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ACKNOWLEDGMENT

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Review and technical support was also provided by the members of the Natural Resources Coordinating Council's Watershed Management Committee.

PURPOSE

INTRODUCTION

A Watershed Approach

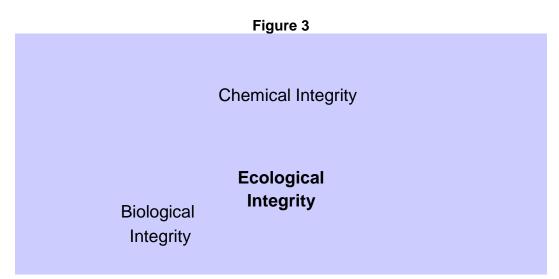
In recent years, there has been an increased awareness among natural resource managers regarding the interdependence of natural systems.94Wn amresoult,amrmor mcomprehensiv aproach toresource mwtershed sashe basicmholistically atther range f nissuestheattaffe

steps in protecting the water and other natural resources. Watershed management can help with the use, protection, and restoration of natural resources, while allowing for sustainable economic growth and development.

The Illinois EPA has delineated the state into 820 watersheds for planning and data management purposes (Figure 2). Approximately 91 percent of the watersheds consist in size of less than 100,000 acres or 156 square miles. Nearly 71 percent (579) of the watersheds are under 50,000 acres or 78 square miles in size. Planning and implementation for watersheds 50,000 acres or less in size is recommended. Many agencies are available to assist a planning committee in subdividing watersheds into manageable units that will lead to a successful planning and implementation effort.

What is Water Quality?

attained (Figure 3). This can only be accomplished by addressing the physical, chemical, and biological/habitat integrity simultaneously.



Where specific numerical water quality standards of state criteria are absent, protection of designated uses is based on narrative standards. Such narrative standards are statements that describe the desired water quality goal. The IPCB narrative standard for toxic substance control sets forth procedures to derive water quality criteria for protection of aquatic life, human health and wildlife. To ensure that narrative toxics are attained, states develop implementation procedures addressing all mechanisms used in their attainment. In addition to a narrative standard for toxics, Illinois also has a general narrative for offensive conditions that states: "Waters of the state shall be free from sludge or bottom deposits, floating debris, visible oil, odor, plant and algae growth, color or turbidity of other than natural origin."

Numeric standards for aquatic life have now been developed to protect for both

state stream classification system, BSC ratings are used for Nondegradation Evaluations, and IBI values developed in conjunction with BSC ratings are used for aquatic life use attainment assessments.

IBI criteria for the five BSC categories which range from Unique Aquatic Resource streams (Class A), to Restricted Aquatic Resource streams (Class E) are presented in Table 1. A detailed report titled "Biological Stream Characterization (BSC): A Biological Assessment of Illinois Stream Quality" (Hite and Bertrand 1989) describes this stream classification system and the ratings through 1989. BSC ratings for Illinois streams have recently been updated through 1993 and a new BSC map and report documenting the updated BSC ratings was published in 1996.

Table 1
Summary of Use Support Assessment Criteria For Illinois Streams

U.S. EPA	Full Support		Partial Support Minor Moderate		Non- Support
GENERAL DESCRIPTION	Good	Good	Fair	Fair	Poor
IEPA/IDNR BIOLOGICAL Stream Characterization (BSC)	Unique Aquatic Resource	Highly Valued Resource	Moderate Aquatic Resource	Limited Aquatic Resource	Restricted Aquatic Resource
FISH/Index of Biotic Integrity (IBI/AIBI)	51-60	41-50	31-40	21-30	<20
BENTHOS/Macroinvertebrate Biotic Index (MBI)	<5.0	5.0 - 5.9	6.0 - 7.5	7.6 - 8.9	>8.9
STREAM Potential Index of HABITAT/Biotic Integrity (PIBI)	51-60	41-50	31-40	<31	
STREAM IEPA Stream Sediment	Nonelevated	Nonelevated -Slightly Elevated	Slightly Elevated	Elevated -Highly Elevated	Extreme

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Illinois Water Quality Report [305(b)]

This report is prepared by the Illinois EPA and provides an assessment of the water quality conditions of the state's surface and groundwater resources. It is prepared to satisfy reporting requirements under Section 305(b) of the Federal Clean Water Act. In addition to characterizing statewide water quality conditions, the summary report is supplemented with watershed specific fact sheets addressing general water quality conditions on a more local level. The information found in this report is very beneficial to planning and technical committees for determining preventative or restorative actions when developing a Watershed Implementation Plan.

The Illinois EPA has maintained an effective and efficient surface water monitoring and assessment program since its inception in 1970. Adjustments and additions to the monitoring effort have been undertaken to keep pace with technological advances and broadening environmental concerns. Monitoring activities focus on water and sediment chemistry as well as on physiological and biological data (aquatic invertebrates, fisheries, and habitat). A comprehensive surface water monitoring strategy outlines monitoring programs, quality-assurance activities, laboratory-support needs, and data-management procedures. As a result of these monitoring and assessment programs, data from over 4,000 stations have been utilized in the assessment of surface water quality conditions. In addition, volunteer citizen monitoring data from 300 lakes collected by 600 volunteers as part of Illinois EPA's Volunteer Lake Monitoring Program (VLMP) were incorporated into these water quality assessments.

What is a Watershed Implementation Plan (WIP)?

A Watershed Implementation Plan is the final product of the watershed planning process. It should be developed to address water quality issues for the purpose of attaining a waterbody's designated use. In order to achieve this, a WIP must identify the potential problems and/or existing problems within a watershed and establish appropriate implementation strategies that will prevent potential problems and/or solve existing problems. A WIP will also need to describe how water quality standards will be attained and the methods to be used to show water quality improvement due to the watershed practices implemented. Utilizing a comprehensive and holistic approach means that point and nonpoint sources are addressed for both ground and surface water resources.

Once the watershed community decides to become involved in the process of watershed planning, the success of the initiative will be based not only on the level of commitment to the effort, but also on the process used to achieved the desired goals. It is recommended that any group beginning the planning process seek the assistance of the USDA N8d

plan addressing water quality issues for the attainment of designated uses must address the physical, chemical, and biological integrity of the water resource(s).

Why Follow This Guidance Document?

A WIP developed following the format found in this guidance document will provide the planning committee with a plan containing: a comprehensive WRI of natural and human resources in the watershed; a list of goals and objectives; specific implementation strategies which identify best management practices with a description of how these BMPs will protect and/or restore the resources identified, including a timetable for completion; an itemized cost summary (budget); and methods for measuring progress/success.

Utilizing this methodology will result in a plan which includes all of the information needed to meet the initiatives of all the state's natural resource agencies and therefore can be utilized to pursue financial resources from several sources, be it local, state, or federal.

This guidance document provides a format and lists the components to be included in a WIP.

Coordination at the State Level

The Natural Resources Coordinating Council (NRCC) was established by Governor Jim Edgar for the purpose of program coordination among the state's natural resource agencies (Illinois EPA, Illinois Department of Agriculture (IDOA), Illinois Department of Natural Resources(IDNR), Illinois Pollution Control Board (IPCB), Illinois Department of Public Health (IDPH), Illinois Department of Commerce and Community Affairs (DCCA)). Under the authority of the NRCC, the Watershed Management Committee was created to serve a liaison function to assist in the coordination of federal and local involvement in watershed management activities, and to coordinate watershed-based activities among the various state natural resource agencies.

The Watershed Management Committee of the NRCC has established coordination issues for which action items have been developed for watershed management in Illinois. This coordination effort has identified watershed priorities between the state agencies, established the watershed delineations for Illinois, identifies the lead agency for the various issues involved in comprehensive watershed planning, and has established a mechanism for the review and endorsement of WIPs.

The Illinois Environmental Protection Act of 1970 (ACT) established a unified statewide program for environmental protection and assigned authority to implement purposes of the Act to three entities. A seven-member Pollution Control Board (IPCB) was assigned the responsibility of establishing the basic regulations and standards necessary for the preservation of the environment. The Act also created and established the Illinois EPA as the principal state agency for the implementation of environmental programs. This includes activities such as monitoring, planning, permitting, financial assistance administration, compliance assurance, and program management conducted to prevent, control and abate water pollution in Illinois.

The Illinois EPA is responsible for the maintenance and updating of the State Water Quality Management Plan that identifies the state's goals and objectives pertaining to activities resulting in degraded water quality. The General Assembly designated the Illinois EPA as the state water pollution control Agency for all purposes of the Federal Clean Water Act. Recently incorporated within the Illinois Water Quality Management Plan, the Illinois EPA has implemented a Watershed Management Program to effectively protect and restore natural resources.

The objective of Illinois EPA's Watershed Management Program is to: "develop an integrated, holistic process to effectively and efficiently protect, enhance and restore the physical, chemical, and biological integrity of our water resources within a defined hydrologic area (watershed)." This comprehensive approach will focus on the total spectrum of water resource issues. The Illinois EPA has restructured its program activities utilizing a priority watershed management approach. This restructuring includes both surface water programs and those groundwater activities that are related to public water supply requirements. The Act further established the Illinois Institute for Environmental Quality as the research and education arm of the state's environmental protection apparatus. These responsibilities were assumed by the Department of Energy and Natural Resources, which as of July 1, 1995, is part of the newly formed Illinois Department of Natural Resources.

Because of these authorities given Illinois EPA, it is the Agency's responsibility to review and provide endorsement of watershed plans developed to address water quality issues. This "guidance document" was created to help local watershed planners meet this water quality objective.

Section 4(m) of the Illinois Environmental Protection Act provides Illinois EPA with the authority to "engage in planning processes and activities and to develop plans in cooperation with units of local government, state agencies and officers, and other appropriate persons in connection with the jurisdiction or duties of each such unit, agency, officer or person." Pursuant to this authority, Illinois EPA will review watershed implementation plans for water quality issues. Plans will also be reviewed by the Watershed Management Committee of the NRCC. Each natural resource agency will be responsible for reviewing the plan for the endorsement of issues over which they have delegated authority. Through this process, the multitude of issues in a WIP may be addressed by the appropriate agency with respect to expertise and resources (staff and funding).

COMPONENTS OF A WATERSHED IMPLEMENTATION PLAN (WIP)

The format and information requested in the "Components" on the following pages are provided to assist local watershed planning committees in the development of a WIP. This framework was established to provide the planning committee with what components should be in a WIP, and what information should be included in each component. A comprehensive WIP will contain the following:

- ⇒ **Component #1** -- A Mission Statement to keep the planning committee focused.
- ⇒ Component #2 -- A narrative which provides a description of the watershed.

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Map Preparations Tips

Maps are an important resource for describing a watershed. A map, or set of maps that overlay, can clearly illustrate how a variety of features interrelate. A detailed map of the watershed may illustrate features such as: administrative boundaries; road network; the principal stream and its tributaries; lakes, ponds, and reservoirs; locations of major wastewater dischargers and other potential pollutant sources; storm drainage networks; land use; topography; and natural features.

COMPONENT #2 WATERSHED DESCRIPTION

To understand the area for which the WIP is being developed, a description of

Waterbodies

In a narrative format, provide as much information as possible about the following items. Use tables and graphs to illustrate significant information and to summarize important facts.

⇒ Lake(s) (name(s), location, surface acres, acre feet, volume in gallons); Trophic Status; Pond(s) (number, acres, life expectancy); River(s) (miles, conditions, level fluctuation, uses, levees); Stream(s) (miles, type - i.e., perennial, intermittent, modified); Trends; Available Chemical, Biological, Physical Data

Source(s) for obtaining above information:

Maps, Public Water Supplies, Illinois EPA, Individual Studies, Soil and Water Conservation Districts (SWCD)

Designated Use

Illinois' waters are classified for a variety of designated uses. A waterbody should be capable of supporting the designated use for which it has been classified. The ability of a waterbody to attain a specified use is influenced by the activities within the watershed. Watershed planning and implementation must address this issue and develop strategies to meet the goal of use attainment.

Identify the designated use(s) of the waterbody(ies)

impairment(s), or potential impairment(s). After the causes are determined, available data, land use information, and site evaluation may be used to determine the source of the pollutant.

List and prioritize the causes and sources of impairments identified by the planning and technical committees.

- ⇒ <u>Causes</u>: Sediment; Nutrients; Metals; Dissolved Oxygen; Toxics; Suspended Solids; Oil and Grease; Thermal Modification; Noxious Aquatic Plants; Turbidity; Pesticides; pH; Other(s)
- ⇒ Sources: Industry; Agriculture; Construction; Hydrologic/Habitat Modification; Urban Runoff/Storm Sewers; Resource Extraction; Silviculture; Other(s)

Source(s) for obtaining above information:

Illinois EPA, Individual Studies, Illinois State Geological Survey (ISGS)

Groundwater

A Watershed Implementation Plan needs to address both ground and surface water issues. Even if surface water quality is the main objective of the plan, it is important to gain as much knowledge as possible about the ground water resource(s). Understanding the interaction between ground and surface water will be beneficial in making decisions for the applicability of certain practices during the implementation stages of the project. Protection of public water supply wells and their recharge areas should be a component of all Watershed Implementation Plans. A comprehensive plan will address both ground and surface water issues and not concentrate on only one.

⇒ Confined Aquifer; Unconfined Aquifer; Capture Zone; Re-charge Area; Wellhead Protection Area; Priority Groundwater Protection Panning Region; Water Wells (abandoned, active, condition); Susceptibility to Nitrogen Leaching; Susceptibility to Pesticide Leaching

Source(s) for obtaining above information:

Illinois EPA, Illinois State Water Survey (ISWS), ISGS

Irrigation

Management practices involved in irrigation may have an effect on water quality for both ground and surface water. It is important to know if nutrients and chemicals are applied through the irrigation system and what effect that may have on the aquifer, and nearby streams. Issues regarding water quantity may also need to be addressed in the planning and implementation process.

⇒ Location; Acres; Source; Number of Wells (groundwater/surface water); Backflow Prevention; Pumpage (gallons per minute)

Source(s) for obtaining above information:

ISWS, Maps, Field Reconnaissance

Drainage

Drainage ditches and drainage tile are potential sources for various pollutants. The influence that various drainage systems have on a watershed should be evaluated and factored into the planning and implementation effort.

⇒ Effects of Surface Drainage; Effects of Subsurface Drainage; Active Drainage Districts; Extent of Drainage Tile

Source(s) for obtaining above information:

Local Drainage District, Field Reconnaissance

Floodplain Boundaries

Flooding can create many problems. Not only can it delay planting, damage existing crops, cause urban damage, and threaten life, it may also be a contributor to water quality degradation. When addressing flooding issues, consideration should be given during design of BMPs so that they address not only flooding, but water quality issues as well.

⇒ Flooding (frequency, history); Flood Structures; Flood Plain Boundaries; 100 Year Flood Zone; Flood Damage Estimates

Source(s) for obtaining above information:

SWCD, Corps of Engineers

Municipal / Industrial

A comprehensive Watershed Implementation Plan should address point source issues as well as nonpoint sources. Identify the point source discharges in the watershed. Other point source issues may exist such as wildcat sewers and malfunctioning septic systems.

⇒ Pollution; Stormwater Runoff; NPDES Permitted Sites

Source(s) for obtaining above information:

Illinois EPA, Field Reconnaissance

Source(s) for obtaining above information:

SWCD, NRCS, IDNR

Fish

Some species of fish are more pollutant tolerant than others. Conducting a fish survey, or obtaining existing information from previous fish surveys, can provide the planning committee with an indicator of a stream's water quality.

⇒ Species; Fish Size; Fish Kills; Habitat; Population; Stocking

Source(s) for obtaining above information:

Illinois EPA, IDNR

Priority Waterbody

Various organizations have established priority areas based on program requirements. A watershed is a dynamic unit. Look at all the resources, and understand their interrelationships. Understanding and then listing program priorities regarding selected watershed plan components will assist the planning committee in identifying and seeking technical assistance and possibly obtaining financial support for implementation.

⇒ Targeted Watershed Approach; Environmental Quality Incentives
Program (EQIP); Resource Rich Region (ecosystem partnership); "T" by
2000 Transect; Conservation Reserve Program (CRP)

Source(s) for obtaining above information:

Illinois EPA, NRCS, IDNR, IDOA

to show such things as acres/percentage of Highly Erodible Land (HEL), prime farmland, and land use capability.

⇒ Soil Types (names and soil associations); Land Use Capability Classes; Highly Erodible Land (HEL); Prime Farmland; Hydric soils; Erodibility Indexes (EI)

Source(s) for obtaining above information:

NRCS, SWCD, U of Illinois Cooperative Extension Service (UICES)

Soil Erosion

Identification and assessment of the types of erosion occurring and the sources and causes within the watershed are essential information to obtain. Available information (i.e., soils, climate, land use, etc.) that is gathered for this inventory will be needed to make this assessment. In many cases it may be necessary to physically walk or drive the watershed to gather accurate information, especially for gully and streambank erosion. Provide a narrative and utilize tables discussing erosion conditions in the watershed. Discuss agricultural and urban issues separately. List erosion rates by soil type, and provide information on sedimentation rates to water bodies. Provide a figure for total soil erosion and sedimentation in the watershed.

When discussing soil loss, planners often refer to it in relation to "T", or "Tolerable" soil loss levels. "T" is based on productivity levels and not water quality. Soil loss equal to "T" will sustain a soils productivity level, but may still be eroding at a level which is detrimental to water quality. To address water quality, the total amount of soil loss needs to be taken into consideration regardless of "T".

- ⇒ Agricultural: Sheet and Rill; Ephemeral; Gully; Streambank; Sedimentation Rates
- ⇒ Construction: Sheet and Rill; Ephemeral; Gully; Streambank; Sedimentation Rates

Source(s) for obtaining above information:

NRCS, SWCD

Geology

Knowledge of the geological history of a watershed provides beneficial information for developing an understanding of the dynamics of the watershed. Formation and age of the stream system, underlying materials, depth to the aquifer, and type of aquifer (confined, unconfined) are all determined by the byals, sourcneff ageaus o tpotent -1.5.4blemo t001 Tc0.2403 Tw-0.245120.75f aqBMP sele evel.1

⇒ Cropping rotations; Alternative Crops; Cover Crops; Specialty Crops;
Pasture (acres); Hayland (acres); Orchards (type, size); Cropland (acres);
Values (average); Cash Rent (dollars); Crop Share; Absentee Landowners
(number & percent); Farm Size (average in acres); Farmsteads (number);
Confinement Livestock Operations (size, location, waste management system, species); Open Feedlots (number, acres affected, animal units, species); Aquaculture (number of operations, type of aquaculture, size/acres); Woodland Resources (species, condition, value, logging, human

Other Resources

Other resources may be considered and included in the WRI that have not been presented in the above component. The above list of resources is not inclusive and the planning and technical committee may be able to identify additional resources which should be included in a WRI.

What's Next?

COMPONENT #5 PROBLEM STATEMENT

The problem statement(s) should describe the problem(s) the WIP will resolve and its relevance to a waterbody's designated use attainment. Each problem statement should identify the type and location of the water resource(s) at risk, or affected; the nature of the problem(s) or water quality impact(s); and the sources and causes of the impact(s). Once this process is completed, the planning

COMPONENT #6 ------ GOALS/OBJECTIVES

A goal is the desired change or outcome the planning committee wishes to achieve and is driven by the problem statement. Setting goals in a watershed effort involves getting the stakeholders to define desired changes as measurable and attainable end points.

The planning committee should develop a set of goals that defines the desired change for each identified problem statement. This will help in guiding protection and restoration efforts. Goals should be specific so that setting specific objectives can be accomplished.

In the goal setting process, the planning committee defines the results it wants to achieve. In setting objectives, the planning committee describes how it will do this. The objectives in the WIP should be concise and state how they will achieve attainment of the designated use of the waterbody(ies) being addressed. The specifics of who will do what, what BMPs will be installed, what control options are available for point source dischargers, the timetable, and a long-term maintenance schedule will be developed in Component #7, *Implementation Strategies of the WIP*. Develop an objective for each goal identified.

Utilize the information in the WRI and the established problem statement(s) to prioritize the list of goals and objectives. The purpose for prioritization is to determine phased implementation for conducting protection and/or restoration efforts to address the problems deemed most significant.

Example Goals and Objectives

Goal #1: To reduce sedimentation entering Water Creek Lake to reduce the turbidity and loss of volume for the public water supply.

Objective #1: To develop and apply resource management systems in targeted areas within the watershed to meet the lake's designated use as a public water supply. Provide educational/informational materials on soil erosion control to both the urban and agricultural communities.

Goal #2. To reduce the nutrient load to Water Creek Lake thereby reducing taste and odor problems and to remain in compliance with established MCLs.

Objective #2. Develop and implement nutrient management systems for agricultural production and create and disseminate informational and educational materials.

Goal #3: To increase wildlife habitat in the Water Creek Lake Watershed.

Objective #3: To re-establish wetlands and re-vegetate the stream corridors with grasses and native hardwoods.

COMPONENT #7 — IMPLEMENTATION STRATEGIES

Once the WRI is completed and analyzed, the sources and causes of pollution identified, and the goals and objectives listed and prioritized, the technical committee can begin developing implementation strategies. Alternative strategies should be developed for each objective identified, while taking into consideration a BMP's ability to address multiple concerns and what control options may be needed for point source dischargers.

This section should contain a detailed description of the practices in each alternative. Each implementation strategy listed should contain language explaining the feasibility of the proposed practices in achieving the identified objectives. It should contain an evaluation of the project's effectiveness, operation, and long-term maintenance upon completion. Describe the environmental impacts associated with each alternative developed. Be as specific as possible in listing the type of practices and the quantity needed to implement the watershed implementation plan.

COMPONENT #8 COST SUMMARY

Identify the projected costs associated with each alternative implementation strategy that has been developed. List BMP(s) and control options for point source issues along with their per unit costs separately. Having individual costs for each BMP and control options will be advantageous in seeking funds for implementation. Cost effectiveness of the practices to be installed should be evaluated for use in determining which BMPs and/or control options will or can be implemented. Developing specific costs is also necessary in order to conduct a cost/benefit analysis. The cost/benefit of the various alternatives may be the determining factor in which alternatives will be selected for implementation. Different funding sources have different requirements and limitations on what can be funded. By listing BMP(s) and control options for point sources individually, rather than showing lump sum totals, allows individual funding sources to review and select eligible practices for possible financial assistance.

At the end of the cost summary section, discuss the local resources available for implementation, and/or as match for state or federal funds. Matching funds to be listed would be hard dollars as well as in-kind services available such as labor, equipment, etc.

COMPONENT #10

MEASURING PROGRESS / SUCCESS

- ⇒ Reports, maps, and photographs of specific controls and protection/restoration practices installed (i.e., terraces, waterways, animal waste lagoons, streambank stabilization, stormwater detention ponds).*
- ⇒ Qualitative and quantitative results of instream monitoring and BMP effectiveness monitoring. Trends in chemical or biological metrics can sometimes be dramatic (even if not at a high confidence level statistically). Visual documentation of waterbody improvements can also be convincing.*

*(adapted from U.S. EPA, Watershed Protection: A Project Focus EPA 841-R-95-003, August 1995)

GLOSSARY

Alternative Strategies - A set of one or more strategies provided to the planning committee to solve resource problems identified in the planning process to achieve proper management of the resources.

Ambient Monitoring - Providing background monitoring of water quality from a fixed station.

Best Management Practice (BMP) - A practice determined by a state or other agency to be the most effective and practicable (including technological, economic, and institutional consideration) means of reducing the amount of pollution from nonpoint sources to a level compatible with water quality goals.

Biological Integrity - The ability to support a balanced, integrated, adaptive community of organisms having a species composition, diversity and functional organization comparable to that of the natural habitat of the region.

Chemical Integrity - The chemical properties within the water column in a state in which the waterbody is unimpaired.. Chemical features include nutrients, toxics or both.

Discharger - A facility that releases effluent into a waterbody from a pipe, or other point source mechanism requiring a National Pollutant Discharge Elimination System (NPDES) permit. An example of a discharger would be a waste-water treatment plant.

Drainage Density - The ratio of the total length of streams within a watershed to the total area of the watershed; thus drainage density has units of the reciprocal of length. A high value of the drainage density would indicate a relatively high density of streams and thus a rapid storm response.

Drainage Pattern - The configuration of arrangement in plan view of the natural stream courses in an area. It is related to local geologic and geomorphologic features and history.

Ecosystem - An interacting community of living organisms, together with the physical and chemical environment in which they live.

Holistic - Emphasizing the importance of the whole and the interdependence of its parts.

Hydrologic Modification - Any change in the natural stream configuration such as channelization, or dredging.

Implementation Strategies - A plan of action specifying best management practices to be installed to protect and/or restore resources.

Lotic - Of, pertaining to, or living in moving water.

Physical Integrity - The physical characteristics present to characterize lotic systems. Physical features include stream hydrology variables such as flow regime, discharge and velocity, and habitat characteristics such as substrate type and instream cover.

Timetable - A schedule listing the times at which certain events are expected to take place.

Watershed Community

3.0 ORGANIZATION AND OFFICERS

- 3.1 The officers of the Task Force are the Chair, Vice-Chair, Secretary, and Treasurer. The Chair shall be one of the (number) voting watershed residents.
- 3.2 The duties of the Chair include, but are not limited to:
- ⇒ Developing meeting agendas;
- ⇒ 'Presiding over all meetings of the Planning Committee; and
- ⇒ Serving as Chair of the Technical Committee and as an ad hoc member of other committees.
- 3.3 The Vice-Chair may be any member of the Planning Committee. The Vice-Chair shall assume the duties of the Chair for the remainder of that term should that office become vacant, and shall preside at meetings of the Planning Committee and Technical Committee when the Chair is unable to attend.
- 3.4 The Secretary may be any member of the Planning Committee. The duties of the Secretary include, but are not limited to:
- ⇒ Maintaining the official records of the Planning Committee;
- ⇒ Recording and distributing the minutes of the Planning Committee meetings;
- ⇒ Maintaining a current record of the names and addresses of Planning Committee members; and
- ⇒ Sending out notices of meetings and any supporting meeting materials at least two (2) weeks prior to scheduled meetings.

4.0 COMMITTEES

4.1 Standing Committees:

The following standing committees shall be established by the Steering Committee to address concerns of the Planning Committee:

- ⇒ Sediment Control and Land Development
- ⇒ Habitat, Wetlands, Riparian Zone Protection
- ⇒ Stream Watch
- ⇒ Groundwater Protection
- ⇒ Public Relations and Public Involvement
- \Rightarrow Funding

4.2 Organizational Committee

The Organizational Committee is established. When the bylaws are adopted by the Planning Committee, the officers elected, and the Steering Committee selected, the Organizational Committee shall cease to exist.

4.3 Other Committees

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6.0 DECISION MAKING

- 6.1 The Task Force shall strive to operate by consensus. Group decisions shall be made by consensus of all members present at any meeting.
- 6.2 Any member may call for a vote on any issue during the course of any meeting.
- 6.3 Decisions made by vote shall require a two-thirds majority of the voting members present for passage.
- 6.4 Voting members may be represented by designated alternatives. Alternates shall be designated by letter or telephone call to the Chair in advance of the meeting. The alternate shall have all the rights and duties of a voting member during the meeting(s) for which they are a designated alternate.

7.0 MISCELLANEOUS PROVISIONS

8.0 ADOPTION AND AMENDMENTS

8.1 These bylaws and any amendments shall be adopted by a simple majority vote of the Planning Committee. Amendments to the bylaws shall be summarized in the notice of the Planning Committee meeting at which the proposed amendments are to be voted on.

Appendix 2

Working with Groups

The following information was adapted from <u>A Guide to Developing Local Watershed Action Plans in Ohio</u>, which was written and published by the State of Ohio

⇒ Shared leadership

The Problem-Solving Method:

- \Rightarrow Define the problem
- ⇒ Determine the cause(s)
- ⇒ Develop alternative approaches
- \Rightarrow Assess the consequences

Select A Solution:

- ⇒ Implement the chosen solution
- ⇒ Evaluate
 - ♦ select issues for analysis
 - ♦ determine feasibility of analysis
 - ♦ determine measures
 - * importance
 - * validity
 - * uniqueness
 - * accuracy
 - * timeliness
 - * privacy and confidentiality
 - * costs of data collection
 - * completeness

II. Collaboration

(adapted from Ohio Commission on Dispute Resolution and Conflict Management)

Collaboration:

- ⇒ A process of joint decision-making among groups, individuals, and organizations that have an interest in the problem; and
- ⇒ A process through which parties involved in different aspects of a problem constructively explore their differences and search for solutions that go beyond the limits of their individual or agency roles or responsibilities.

Features of Collaboration:

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Phases of a consensus-building (collaborative) process (adapted from Collaborating by Barbara Gray, Jossey-Bass Publishers, 1989):

Phase 1 - Plan the process

- \Rightarrow frame the problem
- ⇒ identify stakeholders
- ⇒ commit stakeholders to the collaborative process
- ⇒ identify resources

Phase 2 - Conduct the process

- ⇒ establish ground rules
- ⇒ agree on common definition of the problem
- ⇒ set agenda
- ⇒ organize subgroups
- ⇒ gather information
- ⇒ generate options
- ⇒ communicate with constituencies
- ⇒ build external support
- ⇒ reach agreement

Phase 3 - Implement the agreement

- ⇒ create a monitoring system
- ⇒ monitor compliance
- ⇒ modify activities if necessary

III. Ground Rules

(adapted from Ohio Commission on Dispute Resolution and Conflict Management, 1991, and the Conflict Clinic, Inc., 19989)

Ground rules are agreements individuals in a group make to improve their ability to work together effectively. Ground rules:

- ⇒ establish a general process (and set expectations);
- ⇒ provide a code of conduct for behavior of participants (including leaders and facilitators);
- ⇒ create a framework for cooperation;
- ⇒ help make open communication safe: and
- ⇒ reduce potential for later disputes.

Agreeing on ground rules at the beginning of every meeting sets a framework to ensure that all business deemed important gets addressed (some items may be deferred or otherwise managed, but everything gets aired to the group's satisfaction). When a group meets regularly, the ground rules may become familiar and need not be revisited at each meeting. It may be useful to periodically review the ground rules, however, to be sure that they still meet the group's needs.

IV. Generating and Ranking Ideas

(adapted from Ohio Commission on Dispute Resolution and Conflict Management)

Nominal Group Technique:

A group process for identifying problems, generating possible solutions, and setting priorities. It assumes that ground rules provide an environment where all participants are respected and can speak freely, and a manageable group size (less than 50).

The leader or facilitator explains the steps in the process (see below), then presents the problem statement or question to the group. As the group gets to each step, the leader should explain it in detail.

- **Step 1** (silent generation of ideas in writing) The leader reads the question aloud; it is written on a flip chart or on paper passed out to the group. Members list their responses or ideas in phrases or brief sentences, working silently or independently for a set time.
- **Step 2** (presenting and recording the ideas) The leader asks each member for one idea at a time, and records it on a flip chart. As each sheet is filled, it is taped to the wall to remain visible. Adding to ideas is encouraged. No discussion, elaboration, or criticism is allowed (these occur in Step 3). The leader continues asking around the group until all ideas are presented. (Alternatively, pass out index cards to record ideas, then collect the cards and write the responses on the flip chart. Another alternative is brainstorming, where people randomly shout out their ideas while one or more recorders or scribes writes them on a flip chart. This is potentially dangerous unless the group has a high level of trust and respect, and everyone feels free to participate; otherwise, some people might not speak up, and their ideas may not be considered.)
- **Step 3** (discussion of ideas) Clarification of ideas takes place at this stage. The leader reads each item aloud, and asks for comments. Similar ideas can be lumped together, and some may be removed from consideration if they are not applicable. Once all ideas have been discussed to the group's satisfaction, this stage ends.
- **Step 4** (ranking the ideas) This is like voting. Each person selects five (or seven, if the number is large: decision by leader) ideas considered most important and ranks them in order, number 1 being most important. Index cards can be used, or sheets of paper. The rankings are collected, tallied, and recorded on the flip chart. Alternatively, distribute colored sticky dots to each person voting (number of dots equals number of votes); voting occurs on the flip charts according to the placement of the dots. A voter can place more than one dot on a preferred idea, or give one vote to each of several ideas.
- **Step 5** (discussion and agreement) Discuss the voting results and significance. Discuss the ranked items and their relative order. If the ideas and order seem acceptable, the leader asks if anyone has reservations about the list. Accept the list as the basis for further activity if there are no objections. If there are reservations or the group is clearly not in agreement, the leader starts a second round of priority setting, using the small list from the first vote. Each person gets three votes or stickers, and votes. Discuss the results and see agreement.

Survey Results:

Uses results of a questionnaire survey designed to get ideas or to rank ideas. Tabulation of survey data can be done by one person or a small working group. Ranking is based on tabulation results. This process may be used in a meeting, but is likely to take more time than would Nominal Group Technique. If carried out by mail or other means of questionnaire distribution, it allows more people to participate.