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St. Lawrence-Eastern Ontario Commission

H OVERALL PROGRAM DESIGN

April 1977-March 1978

COASTAL ZONE
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New York Coastal Zone Management Program

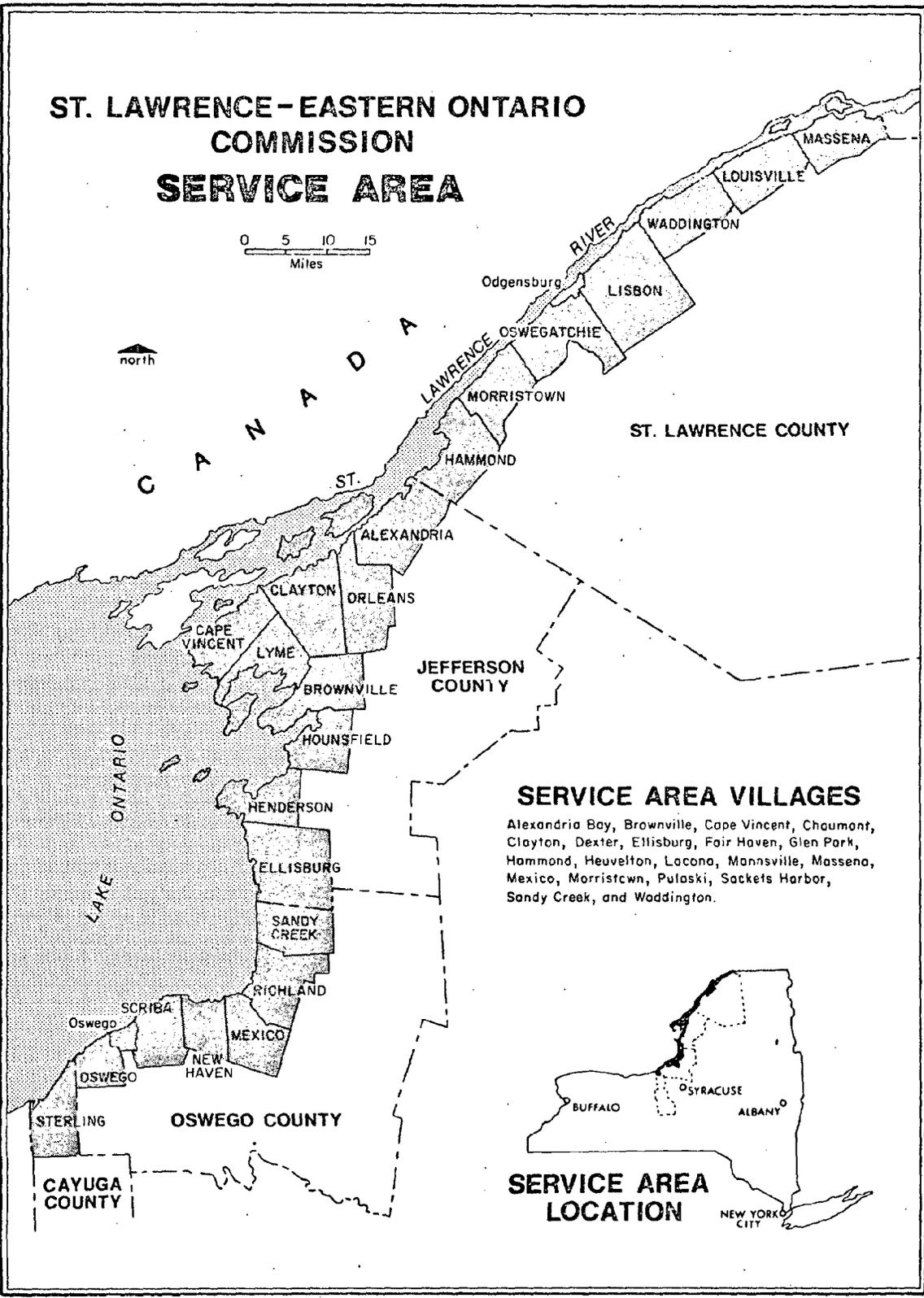
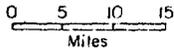
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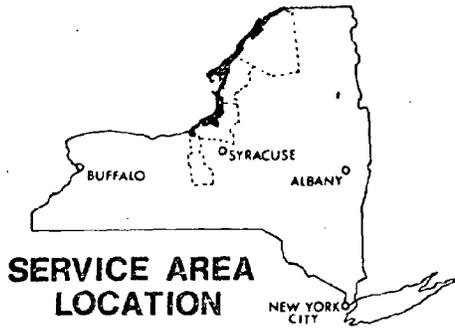
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ST. LAWRENCE - EASTERN ONTARIO COMMISSION SERVICE AREA



SERVICE AREA VILLAGES

Alexandria Bay, Brownville, Cape Vincent, Chaumont, Clayton, Dexter, Ellisburg, Fair Haven, Glen Park, Hammond, Heuvelton, Lacono, Mannsville, Massena, Mexico, Morristown, Pulaski, Sackets Harbor, Sandy Creek, and Waddington.



OVERALL PROGRAM DESIGN

COASTAL ZONE
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OVERALL PROGRAM DESIGN

INTRODUCTION

The current (1976-77) program year includes completion of the initial plan for the St. Lawrence-Eastern Ontario area, for which the Commission is responsible under Article 37 of the Executive Law (Chapter 701, Laws of 1974). Accordingly, the Annual Work Program proposed for FY 1977-78 reflects a period of transition for the Commission. Changing character of the overall

program is represented by changes in its organization, as well as the content of projected work elements. The following three major categories of activities are foreseen for the years immediately ahead. They are shown on the accompanying chart.

(1) Program Development/Planning-- Plan follow-up, including executive, legislative, and public review processes necessary for its adoption. Completion of technical, organizational, and institutional requirements for federal certification of the St. Lawrence-Eastern Ontario segment of the state's coastal zone management program (under provisions of PL 92-583). Initiation of detailed planning for subareas having significant coastal resource/development problems or opportunities.

(2) Management Program Operations-- Continuation of the Commission's project review responsibilities, with emphasis (in the primary coastal zone) on ensuring compatibility with adopted plan objectives and standards. Development and active promotion of a local assistance program, to aid responsible local implementation of coastal management policies. Initiating regular procedures for review and update of the plan and program as required by the Commission's legislation. Maintaining and expanding mechanisms for ensuring effective public participation in the planning, operational and research aspects of the Commission's program. Other coastal zone management activities, as yet undetermined, for which the Commission may become responsible under the state's adopted CZM program.

(3) Management Program Research-- Investigation of subjects for which a better data base is needed to support specific standards or guidelines for coastal resources management, and for plan refinement/up-date. Current

SUMMARY OF OVERALL PROGRAM, 1976-1979

<u>Program Element</u>	<u>FY 1976-77</u>	<u>FY 1977-78</u>	<u>FY 1978-79</u>
<u>A. Program Development/Planning</u>			
SLEO Area Plan	Primary	Secondary	
SLEO CZM Program Devel.	Primary	Secondary	
SLEO CZM Segment Certification		Secondary	Primary
Subarea Planning		Secondary	Primary
<u>B. Management Program Operations</u>			
Public Participation	Primary	Primary	Primary
Project Reviews	Primary	Primary	Primary
Plan Review Procedures		Secondary	Primary
Local Assistance		Secondary	Primary
Other			Secondary
<u>C. Management Program Research</u>			
The Coastal Economy	Primary	Primary	Primary
Outdoor Recreation	Primary	Primary	Primary
Coastal Processes	Primary	Primary	Primary
Water Quality	Primary	Primary	Primary
Special Studies		Secondary	Primary

Anticipated Emphasis: Primary 
 Secondary 

PROJECTED ALLOCATION OF PROFESSIONAL/TECHNICAL STAFF

OVERALL PROGRAM SUMMARY 1977-1979

(man-weeks)**

PROGRAM ELEMENT	Exec. Director	Deputy	Counsel	Prin. Acc't. Clerk	Com. Rel. Officer	Sr. Cartographer	Dir., PR&D	CZ Res. Anal.*	SLEOC Res. Aide	CZ Res. Anal.*	CZ Res. Tech. Spec.	Env. Qual. Tech.*	Assoc. Nat. Res. Plnr.	CZ Res. Anal.*	Sr. Nat. Res. Plnr.	Nat. Res. Plnr.
1.1 SLEO Plan Adoption	10	5	10		10	1	2	5			2					2
1.2 CZM Prog. Devel.	4	14	5		10	6	4	18	6		6					6
1.3 CZM Prog. Segment	4	5	1		2	1	3	5	2							2
1.4 Sub-Area Plng.	5	8	2		5	4	6		12	18	8	8	8	18		18
2.1 Public Particip.	10	2			40	6	3									
2.2 Project Review	2	2	1		4		4					10			55	20
2.3 Plan Up-date	1	3	1			2	2	5		2	5		5	5	5	10
2.4 Local Assistance	2	5				10	5						10	10	20	25
2.5 Other Mgmt.																
3.1 Coastal Economy	8	14				10	63	17	85		4					4
3.2 Outdoor Recreation	8	16				20	50	35	56		3					3
3.3 Coastal Processes		10				20	15			25	10	40	25	20		
3.4 Water Quality	1	2		2	10	5				30	40	30	35	20		25
3.5 Special Studies	6			8		9	82		25							

NOTES: *Items proposed for non-state funding during FY 77-78.

**Estimated total requirements for optimum staff commitment to each work element. Assumption of 48 weeks effective work-time per person, annually, is a measure of the extent of over-budgeting provided in the program. Estimates are for substantive program operations, and exclude regular internal administrative loads.

and projected fields of study include the coastal economy (the recreation industry, property taxation, municipal revenue/expenditure patterns, shoreland-inland interrelationships), coastal processes (shoreland property damage assessment, evaluation of protective structures, resource productivity impacts, shoreline erosion rates), nearshore water quality (small watershed management of non-point sources, cottage pollution), and special problem-oriented investigations (assessment of economic and biotic impacts of the oil spill of June 1976, possible impacts of winter navigation in the St. Lawrence River).

Although in a number of important respects the Commission's future program may be shaped by external factors that cannot be forecast at this time (such as Executive/Legislative decisions on organizational structure of the state's CZM program), some essentials are clear: (1) the planning process can begin to focus on specific geographic subareas or subjects of concern, rather than be directed broadly to the entire service area; (2) operational and implementation activities should receive a growing share of the Commission's resources; (3) there should be a flexible program of problem-oriented research to provide objective bases for resource management/development decisions, for input to plan review and up-date, and for timely response to emerging issues along the shoreline. These considerations have shaped the projected program of the Commission for the next two years.

The program design also reflects the experience gained during the past three years in which, annually, available personnel and funds have been less than projected program requirements. During the same period, some

work elements have been advanced with funds secured from federal agencies concerned with specific aspects of the area's coastal environment; support of that sort, although regularly pursued, cannot be accurately anticipated either as to timing, amount of funds, or specific study content.

Accordingly the FY 77-78 program provides flexibility as a necessary ingredient in several aspects of the Commission's work. Included are (1) work elements required under the Commission's legislation, (2) tasks anticipated for continued development of the state's Coastal Zone Management Program, (3) activities in support of other federal programs related to coastal zone conditions, and (4) further more detailed studies of areas and subjects required for effective coastal zone program operation, refinement, and up-date. Flexibility is provided through the device of over-budgeting: the required, ongoing, probable, and desirable work elements that are identified in the program, together would entail a total staff/funding commitment substantially greater than the Commission's foreseeable resources. In effect, a "stock-pile" of needed work is provided, sufficient to occupy the current (under-strength) staff for two or three years ahead. The operational load at any particular time will depend upon circumstances, in accordance with these priority criteria: (1) mandated activities, (2) CZM program development and operations, (3) non-CZM federally-funded tasks, and (4) other state-funded activities. On that basis, specific work elements will be advanced or postponed in keeping with available staff/funding resources.

Following are descriptions of projected program categories and work elements, and their estimated requirements. The concluding section presents the recommended annual work program.

1. PROGRAM DEVELOPMENT/PLANNING

1.1

St. Lawrence-Eastern Ontario Area Plan Adoption

Submittal to the Governor and Legislature of the Commission's recommended area plan, the Coastal Resources Development Guide, at the end of the current fiscal year, will mark completion of the statutory objective of Section 847-f, Article 37 of the Executive Law. (Additional responsibilities of the Commission under that act include: review of proposed development projects; investigation of problems associated with regulation of Lake/River water levels; providing local assistance in plan implementation; assisting economic development of the area; assisting federal-state-local interagency coordination; continuing investigation of coastal resources, problems, and needs of the area, and submittal of appropriate recommendations to the governor and legislature. Such tasks are addressed under program categories 2 and 3, below.)

Response of state executive/legislative leadership to the recommended plan and program cannot be anticipated at this point, but a considerable measure of Commission involvement during the review/adoption process must be provided for. Although final legislative action might be taken during the 1977 session, the Commission's overall program provides for extension of this process into the following year.

Objectives:

(1) State agency and legislative review, modification, and acceptance of Coastal Resources Development Guide.

(2) Formulation of acceptable legislative and other supplementary measures in support of plan recommendations.

(3) Enactment of legislative/administrative measures for implementation of state policies recommended in the plan.

Approach/Methodology:

Conferences with department and legislative committee personnel to identify and provide additional supportive information needed with respect to specific findings or recommendations of the plan. Formulate and draft workable alternatives to recommended plan features found to be unacceptable. Participate in legislative hearings, public information meetings and local government workshops regarding the plan. Maintain local citizen and agency participation process to foster final adoption of acceptable and effective implementary measures.

Estimated Requirements: 47 man-weeks

1.2
SLEO Coastal Zone Management Program Development

During 1976-77 the Commission has participated as a sub-state contractor assisting in development of the state's coastal zone management program, specifically as regards that portion of the coastal zone within the Commission's service area. The substance of federal requirements for CZM program development is reflected by the required content of the Commission's plan, but there are technical differences (such as the geographic area covered) and some specific procedural requirements not included in the Commission's legislation (including federal agency review).

For that reason, additional time and staff commitment is projected during FY 77-78 to allow for any necessary refinement and further development of the CZM program for this area. Beyond that point, extending possibly into

FY 78-79, there is provision for assisting the state lead agency and other state departments in ensuring integration of the recommended SLEO CZM program with the balance of the unified state program. This entire process will be largely concurrent, and interrelated, with activities performed under Element 1. 1.

Objectives:

(1) Completion of CZM program development for SLEO area in accordance with federal/state guidelines.

(2) Ensure that completed SLEO program will form an integrated element in the subsequent overall state CZM program.

Approach/Methodology:

Review relevant provisions of SLEO Coastal Resource Development Guide with state/federal CZM program staff to identify needed changes, supplementary information, or additional provisions. (To extent appropriate, incorporate such modifications in final Guide provisions as adopted under Element 1. 1.)

Prepare any necessary additional technical materials relative to the coastal zone management features of the Guide; obtain public and local agency comment, and make appropriate and feasible adjustments to final recommendations for the SLEO area program. Assist state lead agency and other participating departments with federal pre-application review of proposed program to ensure compliance with technical and procedural requirements and consistency with overall state CZM program.

Estimated Requirements: 79 man-weeks

1.3

SLEO Coastal Zone Management Segment Certification

The Coastal Zone Management Act allows a participating state the option of developing its CZM program in segments covering particular portions of its coastlines. (In that way, federal grants to defray the state's operational management costs would be available, in part, sooner than if it were necessary to first develop an approved program for the state's entire coastal zone.) New York has elected to proceed in that way, and the SLEO area has been proposed as one of the early segments to be completed.

Requirements for segmental CZM approval deal partly with technical matters (e. g. , preparation of an environmental impact statement, identification of all other proposed segments and of the means for exercising state policy control during and after their program development phase) and with procedural steps to be followed (e. g. , state hearings, federal agencies' reviews, and response to comments received). In the absence of any substantive problems, the process of review and approval of an application for an operational grant for a completed segmental program is estimated to require nearly one year.

Timing of this process can be projected only approximately because completion of the necessary prior steps of program development (Element 1. 2), including required state-level aspects, cannot be determined with precision. The relative sequence of these related elements, however, is indicated on the Overall Program Summary chart.

Neither the statewide CZM program, nor the SLEO area portion thereof, have at this point been developed sufficiently to identify the nature or extent of the Commission's eventual role. For that reason, it is not

possible to specify what particular activities may be appropriate during the segment preparation and application process (extending into or through FY 78-79). Estimates of likely staff requirements are included in the overall program for general guidance in budgeting and resource allocation.

Objectives:

(1) Assist state lead agency in preparation of an approvable segment application for administrative grants under the Coastal Zone Management Program.

(2) Provide appropriate assistance to state lead agency and federal OCZM staff during the review and approval process.

Approval/Methodology:

Provide technical information, if needed, for preparation of draft environmental impact statement. Participate as required in public hearings on the segmental program, and prepare any necessary recommendations for response to comments on local aspects of the program. Participate with state lead agency staff in meeting with and responding to federal OCZM, CEQ, and other agencies' review comments. Prepare local program revisions if required, and if appropriate obtain advisory committee and other local public comment thereon.

Estimated Requirements: 25 man-weeks

1.4
Sub-Area Planning

In the course of developing the plan and CZM program, a number of sub-areas have been identified as having special value, problems, or potentials.

During this process it was not possible to develop or conduct detailed investigations of the character needed to do more than identify major local issues and opportunities, current or potential. The latter, accordingly, will constitute the basis for pertinent findings and recommendations of the Guide and initial CZM program development. The need for detailed local planning in such areas is recognized, and appropriate projections of Commission commitment to this effort is reflected in the overall program. Foreseeable resource and time constraints during FY 77-78 appear to limit the extent to which such work may be undertaken, but initial study of the first area could as a practical matter be anticipated when Elements 1.1 and 1.2 have been substantially completed.

As an example, a possible candidate for early attention under this work element is Sub-Area III, the Thousand Islands (Cape Vincent to Hammond): It is of distinctive, even unique, geologic and scenic character, a recreation area of international status. In recent decades, recreation-oriented development has intensified markedly and has altered significantly in character from that of earlier periods; a mass market has entered an area formerly enjoyed by a few. Biologically, it is the most productive reach of the River. Physically it constitutes a critical link on the Great Lakes-St. Lawrence Seaway. Man-made and natural resources of the area are in an unstable relationship; continued inappropriate development of the former may occur at the expense of the latter. And both are highly vulnerable to severe and costly impacts in the event of a release of oil or other toxic substance. North of the border a long-range program has been started to convert most of the Canadian Islands to a federal park.

Such points illustrate the variety of concerns to be addressed through a local refinement of the area plan and program for, for example, the Thousand Islands.

Objectives:

(1) Preparation of sub-area refinements of SLEO Plan and CZM program for particular coastal sectors, in which the initial plan and program do not provide sufficiently specific guidance on matters of critical local significance.

(2) Secure adoption of appropriate complementary policies by local, state, or federal agencies in order to accomplish sub-area plan objectives.

Approach/Methodology:

Using SLEOC citizen advisory committees, and other appropriate public participation mechanisms, review possible sub-areas for priority attention. For the selected sub-area, form advisory panel of representatives of local government and relevant community interests, to participate in and monitor the planning process. Establish initial program goals and objective; identify, obtain, and analyze information relevant to objectives. Evaluate the issues identified in that process in terms of existing institutional responsibilities, capabilities and policies. Formulate recommended and alternative policies and programs, responsive to local objectives, and reconcile with established SLEO area plan and CZM program. Secure adoption of plan and complementary policies by responsible jurisdictions or agencies.

Estimated Requirements: 120 man-weeks

2. MANAGEMENT PROGRAM OPERATIONS

Activities designed to foster achievement of Commission objectives, compliance with adopted CZM policies, and implementation of the SLEO area plan are projected to require an increasing share of the Commission's resources. Several elements are included in this program category.

(1) Participatory Processes--These are designed to (a) expand awareness and understanding of the program and elicit active participation and positive contribution by affected interest groups and concerned segments of the area's residents; (b) strengthen mutually productive relationships with related public agencies at local, state, and federal levels; (c) provide for dissemination of information on Commission programs and products through use of as wide a variety of media and techniques as possible, and (d) provide varied and effective means for obtaining timely public comment thereon, as an important means for ensuring a responsible and responsive overall program, within the intent of the Commission's legislation. Appropriate features of these processes are employed as an integral part of most program elements.

(2) Project reviews-- The initial form of coastal resource management responsibility assigned the Commission in its legislation, project review action will increasingly draw upon the resource-based development standards contained in the adopted area plan and CZM program.

(3) Plan review and update process--Depending upon the eventual schedule of plan adoption, the continuing process making periodic review of plan objectives and policies will be undertaken. It is projected that, toward the end of the current program period, design of specific monitoring, data up-date, and review procedures will be undertaken.

(4) Local assistance-- Sound local planning and related development controls are seen as a key to achievement of the objectives for which the Commission was established. Such local programs as now exist are largely ineffective for those purposes. The Commission, as a state agency, can perform an important and useful service in assisting localities, on request (several of which are received each year), to identify their particular development/resource advantages and limitations as a basis for formulating sound local controls. Substantial effort under this element will necessarily not begin until completion of Elements 1.1 and 1.2. Such activity will obviously interrelate closely with tasks performed under Elements 2.1 and 1.4. Moreover, under its current rules, the Commission may enter into agreement with a locality having an acceptable control program and delegate to the appropriate local agency much or all of its normal project review responsibilities.

An early effort at local assistance, of a different sort, may be undertaken in response to numerous public comments to the effect that existing state/federal permit requirements and procedures, for coastal development projects, are confusing, duplicatory and needlessly time-consuming. To the extent that these conditions do exist, it may be worthwhile and feasible for the Commission to provide, in cooperation with the respective permit-issuing agencies, a "one stop" permit procedure. Preliminary design of such a procedure could be undertaken in the last quarter of FY 77-78 if other basic program elements are then well advanced.

(5) Other-- Depending upon state decisions regarding organization and structure of the state's CZM program, the Commission may receive additional coastal resource management responsibilities. These are as yet

undeterminate; some staff commitment is provided for in the last half of FY 78-79.

These elements are recapitulated below.

Work Element 2.1: PARTICIPATORY PROCESSES

Objectives:

- (1) To ensure effective opportunity for participation and comment, by the general public and by affected agencies, throughout the planning process;
- (2) To obtain maximum benefit, and commensurate economy of effort, of the programs of other agencies and from informed citizens generally;
- (3) To provide suitable means for obtaining such participation, comment, and in-put.

Approach/Methodology:

Utilize local advisory committees representative of various technical skills and interest groups; conduct information meetings in various parts of the area both (1) to obtain residents' views on specific issues for guidance in conducting the work program, and (2) to obtain informal reaction to draft proposals prior to preparation of recommendations for Commission consideration. Conduct hearings by the Commission on key elements of the program, to determine public views prior to formulating final recommendations. Use available communication media to inform the public of the Commission's program and its progress, and to elicit comments thereon.

Anticipated Requirements: 81 man-weeks

Work Element 2.2: PROJECT REVIEWS

Objectives:

- (1) Provide technical advise/assistance to project sponsors regarding potential for adverse impacts;

(2) Encourage achievement of environmentally sound standards for development projects;

(3) Coordinate review process with other affected agencies to ensure consistency and efficiency in performing reviews;

(4) Provide effective public information regarding projects likely to cause adverse impacts on the coastal environment.

Approach/Methodology:

Correspondence and personal contact with sponsor regarding project character/potential impacts; site inspections in conjunction with representatives of other affected agencies. Application of Commission's resource-base and related data to project design data, to assess potential impacts. Conferences/negotiations with project sponsor/consultants/other agency representatives. Public hearing if required.

Estimated Requirements: 98 man-weeks

Work Element 2.3: PLAN REVIEW/UP-DATE

Objectives:

(1) Design procedures for identifying significant changes in coastal development or environmental conditions;

(2) Design procedures for assessing changing coastal conditions in relation to area plan objectives and policies.

(3) Design and, as appropriate, implement re-cycle of relevant aspects of plan/program development phase in response to conditions identified.

Approach/Methodology:

Set-up and maintain development/resource surveillance system by such means as permit records, plat recordings, project review process, field survey, news releases, agency reports, aerial photography. Identify evident

trends or changes in character of the area, with particular attention to (1) coastal zone, and (2) projects of size or character likely to have significant impacts. Compare findings with established policy/plan requirements or standards. Identify likely source or causes of discrepancies noted. Recycle relevant portion of technical and participatory work elements, addressing aspects of observed conditions that are not consistent with adopted plan and program. Formulate and adopt policy or other appropriate amendments to plan or management program.

Estimated Requirements: 47 man-weeks

Work Element 2.4: LOCAL ASSISTANCE

Objectives:

(1) Assist requesting local governments to formulate local plans and management programs consistent with policies and standards of adopted plan and coastal zone management program for the area.

Approach/Methodology:

Encourage requests for local assistance by such means as: (a) review of the Commission's findings with advisory committee members and other local representatives; (b) note local examples of project reviews in which adverse affects and/or unnecessary sponsor effort and expense were encountered, that could have been prevented by a sound and responsible local plan and program. When requested to do so, work with planning board and local officials to establish local goals and objectives for program, and provide or assist in collecting/analyzing appropriate information required for the particular plan elements or regulatory measures the locality undertakes to prepare.

Estimated Requirements: 90 man-weeks

Work Element 2.5: OTHER MANAGEMENT ACTIVITIES

(To be identified in FY 78-79 Work Program.)

3. MANAGEMENT PROGRAM RESEARCH

During the Commission's inventory and analysis phase of plan development, a common end-product of the various work elements was a summation of the inadequacy of available baseline data on the area's natural and man-made resources, and recommendations for needed additional research.

During the same period opportunities arose to obtain at least parts of the desired information on some subjects, through the medium of research contracts from federal agencies concerned with particular topics relevant to coastal issues in the Commission's service area. The consultant and temporary staff assistance obtained in that manner proved to be an effective means for remedying specific data needs with a corresponding increase in effectiveness of available state funds. The projected program provides for further problem and program oriented studies funded in that fashion.

A second consideration leading to increased projected activity in this program category arises from the anticipated completion, during the next two years, of the Coastal Resources Development Guide and CZM management program for the area. As that occurs, staff specialists can begin to devote more time to filling essential data gaps uncovered earlier.

Finally, experience has shown that neither the occurrence of troublesome resource problems nor opportunities for timely research projects can be fully anticipated and provided for in a projected work program. The program must allow for a measure of flexibility to accommodate such occasions.

The elements described below are designed to address significant aspects of subjects of major importance in the Commission's area. Study findings will constitute useful in-put to the sub-areas planning program, project review process, plan review and up-date, and local assistance efforts.

Possible funding considerations can be identified briefly, and are discussed elsewhere in the annual budget proposal.

3.1--Portions of the needed economic investigations as described, may be undertaken with state funds and available staff with or without consultant assistance. However, potential federal funding sources include the Bureau of Outdoor Recreation (regarding economics of the recreation industry) and Environmental Protection Agency (aspects of the economy of the River shoreline, as a part of impact assessment of the oil spill of June 1976).

3.2--Additional needed information on outdoor recreation in the area may be obtained with assistance from Bureau of Outdoor Recreation (for its own purposes, or as study manager for the Winter Navigation Board's assessments of potential impacts of extended Seaway navigation).

3.3--Corps of Engineers funding is anticipated to complete the basic survey of shoreline property damage (due to high water storm conditions), begun last year. Commission funds are likely to be used to complete the detailed inventory and evaluation of protective structures and shoreline erosion problems.

3.4--There are two significant types of near-shore water quality problems of local concern. Those attributed to non-point sources (upland runoff from agricultural and forest areas) will be investigated, and feasible remedies tested and demonstrated, in a pilot project now under development. Federal funding (through NYS DEC) under section 208, FWQA, is anticipated; local Soil and Water Conservation Districts and USDA/SCS are expected to participate, and federal cost-sharing under the RC&D program will be utilized to implement corrective measures. Study of pollution attributed to inadequate

sewage treatment measures in areas of concentrated shoreline development is anticipated to be undertaken using Commission funds, if resources permit.

3.5--Projected investigation of special problem situations include, currently, an assessment of the biologic, physical, and economic impacts on the St. Lawrence River and its shoreline communities of the recent major oil spill. To be funded by EPA, the study is to be directed by a multi-agency, international team with the Commission serving as project manager and lead agency.

3.1

The Economy of the St. Lawrence-Eastern Ontario Commission Coastal Zone

Currently little quantitative data is available relative to the various sectors making up the service area's economy. Thus, it is difficult to design a program oriented toward developing and strengthening the economy of the area. Significant subjects to be addressed include an assessment of what the area has to offer various enterprises relative to the requirements of those enterprises; an assessment of the impact the provision of public facilities has on the economic viability of private efforts to provide comparable facilities or service; an evaluation of the importance of the various sectors of the economy in terms of employment and regional income generated (in particular agribusiness, recreation, and manufacturing); and a determination of the economic feasibility of specific facilities recommended for construction (examples are proposed convention centers near the Thousand Islands and Ogdensburg). These are not inclusive subjects requiring investigation and analysis but are at present the ones requiring action.

Work Element 3.1.1 ANALYSIS OF ECONOMY

Objectives:

a) to determine the current economic significance of each sector of the economy in terms of employment and regional income generated (Work Element 3.2.2 proposes a similar study for the recreation sector)

b) to determine the impact on the service area economy of changes in any sector.

Approach/Methodology:

Using standard regional economic analysis techniques, determine the multiplier for each sector of the economy in order to be able to evaluate the impact that changes in each sector would have on the overall economy. In doing this, an inventory detailing the current employment by sector and regional income generated by the various sectors in the service area economy will be completed.

Estimated Requirements: 102 man-weeks*

Work Element 3. 1. 2 DETERMINATION OF COMPARATIVE
ECONOMIC ADVANTAGE

Objectives:

- a) to determine which enterprises would have a comparative advantage operating in the service area.
- b) to develop a program to attract such enterprises to the service area.

Approach/Methodology:

Review earlier inventory and evaluation of the resources, both natural and man-made, and the locational factors that exist in the service area. Compare these to what is required by specific types of enterprises in order to determine those that could operate in the area and be competitive. Design an appropriate program for attracting such enterprises, including, as necessary, recommendations for changes in public policy or programs to reduce competitive disadvantages of the area.

Estimated Requirements: 67 man-weeks*

*Possible consultant item.

Work Element 3. 1. 3 PUBLIC VS. PRIVATE PROVISIONS OF RECREATION FACILITIES/SERVICES

Objectives:

- a) determine the impact on the private sector of public provisions of recreational facilities/services.
- b) evaluate the capabilities of the private sector in providing recreational facilities/services.
- c) recommend a policy relative to public vs. private provision of recreational services/facilities.

Approach/Methodology:

Through survey and interview techniques, evaluate the impact that public provisions of recreational facilities/services has had on the private sector in terms of economic viability. By examining capital requirements, environmental considerations, ability to recover costs through user charges, and other factors, evaluate the capability of the private sector to provide the facilities/services currently required to fulfill the demand of recreationists. From the information derived in the above processes, develop a policy relative to the provision of additional recreational facilities/services indicating which sector should provide a given facility/service.

Estimated Requirements: 24 man-weeks

Work Element 3. 1. 4 ECONOMIC FEASIBILITY OF SPECIFIC PROJECTS

Objectives:

- a) determine the economic feasibility of specific projects/programs recommended to enhance the economy of the area.

b) develop a program to ensure the completion of those projects/ programs found feasible.

Approach/Methodology:

Using standard benefits-cost techniques, evaluate recommended projects/programs to determine their economic feasibility. (Examples are the recommended convention centers near the Ogdensburg and Thousand Islands bridges; continuation of rail service to Ogdensburg; development of a marina and harbor of refuge at Port Ontario). If found feasible, develop a program to ensure each project/program is completed.

Estimated Requirements: 12 man-weeks*

*Continuing efforts will be required in response to specific project proposals.

3.2

Outdoor Recreation in the SLEO Coastal Zone

It is customary to identify outdoor recreation/tourism as a major function of the area--a multi-million dollar asset to the local economies, the major use of the shoreline and nearshore waters, and so forth. Yet there is only limited and fragmentary objective information on the subject. The Commission has investigated aspects of the emerging salmon sports fishery, winter recreation on the River, and riparian recreationists (permanent, seasonal, and transient) activities, expenditures, and attitudes.

Findings of these studies are proving useful, but there are significant gaps in the information needed to define coastal resource management and development policies that will appropriately reflect the area's capabilities and limitations for supporting such activities. Following are brief descriptions of currently proposed work elements responsive to such information requirements. Their order generally reflects priority, although in some instances the actual work program will, of course, be shaped by availability of non-state (grant or contract) funds for specific projects. Aspects of several key subjects are covered by these work elements, including: recreation demand (types of activity engaged in by location and season, numbers of participants, types and origins of participants, natural resources utilized), economics of the local recreation industry (recreationists' expenditure patterns, entrepreneur's capital needs and sources of funds, absentee ownership of the area's recreation enterprises, public/private competition, wage rates and amounts, seasonality of employment), community impacts (tax revenues/public service requirements

analysis of recreational properties, impacts of publicly-owned recreation facilities) and resource/use impacts or conflicts (impacts of Seaway navigation on recreation resources and activities, amount and character of public recreation access requirements vs. private shoreline development trends).

Work Element 3. 2. 1. DEMAND FOR RECREATION SERVICES AND FACILITIES IN THE SERVICE AREA

Objectives:

- a) to determine the demand for various types of recreation service and facilities in the service area.
- b) to determine the ability of the area to meet these demands.
- c) to develop a program including both the public and private sector to meet the demands that are not currently being met.

Approach/Methodology:

Using standard demand estimation techniques total demand by type of recreation activity will be projected for the service area. This demand will be spatially allocated within the minor civil divisions making up the service area. Based on an inventory of existing facilities and an assessment of natural resource capabilities, the supply of recreation services that is and can be provided will be determined. Having determined where demand exceeds supply develop a plan of action, including both the public and private sectors, to provide the services and facilities required to meet as much of the demand as is possible. This entire analytical process will be accomplished within the constraints of economic feasibility and environmental compatibility.

Estimated Requirements: 60 man-weeks

Work Element 3. 2. 2 RECREATION SECTOR ECONOMY

Objectives:

- a) to determine what elements of the service area economy make up the recreation sector
- b) to determine the economic significance of the recreation sector in terms of employment and regional income generation.
- c) to evaluate the potential for expansion of the recreation sector.

Approach/Methodology:

Using primary (developed through interviews and surveys) and secondary data a determination of what commercial enterprises derive their income either directly or indirectly from the recreation activity that occurs in the service area will be made. With this knowledge, the significance of the recreation sector of the economy can be determined in terms of employment and regional income generated.

This information, combined with that found in Work Element 3. 2. 1, would permit an evaluation of the potential for expansion of the recreation sector. From this, a program of action to strengthen this sector will be developed.

Estimated Requirements: 74 man-weeks.

Work Element 3. 2. 3. FISCAL IMPACT OF SEASONAL HOMES

Objectives:

- a) to determine an equitable burden of tax revenue to be assessed seasonal homes.
- b) to determine the tax revenue-public expenditure for services ratio for seasonal homes.

c) to assist local taxing bodies develop a program of taxation that implements the policy of that taxing body relative to seasonal homes.

Approach/Methodology:

Through analysis of expenditures for services by all levels of government that receive tax revenue from seasonal home owners, determine an equitable tax share based on services rendered. From analysis of tax rolls, determine the current burden seasonal home owners pay. From this data, assist local taxing bodies structure their tax rate to implement the policies they desire.

Estimated Requirements: 57 man-weeks

3.3
Coastal Processes

Investigation of high water conditions on the Lake and River-- causes, consequences, and possible remedies--has been a responsibility of the Commission. The initial survey and report on the subject showed the need to obtain additional locally specific information in several related matters as a basis for preparing useful guidelines and standards for shoreline development and resource management.

For examples, subsequent investigations of the Oswego County shoreline showed that despite construction of nearly 500 protective structures, riparian properties experienced substantial erosion damage during the period 1972-74 (more than in any of the ten other sample Great Lakes counties studied). Over 80 percent of the structures showed significant design or maintenance deficiencies. (Concurrent Canadian studies indicate that well engineered and constructed structures are too costly to justify,

except on shorelines of high average property valuation.) Considerable shoreline development has been sited too close to the current (high) water level. Comparable data are needed for the remainder of the area.

Work Element 3.3.1: SHORELAND DAMAGE INVESTIGATION

Objectives:

Identify, locate, and quantify flood and erosion damages to shoreline properties during the recent period of high water levels, in St. Lawrence, Jefferson, and Cayuga Counties.

Approach/Methodology:

Employ standardized procedures used in earlier Oswego County study. Identify shoreline properties and classify according to location, use, and ownership. Determine estimated nature and extent of damages experienced, through a combination of field inspection, mail survey, and personal interviews.

Estimated Requirements: 40 man-weeks

Work Element 3.3.2: SHORELINE PROTECTIVE STRUCTURES

Objectives:

(1) For the shoreline of St. Lawrence, Jefferson, and Cayuga Counties, describe according to standard classifications, shoreforms and degree of erodability.

(2) Locate all shoreland protective structures, classify by type, and evaluate as to adequate design, maintenance, and level of effectiveness.

Approach/Methodology:

Field inspection and mapping, at scale of 1"=200'. Structural observations recorded on standard DA/CE forms, for comparability with earlier data.

Estimated Requirements: 125 man-weeks

3.4 Water Quality

Several types of water quality problems may affect productivity and use of the area's coastal waters and aquatic resources. They can be classified according to their area of origin: (1) from the upper Lakes; over four-fifths of Lake Ontario's water comes from upstream Great Lakes sources, and carries significant pollutant loads; (2) from sources within the Ontario Basin, but outside the SLEO area; additional pollutants are contributed by both point and non-point sources, with the larger tributary rivers and coastal metropolitan centers the major external sources of potential local significance; and, (3) from sources within the area.

Although externally generated pollutants may be cause for local distress (as in the earlier case of mercury contamination of fish, and current evidence of excessive levels of toxic organic compounds), the Commission's program cannot as a practical matter address such problems directly, other than by lending support to appropriate corrective programs of other agencies, at state, federal, and international levels.

Of those water quality problems having local origins, municipal and industrial waste water discharges are steadily (to the extent of available funds) being brought under control in accordance with on-going federal/state water pollution control programs; again, except for appropriate support, the Commission's program cannot contribute positively to those efforts.

Two particular local sources of troublesome water quality problems have been noted, that have heretofore received inadequate attention, that appear to be appropriate for Commission study, and for which pilot studies (at least) could be accomplished within available and projected Commission

resources. These are: (1) non-point upland runoff into an aquatic resource area of high value. The area's coastal wetlands and embayments offer several examples of such situations, in which problems such as excessive aquatic weed growth can be traced (at least in part) to upland nutrient sources. In concert with NYS DEC (as part of its statewide water quality management program under Section 208, FWQA) and the St. Lawrence Soil and Water Conservation District, the Black Lake/Indian River watershed has been selected for study; (2) diffuse non-point/point source contamination of nearshore embayed waters from shoreline recreational development. Several popular recreational areas exhibit evidence of sewage contamination and one (Chaumont Bay) has been studied intensively by the Commission, but findings are inconclusive as to the relative roles of shoreline and upland sources.

Work Element 3.4.1: SMALL WATERSHED NPS PILOT STUDY

Objectives:

(1) Design a program of appropriate land and water conservation measures, and related practices for abatement of NPS pollution in Black Lake.

(2) Progressively implement the recommended measures and practices for NPS abatement.

(3) Maintain monitoring program to determine extent and rate of NPS pollution decline, and resultant impacts on Black Lake.

(4) Analyze results to determine effectiveness of the program, and to identify those particular aspects that could appropriately be implemented in other areas under specified conditions.

Approach/Methodology:

Based upon results of water sampling program over past two years (SLEOC and SWCD), determine additional water quality data, if any, is needed to identify general order of magnitude and areas of origin of NPS loadings entering Black Lake; acquire if required. Acquire (through remote sensing techniques) current land cover/land use imagery of Indian River basin, categorized and scaled to allow determination of those areas of the types most likely to be significant NPS sources. Advisory committee under local SWCD leadership determine appropriate measures/practices for effecting needed runoff or other NPS control for each type of contributory area, and obtain review/acceptance by landowners. Program funding/implementation of the accepted program measures through regional RC&D project. Maintain subsequent surveillance sampling program to identify evident changes in type or rate of NPS contribution to basin streams. Generalize for evaluation and transferability, as sufficient indication of results (or lack thereof) accumulates.

Estimated Requirements: 150 man-weeks

Work Element 3.4.2: SHORELINE COTTAGE POLLUTION

Objectives:

(1) Identify, for a pilot area, nature and extent of diffuse non-point/point source pollution of nearshore waters from shoreline residences' sewage disposal facilities.

(2) Identify pertinent variables (e. g. , type and design of system, age, location of disposal area with regard to waterline, slope and soil

conditions, average loading (GPD) during study period.)

(3) Relate system variables to performance/nonperformance of systems.

(4) Formulate specific standards or development guidelines, applicable to observed conditions, that would serve to abate nearshore pollution under specific conditions.

(5) Assess feasibility of implementation in terms of magnitude and incidence of direct costs, alternative incentives and disposal measures, physical and other inflexible constraints.

Approach/Methodology:

Utilize (or form ad hoc) citizen advisory committee to select study area from among those embayments previously found to have significant evidence of cottage pollution; obtain cooperation of representative (for variables noted in (2) above) sample of householders. Perform dye-tests, supplemented by water samples, to determine system's performance. Analyze results to identify significant site/system variables related to inadequate and acceptable performance levels. Draft standards/guidelines and test sample sites for applicability. Identify implementation problems and recommend appropriate policies.

Estimated Requirements: 50 man-weeks

3.5

Special Studies

Damage Assessment Following Alexandria Bay Oil Spill

With the presence of the St. Lawrence Seaway in the Commission service area, and consequent shipment of large quantities of oil products

and other hazardous materials, the potential for a major spill is present. Such a spill occurred June 23, 1976 in the vicinity of Alexandria Bay with 308,000 gallons of oil being discharged into the St. Lawrence River. According to USCG spokesman, the clean-up operation was the most costly in U. S. history, exceeding 7 million dollars to date.

In order to prepare for future spills, the knowledge gained during the clean-up of the June spill relative to the impact, both economic and environmental, should be assessed and analyzed. The data yielded by this assessment and analyses can then be utilized to develop appropriate procedures and/or policies pertaining to transport and/or spillage of hazardous materials in the River and similar areas.

In conjunction with U. S. EPA and other federal, state and Canadian agencies and institutions, the St. Lawrence-Eastern Ontario Commission has developed a proposal to accomplish the above goals.

Objectives:

- (1) To evaluate the adequacy of the clean-up of the June 23, 1976 oil spill on the St. Lawrence River;
- (2) To determine the effects of the spilled oil on small mammals, waterfowl, aquatic and wetland resources;
- (3) To determine the levels of petroleum hydrocarbons within the affected ecosystems to determine the extent of contamination and bioaccumulation from this spill;
- (4) To determine the economic impact of the oil spill;
- (5) To synthesize the findings derived in meeting objectives 1-4 above into a form usable in developing appropriate procedures/policies for prevention of, or response to, future contingencies of this sort.

Approach/Methodology:

The approach to be taken to complete this element is the application of standard scientific methods and procedures, as required, to achieve the objectives set forth above. The synthesis of the findings derived in achieving these objectives into a form that is usable as a policy or decision-making tool will be accomplished through utilization of the professional knowledge of the agencies involved, plus others knowledgeable in specific disciplines related to the subject. The latter groups will be incorporated into the process through the interaction of a "steering committee." Membership on this committee will be from both Canadian and United States organizations and institutions.

Estimated Requirements (SLEOC only): 130 man-weeks

FY 1977-78

ANNUAL WORK PROGRAM

Projected annual work program, summarized on the following chart, is derived from the overall priorities noted in the program "Introduction." In view of uncertainties as to available staff level and extent of supplemental non-state funding, the program is to be considered tentative.

Under constrained conditions the following priorities are recommended, with appropriate allocation of resources.

Priority I:

- (1) completion of CZM program development to the point of an approvable segment application (1. 2 and 1. 3)
- (2) required continuing tasks (2. 1 and 2. 2)
- (3) development of base data for oil spill contingency planning (3. 5)
- (4) follow-up of recommended Coastal Resources Development Guide, to adoption (1. 1)

Priority II:

- (1) water quality management studies (3. 4. 1 and 3. 4. 2)
- (2) Coastal Property Damage assessment (3. 3. 1)
- (3) Coastal Economy (3. 1. 1 and 3. 1. 2)
- (4) Outdoor Recreation (3. 2. 1 and 3. 2. 2)
- (5) Shoreline protective structures (3. 3. 2)

Priority III:

- (1) Sub-area planning (1. 4)
- (2) Local assistance (2. 4)
- (3) Coastal Economy (3. 1. 3 and 3. 1. 4)
- (4) Outdoor Recreation (3. 2. 3)
- (5) Plan review/update (2. 3)

Annual Work Program Summary
FY 1977-1978

ALLOCATION OF PROFESSIONAL STAFF TIME
(Man-weeks)

BY PROGRAM AUTHORITIES

PROGRAM ELEMENT	PROGRAM PRIORITY		
	I	II	III
1.1 Plan Adoption *	40		
1.2 CZM Program *	60		
1.3 CZM Certification *	20		
1.4 Sub-Area Plng.			30
2.1 Particip. Processes *	40		
2.2 Project Review *	45		
2.3 Plan Up-date			5
2.4 Local Assist.			15
3.11 Econ. Anal. *		50	
3.12 Econ. Advantage *		35	
3.13 Public/Priv. Rec.			12
3.14 Econ. Feasib.			6
3.21 Rec. Demand *		40	
3.22 Rec. Economy *		45	
3.23 Seasonal Homes			35
3.31 Shorelands *		20	
3.32 Structures		60	
3.41 Watershed NPS *		75	
3.42 Shoreline Pol. *		25	
3.5 Spill Assess.	65		
TOTALS:	270	350	103

NOTES:

1. Projected staff strength levels*:

	<u>No. Items</u>	<u>Annual Man-weeks</u>
Existing full-time prof./tech.	9	432
Authorized (vacant)	3	144
Projected, Fed. funds (vacant)	3	144

*Excludes Counsel, Princ. Account Clerk, and support items.

- Projected staff requirements for each work element reflect FY 77-78 share of total requirements (through 3/79) projected in Overall Program Summary.
- Items marked with an asterisk (*) could be undertaken during FY 77-78, under the indicated priority sequence, with a staff level of 11 (current staff plus any 2 of the vacant or projected non-state funded items).
- Additional work elements could be addressed during the budget period if the average staff requirement per task were less than those indicated.

ST. LAWRENCE-EASTERN ONTARIO COMMISSION

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Carl F. Cameron	Massena
Patricia C. Mason	Gouverneur
Herman Shulman	Potsdam

Jefferson County:

Lewis V. Branche	Cape Vincent
William L. Curtis, Jr., Secretary	Sackets Harbor
Richard R. Macsherry, Vice-Chairman	Watertown
(One Vacancy)	

Oswego County:

Norma A. Bartle	Oswego
Louis W. Kent	Oswego
Hugh C. Nicholson	Pulaski

Cayuga County:

C. Clair Conroy	Martville
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At Large:

Donald C. Hartley	Ticonderoga (Essex County)
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