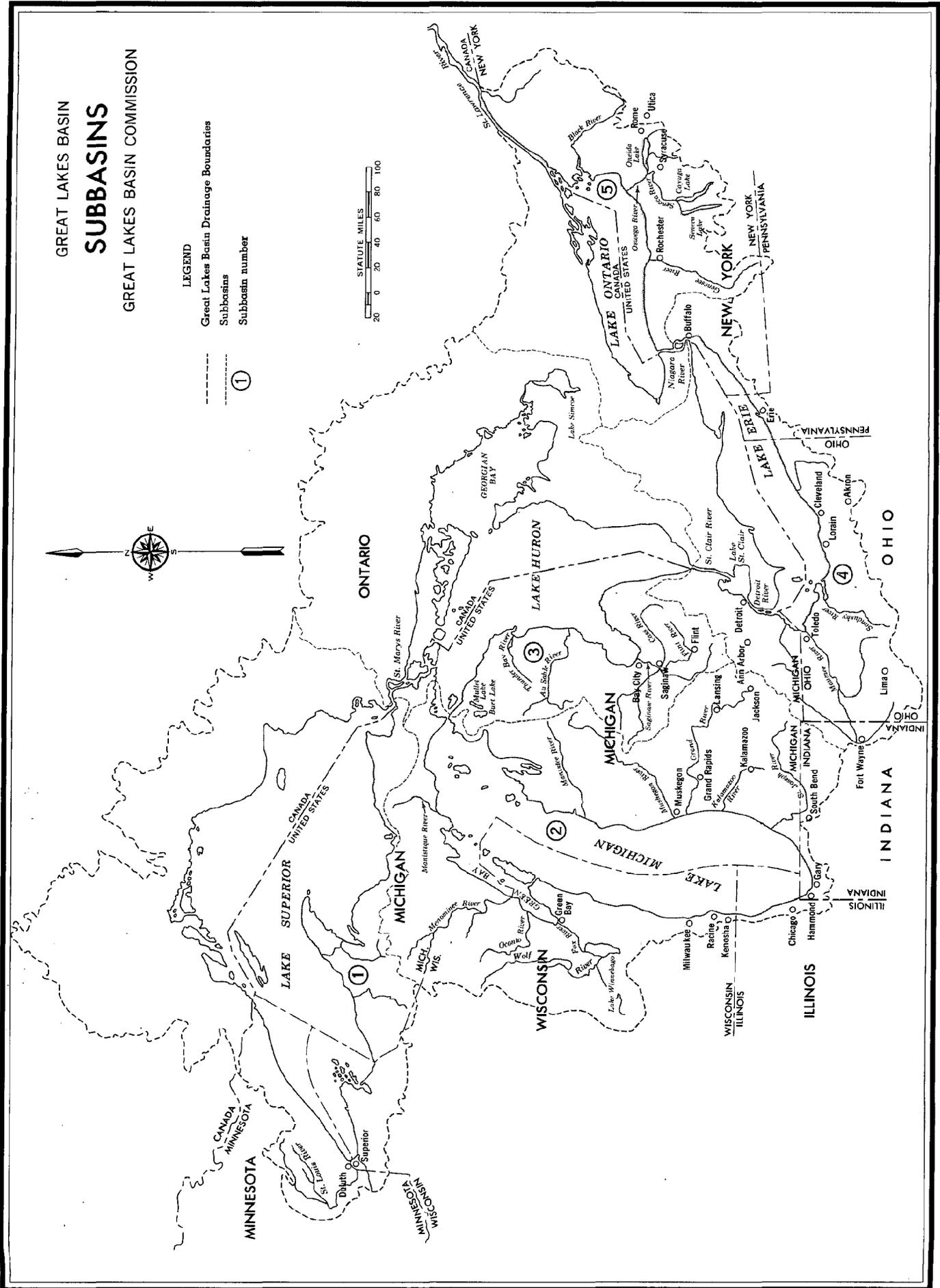
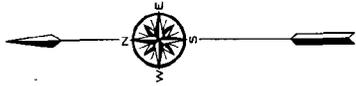
TABLE OF CONTENTS

	Page
Foreword	ii
Introduction	1
Membership	2
Area of Jurisdiction	4
Professional Staff	4
Financial Structure	4
The Year in Brief – Activities in Fiscal Year 1969.....	4
Priorities for Future Data Collection, Investigations, Planning and Construction of Projects	5
Future Type 2 Study of the Maumee River Basin	5
Special Great Lakes Study	6
Coordination with Ongoing Studies	7
Guidelines for the Comprehensive, Coordinated, Joint Plan	7
Comprehensive Framework Study.....	8
Accomplishments of the Work Groups for the Framework Study	9
Anticipated Activities for Fiscal Year 1970	16
Ongoing Activities Affecting Great Lakes Basin Planning.....	16
State Actions in Water Resources Planning	20
The Great Lakes Basin Library.....	23
Future of the Commission	23
Audit Report.....	25

GREAT LAKES BASIN SUBBASINS

GREAT LAKES BASIN COMMISSION

LEGEND
 --- Great Lakes Basin Drainage Boundaries
 --- Subbasins
 ① Subbasin number





Siskiwit Falls, Isle Royale, Michigan – National Park Service

Throughout history, water, like air, has been considered a free commodity to be used freely by anyone. As water use and needs have increased, water quality has degenerated, until no

longer can the water resources of the Great Lakes be considered to be unlimited.

INTRODUCTION

At the request of the Governors of Indiana, Michigan, Minnesota, Ohio and Wisconsin, with the concurrence of the Governors of Illinois, New York and Pennsylvania, and the approval of the Water Resources Council, the President established the Great Lakes Basin Commission by executive order on April 20, 1967. This was accomplished under the authority of the Water Resources Planning Act of 1965.

This action recognized a long-standing need for effective coordination and sound resources planning. Heretofore, for the most part, government agencies at all levels concerned with water resources problems have tended to function independently. Problems in the Great Lakes relating to water level control, pol-

lution, navigation, recreation, and shoreline development transcend State and even National boundaries. Moreover, the Lakes themselves present an entirely different problem in terms of ecological imbalances, waste assimilation, buildup of dissolved solids, bacteria and chemical contamination and oxygen depletion than do the waters of the tributary streams.

Legislative authority for the Great Lakes Basin Commission is set forth in the Water Resources Planning Act of 1965, which provides that a River Basin Commission shall:

- (a) Serve as the principal agency for the coordination of plans for the development of water and related land resources in the region, including

Federal, State, interstate, local and nongovernmental planning.

- (b) Prepare and keep up-to-date a comprehensive, coordinated, joint plan for use and development of water and related land resources. The plan should consider and identify alternatives and may be prepared in stages.
- (c) Recommend long-range schedules of priorities for individual projects.
- (d) Foster and undertake other studies as needed.

The Act provides in Section 204 that each River Basin Commission may also: "Engage in such activities and make such studies and investigations as are necessary and desirable in carrying out the policy set forth in Section 2 of this Act and in accomplishing the purposes set forth in Section 201(b) of this Act."

The Act also quite specifically stipulates that the actions of the River Basin Commission may in no way alter existing jurisdictions, supersede existing laws, or expand or diminish existing responsibilities.

In short, the State-Federal-interstate-local partnership established in the Great Lakes Basin Commission is designed primarily for leadership, guidance, and coordination of planning. The agencies represented on the Commission have the capacity to act as well as to plan. Thus, these agencies, with Commission leadership, can achieve coordinated action toward a unified objective which is the goal in comprehensive planning and development of the resources. This envisions a working partnership among the agencies which share the responsibility for planning and management of these resources. Eventually the results, conclusions and recommendations of all of the studies which are pertinent to the conservation, development and use of the water and related land resources of the Great Lakes Basin will be analyzed, coordinated and summarized in the Comprehensive, Coordinated, Joint Plan for the Great Lakes Basin.

The Great Lakes Basin Commission has now completed its second year. A brief review of pertinent facts following the issuance of the executive order establishing the Commission is included here to give some background to the actions to which the Commission addressed itself during Fiscal Year 1968.

Simultaneously with the issuance of the executive order, Raymond F. Clevenger of Michigan was appointed Commission Chairman by the President. The first, or organizational, meeting of the Great Lakes Basin Commission was held in Ann Arbor, Michigan,

in June of 1967. Commission members representing various Federal agencies and the eight States named above were present. At this meeting, Mr. Fred E. Morr, Director of the Ohio Department of Natural Resources, was elected Vice-Chairman of the Commission. The Commission selected Ann Arbor, Michigan, as the location for its headquarters.

During Fiscal Year 1968 the Great Lakes Basin Commission held five more meetings. Ad hoc committees were appointed to recommend Commission bylaws, staffing and budget guidelines and policies for goals and procedures. The recommendations of these committees were subsequently adopted by the Commission. Mr. Clevenger resigned as Chairman in June of 1968.



U. S. Department of Agriculture
Water everywhere – flooded conditions of a rural area in Ohio.

MEMBERSHIP

The Great Lakes Basin Commission is composed of a Chairman appointed by the President, a State member designated by each Governor, a member designated by the Secretary of each of the nine Federal departments with substantial programs or interests in water and related land resources, and a member designated by the Great Lakes Commission, a commission formed under interstate compact. The Vice-Chairman is elected by the State members. During the entire past year the Commission has operated under the able leadership of Mr. Verne M. Bathurst, who served as both Alternate Chairman for the Commission and as the Commissioner for the U.S. Department of Agriculture. The membership, as of time of printing, is as follows:

GREAT LAKES BASIN COMMISSION MEMBERS AND ALTERNATES

Chairman: Mr. Frederick O. Rouse (Appointed by the President August 13, 1969)
Alternate Chairman: Mr. Verne M. Bathurst (Served from June 1968 to August 1969)
Vice-Chairman: Mr. Fred E. Morr

<u>State</u>	<u>Member</u>	<u>Alternate</u>
State of Illinois	Mr. William T. Lodge ¹	Dr. William C. Ackermann
State of Indiana	Mr. John E. Mitchell ² Mr. Perley H. Provost ²	Mr. William J. Andrews
State of Michigan	Dr. Ralph A. MacMullan	Mr. Loring F. Oeming ³ Mr. A. Gene Gazlay Mr. Ralph W. Purdy ³
State of Minnesota	Mr. William C. Walton	
State of New York	Mr. R. Stewart Kilborne	Dr. W. Mason Lawrence
State of Ohio	Mr. Fred E. Morr	Dr. Robert W. Teater ⁴ (Alternate Vice-Chairman) Mr. S. L. Frost
Commonwealth of Pennsylvania	Dr. Maurice K. Goddard	Mr. C. H. McConnell
State of Wisconsin	Mr. Lester P. Voigt	Mr. Thomas G. Frangos
<u>Federal</u>	<u>Member</u>	<u>Alternate</u>
Department of Agriculture	Mr. Verne M. Bathurst ⁵ Mr. Arthur H. Cratty ⁵	Mr. Robert S. Fellows
Department of the Army	Brig. Gen. Robert M. Tarbox ⁶ Brig. Gen. William W. Watkin, Jr. ⁶	Mr. James S. King ⁷ Mr. Edwin V. Weiss ⁷ Col. James T. White, Jr.
Department of Commerce	Mr. Erwin C. Hannum	Dr. Walter Thoresen
Department of Health, Education and Welfare	Mr. Donald W. Marshall	
Department of Housing and Urban Development	Mr. Francis D. Fisher	Mr. Edward Bruder
Department of the Interior	Mr. Charles H. Stoddard ⁸ Mr. Burton H. Atwood ⁸	Mr. Fred Wampler
Department of Transportation	Mr. Joseph McCann ⁹ Mr. David W. Oberlin ⁹	Rear Adm. William F. Rea III Mr. Ross Kruser
Federal Power Commission	Mr. Lenard B. Young	Mr. Orel E. Haukedahl
Department of Justice	Mr. Walter Kiechel, Jr.	Mr. Clyde O. Martz ¹⁰
<u>Compact Commission</u>	<u>Member</u>	<u>Alternate</u>
Great Lakes Commission	Sen. Robert E. Stockdale	Col. Leonard Goodsell

¹Mr. Lodge served through November of 1968.

²Mr. Mitchell served through March of 1969; Mr. Provost replaced Mr. Mitchell and served until his death Sept. 25, 1969.

³Mr. Oeming retired in January of 1969; Mr. Purdy replaced Mr. Oeming.

⁴Dr. Teater served through April of 1969.

⁵Mr. Bathurst served through August of 1969; Mr. Cratty replaced Mr. Bathurst.

⁶General Tarbox served through June of 1969; General Watkin replaced General Tarbox.

⁷Mr. King died in November of 1968; Mr. Weiss replaced Mr. King.

⁸Mr. Stoddard served through November of 1968; Mr. Atwood replaced Mr. Stoddard.

⁹Mr. McCann served through April of 1969; Mr. McCann was replaced by Mr. Oberlin.

¹⁰Mr. Martz served until January of 1969.

AREA OF JURISDICTION

The Great Lakes Basin Commission's area of jurisdiction covers the United States portion of the drainage area of the five Great Lakes, their tributaries and the tributaries discharging into the St. Lawrence River which reach that river within the United States. The studies of needs, problems, and solutions in the Framework Study will be carried out by groups of adjacent river basins. Some of the information needed in the study is available only by counties, without regard to drainage basin boundaries; the term Great Lakes Region was adopted for the study as an approximation boundary by counties of the Great Lakes Basin, but including certain selected additional counties having important economic relationships to this basin. The region is divided into five subregions having a similar county boundary relationship to the five lake subbasins.

PROFESSIONAL STAFF

As provided by law, a small staff has been recruited by the Chairman or the Alternate Chairman with the concurrence of the Vice-Chairman.

The present staff consists of the following:

Staff Director and

Director of Planning. Leonard T. Crook
Comprehensive Basin Planner. John L. Hull
Comprehensive Basin Planner. Eugene A. Jarecki
Comprehensive Basin Planner. Oliver C. Reedy
Comprehensive Basin Planner. David C. N. Robb
Secretary to the Commission
and Staff Director Virginia Lawrence
Secretary to Director of
Planning and Composer Norma Greenwood
Librarian Michele Tetley
Library Researcher. Charlotte Fitzsimons

At the end of the year the supporting staff consisted of a writer-editor, two part-time writers, and two part-time typists.

The Budget and Staffing Committee at their March 1969 meeting reaffirmed the pattern which they had previously requested and asked that five additional professional personnel be employed as soon as practical for Commission directed work.

FINANCIAL STRUCTURE

The Great Lakes Basin Commission's operating expenses are shared one-half by the eight participating States and one-half by the Federal Government. The eight States contribute equal amounts. The salary and expenses of the Chairman are borne entirely by the Federal Government. The expenditures are for professional and supporting staff, employee benefits, office expenses and administration, reproduction, printing, supplies and library expenses.

The anticipated income to the Commission for Fiscal Year 1969 was \$360,000. This amount, used for budgeting purposes for the Commission activities, was based upon a commitment of \$22,500 per State from each of the eight States for Fiscal Year 1969 and matching Federal funds of \$180,000. Working capital of \$165,025 was on hand at the beginning of Fiscal Year 1969.

A report of the audit of receipts and expenditures from July 1, 1968 to June 30, 1969 is presented elsewhere in the report.

At the March 1969 Commission Meeting the States reaffirmed their commitment to provide \$22,500 each for Fiscal Year 1970. This amount, when appropriated and matched with equal Federal funds, will provide \$360,000 plus the Fiscal Year 1969 carry-over for Commission use in Fiscal Year 1970.

THE YEAR IN BRIEF — ACTIVITIES IN FISCAL YEAR 1969

The Great Lakes Basin Commission's primary mission is to prepare and keep up-to-date a comprehensive, coordinated joint plan for the entire basin area within its jurisdiction. This plan will be of use for Federal, State, interstate, local and nongovernmental development of water and related land resources in the Great Lakes Basin.

The Commission gave first priority to those activities which would contribute immediately or in the near future to the primary mission of the Commission. In addition to the principal Commission effort on the Comprehensive Framework Study, the Commission concentrated its efforts on establishing priorities for future data collection, investigations, planning and construction of projects; a future Type 2 (feasibility or survey level) study of the Maumee

River Basin, the special study of the Great Lakes; coordination of ongoing planning activities; and the development of Guidelines for the Comprehensive, Coordinated, Joint Plan.

PRIORITIES FOR FUTURE DATA COLLECTION, INVESTIGATIONS, PLANNING AND CONSTRUCTION OF PROJECTS

The Water Resources Planning Act requires the Commission to recommend long-range schedules of priorities for the collection and analysis of basic data and for investigation, planning and construction of projects. The Water Resources Council requested that the Great Lakes Basin Commission prepare their recommendations by April 1, 1969.

It is intended that the long-range priorities evolve into a representative guide that can be used with confidence by Federal and State Government agencies in preparation of their programs and annual budget submissions. The priorities should permit flexibility and be responsive to actual decisions in the legislative and appropriate process.

To initiate this program the Commission prepared and forwarded to the Water Resources Council a tabulation of program elements and associated priority group values for investigations only. It is believed that, with the program elements defined for investigations, the other priorities for basic data collection which precedes the investigations, and management measures and construction of projects which follow



Bureau of Commercial Fisheries, U. S. Dept. of the Interior

Mature alewives migrate to the shallow water in the early spring where, for unknown reasons, they die in massive numbers. They clog water intakes and distress bathers, lake shore residents and resort owners.

the investigations can then be readily established in the annual updating of this program. The Framework Study is being accomplished partly for the purpose of establishing such relative priorities.

The Commission emphasizes the importance of this program. Benefits resulting from coordinating ongoing and future investigation programs and in understanding the relationships among problems and needs in the Great Lakes Basin are already apparent.

FUTURE TYPE 2 STUDY OF THE MAUMEE RIVER BASIN

At the request of the States of Indiana, Ohio and Michigan, the Maumee River Basin was selected for the Commission's first Type 2 study endeavor. This basin was selected for early study for a number of reasons. Of the eleven suggested studies of the Type 2 nature in the same category as the Maumee, it was the only urgently needed investigation having the support of three States. The Maumee Basin was under a Federal Water Pollution Control Administration pollution enforcement action requiring early action by the three States. It was one of the rivers named in the new Federal scenic rivers legislation which required early Federal-State study to determine its potential as a scenic river. There were a number of flood plain studies underway by the Corps of Engineers and others were scheduled. The Cross-Wabash Canal study is underway by the Corps of Engineers and scheduled for completion in 1971. This study is in the interest of providing facilities for navigation and related purposes from Toledo to Fort Wayne and the Ohio River. There were more applications for assistance in watershed planning and protection under Public Law 566 than in any other subbasin, and the Maumee Basin is considered to be the greatest silt-producing subbasin in the Great Lakes area. Other planning was underway by the States and other agencies for special purposes which it was felt would benefit from a combined planning effort.

The Commission Staff worked with the involved States and Federal agencies in defining the necessary study elements and associated costs, and in developing a mutually acceptable budget estimate for the Maumee Basin Study.

By adoption of a resolution by the Commission, the Plan of Study and Budget Submittal for the Maumee Study was forwarded to the Water Resources Council for a proposed start in Fiscal Year 1971.

SPECIAL GREAT LAKES STUDY

It has been widely recognized that there is need for a limnological systems analysis and mathematical modeling of the Great Lakes themselves to provide values to use in detailed planning studies. Several research proposals have been made, but no limnological systems analysis of the entire Lakes system has yet been developed. The development of such a study for the Great Lakes is considered essential to obtain specific consequences of various alternatives which are needed for the Type 2 planning studies for the Great Lakes. The limnological systems model(s) will assist in selecting alternative courses of action among various structural, nonstructural and management measures to meet near and long-term needs and problems of water and related land resources in the Great Lakes Basin. These studies will provide quantitative values of Lake parameters to complement the Type 2 studies for the river basins which, with other studies, will eventually make up the Comprehensive, Coordinated, Joint Plan.

In order to assess the current practicability of this type of analysis, an exploratory meeting was held with people expert in the field of systems analysis. This meeting confirmed the opinion that a limnological systems modeling of the Great Lakes would be very desirable if found practicable during investigation.

The Commission authorized a practicability study of the proposed limnological systems analysis for the Great Lakes Basin and approved limited funds for use in contracting for the study.

Preliminary arrangements for the practicability study have been initiated. A Board of Technical Advisors has been selected. This Board has determined that the practicability study should have the following objectives:

- (1) Specify the objectives of the limnological systems analysis program and outline the questions that a system model(s) could answer for a Type 2 planning study on the Great Lakes.
- (2) Identify those variables which are critical and necessary to depiction of the natural system in the Great Lakes which can be applied to mathematical modeling. This would include variables which characterize man's activities, e.g., coliform bacteria population statistics, chemical constituents, and flow impediments or flow improvements.
- (3) Locate, identify source, and evaluate the relevant existing data for the Great Lakes in terms of reliability and compatibility with similar data collected under different programs, and correlate with the list of important input variables identified.
- (4) Explore ongoing and proposed models and techniques developed within and outside the Great Lakes area which could be utilized for planning and problem solutions.
- (5) Evaluate flexibility of using the systems analysis to depict the physical-chemical-ecological processes which should be included and the reference of their inclusion within model(s).
- (6) Develop a simple demonstration lake model which will illustrate the applicability of mathematical modeling to the limnological processes.
- (7) Specify the data requirements, data sources, and manpower, costs, and time requirements for the limnological systems analysis model(s) effort. Cost estimates should be segregated into those cost elements to be allocated to outside contractors and those that can be assumed by various States, Federal agencies and others.



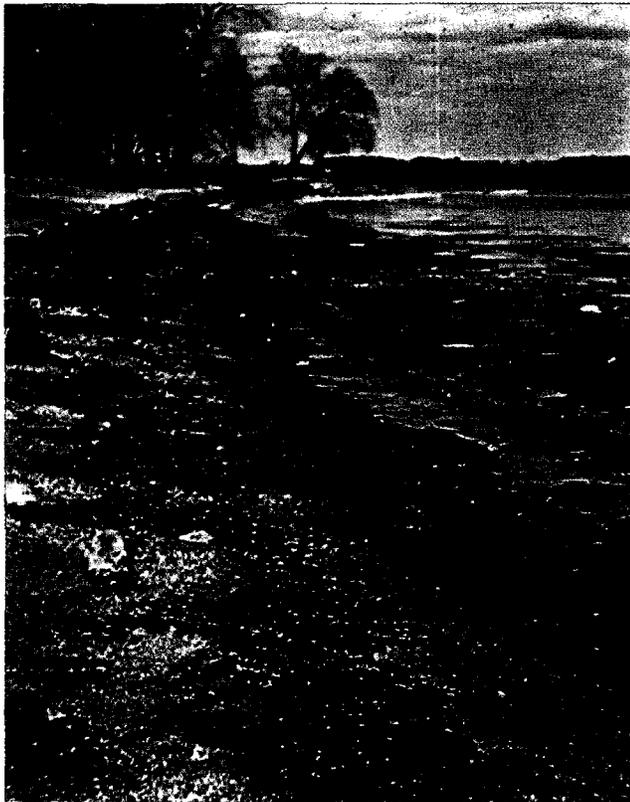
Federal Water Pollution Control Administration

Oil in slackwater of Ottawa River. Wastes have been discharged into the Lakes in such quantities that the water's value to other users has become unreasonably impaired.

COORDINATION WITH ONGOING STUDIES

Coordination between the ongoing studies and the Basin Commission is being accomplished through representation from the staff of the Great Lakes Basin Commission on the several Coordinating Committees for the Type 2 studies being made in the Basin. Also coordination and close working relationships are being developed with regional planning groups, watershed councils and other regional planning commissions.

The Planning Director has been appointed as the Great Lakes Basin Commission's representative on the Southeastern Michigan Coordinating Committee, the Grand River Basin Coordinating Committee, and the Southeast Wisconsin Coordinating Committee. The Planning Director will also serve on the Plan Formulation Sub-Committee for both the Southeastern Michigan Water Resources Study and the Grand River Basin Study. Membership on these committees should insure that the criteria, standards, techniques and procedures will either be acceptable to the Great Lakes Basin Commission or permit ample notification of essential differences.



Federal Water Pollution Control Administration
Organic sediment, algae and debris, Maple Beach, Mouth of
Detroit River.

The Southeastern Michigan Water Resources Study was initiated in the latter part of 1966. Collection of data and analysis of needs and problems in water and related land resources are well underway by various participating Federal agencies and by the State of Michigan. Development of plan formulation criteria is now being started. The final report is scheduled for completion in 1972.

The Grand River Basin Comprehensive Planning Study started in 1964 and is now in its final phase. The preliminary early action program has been developed through the participation of six Federal Departments, the State of Michigan, and the Michigan Grand River Watershed Council. Public informational meetings have been held on the preliminary plans. Public hearings on the basin plan and completion of the report are scheduled for 1970.

The Commission Staff was not represented on the Genesee River Basin Study. This study was in the final stages when the coordinating procedures were set up. The Commission Staff made a limited review of the preliminary draft of the Summary Report and provided comments to the Genesee Coordinating Committee for their consideration. Members of the Great Lakes Basin Commission Staff made a field trip over the Genesee Basin to inspect the problem areas and become acquainted with several of the proposed projects included in the "Summary Report." Members of the Commission Staff attended the June 10-11, 1969 Coordinating Committee meeting on the Genesee River Basin Study at which time the comments from all the reviewing agencies were considered and guidance and decisions were made for the preparing of the final report. The Commission Staff did not offer any opinion at this time as to whether the Genesee Study and report would be acceptable as a part of the Comprehensive, Coordinated, Joint Plan for the Great Lakes Basin. However, the preliminary report does not appear to contain any proposals which would conflict with the basinwide framework plan now being developed by the Great Lakes Basin Commission.

GUIDELINES FOR THE COMPREHENSIVE, COORDINATED, JOINT PLAN

The Commission has recognized a need for guidelines for the development of a comprehensive, coordinated joint plan which would follow and build on the Framework Study and related detailed studies. Work

has been initiated and a draft of the guidelines is being prepared by the Commission Staff.

These guidelines are being prepared to explain and guide the course of action needed in the preparation of the Comprehensive Plan. The Plan will be based, first upon the Framework Plan now being prepared for the Great Lakes Basin, scheduled for completion in Fiscal Year 1972, and second upon the various more detailed studies and those special studies now underway by various States and Federal agencies. It is envisioned that the Framework Study will indicate the need and recommend detailed studies for some portions of the Basin. All of these studies and reports, with appendices, will be used as supporting material for the Commission's Comprehensive Plan.

The guidelines are being prepared in three parts. The first part will show the existing situation in the Basin, a general basin description, a brief resume of existing water and related land resource development, and a summary of available pertinent data. The second part will define the objectives, goals and needs of the Comprehensive Plan, stages in developing the plan, basis for the plan, and the technical and socio-economic requirements of the plan. The third part will develop scheduling, priorities, coordination, and review procedures, and the formulation of the Comprehensive Plan.

Eventually the results, conclusions, and recommendations of all of the studies and reports sponsored by the Great Lakes Basin Commission, by any or all of the States, Federal, interstate, local and non-governmental agencies which are pertinent to the conservation, development and use of the water and related land resources of the Great Lakes Basin will be summarized and compiled into a flexible proposal constituting the Comprehensive, Coordinated, Joint Plan for the Great Lakes Basin.

COMPREHENSIVE FRAMEWORK STUDY

The Commission has organized separate work groups for the accomplishment of specific items of work. The structure adopted for effective and efficient development of the framework investigation consists of a relatively small Framework Study Executive Committee for interpretation of Commission policies; a Plan and Program Formulation Committee, composed generally of a senior planner from each Commissioner's staff to issue instructions based on policy interpretations; a group of six coordinators to

exercise liaison and coordination of responsibilities over two to seven work groups of like orientation; and twenty-seven work groups covering the entire gamut of water and related land resources planning to accomplish the actual investigations and reporting for the Framework Study.

The Plan of Study was completed in August and issued in October of 1968. It stated the goals, objectives, extent of the investigations, and work schedules, and provided the initial coordinating device for the study.

It was recognized that the Plan of Study would need periodic updating and revision as work on the studies developed new aspects and activity schedules were further refined. The Plan of Study is now under revision to reflect the budget reductions, to incorporate new thoughts and procedures, and to improve the format.

A draft of the "Guidelines for Framework Plan Formulation" for the Framework Study has been prepared by an ad hoc committee and the Commission staff. The draft is being reviewed by the Plan and Program Formulation Committee, the Coordinators and the Work Group Chairmen.

The principal activities in connection with the Framework Study have been carried out by various work groups. Organizational arrangements have been completed, initial meetings held, with one or two exceptions, and considerable progress has been made. The organization of the study investigation, the scope of the investigation and the status of the Work Group accomplishments are given in the following section.



U. S. Department of Agriculture
Erosion and sediment production resulting from denuding the soil for urban development.

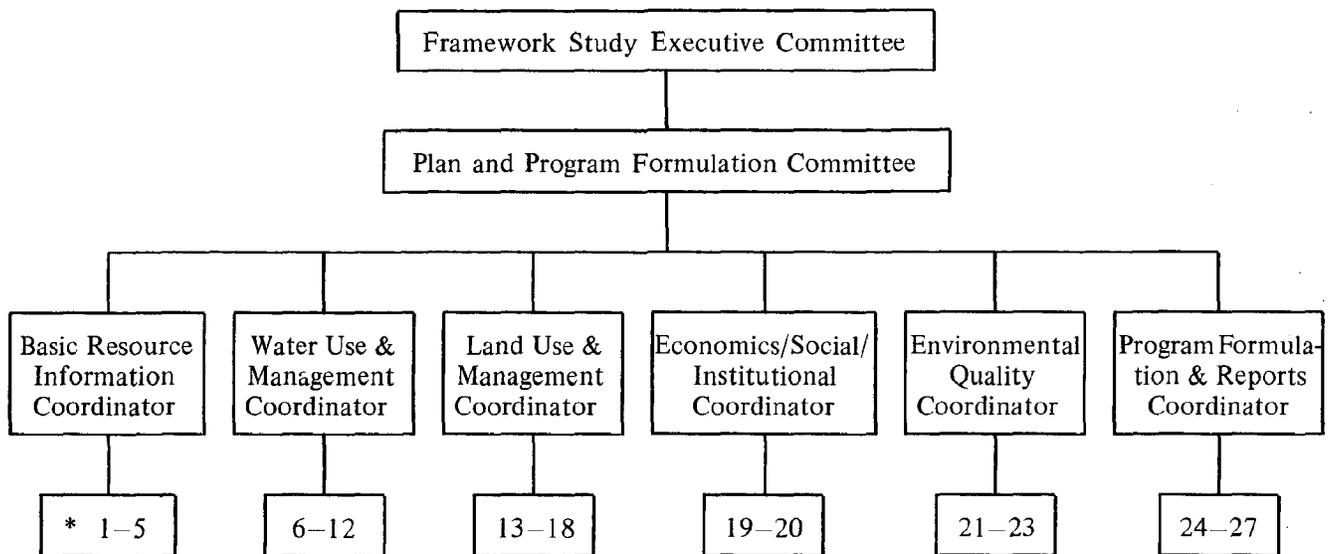
ACCOMPLISHMENTS OF THE WORK GROUPS FOR THE FRAMEWORK STUDY

The scope of the work to provide the information needed for the Framework Study is indicated by major areas of interest and Work Groups of similar orientation to provide information for these major areas of interest. These are: Basic Resource Information: (1) Climate and Meteorology, (2) Surface Water Hydrology, (3) Geology and Ground Water, (4) Limnology of Lakes and Embayments, (5) Mineral Resources. Water Use and Management: (6) Water Supply—Municipal, Industrial and Rural, (7) Water Quality and Pollution Control, (8) Fish, (9) Navigation—Commercial and Recreational Boating, (10) Power, (11) Levels and Flows, (12) Shore Use and

Erosion. Land Use and Management: (13) Land Use, (14) Flood Plains, (15) Irrigation, (16) Drainage, (17) Wildlife, (18) Sediment and Erosion. Economics/Social/Institutional: (19) Economic and Demographic, (20) Federal and State: Regulations, Policies, Programs, and Institutional Arrangements. Environmental Quality: (21) Recreation, (22) Aesthetic and Cultural, (23) Health Aspects. Plan and Program Formulation and Reports: (24) Basin Description, (25) Water and Land Requirements, (26) Plan and Program Formulation, performed by the Plan and Program Formulation Committee, and (27) History of Study.

The organization for the Great Lakes Basin Commission Framework Study is shown in the organization chart.

ORGANIZATION FOR THE GREAT LAKES BASIN COMMISSION FRAMEWORK STUDY



* Work Group Numbers

Most of the organizational arrangements for the Framework Study have been developed. The concept adopted by the Commission in the conduct of the Framework Study is to include and promote involvement of as many competent, interested agencies and individuals as possible in staffing the Work Groups. While each Work Group has been staffed principally from Federal, State and local agency personnel, there

are a large number of nongovernmental planners who are members of the various Work Groups. The value of involving these people lies in the new and perhaps somewhat different views they bring to bear on the issues, their knowledge of the conditions and the possible alternatives, the stimulation to other Work Group members, the pretesting of tentative conclusions, an increase in public education and public

relations concerning the studies, and in many cases a wealth of data which they bring to the study, of various types not collected by State or Federal agencies.

The scope of work specified for each of the Work Groups, the character of the entire Framework Study and the Work Group accomplishments to date are briefly discussed in the following paragraphs.

Work Group No. 1 – Climate and Meteorology.

This Work Group has scheduled activities for the collection and tabulation of data from available records related to temperature, rainfall and snowfall. The Work Group was not funded in Fiscal Year 1969. The major accomplishment of this Work Group to June 30, 1969 has been about 80 percent completion of a composite climatological base map which is being prepared by the State of Ohio. All State representatives have been designated for membership on the Work Group.

Work Group No. 2 – Surface Water Hydrology.

Accomplishments of this Work Group include adoption of coordination and work procedures, work assignments, establishment of study priorities, method of analysis and presentation of data in the appendix. Bar charts and other work schedules are being developed to assist and assure that all agencies and States are aware of the critical time elements. No problems are indicated at this time, and accomplishments during this fiscal year are commensurate with the expenditures.

Work Group No. 3 – Geology and Ground Water.

The accomplishment of this Work Group has been a review and appraisal of most of the available geologic maps and published reports. The Work Group has adopted the use of maps for presentation of the data, supplemented by text. Color plates are to be used to distinguish between the geographic boundaries and those of the geology and ground water units. Membership is adequate with all States except Illinois having representation on the Work Group. The overall activities of this Work Group are estimated to be about 15 percent completed.

Work Group No. 4 – Limnology of Lakes and Embayments. The development of usable records in technical terms, with explanations suitable for laymen interpretation, of all the limnological factors, is proceeding according to the schedule set up by the Work Group. Coordination is being carried out through the use of a flow and critical path diagram which identifies information exchange with other Work Groups. Funding for Fiscal Year 1970 appears

to be adequate to accomplish the work planned; however, Fiscal Year 1969 funds were depleted in May 1969.

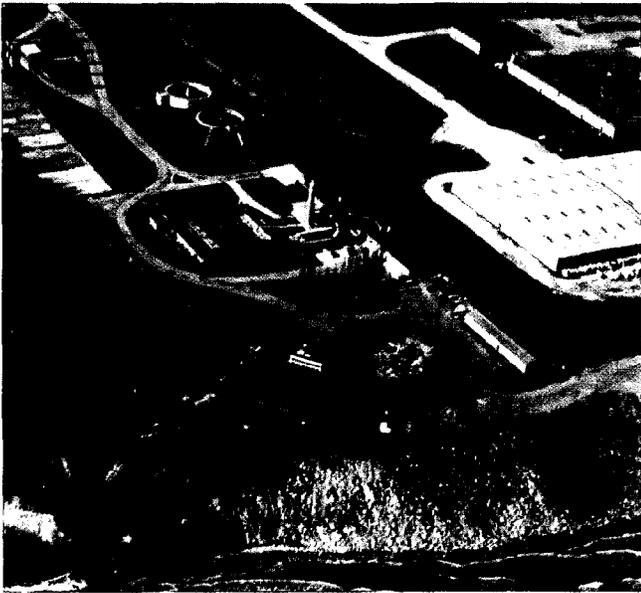
Work Group No. 5 – Mineral Resources. The Work Group has completed its revision of the Plan of Study. Organization and study coordination have been established. Representation on the Work Group is considered adequate, and willingness to participate and interest shown by State members have been commendable. The Bureau of Mines has assumed principal responsibility for preparation of the Mineral Appendix. The tabulation of the historical production data and projections of mineral demands are underway. About 10 to 15 percent of the total scheduled work has been completed. Subarea base maps with county lines and without drainage lines will be used by the Work Group to present data.

Work Group No. 6 – Water Supply—Municipal,

Industrial and Rural. This Work Group has prepared its schedule for an analysis of the existing water supplies, water quality, treatment conditions and water problems, and projections of water requirements. The Work Group has completed updating water supply information for municipal water facilities in the States of Ohio, Indiana and Minnesota. A standard format that the States can use in the tabulation of current municipal water use data and future municipal water use projections is currently being prepared. A water use budget has been developed for rural domestic and livestock water use through the year 2020. Progress on water requirements for industrial growth is pending further approval by the Bureau of the Budget of the questionnaire, "Water Requirements for Industrial Growth." The overall work is estimated to be about 10 percent completed at present.

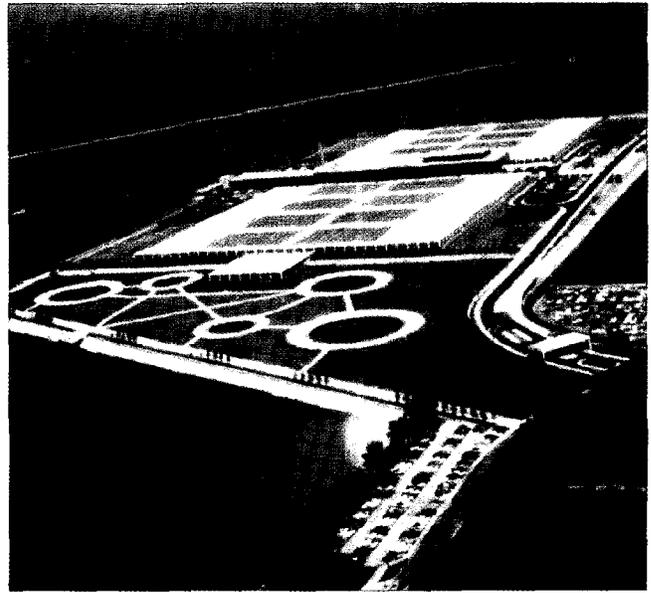
Work Group No. 7 – Water Quality and Pollution

Control. This Work Group organized itself into five subgroups to present data on water quality and pollution control for each of the Great Lakes and its tributary basins. Draft reports for Sections 1 through 4 of the Appendix have been completed for the Lake Michigan Basin and the Lake Huron Basin. First drafts of these four sections for the other three lakes are nearly complete. Coordination with other Work Groups has been good. Receipt of information from the Economic and Demographic Work Group has been helpful and has also focused attention on the need for developing a consistent methodology to be



Wisconsin Department of Natural Resources

One of Wisconsin's new waste treatment plants.



Federal Water Pollution Control Administration

Chicago's new 1000 million gallon per day water treatment plant.

used in translating economic base projection statistics into associated waste water quantities and waste loads.

This Work Group is about on schedule and is characterized by a high degree of competence, interest and willingness to work. It is expected that the materials developed in Sections 1 through 4 will provide much of the information needed by the other Work Groups.

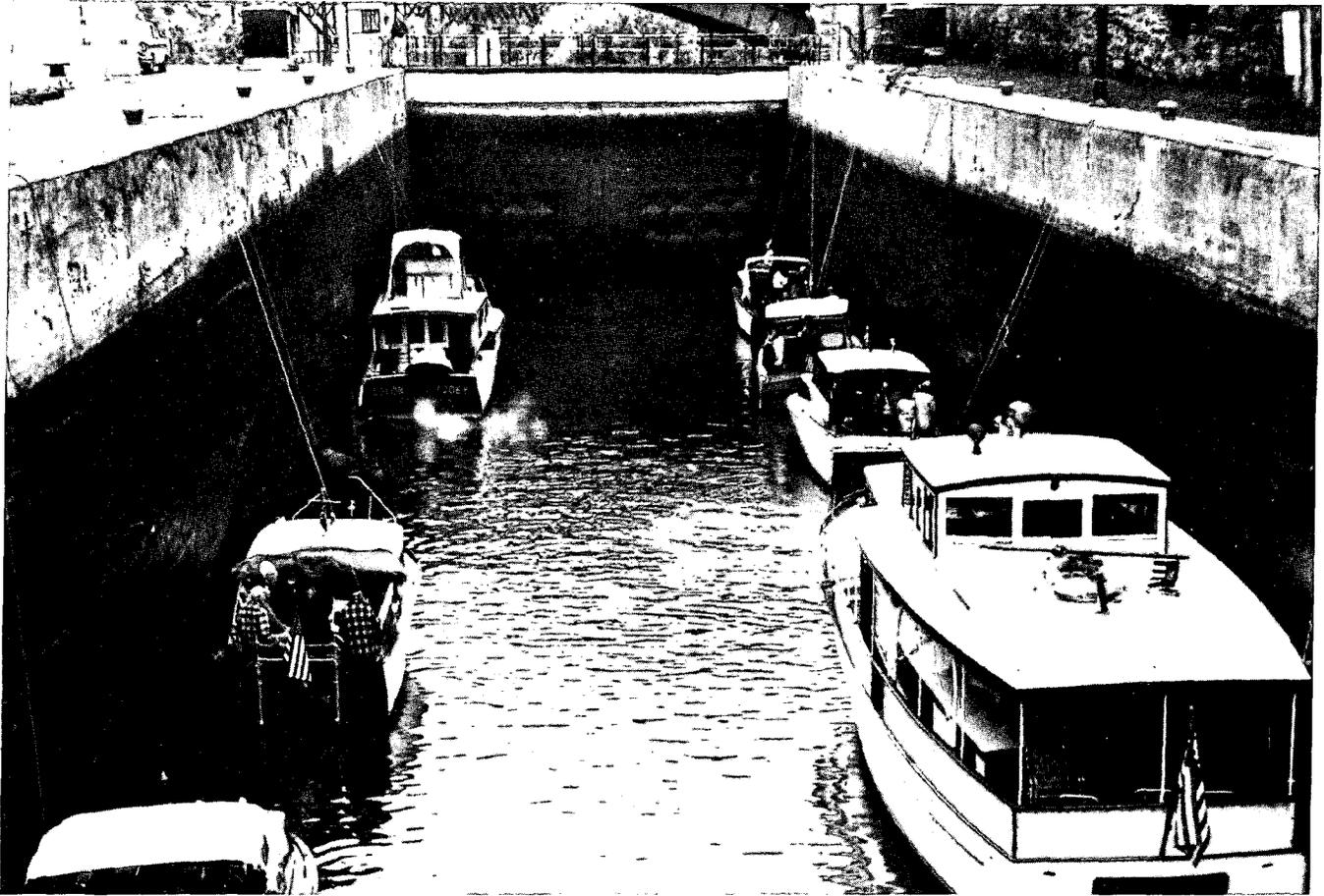
Work Group No. 8 – Fish. The first major accomplishment of the Fish Work Group in its work dealing with past, present and future uses of the fishing resources of the Basin was publication in April 1969 of a report entitled "Analysis of Fishery Programs and Review of Current Plans for the Management of Fishery Resources of the Great Lakes." This report was distributed to all members of the Fish Work Group, Work Group Chairmen, members of the Plan and Program Formulation Committee and the Commissioners.

The Work Group has completed the narrative work plan, specifications for the Work Group, cost estimates, an annotated outline of the Fish Appendix, and a timetable for units of accomplishment. The first draft of certain sections of the Appendix has been completed. Approximately 15 percent of the total Appendix report is complete. Coordination with other Work Groups is continuing. The Fish Work Group is now working on a special request for

information from the Water Quality Work Group. All of the Great Lakes Basin States have representatives on the Work Group and three Federal agencies are represented. There are 26 official representatives on this Work Group, plus 14 additional people who are auditing the activities.

Work Group No. 9 – Navigation–Commercial and Recreational Boating. The Navigation Work Group comprises two task subgroups. The commercial navigation subgroup is responsible for deep navigation. The recreational boating subgroup is concerned only with recreational boating. The work is still in the initial stages of planning. The membership of the Work Group is considered to be adequate. Coordination has been initiated with a number of Work Groups. However, because of the limited accomplishments, the coordinated effort has not yet provided for exchange of data.

Work Group No. 10 – Power. Accomplishments in providing estimates of future water use for power generation in the Basin are proceeding on schedule, with an estimated 20 percent of the work completed. Coordination has been established with other Work Groups, principally Levels and Flows and Water Quality and Pollution Control. Funds available are considered adequate and it appears that they will be adequate for the ensuing year. Review procedures of the first draft of the Power Appendix have been adopted, and some consideration is being given to



The power boat – prosperity's child. Boating for pleasure ranks high in the numbers of participants engaged in water-based recreational activities. Indications are that in the next

providing the second draft of the report to major utilities operating within the Basin as a part of the coordination effort.

Work Group No. 11 – Levels and Flows. In addition to organizing and setting the specifications for the study and appendix outline, one of the first tasks decided upon by this Work Group was preparation of the Study Memorandum, "Great Lakes Information." After review, the Work Group distributed the Study Memorandum to all other Work Groups in order to provide them with sufficient information on physical characteristics and historical levels and flows of the Great Lakes for general use in the study. This information has been well received by the other Work Groups. It is expected that this document will provide the other Work Groups with the general data they will require concerning levels and flows. However, further coordination is planned, and more detailed data will be furnished as required. Discussions on effects of fluctuating lake levels as related to land

The Barge Canal – New York State Conservation Department fifty years, demand for these kinds of facilities will increase severalfold over the present levels.

management, zoning and recreational considerations are providing excellent study progress. It is estimated that the amount of funds available is the minimum amount needed to assure that the work schedule can be maintained.

Work Group No. 12 – Shore Use and Erosion. This Work Group decided to identify graphically existing shore property conditions and problems. The items to be mapped and the mapping format were defined. Each State was requested to complete the mapping for its own shoreline. Shoreline mileage maps have been completed for all of the Great Lakes shores except the St. Marys River. Maps showing the locations of the major water intakes and waste water outfalls on the Great Lakes have been completed in draft form. An estimated 30 percent of the mapping of existing shore property conditions and problems has been completed. The overall study is proceeding generally as planned and as rapidly as possible consistent with limited funds and manpower.

Work Group No. 13 – Land Use. The Work Group has completed listing of water and land acreages by State, county, and planning subarea as delineated by county boundaries. Also a tabulation has been completed of the drainage areas of subbasins and complexes with a breakdown by States. Both of these tabulations of data are being reviewed and reconciled, and when the necessary adjustments are made, they will be submitted to the Commission for adoption and use by all Work Groups. The field collection of the land use and crop yield data has been completed and is being summarized for use in a computer model. Soil resource group data has been tabulated and summarized. A land use table for the State of Michigan has been completed and similar data for the remaining States is being developed. Coordination has been established with the other Work Groups. The data developed by the Land Use Work Group will be needed by many of the other Work Groups.

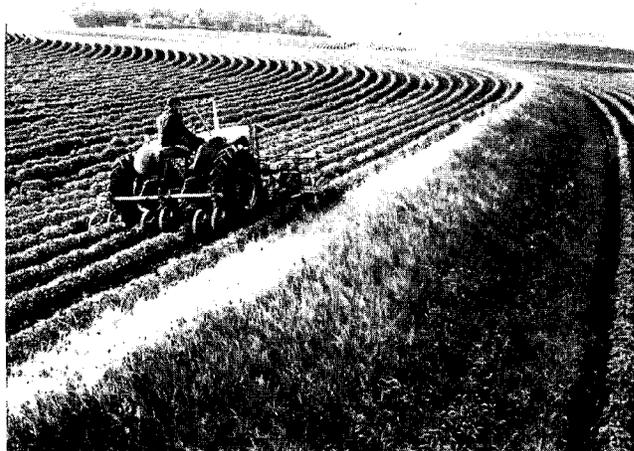
Work Group No. 14 – Flood Plains. The Work Group completed its organization, drafted its portion of the Plan of Study, and developed the specifications for its work early in the year. Accomplishments include development of a damage identification and classification system and units to be used in reporting damages. Methods of conducting the study have been established, and their workability will be tested on a trial area. Data required from other Work Groups have been indicated, and coordination procedures for exchange of information have been discussed.

Work Group No. 15 – Irrigation. This Work Group has developed its study specifications, appendix outline and work plan. Crop irrigation averages have been collected and are being processed. Preliminary work has been accomplished on a survey of water requirements by crops and location using a computer program. The preparation of a map of soil limitations or suitability for irrigation has been initiated. It is estimated that the total job is about 10 percent completed. Coordination procedures have been established and information needed or to be furnished has been identified.

Work Group No. 16 – Drainage. The plan of work has been revised and the organization completed to do the work. Considerable data has been completed on the drainage problems on cropland. Crop yield reductions due to poor drainage have been estimated, and the data is being processed. Inventory of the major drainage problems in the State of Michigan is complete. Work is progressing on the preparation of a generalized map of the drainage problems as

they relate to the soils. A study of the soils in expanding metropolitan areas has been initiated and is continuing. Generally the work is about 15 percent completed.

Work Group No. 17 – Wildlife. This Work Group did not meet during Fiscal Year 1969. Changes in agency personnel resulted in two changes in the chairmanship of the Work Group. However, data available in the office of the chairman were tabulated and processed. A meeting is scheduled early in the new fiscal year.



U. S. Department of Agriculture

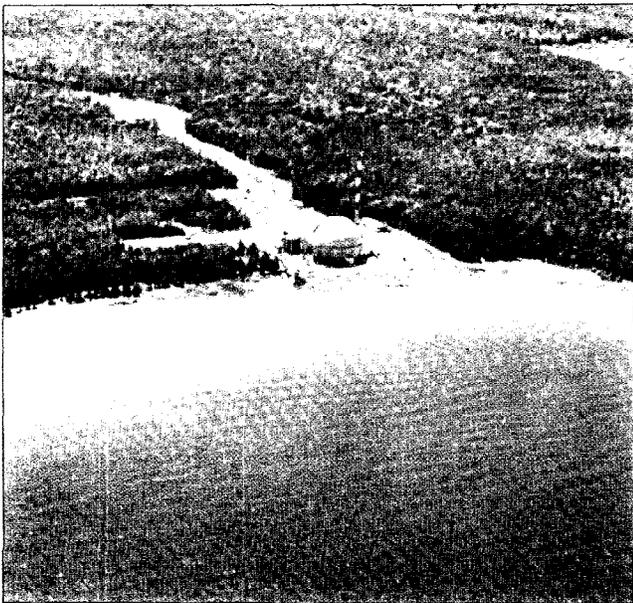
Grassed backslope of the terrace and contour cultivation prevents erosion and sediment production on the Phillips Farm in Minnesota.

Work Group No. 18 – Sediment and Erosion. This Work Group has evaluated the present and future potential erosion from urban development. The first draft of the write-up is ready. An evaluation of streambank erosion has been completed and the first draft of the write-up prepared. Questionnaires were sent to the field to obtain local information and opinions on erosion and sediment problems. Responses were received from all 190 counties. The information obtained from the questionnaires has been summarized and is ready to be written up. The evaluation of sheet erosion rates by counties in the rural areas is roughly 50 percent completed. A comprehensive soil association map has been completed. Work is beginning on interpretations from this and topographic maps to develop information on relief characteristics that control erosion rates and influence sedimentation location and rates. Work assignments have been assumed by two Work Group participants, one to make special studies of the Red Clay area of the Lake Superior region, and the other to study solids from municipal and industrial waste treatment plants.

Work Group No. 19 – Economic and Demographic.

This Work Group organized in Fiscal Year 1968 and has held three operational meetings in Fiscal Year 1969. The Fiscal Year 1969 meetings have included discussions of the two technical reports containing preliminary projections completed by the Work Group. The Work Group has completed the following preliminary projections: (1) agricultural production, farm employment and population for 1960, 1980, 2000 and 2020 for the Great Lakes Basin Commission Planning Subareas; (2) employment by industry categories and total population, personal income, and earnings for 1929 to 2020 by decades, for both OBE Economic Areas and Great Lakes Basin Commission Planning Subareas.

Based on the preceding reports, projections have been prepared of farm and non-farm population by Great Lakes Basin Commission Planning Subareas. Also the Office of Business Economics and the North Central Division, Corps of Engineers, have prepared total population data for 1940, 1950, 1960 and 1966 by counties by Great Lakes Basin Commission Planning Subareas. The OBE has developed projections for 1980 to 2020 for each Great Lakes State and the total population for each Great Lakes Basin Commission Planning Subarea and Water Resources Planning Area. The Work Group is anticipating an on-schedule draft of each individual report from each major participant by December 1, 1969. The overall accomplishment is about 20 percent of the total work.



Michigan Department of Natural Resources

Big Rock Point “NUKE” – The increased demand for future water use for power generation may have an effect on water quality.

Coordination procedures have been set up. Copies of the preliminary projections in the two technical reports have been distributed to all Work Group Chairmen. Also the farm and non-farm population projections have been furnished as requested. Work Group problems are primarily those related to the level of geographic detail for projections of economic data required for municipal and industrial water use and plan formulation for river basins and complexes.

Work Group No. 20 – Federal and State: Regulations, Policies, Programs, and Institutional Arrangements. This Work Group is proceeding on schedule with the agreed upon work plan. However, due to the change in completion date from January 1, 1972 to January 1, 1971, a revised outline is being developed. Due to the unique structuring of this Work Group, coordination with other groups, other than fragmentary requests, has been premature. Membership on the Work Group is adequate, and the representatives appointed are highly qualified and competent individuals who are eager to participate to the fullest extent possible.

Work Group No. 21 – Recreation. This Work Group has held one meeting. General goals and methods of approach to this study were discussed. Despite the cut in projected funding, it is anticipated that work schedules can be met; however, the depth of examination will be restricted, particularly in the area of tourism. The first draft of Appendix Introduction and General Description is virtually com-



Michigan Department of Natural Resources

The Lakes offer a significant asset for outdoor water-oriented recreation for both residents and out-of-State visitors. A recreation scene on a Michigan beach.

pleted, and much of the groundwork for supply, demand and needs analysis has been started. There is need for coordination and liaison work to secure needed input from other Work Groups.

Work Group No. 22' – Aesthetic and Cultural. The first chairman of this Work Group retired during the year, and there was a period of several weeks before the replacement was able to devote any time to the Framework Study. Under National Park Service policy the major input of the Service in studies of this sort is provided by a contractor, with Park Service personnel providing supervision, interpretation and overall participation in the study. During the period between active chairmanships, the Regional Office of the Park Service continued contract negotiations, and executed a contract with Professor Philip M. Lewis of Madison, Wisconsin. The new chairman was then in a position to call a meeting of the Work Group with Professor Lewis to discuss contract terms, objectives, and procedures. Base maps of the entire Region have been furnished to Professor Lewis. The States will be major contributors in providing map overlays showing aesthetic and cultural features. A seminar will be held at an early date to discuss mapping procedures.

Work Group No. 23 – Health Aspects. The Health Aspects Work Group has held one meeting and developed a work plan and appendix outline. All States are represented on the Work Group. The United States Public Health Service has developed "Health Guidelines for Water Resources and Related Land Use Management" which will be used with similar materials from the States and local public health agencies. It is anticipated that these guidelines can be used in conjunction with the water resource development planning for the Great Lakes Basin. Progress has been moderate, but it is expected that the proposed schedule will be maintained.

Work Group No. 24 – Basin Description. Basin descriptions are being prepared in first draft by the Commission staff. These will be reviewed by the chairmen of all Work Groups for accuracy and used as appropriate without repetition for each appendix.

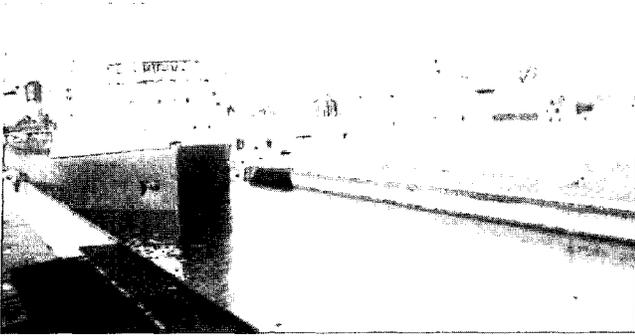
Work Group No. 25 – Water and Land Requirements. This Work Group has not yet been activated, although members have been designated by three Federal agencies and four States. Until the other Work Groups are further advanced in stating their needs, there is no need for this Work Group to meet. It is expected that activity will begin in the next six months.

Work Group No. 26 – Plan and Program Formulation. Work for this appendix will be performed by the Plan and Program Formulation Committee. This Committee, representing all of the constituent agencies of the Commission, and made up of principal planning personnel from these agencies, has performed an important function in advising the Commissioners and the Commission staff on both the management and technical aspects of the studies in progress. The Committee has had a number of meetings to consider and agree on the goals and objectives of the Framework Study, and the procedures and techniques to be employed in plan formulation, and to establish the order in which various segments of the Basin will be considered in the plan formulation process.

Work Group No. 27 – History of Study. This Work Group has not yet been activated, although some appointments have been made. Material on the history of the study is being furnished to the Commission staff. Annual analytical histories will be prepared.



U. S. Department of Agriculture
Forest and woodland make up about half of the total land base. They are concentrated in northern Minnesota, Michigan, Wisconsin and New York. This resource has a significant influence on the economy of the region and also provides a suitable environment for wildlife and outdoor recreation.



Great Lakes Basin Commission

The Great Lakes carry more freight tonnage in a year than all of the Gulf and Pacific ports combined. In its nine-month navigation season, the locks at Sault Ste. Marie at the eastern tip of Lake Michigan pass more than twice the freight tonnage than is passed through the Panama Canal in a year.

ANTICIPATED ACTIVITIES FOR FISCAL YEAR 1970

On August 13, 1969, President Nixon appointed Mr. Frederick O. Rouse of Michigan Chairman of the Great Lakes Basin Commission.

During Fiscal Year 1970 it is expected that the Basin Commission will have:

- (a) completed its basic staffing for Commission directed activities;
- (b) aggressively continued the Framework Investigations;
- (c) undertaken the practicability study for the special Systems Analysis Study for the Great Lakes;
- (d) completed the revisions of the Plan of Study for the Framework Study;
- (e) completed Guidelines for Plan Formulation for the Framework Study;
- (f) initiated actual plan formulation on a scheduled priority basis for the Framework Plan for the tributaries and the Basin;
- (g) completed guidelines for the development of a comprehensive, coordinated, joint Basin plan;
- (h) continued activities in the coordination of ongoing studies; and
- (i) extended the activities of the Great Lakes Basin Commission Library in identifying and obtaining reference materials to be used for reference and research by members of the Commission, the Commission staff, and Commission contractors.

During this same period, it is expected that new studies will be initiated by Commission members for which the Commission will consider Commission staff coordination necessary and beneficial.

ONGOING ACTIVITIES AFFECTING GREAT LAKES BASIN PLANNING

Throughout the year the Great Lakes Basin Commission and its Staff addressed themselves to many subjects relating to planning and reviewed numerous ongoing activities, actions and proposals affecting planning in the Great Lakes. Among these were:

The Upper Great Lakes Regional Commission –

This is a regional-action planning commission covering 119 counties in northern Wisconsin, northern Minnesota and northern Michigan. The Commission has money for technical assistance. It has funded programs in forestry in Michigan, on lake management and lake revival in Wisconsin and provided assistance through the State Departments, the Great Lakes Fishery Commission and the Bureau of Outdoor Recreation on acceleration of the lamprey control program. Funds and assistance have also involved work in land and water conservation and development of airports and marinas. The Regional Commission has a long-range planning task force as well as a short-term task force to develop an early action program through the Governors. The first five-year spending program is underway. There are similarities of interests between the Regional Commission's activities and those of the Great Lakes Basin Commission, and therefore continuing close coordination and relationships will be sought to avoid duplication of efforts in planning and to insure compatibility of results.

Great Lakes Commission – Public Law 90-419, signed in July 1968, granted the consent of Congress to the Great Lakes Basin Compact, covering the eight Great Lakes States. Under the provisions of Title II of the Water Resources Planning Act, the Great Lakes Basin Commission extended an invitation to the Great Lakes Commission to name a representative to the Great Lakes Basin Commission. Mr. Robert E. Stockdale, Ohio Senator and Chairman of the Great Lakes Commission, was named as the member of the Basin Commission. Col. Leonard Goodsell, Executive Director, is the alternate.

In his remarks to the Great Lakes Basin Commission at its October meeting in Erie, Pennsylvania, Senator Stockdale stated that the Great Lakes Commission accepts the concept that the Great Lakes Basin Commission is coordinator of planning agencies as provided by Public Law 89-80 and pledged complete cooperation to the Commission in its role of coordinating the Federal-State planning efforts in the Great Lakes region and in developing the comprehensive plan for the Basin.

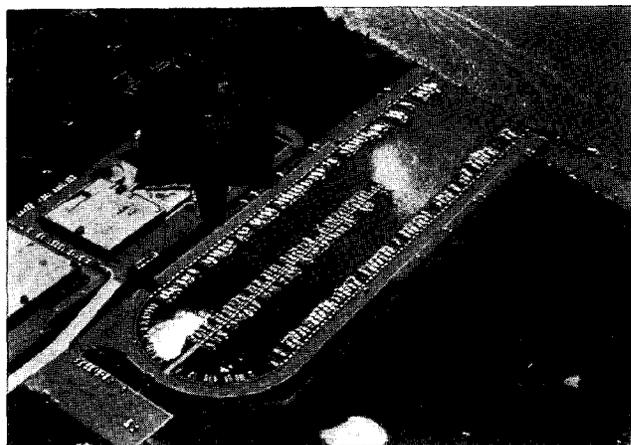
Estuary Protection Act of 1968 – As enacted by the Congress, the act authorizes the Secretary of the Interior, in cooperation with the States, to conduct an inventory and study of the Nation's estuaries and their natural resources. The act specifically includes "the land and water areas of the Great Lakes." The study of the estuaries and Great Lakes includes, among other matters, their wildlife and recreational potential, their ecology, their value to the marine, anadromous, and shell fisheries and their aesthetic value. Also to be considered is their importance to navigation, their value for food, hurricane and erosion control, their mineral value, and the value of submerged lands underlying the waters of the estuaries. The value of such areas for more intensive development for economic use as part of urban developments and for commercial and industrial purposes will also be evaluated. The act further states that the estuarine study would be coordinated with the comprehensive estuarine pollution study currently underway under the Federal Water Pollution Control Administration.

The Water Resources Council advised the Chairmen of the River Basin Commissions and the coordinators of all Type 1 and 2 studies not yet completed to consider with the field representatives of the Secretary of the Interior how this act can best be implemented through the work of the River Basin Commissions and comprehensive studies that are now underway.

This inventory and study overlaps into many functions and activities of the Work Groups for the Framework Study. Therefore, there is need for close coordination between the two studies, particularly in the phases of the analysis of the inventory and in the development of the recommendations that will be sent to Congress.

The Commission Staff has established lines of communication on this matter with field representatives of the Secretary of the Interior. The lead agency for the Great Lakes portion of the study is the Bureau of Sport Fisheries and Wildlife. The report is to be presented to Congress by the Secretary of the Interior by January 30, 1970.

The Alternate Chairman designated a Task Force to consider the relationship of the estuarine study and the activities of about eight Work Groups working on the Framework Study. The Task Force will evaluate the Great Lakes Basin Commission involvement and interface with the estuarine study. The Task Force is composed of members from three States and three Federal agencies with the member from Michigan as Chairman.



Michigan State Waterways Commission

Additional facilities for recreational craft are needed. With increased leisure time and more money to spend boat enthusiasts will utilize marinas at 30 to 40 mile intervals along the shores of the Lakes.

Lake Erie - Lake Superior Proposal – The Marine Sciences Council proposed early in 1967 a series of case studies in "Multiple Uses of the Coastal Zone." These studies were to be made in a selected number of coastal reaches of varying characters. The stated purpose was to discover any existing general principle which would have important impact on technological or institutional development of the coastal zone.

One of the selected areas was the Great Lakes where a comparative study of the coastline of Lake Erie (a eutrophic lake with a dense population on its coast) and Lake Superior (an oligotrophic lake with sparse bordering population) offered the greatest opportunity for comparison. Although the Erie-Superior study was proposed for 1967, no award was made at that time.

In March 1968 the Erie-Superior study was offered again, and the Great Lakes Basin Commission submitted a proposal to the National Council on Marine Resources and Engineering Development which was responsive to the request and which indicated the strong parallels of interest which existed between the Marine Sciences studies and the Great Lakes Basin Commission Framework Planning.

On July 10, 1968, the National Council on Marine Resources and Engineering Development notified the Great Lakes Basin Commission that the study had been awarded elsewhere. Later information revealed that the study was being done by the National Planning Association. The National Planning Association has discussed its study of Lakes Superior and Erie several times with the Commission Staff.

Commission on Marine Science, Engineering and Resources – The Commission on Marine Science, Engineering and Resources, established under the Marine Resources and Development Act of 1966, has been concerned with matters affecting the estuaries and the oceans, including the Great Lakes, during the past several years. It contracted with Battelle Northwest for a study concerning the restoration of the Great Lakes and a review of potentials and recommendations for implementation of the findings. The Great Lakes Basin Commission Staff cooperated with Battelle Northwest in furnishing information for this study. The Commission has an interest in the report relative to the proposed restoration, including the plan for destratification and any proposed institutional arrangements for restoration of the Lakes.

Streambank Erosion Study – Section 120 of Public Law 90-483 authorized and directed the Secretary of the Army, acting through the Chief of Engineers of the Corps of Engineers, to make a study of the nature and scope of the damages which result from streambank erosion throughout the United States. The study was to be made with a view to determining the need for and the feasibility of a coordinated program of streambank protection in the interests of reducing damages from the deposition of sediment in reservoirs and waterways, the destruction of channels and adjacent lands, and other adverse effects on streambank erosion.

This was a one-year study to be accomplished by the Corps of Engineers in cooperation with other agencies, principally the U. S. Departments of Agriculture and the Interior, but no additional funds were provided to do the work.

This study would have to cover much of the same ground as that proposed to be accomplished through the Work Group on Sediment and Erosion as set up under the Framework Study of the Great Lakes Basin Commission. Consequently, because the Framework Study organization was already in being, and in order to provide the needed coordination between the two studies, the work was accomplished through the Work Groups. This study generated useful data for future Commission activity, and established the effectiveness of the Commission Framework Study organization in accomplishing areas of study related to or compatible with the Framework Study.

Wild and Scenic Rivers Act (Public Law 90-542) – This act provides for the establishment of a National Wild and Scenic Rivers System. A designated reach

of the Wolf River in Wisconsin has been named as a component of the system. The reach designated is from the Langlade-Menominee County line downstream to Keshwa Falls. The upper Wolf is presently part of the Wisconsin State scenic river system. Two other rivers in the Great Lakes Basin, the Pere Marquette in Michigan, and the Maumee in Ohio and Indiana, have been designated in the act as potential additions to the National Wild and Scenic Rivers System.

There is need to coordinate these studies as they relate to the Framework Study and the proposed Maumee Type 2 Study. The Bureau of Outdoor Recreation of the Department of the Interior and/or the Forest Service of the Department of Agriculture are generally responsible for the studies. The initiation, data collection, analysis and preparation of the recommendations will be important to several of the Work Groups in planning for meeting future needs. A potential addition of a reach on the Maumee River would have direct effects upon the planning in the proposed Maumee Type 2 Study. In the development of the Great Lakes Basin Framework Plan, the approved and potential designated rivers will be considered and evaluated. Also, the Recreation and Aesthetic and Cultural Work Groups will consider other rivers, or portions of rivers, and their related lands, in addition to the approved and potential designations, for meeting future environmental and recreational needs.



Wisconsin Department of Natural Resources

Fishing in a remote and free-flowing stream in Wisconsin. The pressure of competing water uses is one of the greatest and most difficult problems facing the recreational planner. This is especially difficult in areas with large population concentrations and limited water resources.

Erosion of Beaches and Shorelines – Public Law 90-483 authorized the Corps of Engineers to conduct a study of National shoreline erosion. The study will deal with overall problems of beach erosion and will include surveys of State and local activities, types of remedial action possible and preliminary cost estimates of such action. The act specifically mentions the Great Lakes, including the estuaries and bays thereof.

The study will also develop recommendations for land use along the shorelines and point out title uncertainties. This study is closely related to the Framework Study for the Great Lakes Basin now underway and will be done largely by the Shoreline and Erosion Work Group in conjunction with their activities for the Framework Study. A nominal amount of additional detail and changes in format will be required so that the information can be furnished to the States and local authorities.

Alewife Die-Off in the Great Lakes – During the summer of 1967, a massive die-off of alewife trash fish occurred in Lake Michigan. This created problems of disposal, beach use, and the utilization of community recreation facilities around the shore of the Lake. The economic loss was estimated to be in excess of \$100 million.

During this time, the Great Lakes Basin Commission became concerned with the problem and appre-



Federal Water Pollution Control Administration
Sediment and waste in Driftmeyer Ditch, Maumee River, Ohio.

hensive of the adequacy of coordinated planning by the States and communities. As a direct consequence of the studies of a Commission Task Force, a plan for alleviation of the losses was implemented by the States and the Federal Water Pollution Control Administration in 1968. However, the massive die-off did not occur. The equipment and techniques conceived, designed and tested are available for future use.

The Great Lakes Basin Commission continued to follow the progress being made toward the solution of the alewife menace. At the March 1969 meeting of the Commission it was reported that preliminary estimates indicated that there would not be a major die-off of alewives in 1969, based on the indications that the adult population in the fall of 1968 was about the same as in the fall of 1967. Thus, no serious problems were anticipated for 1969.

A report was prepared by the Bureau of Commercial Fisheries giving technical information on means of alleviating the short-term problems resulting from the die-off. At the same time, it was strongly urged that a broader long-range approach be taken, that the entire ecology of the Lake be studied and that adequate research be carried on in order that the problems which existed might be resolved.

National Water Commission – The National Water Commission, a recently established study Commission on water resources policy, was authorized by Public Law 90-515 in September 1968.

At the proposal of the Bureau of the Budget and the Congress, the National Water Commission, among other things, is to: (1) review present and anticipated National water resources problems, make projections of water requirements as necessary and identify alternative ways of meeting these requirements; (2) consider economic and social consequences of water resources development; and (3) advise on such specific water resource matters as may be referred by the President and the Water Resources Council.

The National Water Commission is reviewing the findings and recommendations which resulted from previous studies of water programs and policies, such as those of the Water Resources Policy Commission, the Advisory Committee on Water Resources Policy, the reports of the two Hoover Commissions dealing with water resources, and the report of the Senate Select Committee on National Water Resources which led to the establishment of the Water Resources Council and the River Basin Commissions.

The National Water Commission is working closely

with River Basin Commissions and is desirous of maintaining continuing contact. Since the National Water Commission is required to consult with the Water Resources Council for review and comment, the Great Lakes Basin Commission may have some suggestions for preparation of the National Water Commission's report on National water policy.

International Field Year of the Great Lakes – The International Field Year of the Great Lakes is a joint research and data collection proposal of the Canadian and U. S. National Committees of the International Hydrologic Decade to study intensely Lake Ontario in order to increase the basic knowledge and ability to understand all of the Great Lakes. The primary objectives of the study are to develop an atmospheric water budget, a ground water budget, a surface water budget, an energy balance and a study of the major circulation patterns of the Lake.

The Corps of Engineers has undertaken major lead agency responsibilities, but program initiation has been delayed because of lack of funds.

The results of these studies will be of major significance to the Great Lakes Basin Commission in its relation to the proposed limnological systems analysis approach to the planning for the Great Lakes and in the development of a comprehensive, coordinated, approach to the planning for the Great Lakes and in the development of a comprehensive, coordinated, joint plan for the Great Lakes Basin. Because of these close ties the Commission adopted a resolution to support fully the Corps of Engineers' efforts for these studies and urged Congressional support for the budget requests of the Corps of Engineers to initiate the study.

Great Lakes Fishery Commission Funding for the Sea Lamprey Control Program – The Sea Lamprey Control Program was started in Lake Superior in 1958, and after several years (1962) there was evidence of control. In Lake Michigan treatments have been fairly well completed, with the second and third cycles of treatment applied to some of the tributary streams. There was a slow start on Lake Huron, with the Canadian Government providing more input than the United States. There is some reinfestation of Lakes Michigan and Superior from Lake Huron because of the lack of effective control; these lakes must be treated as a unit if effective control is to be achieved. The total rehabilitation program hinges on how effectively the sea lamprey is controlled in all the Lakes. The problem at the present time is one of a lack of funds.

In an effort to assist in getting the needed funds

for the Sea Lamprey Control Program, the Commission passed a resolution in wholehearted support of the Great Lakes Fishery Commission's budget urging Congress to appropriate the full amount requested for this program which is so vital to State, National, and international interests in the entire central region of North America. This resolution was forwarded to the Water Resources Council for consideration. The Commission urged the Council to take appropriate action relative to the budget request for the Lamprey Control Program.



Michigan State Waterways Commission

Caseville Harbor – Harbors of refuge are a needed facility for the well-being of the lake boaters.

STATE ACTIONS IN WATER RESOURCES PLANNING

Coordinated and comprehensive water resources planning has been enhanced through the financial assistance provided to the States under Title III of Public Law 89-80. This Act provides funds with which to meet some of the need for increased participation by the States in water and related land resources planning. Under this program of Federal financial assistance, augmented State matching funds are provided whenever the Water Resources Council approves a State program for comprehensive water and related land resources planning which meets the requirements of the Act.

Coordination between comprehensive water resources planning and other State-wide programs—one of the requirements of the Act—is under development at the present time in all of the Great Lakes Basin States.

Illinois published a State water plan in 1967 which was entitled, "Water for Illinois, A Plan for Action." With that report as a basis, advanced planning techniques are under development with substantial assistance from Title III funds. During Fiscal Year 1969 most of this effort was directed to model building and systems analysis, and late in the year a start was made in its application to the Chicago Region where Great Lakes water is used. Coordination and cooperation with the Great Lakes Basin Commission is achieved through representation on the Commission



Wisconsin Department of Natural Resources
Environmental Quality – peace and tranquility.

and several of the Framework Study Work Groups.

The State of Michigan Comprehensive Water Planning Program is composed of three separate, yet closely coordinated, elements: (1) the development, in cooperation with the Great Lakes Basin Commission, of a State framework plan; (2) the formulation of specific developmental plans and programs, i.e., water quality standards and designated use areas thereof, Great Lakes shore erosion, and others; and (3) cooperation and assistance to local watershed entities in the development of their water planning and management activities.

The Minnesota State Planning Agency activated a Water Resources Coordinating Committee during Fiscal Year 1967, partly with Title III grant funds provided by the Water Resources Council. This Committee is administering and coordinating the State water and related land resources planning program.

During Fiscal Year 1969, the Committee made con-

siderable progress toward completion of a framework State-wide plan. The goals, objectives, assumptions, criteria, and rationale developed largely by Federal agencies for the appendices of Federal-State water and related land resources planning organizations were compiled and distributed to 400 responsible citizens, legislators, and employees of State and local governments for their review and comment from a State, local and private viewpoint. Based on comments received, the section of the framework plan, "Goals, Objectives, Assumptions, Criteria and Rationale," was prepared.

About one-third of the first draft of a report describing the framework State-wide water and related land resources plan was completed.

The State of Minnesota participated in Federal-State comprehensive water and related land resource planning, including the work of the Great Lakes Basin Commission, and membership on seventeen of the Committees and Work Groups of the Framework Study. However, because of manpower limitations and lack of funds, participation has been limited. The State expresses the view that the funds provided to State agencies through Title III of Public Law 89-80 for participation in Federal-State planning activities are not adequate.

New York State's Water Resources Commission, the central policy body for water, has been engaged in comprehensive regional water resources planning since 1962. Presently, there are seven Commission-sponsored regional water resources planning board studies underway in the Great Lakes Basin: (1) Erie-Niagara, (2) Genesee River Basin, (3) three boards covering twelve counties in the Oswego River Basin, (4) Black River Basin, and (5) St. Lawrence Basin. These studies (similar to Federal Type II planning) are conducted under the policy guidance of the State Water Resources Commission with direct leadership provided by a board of seven local leaders. Staff services, legal, technical, engineering and other services are furnished by the Division of Water Resources of the State Conservation Department. Funds received through Title III of the Federal Water Resources Planning Act provide part of the State effort in this planning program.

Participation in a number of concurrent Federal-State and interstate water resources studies affecting New York State is carried out by the Division of Water Resources on behalf of the State Water Resources Commission. The Division, in carrying out its assigned responsibilities, coordinates with all con-

cerned Federal, State, local and private agencies and provides necessary interchange between programs to avoid duplication of effort.

During the past year, plan formulations were initiated or continued by a number of boards. The Erie-Niagara Basin Board will present its plan in late 1969. A coordinated, three-board plan for the Oswego Basin will probably be available in 1972. Regional board plans for the Genesee, Black and St. Lawrence are scheduled for 1973.

The State of Ohio has now completed a Type II study for the Northwest Region of the State and has commenced planning activity of a Type II nature in the Northeast Region or the balance of that portion of the State within the Great Lakes Basin. Participation and input to each of the Work Groups effectively represents the State's interests in the Great Lakes Basin Commission Framework Study with general coordination of all input being accomplished by the Ohio Department of Natural Resources' staff and its consulting engineer.

From the 20 million dollar 1965 bond issue funds earmarked for Northwest Ohio projects, the State has undertaken cost-sharing participation in five (5) multipurpose reservoir projects—Wellington, Clyde, Findlay, Lima, and Willard. Three other reservoir projects—Tiffin River, Kildeer, and New London—are in pre-contract planning stages.

Forty-two ground water research drillings have been completed and 40 of these test wells have been pump tested. Further research on certain of these wells has been authorized, and acidizing tests will be performed during 1969.

Of 62 monitoring stations called for in the Northwest Ohio Water Development Plan, 14 have been installed in cooperation with the U. S. Geological Survey. Plans have been approved to telemeter five of these Northwest Ohio monitoring stations into a centralized receiving unit in Columbus.

Of 69 Public Law 566 applications submitted, 19 are in the preliminary investigation stage, 8 are in the work plan stage, 10 have been approved for construction, and 5 have been completed.

Significant improvements are occurring along the streams and lakes as the result of Ohio's new Anti-Stream Littering Law passed by the 107th General Assembly. State Game Protectors have already successfully investigated and filed nearly 800 anti-stream littering cases involving 184 streams and 30 lakes in 86 of Ohio's 88 counties. Only 5 cases have been

dismissed. The average fine has been \$33.00. In most instances, courts have required offenders to clean up litter as well as pay fines.

The Commonwealth of Pennsylvania is actively engaged in developing a State Water Plan. The comprehensive conceptual system will be designed as the principal instrument to plan, develop and manage the Commonwealth's water and related land resources. The development effort for the Plan is currently in its framework phase, which is scheduled for completion in 1970. The Plan development will then concentrate on the details suggested by the Framework Study, and is expected to be completed in 1976.

The Framework Study includes inventories of water availability and critical water related needs and a feasibility study for a computerized water management information system. Inventories have been completed on Pennsylvania's reservoirs and natural lakes, and are nearly completed on flood damage centers and municipal water user data. The feasibility study for the management information system is also virtually complete.

In June of 1967 the Natural Resources Commission and the Governor of the State of Indiana authorized the Department of Natural Resources to develop a State Water Plan. The State Water Plan is conceived as a program for the timely conservation, utilization and management of water and related land resources, so formulated as to provide the means for satisfying the State's needs for water during the next fifty years.

Indiana's State Water Plan, which is tentatively scheduled for completion during Fiscal Year 1971, will constitute one element of the Comprehensive Plan for the physical, social and economic development of the State.

An application has recently been submitted to the Water Resources Council for a grant under Title III of the Water Resources Planning Act of 1965 to augment Indiana's State water planning activities.

Coordination and cooperation with the Great Lakes Basin Commission is achieved through the Department of Natural Resources' representation on the Commission and membership on several of the Work Groups for the Framework Study.

The State of Wisconsin, having published its first water resources plan during the past year, is in the process of updating and expanding the scope of that plan. Preliminary efforts have been directed toward the study of new institutional arrangements, water

use and waste treatment investigations, and toward the refinement and extension of cooperation between the various State agencies and departments involved in water resource management considerations. A clearer definition of water resources planning efforts should improve the efficiency of the State's planning. Efforts are also being made to involve the public more actively in planning.

The State of Wisconsin also actively supports the planning activities of the Upper Great Lakes Regional Commission and the U. S. Department of Agriculture Type IV Southeast Wisconsin Rivers Basin Study.

The States have indicated that financial assistance for Comprehensive Planning Grant Authorizations (Title III) is inadequate. Appropriations for grants to the States should be at least doubled or even quadrupled. This need was expressed in a letter to the Water Resources Council in response to the Council's invitation to make suggestions for changes in the Water Resources Planning Act, Public Law 89-80.

THE GREAT LAKES BASIN LIBRARY

The Great Lakes Basin Library was formed in 1968 to handle the information responsibilities of the Great Lakes Basin Commission. The Library collection and activities of its staff are compatible with and complement the duties of the Great Lakes Basin Commission in the coordination of Federal, State, interstate, local and independent plans for the development of the water and related land resources of the Great Lakes Basin.

Water resources, including water quality and quantity, limnology, irrigation, industrial usage, flooding, ground water, navigation, pollution and power, will be the subject areas receiving the most concentration; while the land related resources such as agriculture, wildlife management, recreation, mineral resources, industrial resources, geology, land use and management, urban development, transportation, communications and systems analysis will also be included.

The collection of materials in the above subject areas will be concentrated primarily within the geographic regions included in the Basin. These include Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

The Library will seek to include important and definitive works outside the geographic boundaries of

the Commission, but within the major subject area.

It is not intended that the Library act as a repository for field data and notes, or maintain a collection of highly technical information and reports. Rather, it is responsible for identifying and obtaining a general, up-to-date collection of materials to be used for reference and research by the Great Lakes Basin Commission Staff and the members of the Commission and Work Groups in the Framework Study.

Incorporated in the collection are:

- (1) Reports, studies, comprehensive plans, maps, and other documents generated by Federal, State, local and organizational efforts.
- (2) Reference tools and books of a more general nature and periodicals dealing with water and related natural resources.
- (3) A Current Legislation File and a pamphlet and clippings file for materials of current interest but ephemeral nature.

During the past year the Library published two Bibliographies and a Book Catalog to enable the geographically dispersed Commissioners and Work Group members to use the Library collection to the fullest. In addition, the Great Lakes Basin Library handles interlibrary loan requirements from other libraries, and supplies materials and reference help to qualified persons cooperating with the Commission.

FUTURE OF THE COMMISSION

The Great Lakes Basin Commission considers it essential to look ahead so that the activities of the Commission will be compatible with the needs of the future. The Alternate Chairman named a task force to give consideration to the future activities of the Commission. This task force is charged with the responsibility of taking a look at the collective responsibilities of the Commission after the comprehensive, coordinated, joint plan is completed, or as it is being developed.

The task force appointed includes the following: Chairman, from the Commonwealth of Pennsylvania; a member from each of the States of Indiana, Michigan, and New York; and a member from each of the Departments of Agriculture, Army, Interior, and Justice.

The task force did not meet during the Fiscal Year 1969.



New York State Conservation Department

The Genesee Gorge — Letchworth State Park, New York

ICERMAN, JOHNSON & HOFFMAN

Certified Public Accountants

303 NATIONAL BANK AND TRUST BUILDING

ANN ARBOR, MICHIGAN 48106

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J. R. SUITS, C. P. A.
D. L. BREDEBNITZ, C. P. A.

OFFICES

ANN ARBOR, MICHIGAN
HOWELL, MICHIGAN

July 10, 1969

Great Lakes Basin Commission
2200 North Campus Boulevard
Ann Arbor, Michigan 48105

We have examined the General Operating Fund, and Plant and Equipment Fund statements of financial condition of the Great Lakes Basin Commission as of June 30, 1969, and the General Operating Fund statement of operations for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Capital expenditures are recorded at cost in the Plant and Equipment Fund while payment for these items is provided for in the General Operating Fund budget.

In our opinion, the accompanying statements of financial condition and statement of operations present fairly the financial position of Great Lakes Basin Commission at June 30, 1969 and the results of operations for the year then ended, in conformity with accepted accounting principles on a basis consistent with that of the preceding year.

Icerman Johnson & Hoffman
Icerman, Johnson & Hoffman

Exhibit A
Great Lakes Basin Commission
Statement of Financial Condition
June 30, 1969

General Operating Fund

Assets

Current Assets

Cash on deposit with U.S. Treasury Department	\$159,844	
Petty cash	50	\$159,894
Advances and deposits		6,417
Grants receivable:		
United States Government	\$ 85,000	
State of Illinois	32,500	
State of Indiana	7,500	
State of Wisconsin	22,500	147,500
Other receivables		68
<u>Total current assets</u>		<u>\$313,879</u>

Liabilities and Working Capital

Liabilities

Accounts payable	\$ 14,393	
Accrued payroll	3,136	
Taxes - payroll	8,374	
<u>Total liabilities</u>		\$ 25,903

Working Capital

Unappropriated working capital (Schedule B)		287,976
<u>Total liabilities and working capital</u>		<u>\$313,879</u>

Plant and Equipment Fund

Assets

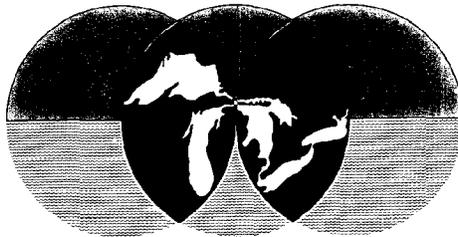
Furniture and equipment	\$ 9,815	
Library books	4,327	
<u>Total assets</u>		<u>\$ 14,142</u>

Equity

Plant and Equipment Fund Equity		\$ 14,142
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Exhibit B
Great Lakes Basin Commission
General Operating Fund
Statement of Operations
Year Ended June 30, 1969

<u>Income</u>			
United States Government grants		\$180,000	
State government grants		<u>180,000</u>	
<u>Total income</u>			<u>\$360,000</u>
<u>Expenses</u>			
Payroll	\$81,987		
Employee annuities	7,184		
Payroll taxes	3,411		
Employee benefits	<u>6,171</u>	\$ 98,753	
Accounting and legal		650	
Contractual services		41,631	
Equipment rental		11,016	
Insurance		560	
Library:			
Salaries	\$ 4,553		
Contracted services	18,885		
Expenses	<u>5,287</u>	28,725	
Meetings and conferences		3,168	
Miscellaneous		44	
Printing, reproduction and mailing		8,853	
Repairs and maintenance		740	
Supplies and postage		6,102	
Telephone and telegraph		2,903	
Travel and relocation expenses		<u>25,574</u>	
<u>Total</u>			\$228,719
Capital expenditures:			
Furniture and equipment		\$ 4,003	
Library books		<u>4,327</u>	
<u>Total</u>			<u>8,330</u>
<u>Total expenses</u>			<u>\$237,049</u>
<u>Excess of income over expenses</u>			<u>\$122,951</u>
Working capital, July 1, 1968			165,025
<u>Working capital, June 30, 1969 (Schedule A)</u>			<u>\$287,976</u>



GREAT LAKES BASIN COMMISSION

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SUMMING UP

Over the years the Congress has established the role and responsibility of the Federal Government to plan and develop the Nation's water and related land resources. Legislation progressively enacted has provided that such planning and development be done in cooperation with the States and other interests. As a means of strengthening coordination among all affected water and related land resource interests, the Congress, in 1965, enacted the Water Resources Planning Act (Public Law 89-80). This Act established the Water Resources Council, authorized establishment of river basin commissions, and provided for financial assistance to the States to increase State participation in coordinated planning of the Nation's water and related land resources.

The Water Resources Planning Act declares that, in order to meet the rapidly expanding demands for water throughout the Nation, it is the policy of the Congress to encourage the conservation, development and utilization of water and related land resources of the United States on a comprehensive and coordinated basis by the Federal Government, States, localities, and private enterprise, with the cooperation of all affected Federal agencies, States, local governments, individuals, corporations, business enterprises and others concerned.

The 1969 Annual Report briefly discusses the activities undertaken by the Commission during the year. First priority was given to those activities which would contribute immediately, or in the near future, to the primary mission of the Commission as set forth in the Water Resources Planning Act.

The Commission held five meetings during the year. The principal Commission efforts were devoted to: (1) conducting the comprehensive Framework Study; (2) establishing of priorities for future data collection, investigation, planning and construction of projects; (3) preparing for a future

Type 2 (feasibility or survey level) study of the Maumee River; (4) initiating a practicability study relative to a proposed limnological systems analysis for the Great Lakes; (5) coordinating ongoing planning activities; and (6) developing guidelines for the Comprehensive Coordinated Joint Plan.

Participation of local-State-Federal agencies and individuals working with the Commission staff resulted in substantial progress on the Comprehensive Framework Study. A tabulation of program elements and associated priority values for investigation were prepared and forwarded to the Water Resources Council. The Commission defined the necessary study elements and associated costs for a mutually acceptable budget estimate for the Maumee River Basin Study which was adopted by the Water Resources Council for a proposed start in Fiscal Year 1971. The Commission authorized a practicability study of the proposed limnological systems analysis for the Great Lakes Basin and approved limited funds for use in contracting for the study. Coordination among several of the ongoing studies and the Basin Commission is being accomplished through representation from the Commission staff on several of the coordinating committees. Coordination and close working relationships are being developed with regional planning groups, watershed councils and other regional planning commissions.

In accordance with the policy of Congress, the Great Lakes Basin Commission had adopted the concept of involving as many interested agencies, organizations and individuals as possible in the conduct of its studies. The total membership on the Work Groups for the Framework Study numbers about 350 people. While most of these are members of the staff of local, State or Federal agencies, there are a large number of nongovernmental planners who are members of the various Work Groups. In the conduct of all Commission business, every effort is made to obtain a consensus.



LOCAL—STATE—INTERSTATE—FEDERAL PARTNERSHIP IN PLANNING

A COORDINATED APPROACH FOR:

- The development of water and related land resources.
- Preparing and keeping up-to-date a comprehensive, coordinated, joint plan for use and development of water and related land resources.
- Recommending long-range schedules of priorities for individual projects.
- Fostering and undertaking other studies as needed.

UNIFIED PLANNING OBJECTIVES TOWARD:

- Increased national income.
- Achievement of regional development.
- Preservation, conservation and enhancement of environment.
- Well-being of people.

