

DISTRICT FORMATION

KEUKA LAKE WATERSHED DISTRICTING COMMITTEE
JULY 19, 1988

AGENDA

1. Introductions
2. Ranking and rating of forms.
3. Development of mission statement.
4. Time and place of next meeting.

ISSUES A KEUKA LAKE WATERSHED
DISTRICT SHOULD ADDRESS

DUTIES AND RESPONSIBILITIES
OF A KEUKA LAKE WATERSHED
DISTRICT

NAVIGATION QUALITY

PROVIDE TECHNICAL SUPPORT

EROSION CONTROLS

PROVIDE ADVICE TO
TOWNS/COUNTIES

SEPTIC SYSTEMS

ENFORCE STATE SANITARY CODE

WATER QUALITY

CONTROL POPULATION INCREASE

ENFORCEMENT OF EXISTING
REGULATIONS

ACT AS INFORMATION CENTER

LAKESHORE POPULATION DENSITY

ACT AS MEDIATOR BETWEEN TOWNS

UPLAND DEVELOPMENT

ENFORCE REGULATIONS

AQUATIC VEGETATION CONTROL

ASSIST IN PLANNING AND
DEVELOPMENT

SEWER DEVELOPMENT

DEVELOP UNIFORM CODES FOR
CONSTRUCTION IN THE WATERSHED

BIULDING PERMIT REGULATION

ENGAGE IN WATER QUALITY
STUDIES

JUNK DISPOSAL

MONITOR WATER QUALITY

DOCKS AND DECKS

CONTROL DEVELOPMENT IN THE
WATERSHED

SHORELINE DEVELOPMENT

ENGAGE IN BUDGET AND TAXING
ISSUES

WATER SAMPLING
COMMUNICATIONS BETWEEN TOWNS

*Consider Water Resources Dept
for some funding - FOV RISTY*

MINUTES

KEUKA LAKE WATERSHED DISTRICTING COMMITTEE

JULY 19, 1988

Present: see attached list.

A list of issues which could be addressed by a Keuka Lake Watershed Management District was distributed. Each member present rated the importance of each issue on a scale of 1-7, then ranked the issues in importance from 1-15. A similar exercise was done with 13 possible duties and responsibilities of the district. The results of these ratings and rankings are shown in the attached tables I & II.

Each table may be explained as follows: the first column of numbers indicates the ranking of the item relative to the others. The second column "Average Ranked Score", shows the average ranking given by the respondents to each item. If, for example, one person ranked septic systems as the most important item on the list, a second ranked it as of 4th importance, and a third individual ranked septic systems as number 6 in importance, the average score would be $1 + 4 + 6 = 11$ divided by $3 = 3.67$. For this column, the lower the score the more important the item is considered, relative to the other items on the list.

The third column, "Average Importance Rating", shows the importance each item is perceived as having. This rating reflects a range from 1, not at all important, to 7, very important. The higher the number, the more important the issue is considered. Note that it is possible for an item to receive a high rating (i.e., be considered important) yet a relatively low ranking. See, for example, the 12th ranked item in Table I, "Communication Between Towns". Despite its low ranking it is perceived as important in the ratings column. In effect, this combination implies a recognition that good communication is important but that it is not an end in itself which the district should seek. The attached sheets offer a more complete discussion of the results of the rating and ranking exercise.

The committee then broke into 3 smaller discussion groups to develop a mission statement, a short summary of the role of a Keuka Lake Watershed Management District. The resulting 3 statements were very similar, leading to the following generalized mission statement:

"The aim of the Keuka Lake Watershed Management District is to protect the water quality of Keuka Lake through the enforcement (and, when necessary, the development) of a set of regulations uniform over the watershed. The District should retain flexibility in order to adapt to changing conditions, and allow for consolidated responsibility in managing the lake and its watershed."

Discussion led to clarification of several points. "Protection of water quality" should be taken to mean maintenance and improvement. "Water quality" includes water for a variety of purposes including private and municipal consumption and potentially conflicting surface uses, such as boating and swimming. Consolidated responsibility and enforcement powers refer to the idea that the district should have both the power to develop and enforce uniform approvals and the responsibility to see that appropriate regulations are developed and enforced. A discussion centered in the idea that this mission statement leads to a bifurcation of duties: both information supply and enforcement are contemplated. General agreement was reached that enforcement powers are critical if the District is to be fully effective.

A short discussion followed regarding funding of the district. Funds can be raised through an assessment, or through fees, or by a combination. Among those activities for which fees were suggested are water withdrawal, septic system construction, and boat use. Mayor Hull said he felt the Village of Penn Yan would be willing to be assessed a reasonable user fee for its use of the lake for a municipal drinking water supply. The use of a tiered assessment system, with those benefiting the most being assessed more heavily than those receiving only minor benefits, was suggested. Such a system has been used in a number of such districts.

The next meeting will be held at 7:30 p.m., Tuesday, August 23, at the Urbana Community Room. Directions will be sent to committee members prior to the meeting.

JHH

Keuka Lake Watershed Districting Committee Meeting
July 19, 1988 - Wayne Town Hall

Name and Mailing Address

Representing

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Raymond E. Tears, 47 Maple St., Savona, N.Y. 14879 \ Resident, Town of Bath

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Lynn L. Patterson, 1184 E. Bluff Dr., Bluff Point, N.Y. 14478 \ Town of Jerusalem

Art Bechhoefer, 1128 E. Bluff Dr., Penn Yan, N.Y. 14527 \ Bluff Point Association

Doris & Jim McCauley, 923 E. Lake Rd., Dundee, N.Y. 14837 \ Selves

R.K. Hull, Maiden Lane, Penn Yan, N.Y. 14527 \ Village of Penn Yan

James D. Howell, Jr., Box 18, County Bldg., Watkins Glen, N.Y. 14891

John H. Herring, Yates County Planning & Economic Development, 431 Liberty St., Penn Yan, N.Y. 14527 \ Yates County Aquatic Vegetation Committee

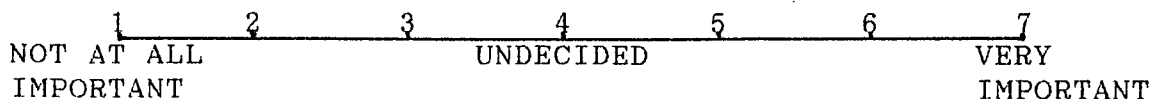
I. ISSUES A KEUKA LAKE WATERSHED DISTRICT SHOULD ADDRESS

	<u>RANK</u>	<u>AVE. RANKED SCORE</u>	<u>AVE. IMP. RATING</u>
SEPTIC SYSTEMS	1	2.94	6.9
WATER QUALITY	2	3.94	6.7
EROSION CONTROLS	3	5.5	6.2
ENFORCEMENT OF EXISTING REGULATIONS	4	6.28	5.7
SEWER DEVELOPMENT	5	6.39	5.6
SHORELINE DEVELOPMENT	6	7.33	5.3
BIULDING PERMIT REGULATION	7	8.11	5.5
UPLAND DEVELOPMENT	8	8.44	5.1
WATER SAMPLING	9	8.56	5.8
LAKESHORE POPULATION DENSITY	10	8.78	4.8
AQUATIC VEGETATION CONTROL	11	9.33	5.1
COMMUNICATIONS BETWEEN TOWNS	12	9.67	6.2
NAVIGATION QUALITY	13	11.28	4.0
JUNK DISPOSAL	14	11.33	4.7
DOCKS AND DECKS	15	12.11	4.2

II. DUTIES AND RESPONSIBILITIES OF A KEUKA LAKE WATERSHED DISTRICT

	<u>RANK</u>	<u>AVE. RANKED SCORE</u>	<u>AVE. IMP. RATING</u>
ASSIST IN PLANNING AND DEVELOPMENT	1	4.5	5.8
ENFORCE STATE SANITARY CODE	2	4.7	6.3
DEVELOP UNIFORM CODES FOR CONSTRUCTION IN THE WATERSHED	3	5.4	5.8
ENFORCE REGULATIONS	4	5.7	5.8
ENGAGE IN WATER QUALITY STUDIES	5	6.1	5.8
MONITOR WATER QUALITY	6	6.8	6.1
PROVIDE ADVICE TO TOWNS/COUNTIES	6	6.8	5.6
PROVIDE TECHNICAL SUPPORT	7	7.45	5.5
CONTROL DEVELOPMENT IN THE WATERSHED	8	7.55	5.1
ACT AS MEDIATOR BETWEEN TOWNS	9	7.55	5.0
ACT AS INFORMATION CENTER	10	8.6	5.5
CONTROL POPULATION INCREASE	11	9.1	3.8
ENGAGE IN BUDGET AND TAXING ISSUES	12	12.55	4.4

IMPORTANCE RATING SCALE



DUTIES AND RESPONSIBILITIES OF A KEUKA LAKE WATERSHED DISTRICT

There was much less agreement among members of the Districting Committee over how to rank these variables, indicated by the relatively high Averaged Ranked Scores. The highest ranked variable achieved an average ranking of 4.5 and the spread of Average Ranked Scores between variables ranked 1 and 11 is only 4.6. The ranked list can be divided into five groups as follows:

1. Those ranked 1 to 4 are concerned with enforcing regulations and controlling development. Only one variable, Enforcing the State Sanitary Code achieves an importance rating above 6.0. The impression given is that this would address the Septic System problem ranked number one among the factors in list I. Two other activities, Assisting in planning and development and Developing uniform construction codes, are aimed at dealing with Erosion Controls, ranked number 3 in list I. Enforcement of Regulations of course is also a prime concern.
2. This group, ranked 5 and 6, is concerned with obtaining information on water quality. Monitoring water quality receives an importance rating of 6.1 reflecting its value in addressing the Water Quality issue ranked number two in list I.
3. This third group consists of providing advice and technical support to towns and counties. Although ranked 6 and 7 they have importance ratings of around 5.5.
4. Those ranked 8, 9, and 10 constitute the fourth group. They all achieve importance ratings at or above 5.0 and are concerned with acting as an information center and mediator between towns. These are not seen as prime duties of the proposed Watershed District, and neither is controlling development in the watershed. This last factor is important to note as the highest ranked activity in this list is "Assist in Planning and Development". Thus the message appears to be that the District should have input into development in the area but they do not want to control it.
5. This last group, ranked 11 and 12, received relatively low importance ratings. It is also clear that the Districting Committee does not want the proposed District to get involved with Budget and taxing issues. Again this is an important point to note. If the proposed District is to have any authority it must have enforcement powers and thus will have to be financed in some manner by those agreeing to be bound by that authority.

ISSUES A KEUKA LAKE WATERSHED DISTRICT SHOULD ADDRESS

This list of variables can be divided into 4 groups on the basis of the ranking and rating carried out by the Districting Committee.

1. This group consists of factors that are very much on peoples' minds as we study the aquatic vegetation problem, Septic systems, water quality, and erosion controls received the highest ranking and scored very high on the importance rating (all scored above 6.0).
2. The group ranked between 4 and 8 *is* concerned with regulations and controlling development (with the exception of Sewer Development, but this could also be regarded as impacting development). Enforcement of existing regulations, Shoreline development, Building permit regulation, and Upland development also all receive importance scores of between 5.0 and 5.7.
3. The group ranked between 9 and 12 *is* a mixed bag concerned with Water Sampling, Lakeshore population density, Aquatic Vegetation control, and Communication between towns. In effect they are the more practical aspects of the three highest ranked concerns, i.e. in order to address water quality we must have a water sampling program and control Aquatic Vegetation; in order to control septic systems we must pay attention to Lakeshore population density; and both of these require better Communications between towns. Communication between towns, although ranked number twelve, has an importance rating of 6.2, indicating the value of good communications but in effect saying that this is not a pre-requisite for the Watershed district.
4. This last group, Navigation Quality, Junk disposal, and Docks and decks, appear as the three lowest ranked and all have importance ratings below 5.0. The impression is given that while these are legitimate concerns, there are more important issues for a Watershed District to address.

LAKES MANAGEMENT MANUAL - OUTLINE

Audience Owners of lakeshore property in New York State, who are assumed to be members of a lake association; lake users, local officials and decision-makers, consultants.

Preface Tells reader how manual is intended to be a useful guide for designing and carrying out a management plan to protect or restore desired uses of lakes in New York State.
States that lake protection takes a combination of individual and community actions working with with local, state and federal government.

Gives overview of how state policy works through laws, regulations, budgets, agencies.

Chapter 1. Introduction (3 or 4 pages)

Purpose: To develop the conceptual basis for solving lake "problems"; working from general complaints ("too many weeds" or "poor fishing") to more specific indicators of problems, to causes and, where sufficient information is available, to source. Develops concept of "problem". Presents in-lake and watershed management approaches, emphasizing an ecosystem perspective for long-term, comprehensive solutions to restore and protect lakes.

A. Background

1. Brief overview of New York State lakes - size, type, number; refers to a more detailed compilation of facts in the appendix.
2. Ecological, social and economic importance of NY lakes; develops concept of uses (best use categories in appendix)
 - a. Past
 - b. Present
 - c. Desired - future

B. Lake problems

1. Characterizes types of complaints about lakes:
 - a. Complaints about the lake itself
 - too many plants
 - poor taste/odor
 - crowding and conflicting recreational uses
 - outbreaks of water-related diseases
 - changing fish populations
 - varying lake levels
 - cloudy, turbid water
 - unappealing lake bottom
 - b. Complaints about the watershed
 - shoreline development
 - upland development
 - changing land values (too high, too low)
2. Relates complaints to use impairments (including degree or severity of problem - critical, present/non-critical, or potential)

(I -continued)

3. Discusses complaints (use impairments) in terms of symptoms vs. causes
 - a. Describes symptoms or indicators of impairment
 - b. Links indicators to cause, defined as pollutant or disturbance
 4. Relates cause to source, noting that connection may not be evident or easily identified
 - a. Easily identified sources - such as direct discharge, eroding slopes, spills
 - b. More hidden sources - such as landfill leachate, leaks, septic wastes
 5. Discusses briefly how any stage of linkage described above (complaint, symptom, cause, source) may be considered a problem. Discusses how individual problems are compounded over time by cumulative natural and human actions
- C. Briefly discusses management as the approach for solving problems
1. Presents an ecosystem approach (defined, ecological + economic + social considerations) to make lake management decisions.
 2. Describes how this manual divides management into in-lake and watershed techniques and practices

Chapter 2. Overview of Lakes as Ecosystems (6-8 pages)

Purpose: To provide a summary, with diagrams, illustrations and tables as appropriate, of how lake ecosystems work, as background needed to understand how disruptions occur and how management solutions can work; assumes that the reader has some familiarity with these topics.

A. Physical factors in lake ecosystems

1. Defines ecosystem; lake (includes pond, reservoir); watershed

2. Why NYS lakes look the way they do

a. How NYS lakes are formed

1. Glacial - lakes, ponds

2. Manmade - ponds, reservoirs

b. Lake basin morphology

1. Geology

2. Watershed topography

3. Lake dimensions

3. How water acts in lakes

a. The hydrologic cycle (diagram)

b. Water movement in a lake basin

1. Amount

inflow, outflow and loss - horizontal circulation

2. Cycles

seasonal, daily - vertical circulation

c. Very brief summary of water chemistry

4. Discusses how these physical factors influence water quality and quantity

B. How plants and animals function in lake ecosystems

1. Ecosystem dynamics (with diagrams)

a. Food webs

b. Nutrient cycling

c. Disruptions (includes definition of pollutant)

2. Lake lifespan - successive stages of aging

a. Describes lake stages - oligotrophic, mesotrophic, eutrophic

b. Eutrophication perceived as a problem

3. Transition to next chapter - complex interactions within ecosystem susceptible to changing conditions; the normal range of ambient conditions; change is neither "good" or "bad" in itself.

Refers to more detailed development of ecological concepts and facts on lakes in New York State in appendix.

Chapter 3. Lake Problems (6-10 pages)

Purpose: To present lake problems (environmental, social or economic) in context of use impairment - cause (pollutant or disturbance) - source (of pollutant or location of practice or disturbance). Develops concepts of symptoms or indicators, pollution, in-lake and watershed changes identified as problems, as the basis for problem diagnosis. Includes list of undesirable species of aquatic plants and animals.

A. Introduction: expand concepts such as "problem", symptom, indicator, cause, source and pollution.

B. In-lake problems, probable causes and likely sources: uses tables to summarize

1. Environmental

a. Nuisance plants and animals (with list of species and common names)

1. Plants: Algae, Weeds

2. Animals: Invertebrates, Vertebrates

b. Poor water quality

1. Poor drinking water

2. Outbreaks of disease

3. Turbidity

c. Changes in fish populations

d. Poor quality lake bottom

e. Varying lake levels

2. Social/Economic

a. Conflicting recreational uses

b. Other use conflicts

c. Aesthetic deterioration

C. Watershed problems that affect the lake - where they fit in the symptom/causes/source linkage (with summary table)

1. Environmental

a. Erosion

b. Sewage contamination

c. Stormwater

d. Diffuse urban runoff

e. Waste disposal other than sewage

f. Hydrologic/habitat modification

g. Leaks, spills, accidents

2. Social/Economic

a. Changing land uses

b. Changing value of property: the price of popularity

c. Decrease in aesthetic values within the watershed

D. Summary statement of how symptoms, causes and sources are inter-related, complex; includes worksheet for reader to begin putting local lake problem into context. Makes transition to next chapter, noting that all parties may not agree on what constitutes a problem.

Chapter 4. Gathering Valid Information to Diagnose Problems

Purpose: To discuss the kinds of information needed to diagnose lake problems (severity of impairment, cause, source.) Includes in-lake and watershed information; observations, history, measures.

A. Data gathering - discusses kinds of information needed, topics, possible sources.

B. Large scale factual/descriptive information - quantitative and qualitative

1. Environmental/natural setting

a. Physical description and mapping

1. watershed: boundary, area, geology, topography, soils
2. lake morphology

b. Hydrology

1. climate (precipitation)
2. tributaries
3. lake level, flow, turnover

2. Cultural setting - land and water uses and trends

a. Regional history (land and water uses)

1. local economy
2. industry and commerce
3. agriculture
4. population and human settlements
5. land ownership - proportion of public (parks), private land

b. History of use impairment

1. water uses (recreation)
2. point sources
municipal, industrial
3. nonpoint sources
diffuse urban runoff, agriculture, etc.

C. Smaller scale measures - quantitative

1. Measures of water quality: (DO, phosphorus, nitrogen, transparency, color, temperature, pH, conductivity, fecal coliform)

2. In-lake inventory

- a. Plants
- b. Animals
- c. Structures (including boats)

3. Watershed inventory

- a. Plants
- b. Animals
- c. Structures

D. Subjective Information - qualitative

1. Personal experience - anecdotal evidence of change over time
2. Perceptions - taste, odor, noise
3. Personal opinion - perception of severity of problem

E. Institutional information - legal/governmental

1. Water quality

- a. Best use classification
- b. Compliance with standards

2. Water use

- a. Present permits
- b. Planned uses, permit applications

3. Land use

- a. Present permitted uses
- b. Planned uses, permit applications

4. Jurisdictions of different levels of government

- a. Local- villages, cities, townships
- b. Regional - boards, authorities, special districts
- c. State - agencies
- d. Federal

F. Summary and transition to next chapter on how to use these different kinds of information.

The appendix will contain a generic list of information sources, with addresses, as appropriate.

Chapter 5. Diagnosing Lake Problems

Purpose: To discuss how the information gathered is used to understand the causes and sources of lake problems as a basis for selecting appropriate management techniques.

- A. Why it is important to consider all types of information
- B. How information is analyzed
 - 1. Assessing present data
 - a. Large scale, factual/descriptive information
 - b. Smaller scale measures - the role of monitoring and testing
 - c. Subjective information
 - d. Institutional information
 - 2. Identifying and collecting additional data
- C. Defining problem(s)
- D. Linking problems to probable causes and sources
- E. Summary and transition to how problem diagnosis is a basis for selecting appropriate management techniques from the range of options presented in Chapters 6 and 7.

Chapter 6. Management Techniques: In-lake

Purpose To present, in tabular format, with minimal description, in-lake techniques for aquatic plant control, restoration of water quality and desirable species; includes appropriateness of technique for use in New York lakes, effectiveness, relative cost and, if the technique is allowed, whether a permit is needed. From this catalogue of options, choices can be made for in-lake management.

Refers to more detailed discussion of techniques in appendix.

A. Methods to remove or control nuisance aquatic plants

1. Physical techniques

- a. Harvesting
 - 1. Suction dredging
 - 2. Rotovating
 - 3. Mechanical harvesting
- b. Bottom barriers
- c. Dredging
 - 1. Hydraulic
 - 2. Dry excavation
- d. Aeration/Circulation
- e. Lake level regulation

2. Chemical techniques

- a. Macrophyte control
 - 1. Registered herbicides
 - 2. New, unregistered herbicides
- b. Algae control
- c. Shading
- d. PO₄ removal
- e. Miscellaneous treatments
 - 1. Liming
 - 2. Rotenone
 - 3. Insect and snail control
 - 4. Oxidants

3. Biological techniques

- a. Grass Carp
- b. Miscellaneous and Research -
 - 1. fish stocking/plankton control
 - 2. insects and microorganisms

B. Methods to control nuisance aquatic animals

- 1. Physical
- 2. Chemical
- 3. Biological

C. Nutrient control: methods to prevent or decrease internal nutrient loading from point source and non-point source contamination

1. Point sources - methods to control wastes from boats

2. Nonpoint sources

- a. Sediment removal
- b. Flushing and dilution
- c. Biochemical bonding (sediment oxidation)
- d. Phosphorus inactivation
- e. Sediment oxidation
- f. Hypolimnetic withdrawal

Chapter 7. Management Techniques: Watershed

Purpose: To present in tabular format, with enough text for clarity, watershed techniques for controlling pollution from point and nonpoint sources, controlling land and water use. Includes effectiveness of technique relative cost and whether a permit is needed; regulatory and voluntary actions. From this catalogue of options, choices can be made for lake management.

A. Pollution controls

1. Point Source - regulatory controls (SPDES)

a. Residential/Commercial

- Municipal sewage treatment systems
- Regional (comprehensive) sewer systems

b. Industrial - discharge permits, pretreatment

2. Nonpoint Source - regulatory, voluntary controls

a. On-site sewage disposal systems

b. Agriculture BMPs *PROPERTY OWNERS*

c. Urban/Suburban - stormwater, construction

d. Stream corridor

e. Road and Streambed erosion

f. Miscellaneous

- forestry
- mining
- acid deposition

B. Land Use Controls

1. Planning: public, private; growth, development

2. Zoning

a. Protective - resource, scenic, open space

b. Restrictive - density, use, access

3. Regulation

a. Fees - licenses, per use

b. Permits

c. Penalties

C. Water Use Controls

1. Planning - accommodating desired uses through planned development

2. Zoning - separating competing activities by time, area

3. Regulation

a. Fees

b. Permits - docks, moorings; activities

c. Penalties - speeding; noise; littering, sewage discharge

Chapter 8. Organizing for Action

Purpose: To discuss who should be involved in making lake management decisions, including the roles of federal, state, regional and local governments, consultants, organizations and individuals. Summarizes methods of building a coalition, using the lake association as catalyst.

Emphasizes need for involving all sectors of the public in order to develop commitment to the lake management choices made (and the economic, social and environmental consequences.)

- A. Who should be involved in watershed protection and maintenance (Overview - actual laws summarized in appendix)
 1. Government roles and responsibilities jurisdiction, mission, funding, technical assistance)
 - a. Federal
 - b. State
 - c. County (EMCs, CACs; land use planning, zoning, formation of districts, land acquisition)
 - d. Local government
 - e. Multi-jurisdictional districts: Examples -Adirondack Park Agency, Saratoga Lake
 2. Organizations' roles: overview - descriptions of lake associations and FOLA in appendix
 3. Role of the consultant - how to find the right one
 4. Roles and responsibilities for individuals: brief summary of what individual homeowners can do to improve lake water quality. Actual list of tips in appendix)

B. Organizing for action

1. Getting people together for a common purpose
 - a. Using existing organizations and networks
 - b. Holding public meetings
 - c. When to hire a consultant - and how to get the right one
 - d. Working with governments
2. Focusing on the problem(s)
 - a. Evaluating community goals and objectives
 - b. Reaching consensus on problems
 - c. Where to go for help
 - Funding
 - Grants
 - In-kind services
 - Technical assistance

Refers to appendix for how to organize a lake association (this manual assumes that the reader already belongs to one) and techniques for effective citizen participation.

Chapter 9. Selecting Options - Developing the Management Plan

Purpose: To present the steps necessary for making informed choices, acceptable to the community, to restore or protect a lake by developing a management plan that includes: problem definition, diagnosis and selection of appropriate management options to achieve the desired goals. Refers to chapters and appendices for more information. Contains worksheets.

A. Problem analysis and definition

1. Identification of lake problems (Chapter 3)
2. Collecting information about your lake (Chapter 4)
3. Reaching consensus on problems (Chapter 8)

B. Designing a plan to solve or control identified problems

1. Identifying where more study is needed
2. Conducting a diagnostic study to identify causes and sources
3. Researching management alternatives
 - a. in-lake techniques (Chapter 6)
 - b. watershed management techniques (Chapter 7)
4. Factoring in social and economic factors of the communities involved
5. Selecting goals and objectives
6. Selecting the appropriate management techniques
7. Designing evaluation criteria to measure effectiveness
8. Developing a workplan
 - a. Who will do the work - responsibilities and tasks
 - b. Schedule
 - c. Funding
 - d. Identifying points where communication (in and out) is needed

C. Transition to implementation chapter; identifying and eliminating barriers to progress

Chapter 10. Implementing the Management Plan

Purpose: To discuss means (financial options), technical assistance schedule, priorities; how to determine measures of progress and results; why communication with all involved sectors is an important part of the plan.

A. Procedures

1. Monitoring
2. Analysis
3. Reporting

B. Decisions

1. Determining priorities
2. Adjusting the plan

Chapter 11. Evaluating the Results

Purpose: To set technical and management criteria; monitoring, analyzing and reporting changes; maintaining desirable results and planning further action.

A. Meeting objectives

1. Environmental measures

2. Social and Economic measures

B. Communicating results (techniques described in appendix)

C. Follow-Up

1. Monitoring, evaluation to maintain success

2. Further work to solve or control remaining problems

3. Reporting and communicating

Appendices

1. Information on New York State's lakes; size, variety, number; ecological, social and economic importance; Funny facts - odd names, number of duplicate names.
2. Geomorphology: (physical composition of lakebed, appearance of lakes, relation of lake to its watershed, as background for understanding what can and cannot be modified by human action) How lakes are formed; lakes as part of drainage basins; tributaries, hillslopes, sediment production and transport.
3. Hydrology: (physical cycles, as background for understanding how and why lakes can change and to what extent human activities can influence lake changes) global hydrologic cycle; water inflows to lakes, interception, outflow; relates to lake level, dependable base flow and yield.
Circulation cycles: seasonal layers and turnover, daily cycles.
4. Aquatic plants commonly found in New York State lakes. Lists most common phytoplankton and macrophytes; illustrates common nuisance weeds.
5. Beneficial uses of NY waters. Presents categories of water classification by "best beneficial use"; summarizes how water quality standards and other measures are used to determine uses.
6. In-lake restoration techniques: detailed text on physical, chemical, biological; nutrient reduction or deactivation techniques.
7. Watershed-based lake management techniques: detailed text on pollution control, land and water use controls through best management practices, state and local regulations, planning and zoning in the
8. Steps to follow to form a lake association, including where to go for help.
9. Steps or checklist for effective citizen participation and consensus building.
10. Overview of effective communications techniques, including how to get media coverage; public information campaigns; education for all publics.
11. Laws regarding New York State's waters.
12. Glossary
13. Bibliography
14. Index

Town of Pulteney

Box A
Pulteney, New York 14874

(607) 868-4222

August 15, 1988

Hon. Charles Babcock
Chairman, Steuben Co. Board of Legislators
Pulteney Square
Bath, New York 14810

Dear Charlie:

The Town of Pulteney has been very involved with the Hornell District office of the NYS Dep't. of Health.

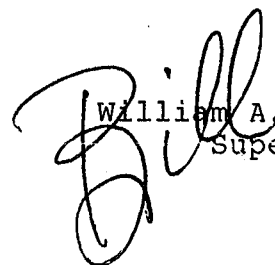
The enclosed letter came to me in response to a request for more personnel in the District office.

My Town Board requested I write to you to inquire as to the interest the County may have in forming a Health Department.

Also, as you and I serve on the Keuka Lake Districting Committee, the concept of a County Health Department might be extended to a combined Steuben-Yates Health Department having joint jurisdiction over the Keuka Watershed.

Perhaps we can discuss this at the next District Committee meeting.

Kindest Regards,


William A. Weber
Supervisor

Enclosure

CC: Greg Hefner, County Planner
Keuka Lake Watershed Perimeter Committee
Brian Flynn, Attorney for Town/Pulteney
Town Board
Charles Egresi, CEO
Dr. C. Brent Olmstead/Health Officer