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WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

SWIS State Wetlands Integration Strategy

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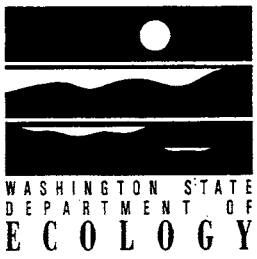

December 1994

ACKNOWLEDGEMENTS

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I would like to give special thanks to the following people: Gary Voerman of EPA; Mary Burg of Ecology; Steve Wells of the Department of Community, Trade, and Economic Development; Rocky Beach of the Department of Fish and Wildlife; Alison Moss of the Association of Washington Business; Dee Arntz of Seattle Audubon Society; Dee Caputo of Adams County Planning; and Tom Mueller and Debbie Knaub of the U.S. Army Corps of Engineers.

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Lynn

Lynn Beaton
Department of Ecology
SWIS Coordinator
December 1994

TABLE OF CONTENTS

Page #

Section II. SWIS Recommendations: The Pieces of a State Wetlands Program

Section III. Discussion of Additional Issues

Section IV. SWIS Implementation Chart

Section V. Appendices

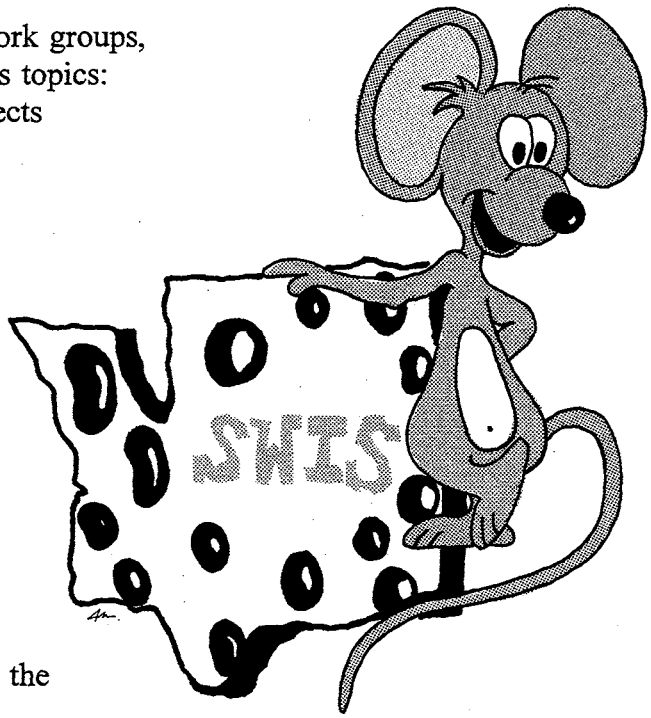
EXECUTIVE SUMMARY

During the past few years, numerous citizens throughout Washington have complained that wetland protection programs are not working well in this state. Frequently mentioned problems include: poor coordination among different levels of government; unnecessary duplication among programs; failure to achieve the goal of "no-net-loss" of wetlands; and complexity of the permit process.

In response to these concerns, the departments of Ecology and Community Development (now Community, Trade, and Economic Development) jointly applied for and received a grant from the U.S. Environmental Protection Agency to develop the State Wetlands Integration Strategy (SWIS). The goal of SWIS is to "develop and implement a more effective, efficient, and coordinated system to better protect the wetland resources of Washington State."

The SWIS grant funded two separate components: 1) four local government demonstration projects; and 2) six work groups. The four local governments which received grant funding are the cities of Camas and Everett, Clallam County, and Whatcom County. Each jurisdiction is designing a different wetlands program tailored to meet their individual circumstances. These pilot projects will demonstrate creative and effective wetland management strategies that can be used around the state.

The second SWIS component involved six work groups, each addressing one of the following wetlands topics: Regulatory Reform, Planning, Technical Aspects of Wetlands, Economics, Education, and Non-Regulatory Actions.



The goal of these work groups was to achieve consensus on recommendations for change. Five of the groups achieved consensus on all of their respective recommendations. The sixth group, dealing with regulatory reform, reached consensus on a majority of issues.

The individual work group reports have been integrated into a single document which is supported by a majority of all work group members. This executive summary describes the key recommendations of the final document.

STATE WETLANDS POLICY

All state wetlands policies and mandates should be consistent.

To ensure consistency, the state agencies involved in wetlands management should develop a single wetlands policy statement, after evaluating all statutes, administrative rules, and policies. The Interagency Wetlands Review Board, comprised of the state agencies involved in wetlands management, should undertake this task.

In the long-term, wetlands planning should be conducted using a watershed context.

To facilitate effective watershed planning, SWIS work group members agreed that state and federal wetlands programs and staff should be organized by watersheds. Agency programs would then be better tailored to local needs and staff members would have a better understanding of local issues. Additionally, local governments should use a watershed approach in developing local plans and regulations.

There should be a single regulatory definition of wetlands used statewide.

A single wetlands definition is critical for effective management of the resource. Local governments should adopt the wetlands definition contained in the Growth Management Act, which is the same as the federal Clean Water Act definition. Additionally, the Shoreline Management Act should be amended to include this same definition of wetlands.

This recommendation is not intended to change the protection provided by the Shoreline Management Act. The current definition of wetlands contained in that act is really a definition of shoreland jurisdiction (200 feet from lakes, streams, and other waterbodies...); it's not a definition of a biological wetland. Work group members recommended that the existing definition be maintained, but the label be changed to something more accurate, such as "shoreland jurisdiction." Then the definition of "wetlands" contained in the GMA should be included in the SMA to make it clear that wetlands are defined in the same way under both laws.

There should be a single wetland delineation manual used statewide.

There are currently two federal wetland delineation manuals (the 1987 and 1989 versions) being used in Washington. Work group members agreed that there should be only one delineation manual and that it should be based on good science. However, as in other states, there was no agreement as to which manual should be used. The National Academy of Sciences is currently examining this issue and is expected soon to recommend a single scientifically valid method for wetland delineation.

The Governor should establish and fund a coordinated state program to manage wetlands information.

Washington does not currently have a reliable system for recording and monitoring wetland losses caused by regulated activities or illegal filling. Similarly, the state does not have a system for recording wetland acreage gains associated with creation, restoration, or mitigation activities. The Governor should establish a program which includes a Geographic Information System (GIS) format that is compatible among state agencies and, to the extent possible, appropriate federal agencies.

The state should also adopt protocols for collecting, managing, and disseminating technical information in a watershed context. These protocols should make it possible for wetland information gathered from local, state, and federal agencies and tribal governments to be entered into a consistent, coordinated spatial database.

WETLANDS PLANNING PROCESS

The Growth Management Act has a strong mandate regarding critical areas, including wetlands. It states that counties and cities "shall adopt development regulations that protect critical areas." However, this general language has resulted in a wide range of approaches to wetland protection statewide.

Standards for wetlands inventory and functional assessment should be developed.

This was a controversial recommendation because it raised concerns among about maintaining local flexibility. It should be made very clear that the recommendation does not suggest that local governments should adopt uniform standards for regulating wetlands. It simply states that there should be consistent standards for collecting wetlands information.

To ensure that these standards are practical and useful for local governments, work group members recommended that they first be developed for a selected area of the state, with extensive public and private input. Funding should be obtained to develop the standards as part of a local pilot project, before considering them statewide.

State and federal agencies should provide better technical assistance to local governments.

Few local governments currently have staff with wetlands expertise. This can make it difficult for them to manage local wetlands regulatory programs effectively. State and federal agency staff should make it a priority to provide this necessary technical assistance to local governments. In addition, identifying specific funding sources will help ensure that local governments receive adequate funding for wetlands planning.

A study should be funded to analyze and provide mechanisms for estimating the economic value of preserving and losing wetlands in Washington.

The study should specify techniques for determining the economic value of each of the following wetland benefits: flood and stormwater control, fish and wildlife habitat, water quality maintenance, groundwater recharge, prevention of soil erosion, commercial production in wetlands, and recreation. This study should also specify techniques for estimating a monetary value for wetland benefits that are difficult, if not impossible, to quantify: cultural and spiritual values, aesthetics, education and research, and endangered species habitat.

WETLANDS PERMITTING PROCESS

All state and federal agencies with wetlands permitting or commenting authority should meet on a regular basis to discuss permit applications.

The goal of these regular meetings should be to provide an opportunity for agencies to work together early in the permit process to provide a single, coordinated response to project proponents. Permit applicants would be invited participants at these meetings.

State and federal agencies should work with the public to draft guidelines for conducting wetland mitigation.

Permit applicants commonly complain that different agencies occasionally require different wetlands mitigation. Work group members believed that the agencies should work with the public to develop consistent guidance for conducting wetlands mitigation. These guidelines are intended to be just that: guidelines. They are not intended to be mandatory or binding on permit applicants, but, instead, should provide more consistent direction for developing wetland mitigation projects.

The Department of Ecology should adopt water quality standards that are specific to wetlands.

Wetlands are regulated by several state programs including the Shoreline Management Act, the Water Pollution Control Act, and the state programs implementing specific sections of the federal Clean Water Act. Because wetlands are currently classified along with other Class A streams and lakes, there is currently little guidance regarding how the water quality standards are specifically applied to wetlands in enforcement actions and permit decisions. Revised water quality standards for wetlands would make the existing regulatory process more streamlined and predictable.

A proposal for a General Permit, as provided under the federal Clean Water Act, should be completed by a local government on a pilot basis.

Under the authority of the federal Clean Water Act, the U.S. Army Corps of Engineers can issue General Permits on a state, regional, or nationwide basis. These permits can be issued for a category of activities when: (1) those activities are substantially similar in nature; or (2) the permit would result in avoiding unnecessary duplication of regulatory control. For both of these types, the impacts allowed by the permit must be individually and cumulatively minimal. The Corps of Engineers should work with a local pilot project to determine if federal permitting requirements can be better coordinated with a local planning program through the use of a General Permit.

Revenues from monetary penalties should be used directly to restore and protect wetlands.

Penalties resulting from wetland enforcement actions should be used directly either to restore the site of the violation or to enhance other wetland resources. Under current federal and state policy, this does not happen; monetary penalties assessed for wetlands violations are used for other purposes. Work group members agreed that these policies should be changed so that penalty monies can directly benefit wetlands.

State and federal agencies should work with the public to develop a statewide protocol for mitigation banking.

Mitigation banking involves restoring or creating wetlands at one site to compensate for wetlands losses at another site. Generally, before a project applicant impacts wetlands on a site, the applicant makes payments to the mitigation bank to purchase wetland "credits." Wetland mitigation banking has been used in a number of states as an alternative means of mitigating wetland impacts where on-site mitigation is not feasible, is of extraordinary cost, or would provide lower resource values.

NON-REGULATORY ACTIONS

Regulation, while being the foundation of most wetland programs, cannot by itself achieve no-net-loss of wetlands. To achieve no-net-loss, or net gain, requires significant effort beyond regulatory programs. Voluntary non-regulatory efforts, including both acquisition and restoration, are needed to effectively protect wetlands. State agencies should reallocate internal agency staff to assist with non-regulatory wetlands protection efforts. These efforts should include providing technical assistance, publishing guidance materials, and funding local demonstration projects.

Each local government should develop a comprehensive wetlands protection program that includes both non-regulatory, and regulatory components.

The non-regulatory program elements (preservation, restoration, and education) should be integrated with regulatory elements to maintain flexibility at the local level, provide cost effective methods, and coordinate with other watershed planning efforts.

Agencies and local governments should develop and promote partnerships with non-profit organizations and citizens to acquire and restore wetlands.

Agencies and local governments should work with groups such as cooperative extension offices, conservation districts, local land trusts, and others to provide technical expertise to landowners. Agencies should also work with tribal governments to establish stewardship programs on tribal lands to serve as non-regulatory models.

WETLANDS EDUCATION

A committee should be established to develop and implement collaborative wetland education strategies.

This education committee should include agencies, organizations, and citizens involved with wetlands education on a statewide basis. This committee should develop a wetland education strategy that focuses on watersheds, supports peer education, and promotes partnerships. The committee should meet periodically to coordinate, evaluate, and implement wetlands education efforts.

Wetland systems that have not been an education focus in the past (e.g., seasonal wetlands and forested wetlands) should receive priority for education efforts.

Adequate funding for wetlands education needs to be provided for all geographic regions in the state. Historically, wetlands in Western Washington, and specifically the Puget Sound area, have received the most attention. Special consideration should now be given to other areas and wetland systems to ensure that the importance of these other systems is well understood.

Agencies and organizations should develop a directory of wetlands information sources.

This directory should provide information concerning: funding sources for local projects, delineation training, regulatory programs, research opportunities; citizen involvement opportunities, and available publications. This directory should be updated annually and augmented locally. Agencies should also promote the EPA hotline as a general source for information about wetlands.

SUMMARY

A total of 47 recommendations were developed by the six work groups and are included in the final SWIS report. These recommendations require a variety of actions for implementation: a few require development of legislation or administrative rules, some require local government action, and several require action by state or federal agencies. Successful implementation of many recommendations also depends upon the active involvement of other groups such as agricultural interests, private business, environmentalists, and the general public.

The Interagency Wetlands Review Board is responsible for ensuring that the SWIS recommendations are implemented. This board is comprised of the directors (or designees) of the state natural resource agencies with wetlands responsibility, as well as the Washington Association of Counties, the Association of Washington Cities, and the Washington State Conservation Commission. The board is responsible for developing strategies and working with the appropriate groups and individuals to implement each recommendation.

Four local demonstration projects form the second component of SWIS. The goal of these projects was to develop a variety of local wetlands planning approaches that can be used as models around the state. Recognizing that local jurisdictions have different needs, each of the four grant recipients used different methods and techniques in developing a local wetlands program. Now that these projects have been completed, the results will be compiled into a single report and distributed across the state.

SECTION I

PROJECT DEVELOPMENT

A. INTRODUCTION

Wetlands are natural systems with a variety of important ecological, economic, recreational, and aesthetic functions and values. Unfortunately, the programs designed to protect wetlands in Washington do not always work effectively. Also, Despite numerous laws enacted to protect them, thousands of acres of wetlands in Washington continue to be lost or degraded each year. Also, the variety of laws regulating wetlands can result in cost, time, and confusion for citizens.

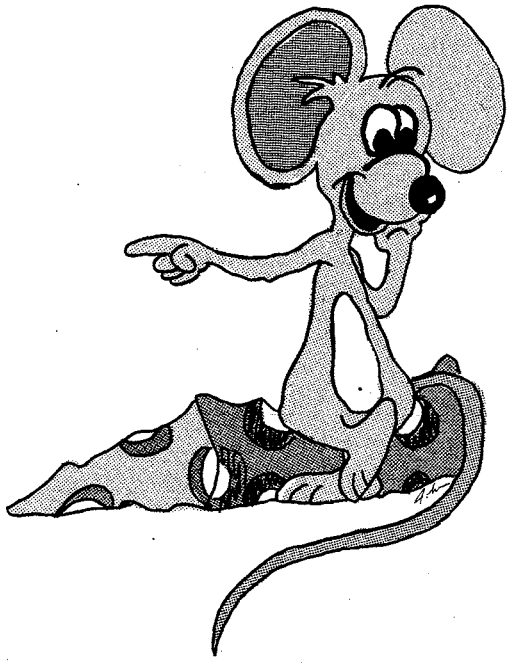
During the past few years, members of both the regulated community and environmental organizations have suggested that existing wetland programs need to be improved. Specific problems that were listed include:

- Poor coordination among different levels of government
- Unnecessary duplication among programs
- Failure to achieve the state goal of "no-net-loss" of wetlands
- Complexity of the permit process
- Lack of monitoring and enforcement
- Failure to recognize differences among various wetland types
- Regulatory and non-regulatory efforts that are not well integrated
- Difficulty in finding relevant information

In response to these concerns, the state departments of Ecology and Community Development (now the Department of Community, Trade and Economic Development) jointly applied for a grant from the U.S. Environmental Protection Agency (EPA) to develop the State Wetlands Integration Strategy (SWIS). A grant was awarded in the fall of 1992, and two people were hired in January of 1993 to begin the SWIS process.

B. SWIS PROCESS

The purpose of SWIS is to "develop and implement a more effective, efficient, and coordinated system to better protect the wetland resources of Washington State." SWIS is comprised of two basic components: 1) six focused work groups and 2) four local demonstration projects. This report describes the process and results of the work group efforts. For information on the four local demonstration projects, see Appendix B.



1. Work Group Process

Six work groups, consisting of 15-25 members each, were created to focus on specific wetland issues and develop recommendations for improving wetlands management statewide, in accordance with the purpose of SWIS. In order to cultivate ideas that would be broadly supported, individuals representing a variety of interests were invited to participate.

To ensure balanced work groups and diverse representation, there was an effort to achieve equal numbers of representatives from each of the following categories:

- Agriculture
- Business/Industry
- Environment
- Citizens at large
- Local governments
- Tribal governments
- State agencies
- Federal agencies

The organizations that were represented on each work group and the names of the individuals representing them are presented in Appendix A.

Each of the six work groups focused on a different wetlands topic:

- Regulatory Reform
- Economics
- Planning and Public Process
- Education
- Non-Regulatory Methods
- Technical Aspects of Wetlands Protection

The work groups each met monthly, from August of 1993 to spring of 1994. The goal of the work group process was to produce consensus recommendations through collaborative problem solving. True consensus involves agreement by all work group members on all aspects of a proposal; true consensus was the desired goal of the SWIS process.

Five of the individual work groups reached consensus on all of their respective recommendations. The sixth, the Regulatory Reform work group, reached consensus on a majority of issues. The six separate reports were then consolidated into a single integrated document, which was reviewed extensively by representatives from each group. All members were given an opportunity to review the final draft. Most of them support this integrated document. Please note that a few work group members were unable to give consensus support to this integrated report.

Work group members recognized that it would not always be possible to reach consensus on all issues. For this reason, ground rules for work groups stated that where consensus could not be reached, work groups would identify areas where there are agreements and disagreements. Therefore, proposals that were supported by many, but not all, work group members are included in Section III of this document.

2. Role of the Interagency Wetlands Review Board

The Interagency Wetlands Review Board (IWRB) was created by Executive Order 90-04 under Governor Booth Gardner. The board consists of the directors or their designees of the state agencies with wetlands responsibilities, as well as the Washington Association of Counties, The Association of Washington Cities, and the Washington State Conservation Commission. The purpose of the board is to coordinate the wetlands activities of the different state agencies and ensure effective protection of wetland resources.

The IWRB committed to implement work group recommendations that are reached by consensus, within the limits of their agencies' resources, mandates and authorities. This endorsement of the SWIS work group process was provided in a letter addressed to all SWIS participants. (See Appendix C.)

C. BACKGROUND - BIOLOGY OF WETLANDS

1. Definition of Wetlands

Wetlands are places were land and water meet. Wetlands are defined in both federal and state law as:

> "those areas that are inundated or saturated by surface or ground water at a frequency to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

If you look at this definition carefully, you will see that there are three basic elements that are needed in order for a wetland to exist: water; saturated or "hydric" soils; and water-loving or "hydrophytic" plants. Although all wetlands share these three characteristics, there are many different types of wetlands and they have a variety of different functions.

Wetlands in Washington range from estuaries to "dryland" wetlands (such as seasonal wetlands in eastern Washington), and from forested wetlands to eelgrass beds. Given the variety of different wetland types, it can be difficult to know a wetland when you see one! In fact, many wetlands are seasonal and may look very dry during the summer.

2. Functions of Wetlands

Historically, some people have viewed wetlands as useless wastelands that should be filled in order to be "more productive." In Washington, the U.S. Fish and Wildlife Service estimates that as of 1980, more than 30% of the state's wetlands have been lost. However, in recent years, we have learned much about the value of wetlands and have gained an appreciation for the many important ecological functions that wetlands provide.

Some of these functions are water quality protection, flood and stormwater control, shoreline stabilization, contributing to groundwater and streamflows, and habitat for wildlife and fish life. Also, many people view wetlands as natural areas that provide aesthetic, recreational and educational opportunities that should be preserved for future generations.

In fact, the great number and variety of functions that wetlands perform are a reason that it can be difficult to classify this resource. Each wetland is unique and may possess several (or very few) functional characteristics. Categorizing and quantifying these functions and their worth involves a science that is still in its infancy. This fact can make it difficult to defend or dismiss the value of any given wetland.

D. BACKGROUND - WETLANDS LAWS AND REGULATIONS

The following section provides brief information on different laws, regulations and policies affecting wetlands. If you would like more detailed information on this subject, please see the "Wetland Regulations Guidebook," published by the Department of Ecology (Publication #88-5).

1. No-Net-Loss Policy

In 1989, Governor Booth Gardner signed an Executive Order establishing a statewide goal addressing wetlands protection. State agencies reporting to the Governor were directed to implement this goal through specific tasks, and other agencies and local governments were encouraged to make their actions consistent with the goal.

> "It is the interim goal...to achieve no overall net loss in acreage and function of Washington's remaining wetlands base. It is further the long-term goal to increase the quantity and quality of Washington's wetlands resource base." (E.O. 89-10).

2. State Laws

Growth Management Act:

The Growth Management Act (GMA) was adopted by the state legislature in 1990 and amended in 1991. It focuses on local, "grass roots" planning and is intended to help local governments better manage growth throughout the state. The GMA establishes 13 planning goals and requires that certain local governments adopt comprehensive plans and development regulations to manage growth. All cities and counties are required to protect critical areas (including wetlands) and resource lands.

Shoreline Management Act:

The Shoreline Management Act (SMA) is designed to help manage development of the state's shorelines. The act emphasizes protecting shoreline resources, accommodating all reasonable and appropriate uses and protecting the public's right to use shorelines.

The SMA contains goals that are implemented by local governments through policies and regulations established in local Shoreline Master Programs.

These local programs receive state review and approval before becoming effective. They are subsequently adopted as state regulations. Certain shoreline permits, issued locally, also require state approval. The SMA requires that development of lands adjacent to shorelines must be consistent with the local shoreline program. The SMA applies to over 230 cities and counties.

Hydraulic Code:

The state Hydraulic Code is intended to protect fish life from damage by construction and other activities in all marine and fresh waters of the state. The code is implemented through a permit called the Hydraulic Project Approval (HPA) obtained from the state Department of Fish and Wildlife. While not directly aimed at protecting wetlands, an HPA is required for any work within the high water areas of state waters, which often include wetlands.

State Environmental Policy Act:

The State Environmental Policy Act (SEPA) provides a process for analyzing the environmental impacts of development. SEPA is not a permit, but is a process designed to fit with other existing permits and certifications. SEPA requires a full disclosure of the likely significant adverse environmental impacts of a project and the identification of ways to mitigate or reduce the impacts of a project. Impacts to the natural and built environment are considered. For proposals likely to have a significant adverse impact on the environment, an environmental impact statement (EIS) must be prepared.

Forest Practices Act:

The Forest Practices Act (FPA) regulates forest practices on state and private lands. Responsibility for administering the provisions of the act lies with the Forest Practices Board and the Department of Natural Resources (DNR). Anyone proposing timber harvesting on state or private land must submit a forest practices application to DNR for approval. Under this act, regulations were developed which categorize and regulate wetlands depending upon their size and location.

State Water Pollution Control Act:

The State Water Pollution Control Act regulates the discharge of pollution to waters of the state, including wetlands. Pollution is defined broadly to include any alteration of the physical, chemical or biological properties of any state waters. The Department of Ecology administers the act through several different permitting programs. Ecology's permitting decisions regarding wetlands are based on the surface water quality standards. These regulations also provide a basis for Ecology's issuance of §401 certifications of federal permits, as directed under the Federal Clean Water Act.

3. Federal Laws

Clean Water Act Section 404:

The primary goal of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 is specifically directed towards regulating discharges of dredged or fill material into waters of the United States, including wetlands.

As required under the Clean Water Act, most proposals to modify wetlands require issuance of a permit under Section 404. Section 404 provides for government and public review on project proposals that alter or destroy waters of the United States by filling (including any soil movement) or disposal of dredge material. Through this permitting program, the United States Army Corps of Engineers (Corps) issues or denies permits. Permit approval must comply with guidelines developed by the Environmental Protection Agency (EPA) under Section 404(b)(1) of the act.

Clean Water Act Section 401:

This section of the law is administered at the state level, by the Department of Ecology. The purpose of Section 401 is to ensure that when the federal government issues a permit (such as a Corps permit under Section 404), that permit complies with state water quality laws, and other appropriate state laws (such as the Water Resources Act and the Hydraulic Code).

Section 401 is implemented through a certification process. Any applicant for a federal permit for any activity that could result in the discharge of a pollutant is required to obtain a certification from the Department of Ecology verifying that the activity does not violate state water quality standards. The department has to determine whether the materials to be discharged will comply with applicable effluent limitations and water quality standards. If the state denies certification, the federal permitting agency must deny the permit application. If the state imposes conditions on a certification, the conditions become part of the federal permit. Wetlands can vary greatly from other kinds of waters. However, currently the state does not have water quality standards that address the unique characteristics of wetlands as separate from other waters.

SECTION II

SWIS RECOMMENDATIONS: THE PIECES OF A STATE WETLANDS PROGRAM

A. STATE WETLANDS POLICY

1. Single Policy Statement

Throughout the State Wetlands Integration Strategy (SWIS) process, governmental representatives and members of the public have recognized the need for integration of state laws and policies regarding wetlands. Several state agencies have specific mandates and legal authorities to manage and protect wetlands, and local governments also have responsibility to plan for and protect wetlands.

Although different agencies and levels of government have different mandates for managing wetlands, there is an overarching, statewide goal addressing wetlands protection. State agencies reporting to the Governor were directed to implement this goal through specific tasks, and other agencies and local governments were encouraged to make their actions consistent with the goal. This goal, established by Governor's Executive Order, states that:

> "It is the interim goal...to achieve no overall net loss in acreage and function of Washington's remaining wetlands base. It is further the long-term goal to increase the quantity and quality of Washington's wetlands resource base." (E.O. 89-10).

In spite of this goal, there is still a lack of consistency in how wetlands are managed statewide. One reason for this inconsistency is that the goal statement is very general, and subject to interpretation. Another reason is that state agencies have diverse mandates and policies which they must meet, while still providing regulatory consistency.

Work group members agreed that state agencies must better coordinate their diverse policies and actions to ensure consistent, predictable regulation. Once these agencies have outlined their mandates and policies, they must work with local governments and the general public to develop standards for integrating these policies into wetlands planning and permitting processes and implementing them at the local level.

Recommendation #1: The state agencies should develop a comprehensive and consistent statement of the state's interests in wetlands. This statement should be based on the wetlands mandates and policies of the Departments of Agriculture; Community, Trade and Economic Development; Ecology; Fish and Wildlife; Natural Resources; Transportation; and the Puget Sound Water Quality Authority. Planning Work Group

Improved coordination at the state level should begin with an evaluation of existing agency policies, priorities, and legal authorities:

(1) What are the state's policies and interests regarding wetlands?
(2) After identifying and evaluating these policies and interests, what are the conflicts?
(3) How do we reconcile conflicting policies and interests? (i.e., how do we reconcile wetlands permitting regulations with the goals of the GMA?)
(4) Finally, how do we set priorities and protect those interests that we identify?

The most direct way to achieve consistency and predictability in wetlands regulation in Washington would involve adopting a single, comprehensive wetlands protection law. Although a single wetlands law is certainly attractive to some interested parties, two previous attempts to pass such a law in Washington have failed. Given this difficulty, SWIS work group members have acknowledged that SWIS should focus on resolving conflicts and inconsistencies among existing laws and programs.

2. Watershed Approach

In Washington, several state resource agencies have begun managing resources in a "watershed context." Both the state agencies and the Clinton administration encourage local governments to do the same. The federal administration has also embraced the watershed approach for resource management at a federal level. "Watershed planning" involves identifying a specific geographic *area* for review. It also implies the *concept* of considering all resources, uses and constraints within an area when developing and implementing a plan.

Recommendation #2: In the long-term, wetlands planning should be conducted within a watershed context. When local governments amend their comprehensive plans and development regulations, they should work to integrate the different plan elements by using a watershed approach. Planning Work Group

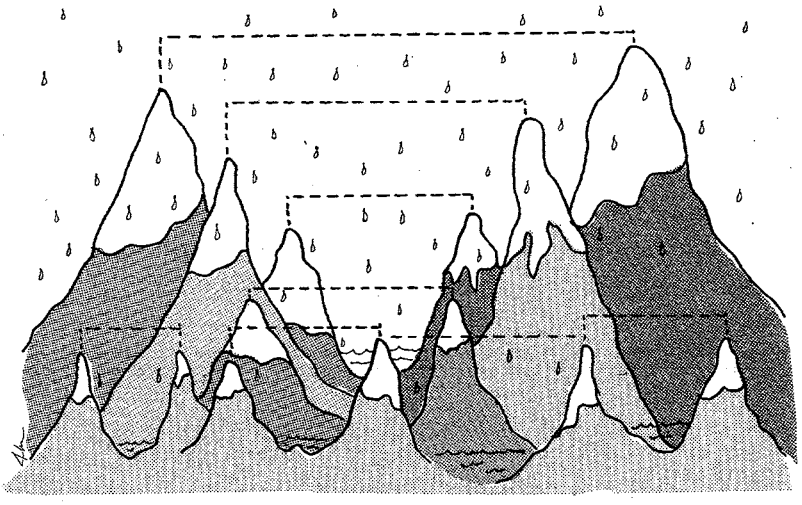
State and federal agencies must assist local governments in using a watershed approach. To do this effectively, some agency programs are organized on a regional, or watershed basis. For example, Ecology's Shorelands program recently reorganized to enhance their ability to provide environmental services on a geographic or regional basis. Members of the Shorelands program at Ecology headquarters were moved to regional offices throughout the state and will work in interdisciplinary teams. This reorganization is expected to improve public service and offer more timely and effective permit review.

Recommendation #3: State and federal wetland programs should be organized by geographic regions, comprised of watersheds, to provide better assistance to the public and improve resource protection. Staff from different state and federal agencies should form interagency teams within each geographic region to facilitate interagency coordination and to work more effectively with the public.
Planning Work Group

To ensure effective watershed planning, state and federal agencies must also recognize and adhere to the same watershed boundaries. These watershed boundaries should then be used by local governments as they develop local watershed plans which reflect the uses and constraints within individual jurisdictions. In assisting local governments, state and federal agencies must be cognizant of these local constraints.

Recommendation #4: To ensure better wetlands protection through watershed-based planning, state, federal, tribal and local governments, in coordination with the public, should establish the boundaries of watershed units to be used consistently across the state. Planning Work Group

Before watershed planning can be coordinated effectively across the state, we must first define (1) "watershed" and (2) "watershed planning." We must remember that watershed planning is not an "overnight" cure for our wetland woes. It will take money and staff to develop and then implement watershed-based planning. Perhaps most notably, it will take time. Time to define the elements of watershed planning, and time to implement this approach across the state.



HOW MANY SHEDS CAN A WATERSHED IF A WATERSHED COULD SHED WATER?

As the concept of "watershed planning" evolves, it should become more clear what standards are best used, and how the various elements of different laws can relate within a watershed context. The transition from the current, often piecemeal, regulatory approach to a more integrated watershed approach may be difficult for some local jurisdictions. However, it is necessary for local governments to make this transition if we are to plan for wetlands (and other resources and uses) within a larger scheme.

Also, when watersheds extend beyond a single political boundary, adjacent jurisdictions should coordinate with each other to ensure consistent watershed planning. In fact, to facilitate consistency among local jurisdictions, the state legislature passed Senate Bill 5038 in March of 1994. This bill requires that local governments develop "service agreements" with other jurisdictions to better coordinate activities that affect adjacent jurisdictions.

To help develop models for conducting wetlands planning within a watershed context, SWIS grants have been awarded to four local governments to assist them in developing comprehensive local wetlands programs. These local governments are the cities of Camas and Everett, Clallam County and Whatcom Counties. One of the key purposes of the local grant projects is to develop approaches for conducting wetlands planning *within a watershed context*. Each of the four governments has designed and is using a slightly different approach to this task, as appropriate to the unique circumstances of each jurisdiction. The grant projects will be completed by the end of 1994. Project results will then be published and distributed early in 1995 so that local governments around the state can use these projects as examples of wetlands planning, if they so choose.

3. Standards

Single Wetlands Definition:

In order to achieve integration of state agency policies regarding wetlands, a single, consistent definition of wetlands must be adopted by all state agencies managing wetlands. Consistency in the way agencies define "wetlands" is critical for effective management of Washington's wetlands resources.

Recommendation #5: All laws and levels of government in Washington should adopt and use a single regulatory definition of wetlands. Planning Work Group

For example, the Shoreline Management Act (SMA) contains a definition of "wetlands" that is different from the definition in the GMA. The SMA defines wetlands in terms of their distance from other water bodies while the GMA definition is based on three biological parameters: water, plants, and soils. Although work group members recognized the different intent of the two definitions, there was still agreement that the different language of the two provides a perception of agency conflict and creates confusion for local governments and the public.

Recommendation #6: The Shoreline Management Act definition of "wetlands" should be amended to be the same as the definition in the Growth Management Act. Planning Work Group

Even though the Planning Work Group wanted the SMA definition of wetlands to be amended to duplicate the definition found in the GMA, work group members still wanted to maintain the protection of shorelands provided by the SMA. They believed that the areas currently designated in the SMA definition of wetlands should still be addressed, but should be titled something more appropriate, such as "shoreline area" or "shorelines and associated wetland areas."

The Growth Management Act allows local governments to adopt a definition of "wetlands" that is different from that in the act, if they so choose. This can lead to confusion and inconsistency between local jurisdictions. To provide better consistency between local governments and among local, state and federal governments, a single definition of "wetlands" should be used by all local governments.

Recommendation #7: When local governments adopt a definition of "wetlands," they should be required to adopt the definition contained in the Growth Management Act. Planning Work Group

The reader should be aware that, at the federal level, there are two definitions of wetlands: The Clean Water Act definition (identical to the GMA definition) is used for regulatory purposes. The U.S. Fish and Wildlife definition, on the other hand, is used for inventory purposes. Nearly identical, the U.S. Fish and Wildlife definition also includes mudflats and the shallow waters of lakes and rivers (less than six feet deep). Work group members recommend that local governments use the GMA/Clean Water Act definition in their local plans and regulations. If local governments want to be as inclusive as possible when producing watershed plans, the U.S. Fish and Wildlife definition may be used when developing inventories.

Wetlands Delineation Manual:

There is no question that having one delineation manual which all agencies use would help to make decisions regarding wetlands consistent at the local, state and federal levels. However, despite widespread agreement that we need ONE delineation manual, there is no consensus on WHICH ONE it should be. We can only hope that the National Academy of Sciences will recommend a scientifically valid method which the federal agencies can adopt. If this occurs, it should be a relatively straightforward process for federal, state, and local agencies, and tribal governments to follow suit.

Recommendation #8: All federal, state, and local agencies, and tribal governments should use a single wetland delineation manual, based on valid scientific methodology. Regulatory Reform Work Group

Functional Assessment:

Accurate assessment of wetland functions is critical for managing wetlands on a watershed basis. As wetland acreage and functions change, so can the overall value of the wetland within a watershed. For example, if a particular type of wetland function is severely reduced due to development impacts within a watershed, wetland managers and local citizens may elect to make restoration of those particular functions a high priority within their watershed. In order to evaluate the functions of a specific wetland within a watershed context, however, we need a scientifically-based technique for assessing wetland functions.

Several wetland assessment methods exist in both regulatory and academic arenas, but no method has been adopted for application on a statewide basis. Wetland mitigation requirements should be based on an assessment of wetland functions. Accordingly, wetland functional assessment methods are extremely important in the wetlands regulatory process. Research should be funded in federal and state agencies as well as universities to develop and test a quantitative wetlands functional assessment protocol that incorporates the regional variability of wetlands in the northwest.

Recommendation #9: The state should establish a permanent interagency wetlands technical committee. This committee should include representatives from the public; tribal and local governments; federal agencies as appropriate; and the state departments of Ecology; Fish and Wildlife; Natural Resources; Transportation; and Community, Trade, and Economic Development. Technical Work Group

Recommendation #10: The wetlands technical committee should adopt uniform methods for functional assessments. These assessment methods should be calibrated to reflect regional variability among watersheds within the state. These methods should then be adopted as standards under the Growth Management Act as described in Recommendations #17 and #18.

Technical Work Group

Cumulative Impacts:

To more fully understand and manage the wetlands within a natural system, we must add together the individual impacts to that system. Cumulative impact thresholds for wetlands should be established on a watershed basis. This is consistent with the approach being recommended throughout the SWIS process, and a watershed approach makes both technical and practical sense. Development within a watershed results in cumulative impacts on both the quantity and quality of water that support wetlands systems in that watershed. Such cumulative impacts on wetlands typically result in cumulative impacts on streams associated with the impacted wetlands within the watershed as well.

The Puget Sound Wetlands and Stormwater Management Research Program, underway since 1987, has conducted extensive research, as has developed some management recommendations related to wetlands. Some of this information may be useful for establishing cumulative impact thresholds for wetlands on a watershed basis.

For instance, research has indicated that amphibian distribution in wetlands, wetland bird communities, wetland hydrology, wetland invertebrates, sensitive wetland plant communities, effects of urban stormwater runoff upon wetland vegetation, flooding tolerances of wetland species, and wetland water quality is directly or indirectly related to the level of development within watersheds. Usually, this research has shown that measurable degradation of wetland resources can be attributed to changes in wetland hydrology caused by development activity within the watershed.

This data could be combined with information about the classification of the wetland and its position in the landscape and other site specific information. It would then be possible to know before evaluating individual projects whether or not the cumulative impact threshold for wetlands or streams had been exceeded in a particular watershed. Permit decisions, including the determination of compensatory mitigation needs, could then be based on the likely impact of a project upon the watershed as a whole.

Recommendation #11: The wetlands technical committee should establish a specific protocol for determining minimum thresholds for cumulative impacts on wetlands. These minimum thresholds should be developed and applied on a watershed basis. Technical Work Group

When establishing this protocol, the technical committee should take immediate advantage of existing information and examine the state's Watershed Analysis Manual under the Forest Practices Act (WAC 222-22), as well as other existing watershed based environmental assessment methods. Within the Puget Sound region, the analysis for establishing threshold levels should also incorporate the data collected by the Puget Sound Wetlands and Stormwater Management Research Program. The committee should also consider the work currently being undertaken by the Puget Sound Wetland Restoration Technical Work Team. This effort is in response to element W-8 of the Puget Sound Water Quality Management Plan and is designed to develop a protocol for conducting voluntary wetland restoration at the watershed scale.

4. Data Management

Information Management System:

Despite the perceived abundance of information about wetlands, and the public's growing awareness of the ecological significance of these resources, substantial data gaps remain. Additional scientific studies of wetland functions, the effects of land use on wetland function and acreage, and the importance of wetlands in overall watershed management are clearly needed.

At the same time that new research is needed, better use of *existing* information related to wetlands is absolutely necessary. Work group members agreed that more effective management and sharing of existing information is an important first step toward better wetlands management statewide.

Several federal and state agencies, tribal governments, and environmental organizations currently have wetland databases or Geographic Information Systems that include wetlands information. These various sources of wetlands information, however, are not integrated nor are they equally accessible to interested parties. The work group suggested that a coordinated wetlands information clearinghouse is needed at the state level. When developing this, GIS managers from tribal governments, local governments, the State Departments of Ecology, Natural Resources, and Fish and Wildlife as well as federal agencies such as EPA, Soil Conservation Service, Corps, bureau of Land Management Forest Service, National Marine Fisheries Service and the Fish and Wildlife Service should be involved.

It is critical that this system be developed to allow information management on a watershed basis. Both region and site-specific information need to be included in the system. The system should be administered by the state and ultimately needs to be designed to enable information sharing with federal, tribal, and local governments and interest groups.

Recommendation #12: The Governor should establish and fund a coordinated state program to manage natural resource wetland information at appropriate scales of resolution on a watershed basis. This program should include a Geographic Information System (GIS) format that would be compatible among all state agencies, and to the extent possible, applicable federal agencies.
Technical Work Group

Recommendation #13: The Governor should appoint an interagency task force to work with the general public and local, state, tribal, and federal governments to develop protocols for collecting, managing, and disseminating technical information in a watershed context. Technical Work Group

The program should be:

- Centralized, independent, interactive
- Accessible to the public, and to local, state, federal, and tribal governments
- Updated frequently and easily
- Given permanent funding - so that users can receive technical assistance
- Inclusive - it should include state and federal GIS programs and data.
- Established by the Governor
- Evaluated with established benchmarks

Measuring Wetlands Gains and Losses:

Speculation about annual wetland losses through regulated activities and illegal filling abounds, and the state does not have a reliable system in place for recording and monitoring those wetland losses. Similarly, the state does not have a system for recording wetland acreage gains associated with creation, restoration, or mitigation activities.

The U.S. Army Corps of Engineers tracks all federal wetland permits, including related mitigation and monitoring activities. However, this tracking system only addresses acreage of wetland impact and does not include information about impacts on wetland functions.

Work group members agreed that the state should establish and adopt a protocol for tracking permitted impacts on wetlands. This protocol should include a reporting requirement that specifies that local, state, and federal agencies report the location and type of wetland impact authorized, as well as any mitigation and monitoring restrictions that may apply for all wetlands permits they issue.

This tracking protocol would also include a provision allowing the state to put information gathered from local, state, and federal agencies and tribal governments regarding wetland impacts into the information management system described previously. Specifically, wetland impact sites, mitigation sites, and restored wetland areas should be tracked in a spatial database (GIS). By establishing a system for effectively monitoring wetland gains and losses, the state will be able to manage wetlands resources using a watershed approach, rather than just the site-specific approach currently employed.

Recommendation #14: The state should establish and fund a wetlands tracking protocol for tribal, local, state, and federal jurisdictions. This system should include a reporting requirement for permits that are approved. Technical Work Group

Ensuring Successful Mitigation:

When a landowner receives a permit to fill a wetland, he or she is required to compensate for that wetland loss through wetlands mitigation (restoration, creation, or enhancement). While monitoring is generally required, there is, unfortunately, little scientific data regarding the success and failure of wetland mitigation sites in the Northwest. To ensure the success of future mitigation projects, we must compile and assess existing information on both voluntary restoration and compensatory mitigation.

A state database should be established that includes an updated bibliography of wetland literature specific to the Northwest region. This bibliography should be indexed by topic. This information would be useful in designing mitigation projects and evaluating the success or failure of specific mitigation sites.

The technical section of the Department of Ecology Shorelands program should initiate an analysis of existing compensatory wetland mitigation projects to evaluate project successes. Ecology's assessment team should incorporate existing studies into the proposed analysis of projects as appropriate. For example, the team should consider the "Interagency Follow-Through Investigation of Compensatory Wetland Mitigation Sites," jointly developed by EPA and U.S. Fish and Wildlife Service in May of 1994. As information becomes available from Ecology's assessment, it should be distributed for immediate use.

Recommendation #15: Ecology should compile and evaluate information concerning existing voluntary restoration and compensatory mitigation projects to determine project successes. This information should then be used to direct future practices. Technical Work Group

Recommendation #16: Ecology and EPA should form an interagency committee to develop a proposal for a system of wetland reference sites, monitoring strategies, and mechanisms for funding site acquisition, long-term monitoring, and directed research. Technical Work Group

B. WETLANDS PLANNING PROCESS

1. Integrating the Wetlands Planning Components of State Laws

Growth Management Act:

The GMA has a strong mandate regarding critical areas, including wetlands. It states that counties and cities "shall adopt development regulations that protect critical areas." (RCW 36.70A.060). Although the law requires protection of wetlands, the "Minimum Guidelines" implementing the law include only recommendations addressing wetlands classification and designation, and do not provide specific standards that local governments must adopt. To encourage local consistency, the Department of Ecology provided a number of technical assistance documents for use by local governments. As was expected, there is still great variability among local wetland programs. This makes it difficult to inventory and manage wetlands consistently across the state.

Some interim local wetlands programs have been adopted that do not provide effective wetlands protection. If the State of Washington truly wants to achieve effective wetlands protection in a watershed context, there must be greater consistency and predictability in local government programs. Also, if local governments adopted predictable, consistent, and effective programs for wetlands protection, it would help enable the state and federal agencies to delegate more authority to the local level. For wetlands planning, this consistency can only be achieved by developing some minimum standards to which local governments must adhere when developing local wetlands protection programs. Work group members agreed that the wetland information on which decisions are based should be standardized, i.e., inventory and functional assessment. Wetland classification, buffer requirements, and mitigation requirements should be at the discretion of local governments.

Recommendation #17: Standards for wetlands inventory and functional assessment should be jointly developed by local governments, state agencies, and the public. The Growth Management Act should be amended to include authority to adopt these standards by administrative rule. Planning Work Group

Work group members agreed that it will take time and coordinated effort to develop these standards under the Growth Management Act. The group agreed that it may be more palatable and sensible to develop standards in a selected area of the state, before considering them statewide.

Recommendation #18: The standards described in the previous recommendation should initially be developed for a specific area of the state, as a pilot project. Once a successful pilot is completed, regionally-specific standards should then be developed for other regions in the state and adopted as state law.
Planning Work Group

State Environmental Policy Act:

There are currently at least two committees in the state, separate from SWIS, that are addressing the integration of SEPA and the GMA. SWIS Planning Work Group members have generally agreed to defer SEPA-related issues to these committees, the "SEPA/GMA Work Group" and a similarly named subcommittee of the Governor's Task Force on Regulatory Reform. However, there is one wetlands issue regarding SEPA ordinances that work group members have decided to address.

Many local governments used their SEPA ordinances as interim critical areas ordinances, under the GMA. Although this made sense given the short timeline for developing interim development regulations, the work group recommends that local governments not use SEPA ordinances as final wetlands ordinances.

Reliance solely on SEPA as an implementing ordinance does not provide adequate opportunity for wetlands protection through the comprehensive planning process, does not adequately address cumulative effects of impacts, and does not provide certainty or predictability for the applicant or reviewing agencies. General impacts and mitigation requirements should be identified in a comprehensive plan and critical area ordinances. Reliance on SEPA review leads to project by project regulation, rather than comprehensive planning.

For the reasons stated above, SEPA ordinances are not appropriate as final development regulations dealing with wetlands. However, some work group members believed that some jurisdictions will not be able to accomplish this recommendation and re-write their ordinances due to staff and funding limitations.

Recommendation #19: Local governments should not use State Environmental Policy Act ordinances as final wetlands critical areas ordinances.
Planning Work Group

2. State and Federal Role in Local Wetlands Planning

Technical and Financial Assistance:

For local governments to have technical wetlands expertise, they need money and training. Local governments have a wide variety of topics and issues to address and do not have the luxury of focusing full-time on wetlands issues. Very few local governments currently have staff with wetlands expertise. This makes it difficult for them to manage local wetlands regulatory programs effectively. State and federal agency staff should make it a priority to provide this necessary technical assistance to local governments. In addition, identifying specific funding sources will help ensure that local governments receive adequate funding for wetlands planning needs.

Recommendation #20: State and federal agencies should collaborate with local governments to provide technical assistance and to identify and obtain funds to support local wetlands planning. Planning Work Group

State Input Concerning Local Plans:

Throughout the SWIS process, local government representatives have indicated that state agencies often do not provide useful input into local planning processes. Agencies often provide confusing, and occasionally conflicting, advice regarding wetlands protection. This needs to be remedied if the Growth Management Act is to be successful in protecting wetlands.

State agency staff need a better understanding of local planning processes in order to most effectively provide input to local governments. Granted, this is made difficult by the variety of local processes and laws across the state. However, state agencies should make it a higher priority to provide coordinated and timely input into local planning processes.

Recommendation #21: State agencies should make it a higher priority to provide coordinated and timely input into local planning processes. When assistance is appropriate, it should be provided promptly and presented in a clear format. Planning Work Group

3. Economics and Wetlands

The Need for Economics:

Traditionally, wetlands have been managed and regulated with minimal consideration of economics. Quantification of the costs and benefits of wetland functions has not usually been a fundamental part of natural resource management.

Many citizens want economics to play a larger role in wetlands management. Many people believe that more wetlands will be protected if we understand the full costs that are incurred by developing them. Others agree that economics should be considered, but for a different reason: they believe that laws requiring wetlands protection unacceptably impair the economy. Measures to protect wetlands are accused of causing a number of economic problems including company relocations, job losses, inflation of housing prices, and a host of other problems directly related to the regulatory process. This has led to a cry that economics should be considered in balance with the environment.

However, others are concerned that economics will skew the debate in favor of development interests by emphasizing "dollar measurable" values. It can be politically difficult to balance the economic value of a private landowner's interest in wetlands against the public interest in the functions of those wetlands. Also, although some wetlands functions can be quantified relatively easily, others are much harder to measure in terms of dollars. Many significant intangible characteristics of wetlands, such as aesthetic and cultural amenities, are hard to measure and are frequently overlooked in traditional economic analyses and yet are an integral part of the value of the wetland system.

Accurate information concerning the economics of wetland functions and the costs of wetland regulations will allow a more informed discussion. Economic analysis, properly utilized, can and should enhance decision-making by providing more complete and accurate information for all players involved. As such, economics is as likely to support wetlands protection as development.

Law Requires that Economics be Considered

The Corps permit regulations state that all Corps districts must perform a public interest review when making a permit decision. This public interest review acknowledges that society has many competing goals including, "conservation, *economics*, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people." (33 CFR 320.4(a); emphasis added)

The Next Step

Although it is not always easy, we need to bring economics into wetland management to quantitatively measure and, as appropriate, protect this important resource. There is considerable challenge to both economic methodology and traditional science to provide increased measurement of subtle and intangible factors. This will require

education of land managers, private landowners, governments, and society at large. It will also demand that society consider the economics of wetlands in a more holistic way which incorporates both traditional and pioneering economic methods. Economics is more than just consideration of the flow of dollars. It also has a body of methodologies to estimate the value of a natural resource in the future and to encourage effective management and protection of that resource in the present.

Defining the "Value" of Wetlands:

As one considers the economics of wetlands, it becomes necessary to assign values to wetland resources. This enables the comparison of various wetlands and specific wetland attributes using a common denominator. Work group members identified a number of wetland functions that could be assigned values. Once the functions were identified, the group reviewed several approaches to assigning value to those individual functions.

Some wetland functions may be assigned values in conventional, monetary terms. For example, it is possible to determine the costs associated with construction and maintenance of a stormwater retention/detention facility and compare that sum to the costs associated with maintaining a wetland for natural stormwater storage and filtration. Other attributes, particularly the aesthetic and cultural significance of wetlands, cannot be easily measured or quantified using a traditional money-based approach, yet those features need to be considered when one assigns value to wetlands.

Work group members discussed the apparent conflict between the use of the term "value" in conventional economic terms and current scientific terms. Typically, the word "value" applies to something of use or worth to humans. In ecological parlance, the word is commonly used to describe the relative importance of different functional processes, such as primary production or water quality enhancement. As we attempt to assign values to wetlands, both economic and ecological characteristics must be contemplated. For more discussion on the economic "value" of wetlands, please see the separate report of the SWIS Economics Work Group.

Assigning Economic Value to Wetlands:

When we determine the economic value of any given wetland site, we must ask ourselves two questions:

(1) What are the benefits and costs of preserving this site?
(2) What are the benefits and costs of developing this site?

In other words, if a site is developed, what benefits do the landowner/public gain? Likewise, if the site is developed, what are the costs that the landowner/public must pay? To answer these questions, we must compare the values of a site before and after development and ask ourselves, "who's better off (and who's worse off) and by how much?" We must also estimate what the benefits and costs will be *over time* - not all impacts of developing or protecting wetlands will be experienced in the short-term.

By answering these questions, we can compare the economic value of developing a site against the economic value of protecting it. We must remember that there is a cost and a benefit to every action. For example, while filling a wetland to build a house may impose a cost on the public, it will provide a benefit to the landowner. Every wetlands permit situation can be examined from both sides.

The work group divided the costs and benefits of wetlands into two general categories. These are described below, with an explanation of possible elements of each.

Category #1: Benefits of Developing Wetlands (and Costs of Protecting Them)

1) **Avoidance of wetlands**. (Occurs when wetland is developed.) The cost to the landowner to *not* develop a site containing wetlands. The unrealized profits that development of the site would have provided.

2) **Replacement mitigation**. (Occurs when wetland is protected.) The cost of mitigating for wetlands loss caused by development. Includes costs such as mitigation design, construction, and monitoring.

3) **Displaced development**. (Occurs when wetland is protected.) If a wetland site is not developed, there will be costs to the landowner and, possibly, to the public. These costs are the difference in profit between building on the original wetland site and having to build elsewhere.

   To determine this cost, you must: (a) determine the benefits and costs of the original proposal; (b) determine the benefits and costs of the proposal the landowner must select, given that he/she can't build as originally planned; and (c) compare the two to determine the net difference between them.

Category #2: Benefits of Protecting Wetlands (and Costs of Developing Them)

This category addresses costs of losing wetlands (and the benefits of preserving them). Placing a dollar estimate on these values can be very difficult. The work group agreed that it is possible to place a dollar amount on some of these wetland functions (#1 - #7 below). However, for other functions, it is extremely difficult, if not impossible, to assign an economic value (#8 - #11).

1) **Flood control.** For both on-site and off-site property owners. It can be difficult to clarify the proximate cause and exact monetary value of flood control benefit. To estimate this amount, you must determine the volume of water that is retained by a wetland and then determine the cost of engineering a structure that would hold the same amount of water.

2) **Fish and wildlife habitat.** Three general steps are taken to assess monetary cost caused by loss of wildlife:
   a. quantify the injury to wildlife that development would cause
   b. identify services provided by wildlife
   c. identify potential users, including the general public and passive users
   d. apply valuation techniques to estimate loss of specific wildlife to different users.

3) **Maintenance of water quality.**

4) **Groundwater recharge.**

5) **Prevention of soil erosion.** Maintenance of sediment stability.

6) **Commercial production.** Profit obtained from production of cranberries, mushrooms, and certain trees that grow in wetlands.

7) **Recreation.**

8) **Cultural/spiritual.**

9) **Aesthetics.**

10) **Education/research.**

11) **Endangered species.** The cost of losing a single endangered species may be much greater (and more difficult to quantify) than the cost of losing other wildlife.

Costs of the Wetlands Permitting Process:

Regardless of whether a wetland is filled or protected, the permitting process costs money. It costs money for an applicant to apply for a permit to impact a wetland, whether the wetland is ultimately filled or preserved. Often, these "transaction costs" associated with a permit application are greater than they need to be and are not commensurate with the values of the wetland under review. The following is a list of some reasons that the costs of a permit application can be high.

1) The permit process is often **inefficient**. There is duplication among the requirements imposed by different agencies and the process can take longer than it should.

2) The permit process is often **unpredictable**. Different permit reviewers may reach different decisions, using the same information. Also, given the separate mandates of the various agencies, different agencies may reach different conclusions unless the process is coordinated.

3) The applicant is often required to provide **unnecessary data**. Data is often required in stages, when it would be more efficient to require all of it at the beginning of the process. Also, data is sometimes required that agency staff later admits was unnecessary or extraneous.

4) Property owners occasionally **do not apply for permits**, because the permit costs can be so high. This can lead to illegal filling of wetlands and to frustration on the part of the general public.

5) Wetlands **"planning" is being conducted on a permit-by-permit basis.**

6) Applicants occasionally **do not submit complete information** as required by the permit application. This can lengthen the permit process.

There are some additional points to keep in mind, when discussing the costs of the permitting process. Performing an economic analysis on the costs of different permit options can be very costly, itself. It is the hope of work group members that the recommendation in this section, once implemented, will provide some of the groundwork for performing an economic analysis of wetlands, thereby reducing the cost of the process.

Valuation Mechanisms:

Once the values of wetlands have been determined, we must find ways to measure, or quantify, those values. We need a common "unit" that we can apply to all wetlands and development benefits that will enable us to conduct "balancing" of different options. Since goods are defined in economic terms, we need to use techniques for establishing an economic value, whenever possible.

Some people fear putting a dollar value on the intangible functions of wetlands (e.g., cultural or aesthetic values). They are concerned that it is impossible to quantify these values, and that attempting to do so will somehow diminish or misrepresent the true "value" of these functions. However, most functions of wetlands are simply not considered in the economic analysis of projects, because these functions are not quantified economically. If an economic cost for these benefits could be estimated, this could actually *increase*, rather than decrease the perceived value of these benefits, given that they are currently often ignored and their value will only increase as wetlands habitats become more scarce.

Recommendation #22: A study should be funded to analyze and provide mechanisms for estimating the economic value of preserving and losing wetlands in the State of Washington. It should specify techniques for determining the economic value of each of the following wetlands benefits: flood and stormwater control, fish and wildlife habitat, water quality maintenance, groundwater recharge, prevention of soil erosion, commercial production in wetlands, and recreation. The study should also specify techniques for estimating a monetary value for these wetlands benefits that are difficult, if not impossible, to quantify: cultural and spiritual values, aesthetics, education and research, and endangered species.

Economics Work Group

4. Guidance for Local Governments

Overall, it is recommended that local protection programs include: 1) comprehensive land use planning, 2) regulation, 3) non-regulatory actions (including preservation, restoration, acquisition, and education), and 4) program evaluation (as also outlined in the Puget Sound Water Quality Management Plan). For further information on the non-regulatory elements, see the discussion on non-regulatory incentives.

Several SWIS recommendations will directly impact local governments. Some recommendations can be implemented immediately, while others may be long-term. As explained in this report, additional work needs to be done by local, state, tribal, and federal governments before many of the recommendations can be fully implemented. For instance, examples of "watershed planning" need to be developed so that local governments will have models to use as they develop and refine their local wetlands programs.

Listed below is a summary of recommendations that will require action by local government, with suggestions as to which could be implemented immediately and which will require more time.

Near-term:

a. Local governments should adopt the GMA definition of wetlands. (Recommendation #7.)

b. Wetlands should be protected by a critical areas ordinance that meets minimum guidelines established under GMA. (Cities and counties are currently developing these ordinances, in accordance with GMA. However, local governments should be aware that Recommendation #17 could necessitate that local governments amend their wetlands ordinances in the future.)

c. Wetland regulations should complement the use of a wide array of non-regulatory protection techniques. (See discussion on non-regulatory incentives.)

d. Local governments should classify wetlands based on their function within a watershed and their local and regional significance. (The GMA currently requires that cities and counties "classify" and "designate" wetlands before developing wetlands protection programs. (See RCW 36.70A.050 and WAC 365-190-040.) Recommendation #2 adds that this wetlands planning should be done using a watershed approach. Given that watershed planning should first be clearly defined and models developed, it may take some time for local governments to implement this recommendation.

Long-term:

e. Wetland inventories should be periodically updated and data produced should be added to the state's wetland database. This database should include information on wetland location and function. (See discussion on wetlands data management.)

f. Local governments in the same watershed should develop agreements with each other for coordinated management of wetlands within a shared watershed.

C. WETLANDS PERMITTING PROCESS

1. Streamlining the Permit Process

Mitigation Requirements:

Lack of consistency among state agency mandates

One of the most common problems described by work group members and the general public is the lack of consistency among state and federal agencies in execution of their respective mandates regarding wetlands. This can lead to different conditions being required by different agencies, specifically concerning wetlands mitigation. For example, some work group members stated that project applicants occasionally find that the different mandates between the Department of Fish and Wildlife and the Department of Ecology lead to conflicts in establishing requirements for projects that require both an Hydraulic Permit Application and a State 401 Water Quality Certification. One agency is focused on protecting fish, fish life, and habitat while another is charged with protecting wetlands and water quality.

Watershed-based mitigation planning

Agencies can best determine overall mitigation policies by considering a watershed approach. If state natural resource agencies could work toward a watershed-based management approach under a common policy for natural resource protection, consistency conflicts would be minimized. This watershed approach could then be coordinated with the usual case by case evaluations. Another measure that could improve coordination among agencies and assist in better watershed planning is greater cross-training of agency staff on wetlands mitigation issues.

Mitigation requirements

Mitigation requirements occasionally differ among different agencies. For example, the Department of Fish and Wildlife typically requires mitigation to be accomplished on-site and in-kind. Ecology, however, may accept mitigation that is off-site or out-of-kind. Department of Fish and Wildlife stressed that they occasionally accept off-site or out-of-kind mitigation as well, if agency staff believes that this appears to be best for overall resource protection.

Agency representatives from the Department of Fish and Wildlife frequently consult with Ecology Shorelands Program staff during the mitigation plan approval process and may refer applicants to Ecology for mitigation guidance, even if Ecology does not have jurisdiction or regulatory authority in the case. Work group members were concerned that the agencies should agree on guidance for conducting mitigation. This mitigation guidance should be based on the site specific circumstances to ensure greater ecological benefits.

Recommendation #23: State and federal agencies, with public participation, should jointly draft guidelines for conducting wetland mitigation.
Regulatory Reform Work Group

Hydraulic Code:

The State Hydraulic Code is intended to protect fish and fish life from impacts associated with "construction of any form of hydraulic project or performance of other work that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state" (RCW 75.20.100 and 75.20.103). While not specifically aimed at wetlands protection, this law frequently is applied in wetland permitting cases. Hydraulic Permit Approval (HPA) from the Department of Fish and Wildlife is required for projects described above affecting state waters, including wetlands. When HPAs are conditioned or denied, it is solely for protection of fish life.

Permit timelines

Permit timelines are a problem commonly raised by project applicants. A Hydraulic Project Approval cannot be issued until the SEPA analysis for a project has been completed. Upon completion of the SEPA process and submittal of a complete hydraulic project permit application, the Department of Fish and Wildlife has 45 days to issue or deny the HPA, although the department attempts to issue responses within 30 days. The State 401 Water Quality Certification from the Department of Ecology, however, cannot be issued until all other state permits have been issued. Since an applicant must first develop a wetland mitigation plan that meets the requirements of the HPA (or local requirements, including the Shoreline Master Program), the potential exists for Ecology to require additional or conflicting mitigation after other permits have been issued.

To ensure consistency among agencies, work group members suggest that agency permitting staff meet periodically to discuss complex projects and develop consistent, coordinated mitigation requirements for permit applicants. This concept is presented in detail below.

Permit Review:

One way to provide a more coordinated approach to permit review and decision-making at the state and federal levels is to create an interagency permit evaluation committee. Such a committee could be convened on a trial or pilot basis. This committee would consist of all state and federal agencies with an interest in wetlands protection and it would meet on a regular basis to discuss selected proposals. The goal

of this committee would be to allow agencies an opportunity to work together early in the permit process to provide a single, coordinated state response to the project proponent regarding his or her proposal. Specifically, agency representatives would be responsible for evaluating project mitigation and contingency proposals submitted by project applicants.

Work group members suggested that this interagency group meet monthly. It should be noted that this timeframe may not allow discussion of HPA conditions before they are finalized, given that HPA decisions must be made within 45 days.

Recommendation #24: Bring all state and federal agencies with wetlands permitting or commenting authority together on a regular basis, perhaps monthly, to discuss permit applications. This interagency group will review selected wetland proposals to provide consistent and timely responses. Permit applicants will be invited as participants to these meetings.

Regulatory Reform Work Group

2. Property Rights and Takings

Government has the authority and responsibility to protect the public health, safety, and welfare. Pursuant to this authority, regulation or limitations to the use of private property is allowed under the police powers of the federal and state constitutions. Accordingly, governments may limit the use of property through land use planning, zoning, and environmental regulations. Courts have recognized, however, that if government regulation goes "too far," it may constitute a taking of property. Both the federal and state constitutions dictate that government cannot take private property for public purposes without just compensation. The legal debate arises in determining when a reduction in value or potential profit constitutes a legal taking of property, thus requiring compensation to the property owner. To determine when a taking has occurred, federal and state courts balance the public need for regulation against the impact a regulation will have upon the private property owner. Recent U.S. Supreme Court decisions have clarified that there must be a relationship (nexus) between the regulation and the impacts being regulated.

The State Attorney General's Office has provided guidance to local governments to help them avoid potential taking of private property. This guidance is intended to be used when local governments develop or review their regulations to assist them in avoiding takings claims. These five statements are:

1. *Does the regulation or action result in a permanent physical occupation of private property?*

2. *Does the regulation or action require a property owner to dedicate a portion of property or to grant an easement? (The dedication of property must be reasonably and specifically designed to prevent or compensate for adverse impacts of the proposed development and substantially advances a legitimate governmental interest.)*

3. *Does the regulation deprive the owner of all economically viable uses of the property?*

4. *Does the regulation have a severe impact on the landowner's economic interest?*

5. *Does the regulation deny a fundamental attribute of ownership?*

In addition to concerns about takings, landowners and citizens also desire that land use regulations and decisions are timely, fair, and predictable. Delays in the permit process lead to frustration by the development community and attempts to weaken land use regulations. Citizens and landowners adjacent to proposed developments also want assurance that the decision-making process is open and fair to all people concerned, and that land use restrictions are not continually being changed.

3. Water Quality Standards for Wetlands

Revision of Washington's Surface Water Quality Standards (Chapter 173-201A WAC) is necessary because the application of some of the standards to wetlands is confusing and, in some cases, irrelevant. Wetlands are "waters of the state" and are regulated by several state programs including the Shoreline Management Act (Chapter 90.58 RCW), the state Water Pollution Control Act (Chapter 90.48 RCW), and the federal Clean Water Act Section 401. Water quality standards are used to guide state agency decisions under these regulatory programs. Because wetlands are currently classified along with other Class A streams and lakes in Chapter 173-201A WAC, there is currently little guidance regarding how the water quality standards are applied to wetlands in state enforcement actions and permit decisions.

Revised water quality standards for wetlands have the potential to make the existing regulatory process more streamlined and predictable. The establishment of narrative standards for the unique and variable traits that wetlands exhibit will improve the consistency and predictability of Section 401 water quality certifications for federal permits. Also, they will provide better information for decisions regarding wastewater discharge permits, stormwater permits, technical assistance programs, and policy development.

The existing draft standards for wetlands that were developed for the last triennial review of the state's surface water quality standards should be considered as a starting point for future review. Standards for wetlands should be developed in conjunction with broad-based public involvement during the next triennial review and update, scheduled to commence in 1994.

Recommendation #25: The Department of Ecology, with broad-based public involvement, should adopt water quality standards that are specific to wetlands in the 1994 surface water quality standards triennial review process. The standards should identify various wetland types in the state, beneficial uses of the state's wetlands, and chemical, physical, and biological criteria to support these beneficial uses. Regulatory Reform Work Group

4. Reducing the Overlap Between Local, State and Federal Programs

State Assumption of the Federal §404 Program:

Individual states may assume the Section 404 regulatory program for all 404 activities except for activities in or adjacent to navigable waters of the United States. (These activities are governed by Section 10 of the Rivers and Harbors Act.) As of today, only Michigan and New Jersey have assumed the federal program. The EPA must review and approve any proposed state assumption. Once a state has assumed the 404 program, EPA retains oversight authority over permit decisions to assure that the state program continues to offer the required environmental protection.

Advantages

- One layer of government is removed from the wetlands regulatory process.
- State can control the program and ensure that it is compatible with all state laws and is as efficient as possible.

Disadvantages

- Before requesting assumption, state must have a program in place that provides protection comparable to that of the federal 404 program.
- It is expensive to assume 404 authority, and no federal money is provided.
- The state already has ability to approve, condition or deny 404 projects by denying water quality certification.
- EPA can "second guess" state's decisions.

Given the large expense involved in assuming the 404 program, the SWIS work group members did not recommend that assumption be considered.

General Permits For Avoiding Regulatory Duplication:

Under the authority of the federal Clean Water Act, the U.S. Army Corps of Engineers can issue General Permits on a state, regional, or nationwide basis. These permits can be issued for a category of activities when:

(1) Those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or

(2) The General Permit would result in avoiding unnecessary duplication of regulatory control exercised by another Federal, state, or local agency provided it has been determined that the environmental consequences are individually and cumulatively minimal.... (33 CFR Section 323.2(h))

General Permits can be issued as an alternative to individual permits. There are several different types of General Permits. Letters of Permission, an alternative to General Permits, are discussed in Section III (Discussion of Additional Issues). General Permits issued to state governments and Nationwide Permits are also discussed in Section III.

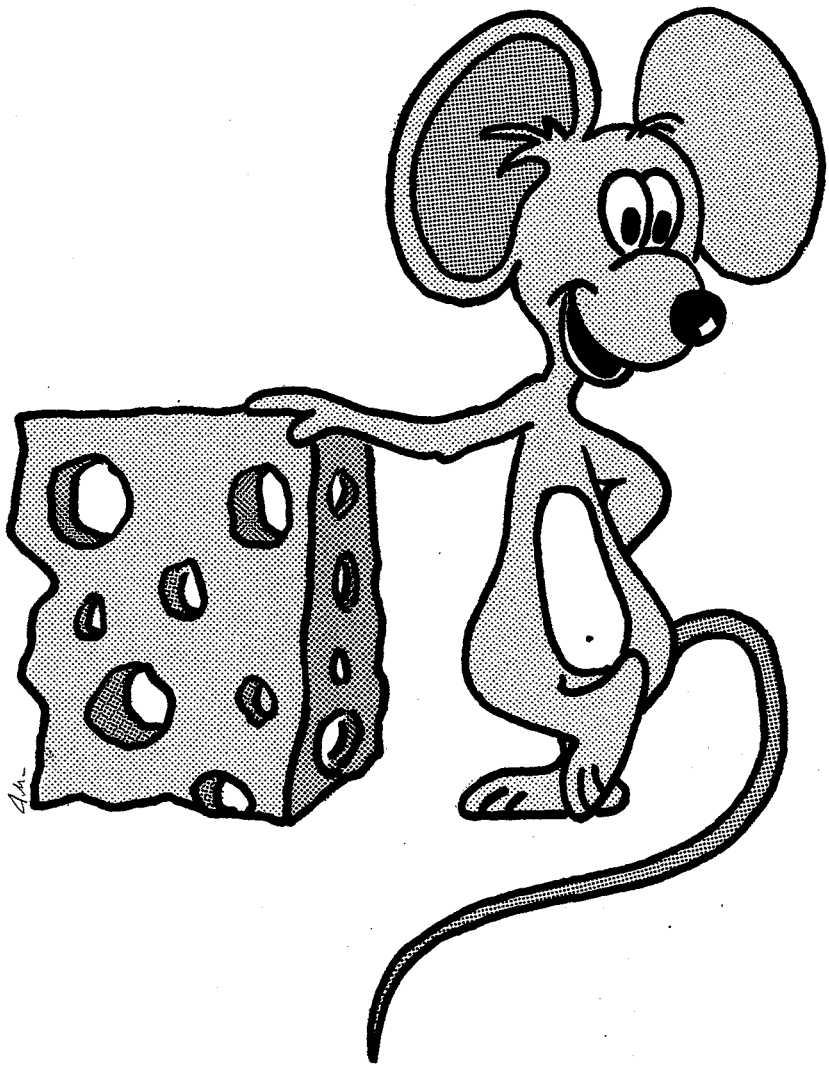
This section addresses General Permits authorized for the purpose of avoiding duplication between the federal wetlands program and local wetlands programs. The Corps can issue a General Permit in instances where there is a state, tribal, or local program that ensures at least the same level of resource protection as 404. The second program doesn't have to have a process identical to 404, as with assumption, but must afford the same level of protection. (Note: This type of General Permit is commonly referred to as a "Programmatic General Permit," although this term does not specifically appear in the federal code.)

General Permits can be issued for a variety of different conditions; they can address some or all of the activities covered by 404, or can deal with a specific geographic area. For example, if there is an existing state permitting process, the state could apply for a General Permit to regulate activities in Class 1 wetlands, or perhaps, to regulate all activities within a specific area of the state. Several states on the east coast have been issued General Permits. The Corps and EPA maintain responsibility for overseeing the implementation of General Permits, under the Clean Water Act. They retain authority to "kick out" individual projects that do not meet the requirements of an authorized General Permit.

The legal requirements for issuing a General Permit are very brief and do not provide clear guidance. New guidance is currently being developed by the Corps' headquarters staff, in Washington, D.C.

Advantages

- Can provide comprehensive resource protection, based on wetlands functions and values.
- Can make permit process more efficient and predictable.
- Only one layer of government is involved in regulating the activities and area covered by the permit.
- Program has to be as protective as 404, but doesn't have to use an identical process, i.e., does not have to have same alternatives analysis process, etc.
- Can be issued for a limited set of activities or a limited geographic area for projects resulting in minimal impacts.
- President Clinton's wetlands policy supports issuance of General Permits.



Disadvantages

- Since new guidance has not yet been distributed, it is unclear exactly what the Seattle district of the Corps would require before issuing a General Permit.
- Would require time and effort working with the Corps and EPA before approval.
- Environmental consequences of the General Permit must be individually and cumulatively minimal.
- State may have to develop regulatory program for certain activities or areas of the state before General Permit could be issued to the state.
- Similarly, a local government would have to develop and adopt a regulatory program before a General Permit could be issued to a local government.
- Could be expensive, but perhaps not more expensive than current system.

General Permit Issued to a Local Government

Members of the work group were interested in the possibility of local governments receiving General Permits from the Corps. It should be noted, however, that the federal government is currently considering excluding local governments and only issuing General Permits to state or tribal governments. In Washington State, this could obviously create a problem for issuance, given that wetlands protection programs are developed at the local level. Despite the current confusion regarding General Permits, two of the four SWIS local grant recipients are exploring the possibility of receiving a General Permit from the Corps.

Work group members agreed that, if General Permits are issued to local governments, they should focus on the type or quality of the wetlands themselves, rather than the type of activity being proposed. For example, a General Permit might not authorize activities in highly functional wetlands in the planning area, but could allow activities in less functional wetlands under a streamlined permit process. In this example, criteria for permit decisions could be decided up front, during the planning stage. This would provide protection of the most functional wetlands in a planning area, would enable local governments to provide more certainty to the public, and would speed up the local processing of wetlands permits.

Recommendation #26: A proposal for a General Permit should be completed by a local government on a pilot basis, and funded by the State Wetlands Integration Strategy (SWIS). The conditions for this General Permit should be developed jointly by the local government, state and federal agencies, and the public, including members of the regulated and environmental communities. These should include, at a minimum, the "recommended conditions for issuance of a General Permit" specified in the final SWIS report.

Regulatory Reform Work Group

Recommended Conditions for Issuance of a General Permit

1) Inventory. An inventory of the wetland sites in the planning area shall be conducted before the General Permit is issued. This inventory does not have to include a delineation of the wetlands, but needs to include general information concerning their location, size, type, and function.

2) Delineation before wetland alteration. Although a delineation does not have to be done before a General Permit is issued, a delineation is required during the local permit processing and before a wetland is altered. The General Permit should specify the standards for conducting the delineation and possibly designate the party (or agency) who will conduct or certify the delineation.

3) Functional assessment. A functional assessment of the wetlands in the planning area should be conducted before issuance of the General Permit.

4) Planning Process. The local government should establish goals for addressing natural resources within the jurisdiction. They should also identify zoning designations and develop a buildable lands inventory. The local preferences for development sites should be based on the results of the functional assessment. Following the local planning process, wetlands in the plan area should be designated for protection or development, or specified as mitigation sites.

5) Mitigation. Protocols for conducting mitigation should be specified in the General Permit.

6) Monitoring. Standards for local monitoring of required mitigation sites should be established. Monitoring data should be periodically delivered to state and federal agencies for programmatic review.

7) Regular review of the General Permit. The Corps of Engineers and the Department of Ecology should review local decisions made pursuant to the General Permit. This review should be conducted annually for the life of the General Permit. The results of the pilot project should be used to determine the appropriate interval for Corps' review of future General Permits in Washington.

8) Amendment or revocation of the General Permit. The General Permit should specify under what conditions it might be amended or revoked. For example, if the local government amends a local ordinance that would affect local wetlands permitting decisions, the General Permit should automatically be reviewed to determine if it should be amended or revoked. The General Permit should also specify the local appeal process that will be used if a decision made under the General Permit is appealed.

9) Training for local staff. Local government staff should receive wetlands technical training to assist them in making informed wetlands decisions. As an alternative, the local government may contract with a consultant to do this work.

Corps' Alternatives Analysis Guidance:

Under the 404(b)(1) guidelines of the federal Clean Water Act, permit applicants must demonstrate that impacts to wetlands were avoided through consideration of project alternatives and an analysis of alternative sites. Specifically, the guidelines state that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to proposed discharge which would have less adverse impacts on the aquatic ecosystem."

Alternatives analyses are required to ensure that adequate and appropriate consideration has been given to minimizing environmental impacts during the site selection and project design process. However, alternatives analyses can be time consuming and costly for project proponents. Because of the time and expense involved and a desire to achieve greater consistency with the Growth Management Act, some work group members suggested that the alternatives analysis be limited in certain cases. (The work group did not reach consensus on this proposal. For a more detailed explanation of this suggestion, see Section II.)

When considering project alternatives, it is important to recognize that certain types of impacts do not have substantial adverse effects when considered on a site-by-site basis, but could have a much greater impact if cumulative impacts were considered on a regional scale. Some work group members stated that addressing this issue and abbreviating the alternatives analysis process should be dealt with through the General Permit process. A General Permit could include a functional assessment of a jurisdiction's wetlands as part of a thorough local planning process, thereby limiting the scope of an alternatives analysis at the time a permit is issued. A General Permit could also include specific implementation strategies and outline criteria for mitigation, monitoring, etc. (See earlier discussion of General Permits.)

Current federal guidance provides the Corps the flexibility to define the scope of the alternatives analysis requirements to fit the specific needs of the project applicant. For example, the Corps can require a less intensive alternatives analysis for an individual than for a corporation. The Corps also considers the potential impacts of projects and the analysis is commensurate with the level of impacts expected.

Recommendation #27: The U.S. Army Corps of Engineers should clarify how existing alternatives analysis guidance may be better applied in Washington and better coordinated with the Growth Management Act.

Regulatory Reform Work Group

Interlocal Agreements:

Interlocal agreements, also known as memoranda of agreement, have been identified as one of several possibilities for achieving vertical integration of wetlands regulatory programs. Chapter 39.34 RCW permits local and state agencies to enter into agreements with other local, state, and federal agencies regarding the sharing or assignment of responsibilities which each agency has under existing law. Memoranda of agreement were identified in the White House Office of Environmental Policy's August 1993 wetlands policy as one of the means for reducing regulatory overlap and delay in the administration of wetlands regulatory programs. It should also be noted that Senate Bill 5038, passed by the state legislature in March of 1994, establishes a process for local governments to develop "local government service agreements" to facilitate consistency between jurisdictions. Interlocal agreements provide local governments with an especially effective tool for "bottom-up" planning.

Potential Uses of Interlocal Agreements

- Elimination of regulatory overlap in wetlands regulation by establishing lead agency responsibilities for certain activities, e.g., verification of wetlands delineations, field work to support jurisdictional determinations, coordinated application requirements, and coordinated scheduling of permit and enforcement processes.

- Efficient acquisition of technical expertise and support for wetlands regulatory programs through joint hiring or funding (or cooperative use) of the services of wetlands specialists.

- Elimination of duplication and conflicts between county and city sensitive area ordinances within urban growth and future annexation areas under the Growth Management Act by specifying how the county and city will coordinate different responsibilities.

Interlocal agreements should be developed based on the available resources and unique needs of federal, state, and local agencies in each geographic area. While no one form of agreement will suit all jurisdictions, the development of interlocal agreements for one or more of the SWIS pilot projects will facilitate future use of such agreements in other local jurisdictions in the State.

Recommendation #28: Interlocal agreements authorized by Chapter 39.34 RCW should be developed with appropriate public input by the State Wetland Integration Strategy (SWIS) pilot projects to demonstrate their effectiveness at eliminating regulatory overlap between federal, state, and local agencies; to achieve joint use of available technical resources; and to foster cooperation among the agencies regarding the development of local or watershed-based wetlands regulatory programs.

5. Enforcement

The Regulatory Reform Work Group recognized that fair, consistent enforcement of wetlands regulations would meet the goals of regulatory reform by providing credibility, predictability, and equity. Effective enforcement of existing regulations can preclude the need for new regulations. Without an effective, visible enforcement effort, other regulatory reform recommendations are less effective. One problem with enforcement is that there are limited resources to adequately enforce the number of laws and ordinances administered at all levels of government. To illustrate:

- The Corps and EPA have joint enforcement responsibility for section 404 of the Clean Water Act. There are several hundred 404 violations per year in the State of Washington and these two federal agencies have approximately eight people to cover the entire state.

- There are over 230 local governments with primary jurisdiction to administer and enforce the Shoreline Management Act, with Ecology in a review and oversight role; there are thousands of miles of shorelines in the state. Ecology has only two people for the entire state to deal with over 150 significant complaints per year. At the local level, shoreline enforcement often is combined with zoning or building enforcement departments and is not given adequate emphasis or priority.

- The Department of Fish and Wildlife deals with dozens of hydraulic project approval (HPA) violations per year.

- Local governments must enforce their grading, clearing and/or drainage and sensitive areas ordinances, usually with limited staff.

Work group members agreed that penalties resulting from wetland enforcement actions should be used directly either to restore the site of the violation or to enhance other wetland resources. Under current federal and state policy, this does not happen; monetary penalties assessed for wetland violations are used for other purposes. Work group members agreed that these policies should be changed so that penalty monies can directly benefit wetlands - the resource that was damaged.

Recommendation #29: Enforcement actions involving wetlands violations should be conducted with adherence to the following:

- ***In most cases, voluntary restoration should be preferred to monetary penalties and court action; and***
- ***In addition to restoration being required, knowing, repeat or flagrant violators should receive monetary penalties and should be taken to court.***

Regulatory Reform Work Group

Recommendation #30: Revenues derived from monetary penalties should be used directly to restore and protect wetlands, rather than reverting to the U.S. treasury or the state general fund. If this recommendation cannot be achieved under current law or administrative policy, legislation should be developed to allow this use of monetary penalties. Further, agencies and programs should be identified as recipients of the monetary funds for restoration of wetlands.
Regulatory Reform Work Group

Agencies should coordinate and share information on enforcement, including statistics on numbers of violations, location, and resolution. For example, enforcement efforts would be more effective if agencies created a common complaint form which covers violations of the federal Clean Water Act (section 404), the Shoreline Management Act, the Hydraulics Code, and, where feasible, local grading, clearing and/or drainage and sensitive areas ordinances. Also, enforcement information should be placed in databases that are easily used on a Geographic Information System.

Recommendation #31: A lead agency should be designated to coordinate information concerning violations of various statutes, where feasible.
Regulatory Reform Work Group

The designated lead agency should provide other agencies having jurisdiction with copies of violation reports on significant wetland fills and site inspections in a timely manner. When conflicts are identified, the lead agency should take responsibility for coordinating with other agencies to resolve the conflicts.

6. Mitigation Banking

Mitigation banking involves restoring or creating wetlands at one site to compensate for wetlands losses at other sites. Generally, before a project applicant impacts the wetlands on a site, the applicant makes payments to the mitigation bank to purchase wetland "credits." These wetland credits are then debited as the site is developed.

Wetland mitigation banking has been considered and used in a number of states as an effective alternative means of mitigating wetland impacts where on-site mitigation is not feasible, is of extraordinary cost, is not likely to be ecologically successful, or would provide lower resource values. The concept of mitigation banks should be pursued in order to accomplish enhanced wetland protection. It should be recognized in this effort that a banking program is neither a panacea nor a substitute for existing wetland mitigation requirements. Banks should be utilized only when replacement is required and mitigation sequencing has been applied. Some work group members think that mitigation sequencing should not be required in all cases: they reason that, if the mitigation bank provides greater wetland functions than the alternate mitigation, why first undertake a costly mitigation sequencing process?

There has been increasing interest by resource agencies, local governments, federal agencies, and by some private parties in mitigation banking. For example, specific authority was provided by Congress in the passage of legislation for financial support of state transportation agencies' wetland banking activities.

Advantages

Wetland banking can help to achieve the federal and state goals of no-net-loss of wetlands. Wetland mitigation banks can also achieve several other goals:

- provide more flexibility in wetland protection
- reduce the costs of projects while maintaining ecological functions
- expedite interagency coordination and project permit reviews
- actively protect wetlands, rather than simply creating protection "plans"
- provide for mitigation on a larger scale rather than having several smaller mitigation efforts
- account for all wetland impacts thereby providing incentives to minimize impacts and maximize mitigation efforts
- provide mitigation that is maintained and monitored more easily than several small, on-site mitigation projects

Disadvantages

- mitigation banking is still experimental in nature
- requires coordination of involved parties to establish mitigation banking credit system
- requires substantial "up-front" investment
- results in net loss of wetlands if mitigation sites fail to function ecologically
- results in substantial economic loss if mitigation sites fail to function ecologically

The state Department of Transportation, in conjunction with several resource and regulatory agencies at both the state and federal levels, has spent two years in developing a comprehensive wetland mitigation banking agreement for use with transportation projects. The provisions of this interagency agreement can provide a resource for the development of wetland banking programs by other public and private parties in our state.

To increase the likelihood of adoption and success, wetland mitigation banks should:

- address planning in a watershed context
- address acreage replacement ratios
- address ecological sustainability
- specify monitoring criteria based on performance standards
- specify a contingency plan
- provide adequate funding source and funding mechanism

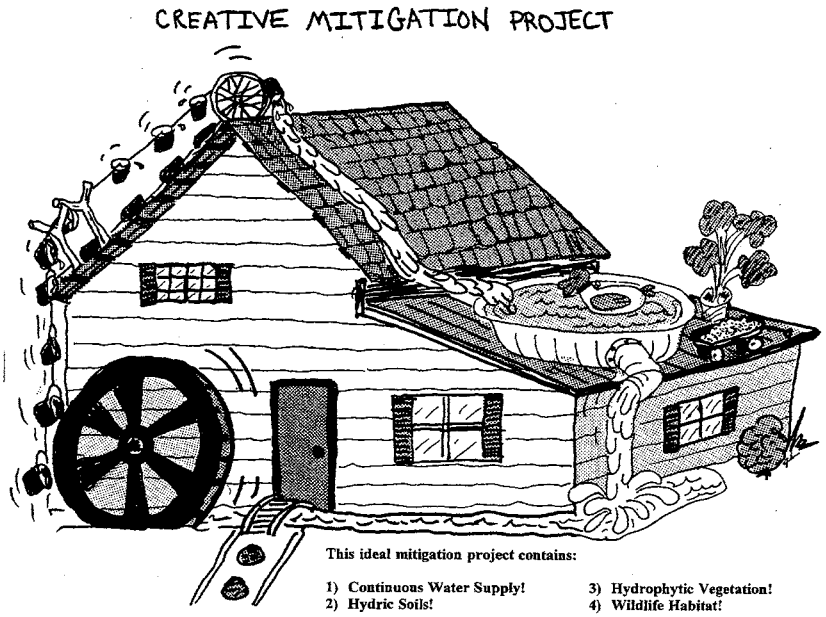
> ***Recommendation #32: The Interagency Wetlands Review Board, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and the U.S. Fish and Wildlife Service should work with state and local government resource and regulatory agencies and the public to develop a statewide protocol for mitigation banking. This effort should establish the criteria for success of mitigation banks and specify monitoring provisions.*** Regulatory Reform Work Group

The statewide protocol should include:

1. Criteria for Memorandums of Agreement (MOAs) that can be used by all parties when establishing a mitigation bank.

2. Site selection criteria based on ecological indicators and watershed processes, uses, and constraints.

3. Guidance for implementation, monitoring, and maintenance of mitigation bank sites.



D. NON-REGULATORY ACTIONS

1. Introduction

Wetlands regulation, while being the foundation of most programs, cannot by itself minimize the loss of wetlands, because:

- Case-by-case permit programs do not provide for watershed considerations (economic and non-economic) in designing compensatory mitigation.
- Case-by-case permit management does not provide flexibility in determining the type or location of wetlands to address.
- Compensatory mitigation is frequently constrained by land availability.
- Attitude of those undertaking creation or restoration is created by legal requirement rather than a desire to increase wetlands resources or provide long-term management objectives.
- There is no incentive for wetlands stewardship.
- There is no means of attaining long-term net gain of wetlands.

To achieve a stable or increasing wetlands resource base requires significant effort beyond regulatory programs. The proclamation of wetlands protection goals and policies has stimulated serious reflection and discussion regarding appropriate wetlands programs and initiatives. Two significant realities emerge:

1. We must expand beyond regulatory mechanisms to achieve the goal.
2. Purposeful, carefully planned restoration is an integral portion of the success formula.

The non-regulatory group believed that aggressive voluntary non-regulatory efforts, including both acquisition and restoration, are critically needed to effectively protect existing wetlands and to achieve an increase in wetlands resources in the future. Given the prevalence of regulatory programs, we believe it is **crucial** to integrate non-regulatory program components and innovative initiatives with regulatory requirements.

Advanced planning and watershed assessment processes can be used to identify critical areas which sustain watershed viability. Wetlands protection goals will be advanced if these identified sites for non-compensatory actions also receive consideration when compensation is required under the regulatory process. Links such as these need to be made if we are to achieve our wetlands protection goals.

Unlike activities such as compensatory mitigation, non-regulatory actions are voluntarily initiated. Leadership for specific projects (e.g. preservation and/or restoration of a specific area) is expected to come from local governments and landowners. For example, comprehensive plans prepared by local governments should include non-regulatory strategies for wetlands management. The challenge is to assess what is currently in place and what is effective, identify appropriate situations for using different methods, and broaden protection opportunities in key areas.

State and Federal agencies need to undertake a coordinated effort to provide technical assistance, and commit financial and other support in cooperation with locally initiated activities. Federal and state involvement should also include the development of tools (technical and procedural) for identifying, selecting, and implementing non-regulatory projects, and where appropriate, on-the-ground demonstration projects undertaken in cooperation with landowner, and local and tribal governments.

Description of Terms:

a) Non-regulatory actions include a broad range of protection incentives and program alternatives: i) non-compensatory restoration, enhancement, and creation options; ii) acquisition and other land preservation techniques such as conservation easements, donations, land swaps, etc.; and iii) land use techniques such as transfer of development rights, and planned unit developments. [Note that any of these can be applied in the context of regulatory efforts. However, the capacity of the land should be a primary consideration in determining whether the use of any of these tools is appropriate.]

b) Outreach includes the concept of soliciting non-regulatory involvement and providing technical assistance. Outreach to local governments would consist of a coordinated statewide effort by all key federal and state agencies involved in wetlands protection. These agencies would commit to provide direct support for non-regulatory activities. Outreach would also occur at the community level, with local governments and other community organizations providing assistance to landowners.

c) Coordinated Effort implies that federal and state agencies will work under a collaborative framework to provide direct assistance to local and tribal governments, and landowners. This effort would integrate/coordinate with existing state non-regulatory programs such as the wetlands protection component of the Puget Sound Plan, the Washington Natural Heritage Program, the Washington Duckstamp Program, etc.

The Non-Regulatory Gap:

Federal and state agencies can play a critical role in soliciting increased local government involvement through the dissemination of information and by offering direct technical assistance. Federal and state agencies need to: commit staff and financial resources to non-regulatory activities; coordinate inter-agency efforts; assess local needs; develop ways to meet these needs; and provide assistance to local governments and non-governmental organizations.

Local governments provide direct on-the-ground resource protection within their communities. To improve this role, they need to develop comprehensive wetlands protection programs which integrate non-regulatory with regulatory approaches. Local governments need to: commit to develop and implement non-regulatory approaches, integrate these approaches with regulatory efforts, develop partnerships with agencies and other community groups that can assist with non-regulatory options, and provide a means for direct assistance to landowners wishing to improve stewardship.

Ongoing resource stewardship on the part of landowners is the true measure of protection. Involvement on the part of owners dictates how effective wetlands protection will be. Means of informing, involving, and assisting landowners in committing to wise wetlands management practices is critical to the ultimate achievement of wetlands protection goals over time.

2. Agency Assistance to Local Communities

In the following discussion, the critical need to involve agencies, local governments, and landowners in non-regulatory activities is presented, followed with action recommendations to address the issue.

Federal and state agencies could and should be more actively involved in promoting non-regulatory activities. In recent years, as non-regulatory programs have arisen at the federal and state level, the need for improved coordination between agencies and the establishment of working partnerships has developed.

As federal and state agencies understand non-regulatory issues better, they can play a key role in facilitating the involvement of local governments and others. Active local involvement increases the number of non-regulatory actions that occur, thus rapidly multiplying wetlands protection benefits. The extent to which federal and state agencies can not only participate themselves, but can engage local communities in active non-regulatory efforts, the more wetlands benefits will be realized.

Historically, agency staff allocations have dealt primarily with issues related to regulatory protection of wetlands through existing authorities such as the Clean Water Act, Shoreline Management Act, etc. Recently, local government outreach has focused on implementation of ordinances under the Growth Management Act, as well. However, it has become increasingly apparent that the time has come to integrate non-regulatory approaches with regulatory ones. Local communities are ready to apply voluntary measures as they recognize that regulations alone do not meet wetlands protection goals or fully address the needs of their communities. It is also apparent that federal, state, and local regulations can be barriers to landowner stewardship. Implementation of non-regulatory practices and other actions which augment wetlands are often impeded by regulatory processes which do not discriminate between positive versus negative outcomes.

An interagency coordinated effort of outreach to local governments is warranted to meet these changing needs and address deficiencies in wetlands resource protection through integration of non-regulatory actions with regulatory ones. The agency outreach would solicit local information and involvement, assess and address informational needs, and provide direct technical support to local and tribal governments to develop and implement effective non-regulatory actions.

Some local communities and/or tribal governments are developing new incentives which integrate non-regulatory actions with regulatory. Information about these approaches and the lessons learned should be provided to other communities. Disseminating information and technical guidance materials across local communities would be a role of the agency coordination effort. Identifying what information is most needed would result from an inquiry of local and tribal governments across the state. Guidance materials would be developed to serve broadly identified needs across jurisdictions. Information would be followed up by direct staff assistance, working with these players to tailor the available options to their community needs/capabilities, to integrate local resource protection programs, and to implement non-regulatory projects.

Recommendation #33: When interest is expressed by local governments, tribal governments, conservation districts, or other community players, state and federal agency staff shall provide assistance in the form of technical documents/information, financial support (through existing grant programs), and staff expertise. Agency staff shall work in partnership with the community to tailor their activities to local conditions and needs.

Non-Regulatory Work Group

Reallocation of Agency Resources:

Federal and state agencies should work together, and with local governments, to reallocate existing resources to non-regulatory activities.

Recommendation #34: The Interagency Wetlands Review Board (IWRB) member agencies should reallocate internal agency staff to address non-regulatory wetlands protection efforts. The link with regulatory programs should be clearly made to facilitate integrating resources from existing programs as appropriate.

Non-Regulatory Work Group

Recommendation #35: The Interagency Wetlands Review Board (IWRB) and federal agencies represented on the State Wetlands Integration Strategy (SWIS) should commit resource support (in the form of grant funding and staff) to non-regulatory wetlands efforts. Designated staff should be assigned to provide assistance to local communities. For some issues, such as wetlands restoration (i.e., program implementation of Puget Sound Plan element W-8 and statewide restoration efforts), agency technical assistance should involve an interdisciplinary team, such as the Cooperative River Basin Team (A five member team working on non-point source issues in the watersheds of the Puget Sound).
Non-Regulatory Work Group

Coordinated Agency Outreach:

Recommendation #36: Ecology should act as lead to the coordinated effort of the appropriate federal and state agencies to address local community needs involving non-regulatory incentives. Non-Regulatory Work Group

The agency coordinated effort should undertake to: a) provide direct, consistent, and ongoing technical assistance from agency staff to local communities; b) motivate community involvement; c) guide planning and resource assessment within a watershed context; d) assess and address technical problems and/or community needs related to non-regulatory applications; e) integrate non-regulatory with regulatory efforts and integrate wetlands resource issues with other water related issues in the watershed; f) provide written guidance such as technical manuals, etc., to streamline local implementation; g) link local and state/federal activities through collaborative partnerships; h) monitor wetlands protection progress across the state; and i) provide funding information and pursue funding options for program implementation at the community level.

Major components of this effort shall include:

a) **Publicizing Benefits:**
The outreach effort should begin with:
1) documenting the economic benefits and services wetlands provide
2) identifying demonstrated non-regulatory successes.

Agency staff should use this information to demonstrate to local governments and others the benefits of non-regulatory activities and solicit their active involvement.

b) **Meeting Non-Regulatory Needs of Communities:**
A general assessment of local needs should be conducted to determine common problems local and tribal governments face. Input from representative local and tribal governments, statewide, would be sought and would include a sampling of jurisdictions from the following categories: Eastern WA/Western WA, city/county, rural/urban, small/large, etc. Following the needs assessment, solutions shall be sought which address the common needs expressed by these jurisdictions. Products should include guidance materials and direct technical assistance by agency staff.

c) **Ongoing Local Demonstration Programs:**
Demonstration efforts should be undertaken by local and/or tribal governments, conservation districts and other local groups with direct hands-on technical assistance from the agencies. The agencies would work with them to help evaluate their current programs, assess needs, develop tailored solutions which overcome limitations associated with non-regulatory implementation for the community, and actively participate in project implementation. Solutions should be put in place which integrate non-regulatory actions with existing programs and actively commit agencies to assisting local communities.

d) **Identifying and Overcoming Limitations:**
An ongoing effort should be made to identify and address weak links in non-regulatory implementation. These may include such items as inadequate funding and deficient technical information. The federal and state agencies should make every effort to overcome identified problems and provide support for measures which advance non-regulatory opportunities.

Regulations Promoting Stewardship: Agencies and governments should review and modify regulations to remove impediments to wetlands stewardship through application of non-regulatory actions.

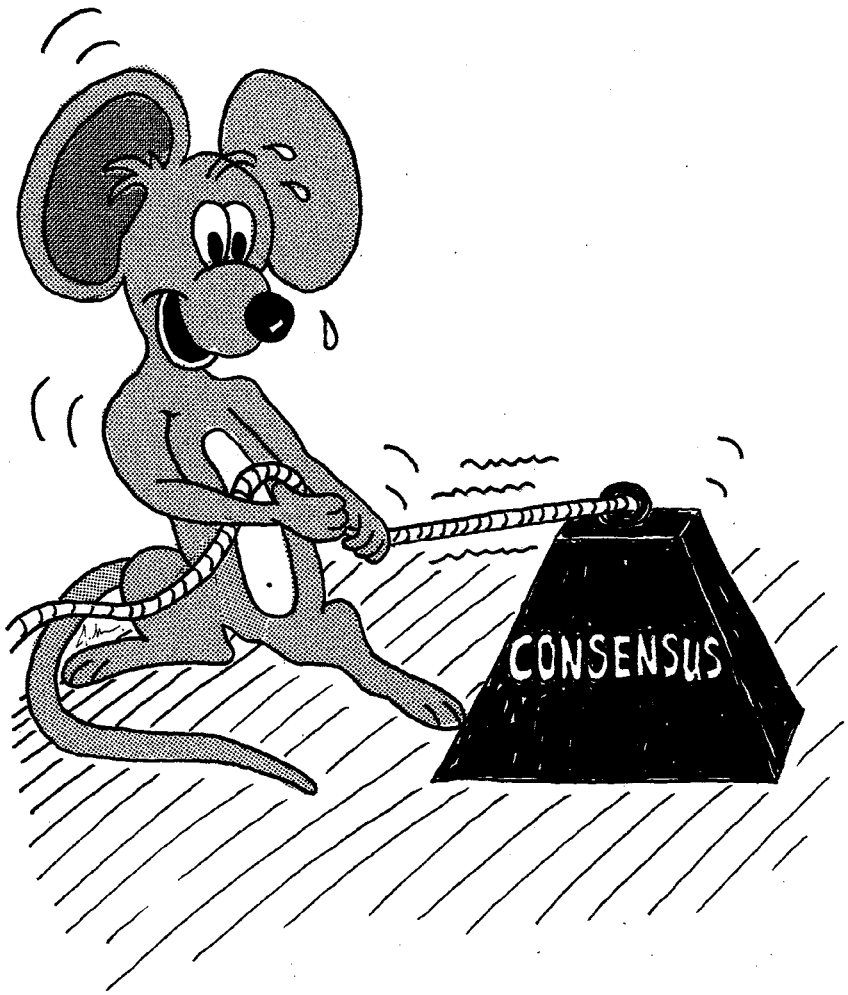
3. Recommendations for Local Communities:

The time has come for widespread local government involvement in non-regulatory actions. As regulatory efforts to protect environmentally sensitive areas such as wetlands are expanded under the Growth Management Act, local governments are seeking a balance with non-regulatory efforts. A critical step toward achieving this end is the development of comprehensive wetlands protection programs which integrate both.

In many cases, local governments can readily integrate non-regulatory activities into other efforts they are already involved in. Most local governments have one or more programs in place that could be used directly or modified to more broadly serve non-regulatory activities. These may be open space current use taxation programs, park acquisition efforts, conservation futures taxes, or a detailed inventory of the jurisdiction's wetlands.

The most straightforward opportunities are likely to come by improving and integrating existing efforts. For example, if a county has an Open Space Current Use Taxation Program already in place, a "public benefit rating system (PBRS)" (as defined in RCW 84.34) might be added to specify additional tax relief available to landowners who place a restrictive conservation easement on a wetland of high value to the community. Also, the PBRS could define all highest quality wetlands identified in the local Sensitive Areas Ordinance as prime candidates for current use taxation classification, thus linking regulatory and incentive programs for improved protection.

To take advantage of funding opportunities for acquisition and restoration actions, maintaining an active list of potential sites for immediate action is critical. This facilitates the securing of funds and advances non-regulatory implementation. Also, the establishment of complementary partnerships will greatly advance implementation. Setting up relationships which share resource information and technical skills, such as associations between local governments and land trusts, works to everyone's benefit.



Comprehensive Wetlands Protection Programs:

Recommendation #37: Each local government should develop and implement a comprehensive wetlands protection program which includes regulatory and non-regulatory components. Non-Regulatory Work Group

One of the benefits of non-regulatory efforts is that they can be combined with regulatory efforts to provide a more complete and comprehensive wetlands program. Given that non-regulatory efforts are voluntary and therefore more "use-friendly" than regulatory programs, non-regulatory incentives should be emphasized.

Local governments frequently ask for models to use when integrating their regulatory and non-regulatory wetlands programs. One model that local governments may choose to use is the Wetlands Program of the Puget Sound Water Quality Management Plan. This model combines regulatory program elements with the following non-regulatory elements:

1) Preservation
2) Restoration
3) Education

Local governments should integrate regulatory and non-regulatory elements in such a way as to avoid ecological fragmentation, maintain flexibility at the local level, have cost effective methods, and work with local growth management plans or interagency watershed planning efforts/teams.

Recommendation #38: Local governments should identify their non-regulatory goals in comprehensive management plans and maintain an up-to-date list of identified projects for immediate action when funds become available. Non-Regulatory Work Group

Recommendation #39: Agencies and local governments should take every opportunity to develop and promote public/private partnerships with non-profit organizations and citizens to advance acquisition and restoration actions, including the identification and management of sites. Non-Regulatory Work Group

4. Fostering Landowner Stewardship

Fostering stewardship applies to all landowners: government and private. At the government level, funds to acquire and manage resource lands and/or conflicting resource use mandates are the major limiting factors. Government management of resource lands does not necessarily protect sensitive features such as wetlands. Cross-agency technical assistance could help inform agencies of management actions that adversely affect wetlands.

To the private landowner, several areas seem to limit stewardship actions. First, landowners need more information about why wetlands are important and why they should be protecting them. Many landowners simply need to be given the information on how to protect their wetlands, with the technical assistance to make it happen. Often, landowners have a general distrust of government. Building ongoing working relationships within the community may increase receptivity to stewardship actions. Support for non-regulatory opportunities may also be achieved with the assistance of professional associations such as real estate and construction industries, agricultural and business groups, and the legal and planning professions. Lastly, funding for landowner compensation and/or long-term land management of private wetlands is a major limitation.

Recommendation #40: Agencies and local governments should provide education/information materials on non-regulatory options available to landowners. Government should also provide direct technical assistance to private landowners to advise them regarding preservation options (tools) and foster community relationships which promote stewardship.

Non-Regulatory Work Group

Agencies and local governments should work with existing groups within the community, such as the cooperative extension offices, conservation districts, local land trusts, and others to help provide technical expertise to private landowners. Professional and trade associations, such as real estate and construction industries, agricultural and business groups, etc., should be acquainted with stewardship options and called on to promote application of stewardship options by landowners.

Recommendation #41: Agencies should work with tribal governments to set up stewardship programs on tribal land that could serve as models.

Non-Regulatory Work Group

E. WETLANDS EDUCATION

While we have placed a great emphasis on regulation, we have made only modest investments in incentives and education. The regulatory process for wetlands can be frustrating to almost everyone, and even though steps are being taken toward improvement, regulations alone may never adequately protect wetlands. Education is a positive, non-regulatory approach to wetlands protection. It is proactive and preventive, and in the long term may give the highest return.

Education helps people understand the value of wetlands in their watersheds. It also empowers them to take actions that protect wetlands on their property or throughout their community. The value of education and training is usually well-understood and supported by most managers. Ironically, its worth is seldom matched by an adequate, dedicated investment of resources.

1. History and Current Status

Wetlands education efforts are not new in Washington, especially within the last five to ten years. Several state and federal agencies, local governments, local and regional interpretive centers, schools, and environmental groups have sponsored a variety of educational projects. Agencies and private organizations have created many educational resources for a variety of audiences; schools have participated in schoolground or community wetlands education projects; a teacher workshop program, *Discover WILD Wetlands,* has been presented to teachers throughout the state; local governments have sponsored community wetlands workshops; environmental organizations have offered materials and training encouraging citizen involvement in local wetlands issues; and business organizations have offered trainings to their peers on wetlands protection practices. There have been many successes, and it can safely be said that overall, there is a greater awareness about wetlands issues than there was 10 years ago.

It is also apparent, however, that a great deal of education and outreach is still needed.

- Wetlands continue to be destroyed and degraded, and to some extent, these losses can be attributed to a lack of understanding of wetland values, wetland regulations, best stewardship practices, or preservation options.

- While many programs or materials have been developed, they have often reached only a limited audience.

- Many areas of the state, especially rural areas, have not received much attention from educational programs.

- Several audiences have gained a very basic understanding of wetlands issues, but now need more specific, targeted information about regulations, non-regulatory options, best management practices.

- There is an ongoing demand for educational resources.

The educational needs in Washington have evolved and are more complex. More audiences need more information on a variety of different issues at a variety of different levels. While several agencies and organizations are involved, their efforts are often fragmented, duplicative, or focused on limited geographic regions. Today's challenge is to efficiently use existing resources, identify opportunities for generating new resources, and bring agencies and organizations together, and collaborate to address the educational needs of Washington State.

2. Identification of Target Audiences

The Education Work Group identified and evaluated target audiences to ensure successful implementation of the recommendations. The group recognized that because some audiences have a greater impact on the resource, it was important to focus efforts on the highest priority audiences. While developing the list was not difficult (thirty-seven audiences in all), assigning priorities took more time. In order to provide a more consistent evaluation of the audiences, the group developed a list of evaluation criteria to apply to each audience. The criteria were:

- Is the audience motivated to learn?
- Is the audience able to change their behavior?
- Is the audience located in a region with little information?
- Does the audience have a significant positive effect on wetlands?
- Is education to this audience supported politically by elected officials?
- Is there a multiplier effect from educating this audience?
- Will the effects of educating this audience continue over time?
- Does educating this audience have a long-term effect (years)?
- Does educating this audience have a short term effect (immediate)

After evaluating audience priorities, work group members developed a wetlands education matrix that identifies the high and medium priority audiences, who should be the lead educator for that audience, what the educational needs are of each audience, whom the lead educator should seek advice from when reaching out to the audience, and who most appropriately should develop the educational resources for the audience (Appendix F). The Interagency Wetlands Review Board and the Wetlands Education Group will promote the use of the Wetlands Education Matrix as a reference tool for agencies and organizations designing and implementing wetlands education efforts.

3. Coordination of Wetlands Education Programs

The long-term vision of the SWIS Education Work Group is to provide wetlands education within a watershed context. To achieve this, using wetlands education as a resource protection tool should be a priority for government agencies. The work group members acknowledged that numerous wetland education efforts currently exist throughout the state. However, these efforts would be more successful and have a greater impact on resource protection if they were well coordinated.

Recommendation #42: The Interagency Wetlands Review Board should establish a "Wetlands Education Group" to develop and implement collaborative wetland education strategies. The Department of Ecology should convene this group, which should include agencies, organizations, and citizens involved with wetlands education on a statewide basis. Education Work Group

This "Wetlands Education Group" will meet to facilitate, implement, and coordinate wetlands education efforts. The group will develop a wetland education strategy and present it to the IWRB annually. The group will continue to meet at least annually to evaluate past efforts and plan future efforts. The group should develop education strategies to build partnerships and encourage collaborative efforts to make the best use of funding resources. To ensure effective wetlands education, this coordination group shall:

- provide wetlands education on a watershed basis
- encourage and support peer education
- identify and promote wetlands success stories
- evaluate wetland education programs on a regular basis

Recommendation #43: Local education organizations (e.g. WSU Cooperative Extension, Conservation Districts and others) should convene a group of local education entities to coordinate and implement wetlands outreach efforts to individual communities and their associated watersheds. Education Work Group

4. Priority Issues

Adequate funding for Wetlands education needs to be provided for all the geographic regions of the state. Special consideration should be applied to geographic regions where past inequities exist (i.e., geographic areas outside of Puget Sound). Agencies should elevate the priority assigned to wetlands education. Agencies should also promote and enhance wetlands education efforts by providing adequate financial and staff support.

Recommendation #44: The Interagency Wetlands Review Board should support full funding of Water Quality Field Agents to provide wetlands and water quality education as laid out in Section EPI-2, 2.1 of the Puget Sound Water Quality Management Plan. The Board should pursue legislation to implement the goals of that project by allocating funding for the project on a statewide basis.
Education Work Group

Federal, state, tribal and local governments should build partnerships with private and non-profit organizations to provide wetlands education. Ecology shall contact agencies and organizations with existing funding programs and inform them of the recommendations of the State Wetlands Integration Strategy Education Work Group.

Recommendation #45: Wetlands systems that have not been an educational focus in the past (e.g., seasonal "dryland" wetlands and forested wetlands) should receive priority for education efforts. Education Work Group

The Interagency Wetlands Review Board should contact existing funding programs and inform them of the policies, priorities and recommendations of the State Wetlands Integration Strategy. The Wetlands Education Coordination Group should work to build partnerships and encourage collaborative efforts to make the best use of existing funding resources.

Recommendation #46: Ecology should work with other wetlands agencies and organizations to develop a directory on how to get information on wetlands (e.g., where to go to get information about funding for local projects, delineation training, regulations, research, publications and other educational resources, citizen involvement, etc.). Education Work Group

This directory could be used by agencies and organizations to help them direct calls. It could also be used by the general public, posted at libraries, and local planning offices. The directory should be updated annually and augmented locally.

Recommendation #47: Agencies should promote 1-800-424-4EPA (EPA hotline) for general information about wetlands. Agencies should provide appropriate information to the hotline. Education Work Group

SECTION III

DISCUSSION OF ADDITIONAL ISSUES

DISCUSSION OF ADDITIONAL ISSUES

The previous section of this document outlines the work group recommendations that were reached by consensus. However, the Regulatory Reform Work Group addressed several regulatory issues for which consensus was not reached. Some of these issues are described below, with an explanation of the different opinions expressed by work group members.

1. Lead Agency for Permit Review

One possible method for providing consistent, coordinated responses to project proponents during project review is to establish one state agency with lead responsibility for permit review. This would not involve a change in the legal authorities of each of the state agencies involved; rather, it would involve designation of a single agency as the lead contact and permit coordinator for the project. That lead agency would be responsible for coordinating the responses of all of the interested state agencies, working with the project proponent, other agencies, and other interested parties to resolve differences.

Some work group members suggested that one state agency should have lead agency responsibility for coordinating permit review. Those supporting this concept suggested that it apply to complex projects that affect resources managed by more than one state agency. Guidelines would need to be developed to clarify when a project should be handled with this approach and to determine the appropriate lead agency.

Other work group members believed that this proposal would be complicated to implement, given that it could be difficult for the designated lead agency to assume any responsibility for ensuring that the requirements of other agencies are met. Also, it was pointed out that agencies have limited resources with which to implement this proposal.

2. Section 404 Alternatives Analysis

Work group members discussed possible revisions to the alternatives analysis process under Section 404 of the Clean Water Act and involving local critical area ordinances. Two recommendations were proposed. One was agreed to by consensus (see earlier discussion on Corps' alternatives analysis guidance) while the second was not. This second proposal is explained below, with advantages and disadvantages, as discussed by the work group members.

Some work group members suggested that, for local jurisdictions that have completed comprehensive plans under the Growth Management Act, 404 alternatives analyses should be limited to a review of sites within the same comprehensive plan and zoning designations. If a permit is proposed for development within a particular land use zone, the alternatives analysis should be limited to other sites within that same zone. For example, if an applicant proposes a commercial development, the alternatives analysis should only consider other commercially zoned lands.

Supporters of this proposal asserted that local governments that have undergone the GMA comprehensive planning process have identified areas that are appropriate for commercial, industrial or residential development and have adopted critical areas ordinances which are intended to protect wetlands. They maintained that local land use designations should therefore provide the context for the 404 alternatives analysis. The applicant should not be expected to conduct an analysis of sites outside the subject zone under the assumption that he/she could get a comprehensive plan amendment and/or a rezone. All other requirements of the 404(b)(1) guidelines must be fulfilled including mitigation sequencing and adequate compensatory mitigation.

This approach to the alternatives analysis requires effective advance planning at the local level. The local government has to have an accurate inventory of existing wetland resources and a sufficient buildable lands inventory. Work group members stressed that although some local governments have progressive wetlands programs that could support this streamlined alternatives analysis, many do not.

Many work group members believed that a limited alternatives analysis would only be acceptable if local governments were required to first meet some standards acceptable to state and federal agencies. It was stated that for large, regional permit proposals, the alternatives analysis should always include a review of alternative sites in a large geographic area. Some also stated that a statewide wetlands inventory should be developed before a streamlined alternatives analysis is considered.

Some members stated that federal permits, such as General Permits and Letters of Permission, could be used to clarify when and how current alternatives analyses could be modified. Work group members also acknowledged that wetland functions should be the cornerstone of the alternatives analysis and that functional assessments would need to be conducted to distinguish certain wetlands appropriate for a streamlined alternatives analysis from those warranting more thorough evaluation. However, some people stated that there is not yet a full understanding of physical and biological functions that particular wetlands provide. Until this scientific documentation is provided, several work group members were uncomfortable with limiting the alternatives analysis. Other work group members pointed out that affected wetlands would still receive protection, given that mitigation sequencing and compensatory mitigation still apply.

3. General Permit Issued to the State

General Permits were described earlier in this document and a recommendation presented that supports issuance of General Permits to local governments, provided they meet certain conditions. The Corps of Engineers would prefer to issue one General Permit to the state, rather than issue General Permits to a number of local governments. It is obviously easier to go through the General Permit process only once, rather than many times, with each being somewhat different.

However, before the Corps can issue a General Permit to the State of Washington, the state must first develop standards and a process for regulating wetlands. Having state standards that the Corps has endorsed could also benefit local governments that wish to be issued a General Permit; it would make it easier for the Corps to allow local governments to make individual permit decisions and would reduce the conflicts among these three levels of government.

Some work group members thought that if state wetlands standards and process are developed and adopted, the state should apply for a General Permit for specific activities or areas within the state. Others were uncomfortable with the state receiving a General Permit because they believed that it might undermine Washington's policy of supporting local government planning decisions.

4. Nationwide General Permit #26

Work group members generally agreed that regulatory attention and energy should first be focused on the wetland resources of greatest functional significance. To do this, the level of wetland regulation should be based on wetland functions. This means that more functional wetlands should receive greater protection.

Proposal Suggested by Some Work Group Members

Nationwide Permit 26, authorized under the Clean Water Act, pertains to wetlands that are above the headwaters of a river or stream (less than 5 cfs average annual flow), or are isolated. Most activities in these wetlands are not subject to the rigorous 404 individual permit process. Instead, for wetlands that meet the Nationwide Permit 26 criteria, up to one acre of fill is allowed without pre-notification to the Corps and generally without mitigation.

Some Regulatory Reform work group members believe that Nationwide Permit 26 is based on assumptions about wetland functions which have not been adequately tested and which frequently appear to conflict with what we know about wetland functions in Washington. They think that, while development proposals affecting some less functional wetlands are subjected to a time-consuming and expensive permitting process, up to one acre of some highly functional wetlands can be filled with no mitigation.

In recognition of the problems described above, these work group members suggested revising Nationwide Permit 26 to eliminate the distinction between adjacent, isolated, and above-the-headwaters wetlands, and to base the level of regulation applied to individual wetlands on the functions of the wetlands. Obviously, this approach requires agreement on which wetlands are the most functional and requires that mitigation conditions be based on wetland functions.

Specific Elements of the Proposal

- Apply Nationwide Permit 26 to all wetlands by eliminating the present distinctions between adjacent, isolated and above-the-headwaters. Impacts (filling, dredging, draining, etc.) up to 1/4 acre of wetlands would be allowed without mitigation. This change would not affect the requirement to comply with the state Hydraulic Code and mitigate for impacts to fish life.

- Impacts of 1/4 to 2 acre(s) of wetlands would require mitigation. (High quality wetlands would require an individual permit.) Wetlands mitigation would begin with minimization, etc. except mitigation for low quality wetlands would begin with compensation.

- The level of regulation should be based on wetlands functions. Impacts to certain types of highly functional wetlands and impacts over 2 acres would require an individual permit.

- Significant or threatened wetland types, such as estuarine wetlands, peat bogs and wetlands contiguous to lakes and streams should be protected from any fill, no matter how small. These protected systems should be clearly defined to make identification consistent and predictable.

Advantages

- This approach would hopefully provide greater protection to more functional wetlands and it would streamline the process for projects affecting less functional wetlands.

- If this permitting method were adopted by a local government under a General Permit, Ecology and the Corps of Engineers would be able to reduce their involvement in the local permitting process.

- In all cases, local jurisdictions would retain the ability to be more restrictive and require greater protection of the resource.

Disadvantages

- Some work group members opposed this proposal, fearing that basing the level of protection on wetland functions would lead to less wetland protection and greater loss of wetland acreage.

- Many wetlands adjacent to lakes and streams are important to fish life. If this proposal is adopted, 1/4 acre of these adjacent wetlands might be filled without a Corps' permit.

- Funding and staffing are necessary to ensure that the Corps can maintain a computer data system to track wetland losses and accurately address cumulative wetlands impacts under Nationwide Permit 26.

Work group members who supported this proposal agreed that a detailed proposal for regionally conditioning Nationwide Permit 26 should be developed with the assistance of an integrated work group representing federal and state agencies, local governments, development interests, environmental constituents, agricultural interests and other interested parties.

In late 1994, the U.S. Army Corps of Engineers plans to revise Nationwide Permit 26. Several work group members believe that the Nationwide Permit 26 provisions for the State of Washington should be consistent with the national standards. For example, if the national standard establishes that the size limit over which a wetland would be regulated is 1/4 acre, then many work group members believe that Washington's standard should also be 1/4 acre. Likewise, if the national standard is revised to require an individual permit for projects above 3 acres (for example), then many work group members believe this limit should also be applied in Washington (rather than the current 2 acre limit).

5. Letters of Permission

Letters of Permission (LOPs), authorized under Section 404 of the Clean Water Act, are another alternative to an individual permit for authorization of wetland fills. Letters of Permission are:

> "... a type of permit issued through an abbreviated processing procedure which includes coordination with Federal and state fish and wildlife agencies, ... and a public interest evaluation, but without the publishing of an individual public notice." (33 CFR 325.2(e)(1))

Section 404 LOPs may be issued to tribal, state, or local governments or individuals. Once issued, they allow the Corps to authorize that certain activities can occur without having to go through the federal permitting process. Section 404 LOPs have not been widely used by the Corps, thus it is difficult to evaluate their potential utility in terms of regulatory reform.

Possible LOP Process

A few local governments in the State of Oregon are currently working with the Corps to use LOPs for projects complying with their local wetlands plans. If these are approved, the local governments would know in advance the conditions that would be required of proposed projects within the plan area. The LOP process proposed in Oregon - combining the federal requirements and the local planning process - is provided below:

1. The District Engineer of the Corps of Engineers, after coordinating with the Environmental Protection Agency and other agencies, develops a list of categories of activities proposed for authorization under the LOP procedures.

2. The Corps and EPA review the local plan to determine that the requirements of Section 404(b)(1) of the Clean Water Act have been met in the process of developing and adopting the local plan. Specifically, the Corps and EPA will review the plan to ensure that before wetlands were designated for fill, the following requirements were completed or developed:

    - an alternatives analysis
    - a wetlands inventory
    - the avoidance test
    - a plan for compensatory mitigation

3. The local government adopts a local permitting process that is reviewed and approved by the Corps.

4. The Corps develops an "abbreviated permit process" that it will apply to permit applications within the plan area. When the Corps reviews a permit under this process, staff will look at only a limited set of issues (minimization and compensatory mitigation), rather than the normal permit criteria. The alternatives analysis will be presumed satisfied once the Corps and EPA approve the plan.

5. A landowner applies for a permit. When this occurs:

    - The city applies its process.
    - If the city approves the permit, the application is sent to the Corps.
    - The Corps sends notice to federal, state and local agencies, interested groups and individuals.
    - There is a fifteen-day comment period.
    - The Corps issues or denies the LOP for the specific project.

A primary difference between General Permits and LOPs: A General Permit is issued *when the wetland plan is approved by the Corps and EPA* as complying with the General Permit requirements. An LOP is not issued until later, *when a specific project is approved* as complying with standards established in advance.

6. Special Area Management Plans

Special Area Management Plans (SAMPS) provide another method for potentially limiting impacts on wetlands through initial identification and planning. This technique goes beyond advanced identification by focusing on the development of a specific wetland management plan for a particular geographic area. The human resources and overall expenses involved in developing a SAMP render it impractical for most jurisdictions within the state. This tool also was determined to have limited value in the context of regulatory reform.

7. Additional Enforcement Issues

Enforcement Education

Enforcement is one tool to help educate the public and possible violators about requirements of the law and to encourage compliance. The primary goal of education is to prevent violations; the primary goal of compliance enforcement is to restore damaged wetland resources and/or to impose penalties.

Some work group members believed that an effective enforcement outreach strategy would include:

- speaking at workshops and conferences
- using media to publicize flagrant violations
- communicating with contractors and local government officials about legal requirements
- explaining the economic and legal consequences of non-compliance

As part of an outreach effort, some members of the work group believed that agencies should provide training to the staff of other agencies and the regulated public on regulatory requirements, enforcement techniques, and wetland delineation and assessment methodologies. Most members, recognizing that long term public education will decrease the number of wetland violations, believed that state and federal agencies, in cooperation with local governments, should develop an enforcement outreach strategy and an enforcement manual. Work group members also stressed that non-regulatory incentives should be emphasized, given that they are voluntary and are therefore a more comfortable approach for landowners.

Enforcement Priorities

Most members of the work group agreed that all levels of government should place a high priority on enforcement and fund staff sufficient to conduct a meaningful and credible enforcement effort. Even with additional staff and funding, agencies will need to set enforcement priorities.

Most work group members agreed that protecting the *most significant* wetlands was the top priority. Accordingly, they believe that enforcement and education efforts should be focussed on geographic areas where high quality, significant wetlands are being lost. These significant wetlands should be identified using such factors as size, classification, and function. However, members also recognized the utility of occasionally focusing enforcement efforts in areas where *numerous violations* have occurred or areas where there are high visibility projects, even if the impacted wetlands are not biologically the most significant. This would discourage additional violations and help stem cumulative wetland impacts.

Many work group members also believed that agencies should actively explore the use of contractor surety bonds and federal debarment (precluding such a contractor from being awarded contracts from federal agencies), where appropriate.

SECTION IV

SWIS IMPLEMENTATION CHART

SWIS IMPLEMENTATION CHART

The SWIS Implementation Chart (pages 72-80) provides a brief outline explaining how each of the 47 SWIS recommendations will be implemented. This chart is organized according to the chapter headings provided in Section II and contains the following four columns:

- **"RECOMMENDATION":** Presents each of the SWIS recommendations in the order in which they appear in the body of this document.
- **"PG":** Lists the page where the recommendation is presented and described in the body of this document.
- **"IMPLEMENTATION":** Lists the party which must implement each recommendation and briefly describes the action they must take. "IWRB" stands for the Interagency Wetlands Review Board and includes the departments of Agriculture; Community, Trade & Economic Development; Ecology; Fish & Wildlife; Natural Resources; Transportation; as well as the Puget Sound Water Quality Authority; Washington Association of Counties; Association of Washington Cities; and the Washington State Conservation Commission.
- **"TIMELINE":** Describes whether the recommendation will be implemented in the short-term or long-term, or as an on-going project.

The Interagency Wetlands Review Board is using this chart as guidance as they develop detailed strategies for implementing each SWIS recommendation.

A. STATE WETLANDS POLICY

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#1: The state agencies should develop a comprehensive and consistent statement of the state's interests in wetlands. This statement should be based on the wetlands mandates and policies of the Departments of Agriculture; Community, Trade and Economic Development; Ecology; Fish and Wildlife; Natural Resources; Transportation; and the Puget Sound Water Quality Authority.	11	***IWRB*** should develop wetlands policy statement.	***Short-term*** - start immediately - should take a few months
#2: In the long-term, wetlands planning should be conducted within a watershed context. When local governments amend their comprehensive plans and development regulations, they should work to integrate the different plan elements by using a watershed approach.	12	***Local governments*** should consider this recommendation as they amend and develop comprehensive plans and development regulations.	***On-going*** - will probably take several years to fully implement
#3: State and federal wetland programs should be organized by geographic regions, comprised of watersheds, to provide better assistance to the public and improve resource protection. Staff from different state and federal agencies should form interagency teams within each geographic region to facilitate interagency coordination and to work more effectively with the public.	13	***IWRB*** should work with ***Watershed Coordinating Council*** to implement.	***Short-term*** - agency staff should be re-organized as soon as possible
#4: To ensure better wetlands protection through watershed-based planning, state, federal, tribal and local governments, in coordination with the public, should establish the boundaries of watershed units to be used consistently across the state.	13	***Watershed Coordinating Council*** should establish watershed units and boundaries.	***Short-term*** - do immediately.
#5: All laws and levels of government in Washington should adopt and use a single regulatory definition of wetlands.	14	***IWRB*** should work to amend appropriate laws. ***Local governments*** should adopt the GMA definition locally.	***Long-term*** - amend state law in 1995 - will take a few years for all locals to implement

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#6: The Shoreline Management Act definition of "wetlands" should be amended to be the same as the definition in the Growth Management Act.	15	***Ecology*** should propose executive request legislation for the 1995 Legislative Session.	***Short-term*** - during 1995 legislative session.
#7: When local governments adopt a definition of "wetlands," they should be required to adopt the definition contained in the Growth Management Act.	15	***DCTED*** should amend the appropriate WAC section.	***Short-term*** - immediately after 1995 legislative session
#8: All federal, state, and local agencies, and tribal governments should use a single wetland delineation manual, based on valid scientific methodology.	16	***IWRB*** should address.	***Long-term*** - end of 1995 (following completion of NAS study)
#9: The state should establish a permanent interagency wetlands technical committee. This committee should include representatives from the public; tribal and local governments; federal agencies as appropriate; and the state departments of Ecology; Fish and Wildlife; Natural Resources; Transportation; and Community, Trade, and Economic Development.	16	***IWRB*** should establish and assign staff to Wetlands Technical Committee.	***Short-term*** - Meetings to begin in May 1995
#10: The wetlands technical committee should adopt uniform methods for functional assessments. These assessment methods should be calibrated to reflect regional variability among watersheds within the state. These methods should then be adopted as standards under the Growth Management Act as described in Recommendations #17 and #18.	17	***Wetlands Technical Committee*** should work with local governments to implement.	***Long-term*** - start in February 1995 - will take at least a year
#11: The wetlands technical committee should establish a specific protocol for determining minimum thresholds for cumulative impacts on wetlands. These minimum thresholds should be developed and applied on a watershed basis.	18	***Wetlands Technical Committee*** should develop.	***Long-term*** - start in July 1995 - will take at least a year

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#12: The Governor should establish and fund a coordinated state program to manage natural resource wetland information at appropriate scales of resolution on a watershed basis. This program should include a Geographic Information System (GIS) format that would be compatible among all state agencies, and to the extent possible, applicable federal agencies.	19	The ***Governor*** should collaborate with ***Watershed Coordinating Council*** and ***IWRB*** to implement.	***On-going*** - start immediately - updated periodically
#13: The Governor should appoint an interagency task force to work with the general public and local, state, tribal, and federal governments to develop protocols for collecting, managing, and disseminating technical information in a watershed context.	19	The ***Governor*** should collaborate with ***Watershed Coordinating Council*** and ***IWRB*** to implement.	***Long-term*** - Governor should appoint immediately - protocol development will take about six months
#14: The state should establish and fund a wetlands tracking protocol for tribal, local, state, and federal jurisdictions. This system should include a reporting requirement for permits that are approved.	20	***IWRB*** should implement.	***On-going*** - start immediately - updated periodically
#15: Ecology should compile and evaluate information concerning existing voluntary restoration and compensatory mitigation projects to determine project successes. This information should then be used to direct future practices.	21	***Ecology*** should implement.	***Long-term*** - will take several months
#16: Ecology and EPA should form an interagency committee to develop a proposal for a system of wetland reference sites, monitoring strategies, and mechanisms for funding site acquisition, long-term monitoring, and directed research.	21	***EPA*** and ***Ecology*** should implement.	***Long-term*** - start in July 1995 - will take at least a year

B. WETLANDS PLANNING PROCESS

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#17: Standards for wetlands inventory and functional assessment should be jointly developed by local governments, state agencies, and the public. The Growth Management Act should be amended to include authority to adopt these standards by administrative rule.	22	***IWRB*** and ***local governments*** should coordinate with the ***public*** to implement.	***Long-term*** - technical work - 1995 - adopt administratively-1996
#18: The standards described in the previous recommendation should initially be developed for a specific area of the state, as a pilot project. Once a successful pilot is completed, regionally-specific standards should then be developed for other regions in the state and adopted as state law.	22	***Wetlands Technical Committee*** should work with ***local government*** pilot project.	***Long-term*** - technical work - 1995 - adopt administratively-1996
#19: Local governments should not use State Environmental Policy Act ordinances as final wetlands critical areas ordinances.	22	***Local governments*** should consider this recommendation as they develop final critical areas ordinances.	***On-going*** - local governments should begin immediately
#20: State and federal agencies should collaborate with local governments to provide technical assistance and to identify and obtain funds to support local wetlands planning.	23	***IWRB***, the ***Corps of Engineers*** and ***EPA*** should implement.	***On-going*** - begin in spring of 1995
#21: State agencies should make it a higher priority to provide coordinated and timely input into local planning processes. When assistance is appropriate, it should be provided promptly and presented in a clear format.	23	***IWRB*** should ensure that GMA work is a high priority.	***On-going*** - should begin following 1995 legislative session
#22: A study should be funded to analyze and provide mechanisms for estimating the economic value of preserving and losing wetlands in the State of Washington. It should specify techniques for determining the economic value of each of the following wetlands benefits: flood and stormwater control, fish and wildlife habitat, water quality maintenance, groundwater recharge, prevention of soil erosion, commercial production in wetlands, and recreation. The study should also specify techniques for estimating a monetary value for these wetlands benefits that are difficult, if not impossible, to quantify: cultural and spiritual values, aesthetics, education and research, and endangered species.	29	***IWRB*** should obtain funding for economics report.	***Long-term*** - start once funding is obtained - will probably take one year

C. WETLANDS PERMITTING PROCESS

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#23: State and federal agencies, with public participation, should jointly draft guidelines for conducting wetland mitigation.	32	***Wetlands Technical Committee*** should implement with ***public*** input.	***Long-term*** - start immediately - will take several months
#24: Bring all state and federal agencies with wetlands permitting or commenting authority together on a regular basis, perhaps monthly, to discuss permit applications. This interagency group will review selected wetland proposals to provide consistent and timely responses. Permit applicants will be invited as participants to these meetings.	33	***IWRB*** member agencies and ***federal agencies*** should meet monthly to discuss permit applications.	***On-going*** - start immediately - will be a permanent, regular meeting
#25: The Department of Ecology, with broad-based public involvement, should adopt water quality standards that are specific to wetlands in the 1994 surface water quality standards triennial review process. The standards should identify various wetland types in the state, beneficial uses of the state's wetlands, and chemical, physical, and biological criteria to support these beneficial uses.	35	***Ecology*** should implement through triennial review.	***On-going*** - start immediately - administrative adoption in 1996
#26: A proposal for a General Permit should be completed by a local government on a pilot basis, and funded by the State Wetlands Integration Strategy (SWIS). The conditions for this General Permit should be developed jointly by the local government, state and federal agencies, and the public, including members of the regulated and environmental communities. These should include, at a minimum, the "recommended conditions for issuance of a General Permit" specified in the final SWIS report.	38	***Camas, Everett, Clallam County*** and/or ***Whatcom County*** (SWIS pilot project grant recipients) should complete proposals to the ***Corps of Engineers*** for a Programmatic General Permit.	***Long-term*** - start in Feb. 1995 - will probably take several months
#27: The U.S. Army Corps of Engineers should clarify how existing alternatives analysis guidance may be better applied in Washington and better coordinated with the Growth Management Act.	40	***Corps of Engineers*** should implement.	***Long-term*** - start in early 1995 - will probably take several months

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#28: Interlocal agreements authorized by Chapter 39.34 RCW should be developed with appropriate public input by the State Wetlands Integration Strategy (SWIS) pilot projects to demonstrate their effectiveness at eliminating regulatory overlap between federal, state, and local agencies; to achieve joint use of available technical resources; and to foster cooperation among the agencies regarding the development of local or watershed-based wetlands regulatory programs.	41	***Camas, Everett, Clallam County*** and/or ***Whatcom County*** (SWIS pilot project grant recipients) should implement.	***Near-term*** - start in Jan. 1995 - will probably take two or three months
#29: Enforcement actions involving wetlands violations should be conducted with adherence to the following: • *In most cases, voluntary restoration should be preferred to monetary penalties and court action; and* • *In addition to restoration being required, knowing, repeat or flagrant violators should receive monetary penalties and should be taken to court.*	42	***Corps of Engineers*** should implement. ***Local governments*** should consider.	***On-going*** - start immediately - incorporate into routine enforcement actions
#30: Revenues derived from monetary penalties should be used directly to restore and protect wetlands, rather than reverting to the U.S. treasury or the state general fund. If this recommendation cannot be achieved under current law or administrative policy, legislation should be developed to allow this use of monetary penalties. Further, agencies and programs should be identified as recipients of the monetary funds for restoration of wetlands.	43	***IWRB*** should work with appropriate federal and state agencies to implement.	***Long-term*** - start in July 1995 - may take several months
#31: A lead agency should be designated to coordinate information concerning violations of various statutes, where feasible.	43	***IWRB*** should coordinate with ***EPA***, ***Corps of Engineers***, and ***local governments***.	***On-going*** - start in August 1995 - on-going coordination
#32: The Interagency Wetlands Review Board, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and the U.S. Fish and Wildlife Service should work with state and local government resource and regulatory agencies and the public to develop a statewide protocol for mitigation banking. This effort should establish the criteria for success of mitigation banks and specify monitoring provisions.	45	***Wetlands Technical Committee*** will take the lead in developing the protocol. ***IWRB*** will then work with appropriate federal and state agencies to implement.	***Long-term*** - start in July 1995 - will take at least one year

D. NON-REGULATORY INCENTIVES

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#33: When interest is expressed by local governments, tribal governments, conservation districts, or other community players, state and federal agency staff shall provide assistance in the form of technical documents/information, financial support (through existing grant programs), and staff expertise. Agency staff shall work in partnership with the community to tailor their activities to local conditions and needs.	49	***Ecology*** and ***EPA*** should provide assistance when requested by the public.	***On-going*** - will depend upon requests received by the public
#34: The Interagency Wetlands Review Board (IWRB) member agencies should reallocate internal agency staff to address non-regulatory wetlands protection efforts. The link with regulatory programs should be clearly made to facilitate integrating resources from existing programs as appropriate.	49	***IWRB*** should ensure that non-regulatory efforts are a high priority.	***On-going*** - start immediately - will take several months
#35: The Interagency Wetlands Review Board (IWRB) and federal agencies represented on the State Wetlands Integration Strategy (SWIS) should commit resource support (in the form of grant funding and staff) to non-regulatory wetlands efforts. Designated staff should be assigned to provide assistance to local communities. For some issues, such as wetlands restoration (i.e. program implementation of Puget Sound Plan element W-8 and statewide restoration efforts), agency technical assistance should involve an interdisciplinary team, such as the Cooperative River Basin Team (a five member team working on non-point source issues in the watersheds of the Puget Sound).	50	***IWRB*** and ***federal agencies*** should implement. Linked to recommendation #34.	***On-going*** - address funding in conjunction with recommendation #34
#36: Ecology should act as lead to the coordinated effort of the appropriate federal and state agencies to address local community needs involving non-regulatory incentives.	50	***Ecology*** should implement.	***On-going*** - address in conjunction with recommendations #34 & #35

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#37: Each local government should develop and implement a comprehensive wetlands protection program which includes regulatory and non-regulatory components.	53	***Local governments*** should consider this recommendation when developing a wetlands protection program.	***Long-term*** - will take time for all local governments to implement
#38: Local governments should identify their non-regulatory goals in comprehensive management plans and maintain an up-to-date list of identified projects for immediate action when funds become available.	53	***Local governments*** should consider this recommendation when developing a wetlands protection program.	***On-going*** - local governments should address when amending local wetlands programs
#39: Agencies and local governments should take every opportunity to develop and promote public/private partnerships with non-profit organizations and citizens to advance acquisition and restoration actions, including the identification and management of sites.	53	***State, federal, and local governments*** should work with the public to implement.	***On-going*** - address as specific opportunities arise
#40: Agencies and local governments should provide education/information materials on non-regulatory options available to landowners. Government should also provide direct technical assistance to private landowners to advise them regarding preservation options (tools) and foster community relationships which promote stewardship.	54	***Ecology*** should implement. ***Local governments*** should consider.	***On-going*** - develop materials by the end of 1995 - distribute on an on-going basis
#41: Agencies should work with tribal governments to set up stewardship programs on tribal land that could serve as models.	54	***Ecology*** and ***EPA*** should work with tribes to implement.	***On-going*** - begin in summer of 1995

E. WETLANDS EDUCATION

RECOMMENDATION	PG	IMPLEMENTATION	TIMELINE
#42: The Interagency Wetlands Review Board should establish a "Wetlands Education Group" to develop and implement collaborative wetland education strategies. The Department of Ecology should convene this group, which should include agencies, organizations, and citizens involved with wetlands education on a statewide basis.	57	***IWRB*** should establish a "Wetlands Education Group" to develop wetland education strategies.	***On-going*** - establish committee in August 1995 - group should meet at least once a year
#43: Local education organizations (e.g. WSU Cooperative Extension, Conservation Districts and others) should convene a group of local education entities to coordinate and implement wetlands outreach efforts to individual communities and their associated watersheds.	57	***Local education organizations*** should implement.	***On-going*** - committee should be established in late 1995 - will meet periodically
#44: The Interagency Wetlands Review Board should support full funding of Water Quality Field Agents to provide wetlands and water quality education as laid out in Section EPI-2, 2.1 of the Puget Sound Water Quality Management Plan. The Board should pursue legislation to implement the goals of that project by allocating funding for the project on a statewide basis.	58	***IWRB*** should support legislation to provide funding.	***Short-term*** - pursue during 1995 legislative session
#45: Wetlands systems that have not been an educational focus in the past (e.g., seasonal "dryland" wetlands and forested wetlands) should receive priority for education efforts.	58	***Wetlands Education Group*** should implement.	***On-going*** - committee should address in August 1995
#46: Ecology should work with other wetlands agencies and organizations to develop a directory on how to get information on wetlands (e.g., where to go to get information about funding for local projects, delineation training, regulations, research, publications and other educational resources, citizen involvement, etc.).	58	***Wetlands Education Group*** should implement.	***Short-term*** - develop directory by the end of 1995
#47: Agencies should promote 1-800-424-4EPA (EPA hotline) for general information about wetlands. Agencies should provide appropriate information to the hotline.	58	***Wetlands Education Group*** should implement.	***On-going*** - should begin immediately

SECTION V

APPENDICES

SWIS PARTICIPANTS

The State Wetlands Integration Strategy participants are listed on the following pages. The organizations and agencies involved in the SWIS process are listed on pages 83 and 84. Beginning on page 85, the individual members of each of the six work groups are listed.

As described earlier in this document, the participants of each of the six work groups developed recommendations addressing their specific wetlands topic. These recommendations were then integrated into the single SWIS report.

Following completion of the integrated document, work group members were asked to sign a "statement of support" for the final SWIS recommendations. To receive an updated list of those work group participants who have indicated support, please contact the Department of Ecology. Please note that not every individual or organization involved in the SWIS project supports the integrated SWIS report.

ORGANIZATIONS AND AGENCIES INVOLVED IN THE STATE WETLANDS INTEGRATION STRATEGY

AGENCIES

U.S. Environmental Protection Agency
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
U.S. National Marine Fisheries Service
U.S. Natural Resource Conservation Service
National Oceanic and Atmospheric Administration
Washington Interagency Wetlands Review Board
Washington Department of Ecology
Washington Department of Community, Trade and Economic Development
Washington Department of Fish & Wildlife
Washington Department of Agriculture
Washington Department of Transportation
Washington Department of Natural Resources
Puget Sound Water Quality Authority
Washington State Office of Financial Management
Washington State Parks and Recreation Commission

AGRICULTURAL INTERESTS

Washington State Farm Bureau
Washington State Water Resources Association
Washington Cattlemen's Association
Cranberry Growers Alliance
Washington State Conservation Commission
Washington State University Cooperative Extension Service

BUSINESS/DEVELOPMENT

Association of Washington Business
Washington Association of Realtors
Washington Public Ports Association
WA Public Utilities District Association
Building Industry Association of Washington
National Association of Industrial Office Parks
King County Economic Development Council
Sheldon and Associates
Huckell/Weinman Associates Inc.
Shapiro and Associates, Inc.
Parametrix, Inc.
Schwabe, Williamson, Ferguson & Burdell
Ater, Wynne, Hewitt, Dodson & Skerritt

ORGANIZATIONS AND AGENCIES INVOLVED IN THE STATE WETLANDS INTEGRATION STRATEGY continued

ENVIRONMENTAL ORGANIZATIONS

Washington Wetlands Network; Seattle Audubon Society (WETNET)
Washington Environmental Council
People for Puget Sound
Trout Unlimited
1000 Friends of Washington
Sierra Club
National Audubon Society
League of Women Voters
Commencement Bay Cleanup Action Committee
Trust for Public Lands
Northwest Land Trust Alliance
Pacific Coast Joint Venture
Washington Forest Protection Association

LOCAL GOVERNMENT

Adams County Planning Department
Association of Washington Cities
City of Bellevue Planning Department
City of Bellingham
City of Everett Planning Department
Clallam County Planning Department
King County Surface Water Management
Mason County Tax Assessor
Thurston County Conservation District
Washington Association of Counties
Washington State Association of County Planning Directors
Washington State Association of City Planning Directors

TRIBES AND TRIBAL INTEREST GROUPS

Point No Point Treaty Council
Northwest Indian Fisheries Commission
S'Klallam Indian Tribe
Tulalip Indian Tribe
Muckleshoot Indian Tribe

REGULATORY REFORM WORK GROUP	
REPRESENTATIVE	**AFFILIATION**
James Trull	Washington State Water Resources Association
Mike Yeager	WA Forest Protection Association
Jeanne Dickman	WA State Water Resources Association
Janie Rose	Washington Cattlemen's Association
Alison Moss	Association of Washington Business
Don Marcy	National Assoc. of Industrial Office Parks
Dyanne Sheldon	Sheldon and Associates
Tom Pors	Econ. Dev. Council of Seattle and King County
Jan Teague/Bill Hewitt	Building Industry Association of Washington
Jeff Parsons	National Audubon Society
Dee Arntz	Washington Environmental Council
Don Schluter	Trout Unlimited
Naki Stevens	People For Puget Sound
Dan Wood	The Umbrella Group
Bobbie Moore	Citizen
Jamie Hartley	Citizen
Ann Aagaard/Wendy Snitzer	League of Women Voters
Dave Stalheim	Clallam County Planning Department
Kathleen Collins	Association of Washington Cities
Eric Johnson	Washington Public Ports Association
Don Haring	Department of Fish and Wildlife
David Stevens	Department of Transportation
Kimberly Ordon	Tulalip Indian Tribe
Chantal Stevens	Muckleshoot Indian Tribe
Tom Mueller/Ann Uhrich	U.S. Army Corps of Engineers
Dennis Carlson	U.S. Fish and Wildlife Service
Gary Voerman	U.S. Environmental Protection Agency
Andy McMillan	Department of Ecology

ECONOMICS WORK GROUP	
REPRESENTATIVE	**AFFILIATION**
Ray Poe	Washington State Farm Bureau
Paul Frazier	WA State Water Resources Association
Dick McCann	Association of Washington Business
Earlene Powell	Washington Association of Realtors
Tracy Burrows	1000 Friends of Washington
Dr. Gardiner Brown	Seattle Audubon Society
Brian Long	Citizen
John Kounts	WA Public Utilities District Association
Patsy Martin	Washington Public Ports Association
Joel Freudenthal	Clallam County
Darryl Cleveland	Mason County Tax Assessor
Jay Ford/Barb Aberle	Department of Transportation
Erik Stockdale	Department of Ecology
Joe Simmonds	Department of Revenue
David Simmonds	Department of Natural Resources
John Carleton	Department of Fish and Wildlife
Steve Moddemeyer	S'Klallam Indian Tribe
Merri Martz	U.S. Army Corps of Engineers
Erik Stockdale	Department of Ecology

EDUCATION WORK GROUP	
REPRESENTATIVE	**AFFILIATION**
Peter Stemberg	Washington State Farm Bureau
Earlene Powell	Washington Association of Realtors
Christi Norman	Seattle Audubon
Easy	Citizen
Peter Haller	Ater, Wynne, Hewitt, Dodson & Skerritt
Donna Simmons	League of Women Voters
Debbie Cornell	King County Surface Water Management
Bob Simmons	WSU Cooperative Ext. - Mason County
Troy Colley	Thurston County Conservation District
Nancy Hansen	City of Bellevue Planning Department
Rita Robison	Dept. of Community, Trade & Economic Dev.
Kathy Kunz	U.S. Army Corps of Engineers
Nancy Gloman	U.S. Fish and Wildlife Service
Susan Handley	U.S. Environmental Protection Agency
Linda Maxson	National Oceanic and Atmospheric Admin.
Brian Lynn	Department of Ecology

PLANNING WORK GROUP	
REPRESENTATIVE	**AFFILIATION**
Don Jacobs	Washington State Farm Bureau
Robert Quinby	Cranberry Growers Alliance
Steve Meyer	Washington Conservation Commission
Kittie Ford	Parametrix, Inc.
Richard Weinman	Huckell, Weinman and Associates
John Thompson	Econ. Dev. Council of Cowlitz County
Tracy Burrows	1000 Friends of Washington
Jeff Parsons	National Audubon Society
Don Schluter	Trout Unlimited
Joe La Tourrette	Pacific Coast Joint Venture
Lucy Copass	League of Women Voters
James Zess	Citizen
Dick Gilmur	Commencement Bay Cleanup Action Committee
John Kounts	WA Public Utility Districts Asscociation
Paul Roberts/Steve Stanley	City of Everett Planning Department
Dee Caputo	Adams County Planning Department
Dennis Gregoire	Port of Everett
Steve Wells	Dept. of Community, Trade & Economic Dev.
Steve Keller	Department of Fish and Wildlife
David Jamison	Department of Natural Resources
Debbie Knaub	U.S. Army Corps of Engineers
Bill Riley	U.S. Environmental Protection Agency
Peggy Clifford	Department of Ecology

NON-REGULATORY WORK GROUP	
REPRESENTATIVE	**AFFILIATION**
Jaclyn Reid	Washington Assoc. of Conservation Districts
Eleanor Camenzind	Washington Cattlemen's Association
Fred Waitman	Washington State Farm Bureau
Robert Quinby	Cranberry Growers Alliance
Earlene Powell	Washington Association of Realtors
Richard Weinman	Huckell/Weinman Associates
Chuck Wolfe	Schwabe, Williamson, Ferguson & Burdell
Tom Haensly	Association of Washington Business
Eleanore Baxendale	1000 Friends of Washington
Joe La Tourrette	Pacific Coast Joint Venture
Betty Tabbutt	League of Women Voters
Pat Crandall	Citizen
Dick Coon	Citizen
Nancy Hansen	City of Bellevue Planning Department
Mike Ramsey	Parks and Recreation Commission
Ginny Broadhurst	Puget Sound Water Quality Authority
Don Haring	Department of Fish and Wildlife
Chantal Stevens	Muckleshoot Indian Tribe
Pat Cagney	U.S. Army Corps of Engineers
Chuck Natsuhara	U.S. Natural Resource Conservation Service
Fred Weinman/Mike Rylko	U.S. Environmental Protection Agency
Jane Rubey	Department of Ecology

TECHNICAL WORK GROUP	
REPRESENTATIVE	**AFFILIATION**
Darrell Turner	Washington State Farm Bureau
Janie Rose	Washington Cattlemen's Association
Marc Boulé	Shapiro and Associates
Richard Robohm	Shapiro and Associates
Charles Simenstad	Seattle Audubon Society
Dee Arntz	Washington Environmental Council
Anne Biklé	Citizen
James Hartley	Citizen
Dick Gilmur	Commencement Bay Cleanup Action Committee
Chris Spens	City of Bellingham
Steve Stanley	City of Everett Planning Department
Steve Gray	Clallam County Planning Department
Rocky Beach	Department of Fish & Wildlife
Bob Zeigler	Department of Fish & Wildlife
David Jamison	Department of Natural Resources
Carl Samuelson	Department of Fish & Wildlife
Karen Walter	Muckleshoot Indian Tribe
Carol Bernthal	Point No Point Treaty Council
Debbie Knaub	U.S. Army Corps of Engineers
Linda Storm	U.S. Environmental Protection Agency
Judy Lantor	U.S. Fish and Wildlife Service
Ivan Lines	U.S. Natural Resource Conservation Service
Tom Hruby	Department of Ecology

THE SWIS LOCAL DEMONSTRATION PROJECTS

Four local governments were awarded SWIS grants totalling $160,000 to develop local wetlands demonstration projects. The purpose of these grants was to explore potential ways to better integrate elements of local wetlands programs into a single, comprehensive, and consistent local wetlands protection program. The pilot projects were designed to demonstrate creative and effective wetlands management strategies that can be used as models around the state.

The four local governments were the City of Everett, the City of Camas, Clallam County, and Whatcom County. Each of the local governments is developing an integrated program that will:

- use a watershed model to develop the project
- integrate regulatory and non-regulatory mechanisms
- have strong public involvement
- involve federal and state resource agencies
- serve as a model for other local governments

Although the four grantees have completed the requirements of their respective SWIS grants, each of them is continuing to refine and implement their wetlands programs. The summaries below outline what the individual projects have accomplished and describe the next steps each jurisdiction is planning to take.

CITY OF EVERETT

The City of Everett received a $45,000 grant to develop a wetlands plan for the Snohomish Estuary and the City's Shoreline Urban Areas.

Objectives:

- Streamline the current local, state and federal wetland permitting process.
- Develop a watershed program which provides for the protection and restoration of the most important wetland ecosystems within the estuary.

Process:

- The City first developed a single integrated wetland map for the Snohomish Estuary and the City's Shoreline Urban Areas.
- The City used the "Indicator Value Assessment" (IVA) method to assess the wetlands within the plan area. An interagency technical team comprised of Everett City biologists and Department of Ecology biologists spent several weeks in the field applying the IVA method.
- A Technical Advisory Committee, comprised of staff from local, state, and federal agencies, as well as the Port of Everett, then reviewed the results of the wetlands assessment. This SWIS grant has offered an opportunity to test the IVA and to evaluate its potential for other local governments.
- The City is now using the results of this technical work to categorize wetlands according to their ecological function. This categorization will help determine which wetlands are the most functional and deserve the greatest protection, as well determine where development is most feasible.

The Next Step:

The results of the IVA method are being used to develop a land use program that integrates the city's Sensitive Areas Ordinance with the Shoreline Master Program.

The city would also like to coordinate the local regulatory program with the Corps of Engineers 404 permit program. To facilitate this, the city is developing an "alternatives analysis" for the city's buildable lands which will be submitted to the Corps of Engineers, Environmental Protection Agency, and Department of Ecology for review and possible approval of a programmatic general permit under Section 404 of the Clean Water Act.

CITY OF CAMAS

The City of Camas received a $45,000 grant to develop a wetlands plan for a 1,500 acre sub-basin of the Fisher Basin, just west of the city. This wetlands plan is now being used to determine the location and extent of growth that is feasible in the Fisher Basin.

Objectives:

- Manage the Fisher Basin as an integrated natural resource system, focusing on wetlands protection within the corridor.
- Allow for light industrial and commercial land uses, as provided in the city's land use plan.
- Provide regional stormwater management in Fisher Basin.

Process:

- The City completed an inventory and general assessment of the aquatic resources of the project area, building upon an inventory done in 1991. This inventory includes wetland areas, wildlife habitat areas, and regional drainage features.
- Stormwater modeling was done, using a computer. The models determine the current flow of stormwater within the project area, and examine the impacts that different development scenarios would have on stormwater.
- Three planning alternatives were generated for public consideration dealing with the development of a commercial business "node." The City's goal was to select the alternative which allows planned levels of growth to occur, while also providing the best protection for the area's wetlands.

The Next Step:

The wetlands inventory that was developed is now being used to balance environmental, land use, and economic issues for Camas. Once the City has selected its plan for the area, the City will draft proposals for non-regulatory approaches such as density transfers, clustering, mitigation banking, conservation easements, and tax incentives.

CLALLAM COUNTY

Clallam County received a $45,000 grant to assess the wetlands in the Sequim Bay and Dungeness River Regional Watersheds. The County wanted to develop an inventory and database to use when issuing permits that impact wetlands.

Objectives:

- Complete an assessment of the hydrologic and ecologic functions of the wetlands in the Sequim Bay and Dungeness Watersheds in Clallam County.
- Develop a geographical information system (GIS) database that can be used to regulate the wetlands in Clallam County.

Process:

- The County developed a comprehensive wetlands inventory, building on extensive previous watershed planning work. Focus was given to areas within the Sequim Bay and the Dungeness Watersheds where conflicts exist between development and wetlands protection.
- A wetlands rating system was developed based on the hydrologic and ecologic characteristics of the wetlands within the watersheds.
- The County then used this information to create a GIS-based model for assessing individual wetland sites within a watershed context. This GIS will be used to quickly and consistently assess wetlands in the watershed for both planning and regulatory purposes.
- Throughout this process, the County worked with a Technical Advisory Committee comprised of local, state, federal, and tribal representatives. This committee reviewed the methodology and final report.

The Next Step:

At this time, the County is conducting public workshops and meetings to explore different development options in light of the SWIS results. The County will implement the GIS database in making daily permit decisions in the two pilot watersheds. The County is also developing a mitigation strategy consistent with all state and federal mitigation guidelines.

WHATCOM COUNTY

Regulatory reform is a key issue for Whatcom County. Unlike the other three grant projects, Whatcom County did not conduct a technical analysis of the wetlands within a specified planning area. Instead, the County used their $25,000 grant to analyze the various county policies and regulations addressing wetlands and recommend changes.

Objectives:

- Streamline local environmental regulations while still maintaining environmental protection.
- Recommend changes to the County's environmental codes to eliminate inconsistency and confusion.

Process:

- Interviews were conducted with County staff to identify problems with the existing regulatory codes and administrative process.
- Inconsistent or conflicting sections of the existing local regulatory codes were identified. In addition, sections were identified that conflict with state and/or federal regulations. Methods for integrating local regulations with state and federal regulations were suggested.
- Methods were identified for improving the administration of environmental permits. This included identifying better ways to provide permit information and assistance to the public, and recommendations for revising the actual permit process.
- Recommendations to clarify administrative rules and procedures were prepared. These recommendations are designed to simplify the local permit process and develop clear local permit standards.

The Next Step:

- The final grant report outlines steps for coordinating the regulatory **process** at the local level as well as ensuring that the **substance** of the regulations are consistent county-wide. Now that the report is completed, the County staff will work with the County Commission to begin implementation of the specified recommendations.

ENDORSEMENT FROM INTERAGENCY WETLANDS REVIEW BOARD

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. BOX 47600 • Olympia, Washington 98504-7600 • (206) 459-6000

October 4, 1993

Dear State Wetland Integration Strategy Participants:

We, the members of the Interagency Wetlands Review Board, convened by Governor's Executive Order 90-04, want to express our support of your efforts in the State Wetlands Integration Strategy. We recognize that you are developing consensus recommendations which will improve the effectiveness and efficiency of wetlands protection in Washington State.

We will work with members of our agencies to implement those recommendations, arrived at by consensus, within the limits of our resources, mandates, and authorities. We look forward to considering all the information you provide as we move forward on making necessary decisions. For those recommendations that are not within our immediate authority, we are committed to pursuing their implementation with the appropriate decision-making authorities.

We recognize the hard work it will take to achieve consensus on these issues and we appreciate your willingness to contribute your time to this endeavor.

Sincerely,

Department of Agriculture

Department of Natural Resources

Department of Community Development

Puget Sound Water Quality Authority

Department of Ecology

Department of Transportation

Department of Fisheries

Department of Wildlife

COMMENT LETTERS FROM PARTICIPANTS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

REPLY TO
ATTN OF: WD-128

Mary Riveland, Director
Washington State Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Mary:

I am writing to support the Final Report on the State Wetlands Integration Strategy. The recommendations contained in the report form the basis for an effective and fair state wetlands strategy. I have been told by Gary Voerman, Chief of the Wetlands Section and project officer for the EPA grant to Ecology that supported this effort, that the credit for bringing these recommendations together rests with your wetlands staff, especially the efforts of Lynn Beaton and Elizabeth Babcock. They deserve special recognition as it has not been easy, given the controversial nature of these issues, to achieve a consensus from such a disparate group of stakeholders. This report is the product of the creative energy of a broad range of people (representing diverse interests) who have demonstrated their commitment to this process by contributing their time to solve difficult problems with the result that a majority of the participants support the recommendations. Despite the fact that some group members will not be signing the document, we believe the recommendations should go forward to the Interagency Wetlands Review Board (IWRB) for their consideration.

The strength of these recommendations will only be realized when they become part of the implementation strategy that will be developed by the IWRB. We look forward to working with the IWRB in carrying out our responsibilities as part of that strategy. In addition to better wetlands protection, many of these recommendations will help Governor Lowry fulfill his commitment to meaningful regulatory reform and we would hope they would receive his personal support. If you have any questions or comments please call me at 553-0479 or Gary at 553-8513.

Sincerely,

Chuck Clarke
Regional Administrator

THE LEAGUE OF
WOMEN VOTERS OF
WASHINGTON

1411 FOURTH AVENUE BUILDING • SUITE 803
SEATTLE, WASHINGTON 98101
FAX 206-622-4908 • TEL. 206-622-8961

December 21, 1994

Lynne Beaton
Wetlands Section
Department of Ecology
Lacey, WA.

RE: November 1, 1994 Integrated SWIS Report

Dear Ms. Beaton:

The League of Women Voters of Washington (LWV/WA) representatives have actively participated throughout the SWIS process in several work groups whose recommendations are included in this final integrated report. We appreciate the work that you and Department of Ecology staff have contributed to bringing about this final product.

We have signed the Statement of Support for our individual work groups. We have declined, however, to endorse the entire SWIS report. This decision comes about because we have not prepared ourselves as an organization to give a comprehensive review of the substance of the entire integrated report.

This decision also reflects concern with the agreed upon consensus process. At the outset of the SWIS process, a method of reporting was adopted by the working groups of "consensus" and "recognition"(meaning that where consensus could not be reached, differing viewpoints would be summarized). In the Regulatory working group, as final consensus was being formulated, certain representatives refused to abide by the earlier agreement. As a result, the report of the Regulatory Group failed to present all the consensus decisions that had been agreed upon early in the process.

Neither does the integrated report represent the exceptional expertise, commitment and diversity of thought from those individuals and organizations who exchanged views over this long period of time. Because of the untimely dissent, even Section III of the document fails to reflect the breadth of discussion on these important wetland issues.

We have had several discussions regarding recommendation#7 of the Planning Group that requires that local government adopt a defnition of "wetlands," as contained in the GMA. The Regulatory Group declined to deal with the "definition of wetlands". Certainly, the intent to adopt and use a single regulatory definition of wetlands would be supported by all groups, and is supported by League as well. We are pleased to see the additional explanatory language in the text following#7. Another way to insure that mudflats and intertidal areas are covered in the definition would be to include a reference in#7 to 33CFR 328.2 where "Waters of the United States" are defined.

As a member of the Regulatory Reform Work Group, I am supporting the recommendation of our group on behalf of The League of Women Voters of Washington. My colleague, Lucy Copass, who served on the Planning and Public Process Work Group is doing the same.

Sincerely,

Ann Aagaard
Chair for Shorelines and Wetlands
The League of Women Voters of Washington

AWB

Association of Washington Business
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Olympia, Washington 98507-0658
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Tacoma 272-6444
Statewide 1-800-521-9325

Seattle 824-2910
FAX 943-5811

Your statewide business advocate

Lynn Beaton
Department of Ecology
P.O. Box 47690
Olympia, Wa. 98504

September 19, 1994

Dear Lynn:

Thank you for providing AWB the opportunity to review the final report of the State Wetlands Integration Strategy (SWIS). As we have discussed over the last several months, the AWB membership harbors a number of significant concerns regarding several of the final recommendations contained in the report. Despite both your best efforts and my own, it is now apparent that a working consensus cannot be achieved on the document.

The primary issues are draft recommendations which suggest that statewide standards be developed in the inventory and functional assessment of wetlands under the GMA. A fundamental principal under the GMA is that of local government prerogative and initiative, upholding the long heritage in Washington state of local government control in the land-use planning arena. This position was widely debated and specifically endorsed in GMA legislative deliberations. In fact, maintaining local government prerogatives with a specific avoidance of statewide standards under GMA, was one of the principal pillars and political agreements which constituted the eventual passage of the Act.

AWB and a coalition of other business trade interests will resist any legislative initiative to undermine this fundamental agreement reached under the passage of the GMA, as the GMA is currently structured in relationship to other state statutory provisions. This position was reaffirmed recently in collective business sector deliberations through both the AWB Land-Use Committee and AWB Environmental Affairs Council. To insure that there is no future confusion as to the potential endorsement of the report by organized business, please note that no individual is authorized to endorse the SWIS report on behalf of AWB, although business members on the SWIS taskforce may, of course, choose to endorse selected segments of the report as an individual.

On a personal note Lynn, I wanted to compliment you on your handling of the SWIS effort. It was a very difficult and certainly frustrating task. While it is disappointing that the various parties could not reach a constructive consensus, the discussions and many recommendations were of merit.

Warm Regards,

Donald R. Chance, Governmental Affairs Director

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Mailing Address: 600 Capitol Way N, Olympia, WA 98501-1091 - (206) 902-2200; TDD (206) 902-2207
Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

December 21, 1994

Ms. Lynn Beaton
Department of Ecology
Shorelands Program
P.O. Box 47690
Olympia, Washington 98504-7690

Dear Ms. Beaton:

As you requested, please find enclosed the following:

(1) A signed statement supporting the integrated SWIS document.
(2) Statements supporting work group reports involving Washington Department of Fish and Wildlife (WDFW) staff.

WDFW supports all work group products and the integrated SWIS recommendations. While we recognize that our comments may not be incorporated into the final document, we wish to include them for the record. Comments are enclosed to each of the respective statements.

Unfortunately, as we are all painfully aware, funding and personnel necessary to implement SWIS will be the limiting factor to the success of these recommendations. Having just received the Governor's recommended budget for 95-97, most of the policy commitments for undertaking new efforts are already cast.

We are also taking this opportunity to thank you for your dedication and hard work in coordinating this long and difficult process. It was an immense undertaking, and we greatly appreciate your efforts to be fair and to facilitate the input of the diverse stakeholders. It is a pleasure working with you, and we wish you the best in your future work.

Sincerely,

Chris Drivdahl
Assistant Director
Habitat Program

CD:RB:pd
Enclosures
cc: Bob Turner
Judith Freeman
WDFW SWIS Participants

WDFW Comments on the Integrated SWIS Report

General Comments:

The Integrated SWIS document will serve as a blueprint for future management of our state's valuable wetlands resource. We support the watershed or landscape approach to managing wetlands and other natural resources. We also recognize that watershed or landscape management will require a high level of information, particularly for fish and wildlife resources. Since wetlands and riparian areas are a primary component in the ecosystem, their preservation and protection will be key to the success of any watershed approach. The recommendations and guidelines set forth in the SWIS report will be very valuable in incorporating wetlands into some of the more global watershed initiatives currently being undertaken by the state and federal governments.

We remain concerned that funding and personnel needed to implement SWIS are as yet unidentified. The Interagency Wetlands Review Board (IWRB) and its member agencies are relied upon to develop new funding sources and to recommend the reallocation of available agency resources to meet SWIS goals and recommendations. This is not an easy task and is perhaps more challenging than the planning aspects of the SWIS process just completed. For example, full implementation of SWIS will mandate 14 more committees and responsibilities for our agency in wetland regulation, education, restoration, preservation, and in functional and watershed analysis. There is simply no way this can be done through the reallocation of our present level of funds and staff. It is therefore likely that SWIS will be implemented incrementally, as opportunities and innovative approaches occur and in the rare event that additional funds become available. We feel that it is imperative that participants in this process and other stakeholders be made acutely aware that the implementation of SWIS will not happen overnight and that it is an ongoing process. Until such time as enough information, education, and methodologies can be accumulated and more non regulatory and landscape management approaches can be implemented, we will continue to rely more on the site by site, regulatory approach to wetlands protection. This means we will implement SWIS recommendations where we can; however, without increased funding and staff, it will take much longer for the overall strategy to be realized.

Comments on Specific Recommendations:

- Recommendation #26 - We support the development of a pilot general permit process by local government with some reservations. There is nothing in our experience to indicate that general permits for wetlands alterations can get us to no net loss of area and function. If this recommendation is implemented, the pilot general permit process should be closely evaluated before it is extended to other areas.

- Recommendation #31 - The wording should be modified to refer only to wetland statutes to avoid confusion over the scope of the effort (traffic statutes, building statutes, etc.).

- Recommendations #34 & 35 - WDFW supports these recommendations with the caveat that (as agreed by the IWRB) we will implement SWIS recommendations where staffing and funding are available. (Also, see general comments above.)

- Recommendation # 36 - We support this recommendation and suggest that, because of EPA's experience with watershed efforts and national wetland analysis, it should be co-lead on non-regulatory incentives.

Comments on Report Discussion:

- Integrating regulatory and non-regulatory approaches

  Page 39, Paragraph 4 and Page 42, Paragraph 1. Non regulatory processes are the method in which long-term gains will occur. Regulatory efforts are the methods that can ensure no net loss. Wetlands programs need to contain both, but they need to be directed on different methodologies if each is to be successful. Monitoring and requirements will differ significantly in each approach.

  Page 41. There needs to be additional funding for effective non-regulatory efforts.

- Watershed and site specific analysis

  Wetlands have a function both by themselves and in the context of a watershed. Both are important. In the near term, watershed analysis will best complement rather than replace site-specific analysis.

  Page 9, Paragraph 5. The physical features of each wetland and its functions and losses may need to be measured individually in order to analyze functions of the entire system.

  Page 12, Paragraph 1. Wetland mitigation needs to be based on both area and function.

  Page 13, Paragraph 1. In most cases, permit decisions cannot be based solely on the impact of a project upon the whole watershed. It is not always possible to identify locally significant impacts at that scale.

- Regulatory Aspects and HPAs

  Page 5, Hydraulic Code - In the last sentence, delete "within the high water areas" and replace with "that will use, divert, obstruct, or change the natural flow or bed." An HPA may be required for construction or other work that meets these requirements, which may be located outside the ordinary high water line.

  Page 21, Fish and Wildlife Habitat - Wording in the subsections should be modified to include fish, consistent with the title of this section.

Page 25, Lack of Consistency Among State Agency Mandates - The title of the section should be modified to also include federal mandates, consistent with the discussion in the first sentence of the section.

Page 26, Hydraulic Code - The reference in the third sentence should be corrected to Hydraulic Project Approval. There are very positive features of the HPA that are not presented. HPA enforcement is one area where financial penalties go to the general fund and have been used for restoration and protection as recommended by the section on Enforcement on Page 35.

Page 26, Permit Review - The third and forth sentences should be modified to be consistent. We believe the desire is to have state and federal representation on the committee so that a coordinated response to the project proponent can be made.

- Alternatives analysis essential for mitigation (avoidance, minimization, compensation)

Page 33, Paragraph 1. Alternative analyses are important components of mitigation in order to provide for sequential avoidance and minimization.

- Minimum standards need to be included for buffers, replacement ratios, compensation, and classification.

Page 16, Paragraph 2. It is very important that standards be developed for buffers, compensatory mitigation, classification, and replacement ratios as recommended in the Technical Committee's report.

- GMA and Cowardin wetland definition in Watershed efforts.

Page 11, Paragraph 3. In watershed efforts, one needs to examine sources of hydrology and follow water movements from snow and rainfall to the water table, wetlands, lakes, and streams as it descends in elevation. The narrower, regulatory GMA definition may not work for watershed efforts. For watershed planning, the Cowardin comprehensive definition should be used. This is consistent with IWRB policy and should be maintained.

WDFW Comments on the SWIS Technical Work Group Report

General Comments:

- The recommendations are basically what was discussed in committees. Some elements were not discussed (functional assessment standards adopted under growth management [6] and DOE to evaluate past project success [7]), but these were in previous draft reports.

- The group report included the committee recommendation that GMA minimum standards were needed for classification, buffers, inventory procedures, mitigation, replacement ratios, and monitoring (Page 2, B Assumptions). Minimum standards for all these elements are very important. However, these are potentially contradicted in the final SWIS report (Page 16, B. 1. Growth Management Act) which states that minimum standards would apply only to inventory and functional assessment but classification, buffer requirements, and mitigation would be at the discretion of local governments.

Comments on Report Discussion:

- Page 5. PHS is excluded from the recommended fish and wildlife databases. Sentence on Page 5 Paragraph 4 states: "In addition, fish and wildlife information contained in databases such as WARIS and SASSI could be used." PHS is essential in doing biodiversity planning and needs to be incorporated.

- There is an analysis that accompanies the recommendations that did not come from the committee. Included in this analysis is an emphasis on consistency and replacement of site-specific analysis with watershed analysis. Consistency has no value in itself. Its value comes only when the consistent level is an improved situation.

  Watershed analysis is a step beyond site-specific analysis, but it does not replace the need for evaluation of functions on site. The watershed level can assess incremental site-specific losses only in pivotal situations.

  A major problem facing us in planning is, our logic is linear but the wetland systems reality is not. An example of this is the optimization of a function may be to the detriment of all others. A wetland can be used to maximize water quality enhancement (wastewater treatment) to the detriment of flood control and fish and wildlife functions. A peat bog can be dredged to enhance fish habitat to the detriment of biodiversity.

  In a wetland system, the optimum is reached in a balance of water flow, soil development, plant community development and disturbance. For these reasons site-specific analysis continues to be very important, and watershed analysis needs to complement rather than replace site-specific analysis.

WDFW Comments on the SWIS Economics Work Group Report

General Comments:

- We support the one recommendation in the report: that a study be funded to analyze economic values for wetland services. There remain some minor technical inaccuracies in the text which might confuse the public.

Comments on Report Discussion:

- Page 5, Matrix. Jobs are listed as a benefit from development. Although it is true that jobs are valuable to local authorities as part of decision making, they are not properly a part of cost-benefit analysis. The measure of economic benefit to the developer is his/her net profit from the wetland project in question, minus the net gain from the next most profitable alternative. In this context, an equivalent number of jobs created elsewhere would cancel out mathematically.

- Page 6. It is implied but not stated explicitly that some of the benefits from protecting wetlands accrue to all citizens. Cost-benefit analysis therefore encompasses more than a local balancing test.

  In the full document, pages 20,21, the conceptual framework of cost-benefit analysis is more accurately discussed. Again, this document leaves out explicit mention that all citizens have property rights in some of the wetland benefits, such as fish and wildlife.

Washington Cattlemen's Association
P. O. Box 96 • 1720 Canyon Road • Ellensburg, WA 98926-0096
509 / 925-9871 • FAX 509 / 925-3004

September 15, 1994

State Wetlands Integration Strategy (SWIS)
Attn: Lynn Beaton
WA Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Dear Ms. Beaton:

The Washington Cattlemen's Association (WCA) is in receipt of the State Wetlands Integration Strategy (SWIS) Preliminary Report (9/2/94 draft). Before discussion of the final report is undertaken, we must take a few moments to inquire why we are asked to approve or disapprove the final report before we see the individual group reports? To use an analogy, when constructing a building one must use individual pieces of material in order to make a building a building and not just a conglomeration of pieces stuck together. This analogy can easily be transferred to the SWIS process. In order to see and understand the SWIS package, one must examine (or reacquaint ourselves with) the individual sections before we can be expected to pass judgement on the entire package.

Over the past year, the WCA has expressed to you and others in the SWIS process our frustrations in this SWIS consensus process. We will not re-examine those areas once again, but in passing we note our frustration was amplified after we examined the SWIS Preliminary Report (9/2/94 draft). Page 2 of the Preliminary Report states, "...all final recommendations were reached by consensus." However, in two of the three groups in which the WCA was involved (Regulatory Reform and Technical Aspects), the objections the WCA and others had regarding some of the recommendations were indiscriminately vetoed and these recommendations appear in the Preliminary Report as if the recommendation was agreed to by consensus. Consensus on many of the Regulatory Reform and Technical Aspects Groups recommendations was not reached! The items of non consensus are numerous and have been shared to SWIS by both myself and the WCA representative on these two committees, Janie Rose.

Section III of the Preliminary Report is reported to be, "Discussion of Additional Issues." However, upon closer examination, other recommendations which did not achieve consensus are located in this section in manner which leads the reader to believe it is somehow more credible than others because of the amount of space and method in which the text was allowed to be nearly as expansive as when the topic was **considered** to be a recommendation. An example

of such case is the discussion of the Nationwide General Permit #26, which did not obtain consensus, yet the text of the subject is nearly as comprehensive as if it did receive consensus.

With the present and previously outlined concerns, the Washington Cattlemen's Association cannot and will not support the SWIS Preliminary Report (9/2/94 draft). While the process has been less than enjoyable for the WCA, we have learned a great deal about how/if to participate in future such consensus processes. If you have any questions, please contact me in the WCA office at (509)925-9871.

Sincerely,

Kent Lebsack

Kent Lebsack
Executive Vice-President

cc: Janie Rose, WCA Representative: Reg. Reform and Technical Aspects Work Group
Eleanor Camenzind, WCA Representative: Non-Regulatory Work Group
Dick Coon, Citizen at Large: Non-Regulatory Work Group
Jeanne Dickman, WA Water Resources Association
Bob Quinby, WA Cranberry Alliance
Jan Teague, WA Building Industry Association
Darrell Turner, WA State Farm Bureau
Dan Wood, The Umbrella Group
Mike Yeager, WA Forest Protection Association

Victor & Roberta Moore
Rt. 2 Box 79
Pullman, WA 99163-9601
(509) 332-4872

July 17, 1994

TO: Lynn Beaton, Elizabeth Babcock and Jaime Kooser
FROM: Bobbie Moore

SUBJ: Final work group report of Regulatory Reform SWIS

First, I want to thank you for including me in this work group. It has been very interesting and I feel I have learned a lot. I have only admiration and appreciation for the three of you, as the ones coordinating this project.

I find it hard to sign on to the group report. Our last meeting completely frustrated me. (I'm sure I'm not the only one.) I feel that the "Cattlemen" and agriculture interests behaved as total obstructionists. Talk about "special interests"! Then when they had any wetland protection stricken, they insisted that there should be no record of who wanted it that way, to make it seem that the whole group was in agreement. I am not in agreement.

I saw the Regulatory Reform work group as an opportunity for citizen input to help the State of Washington get into compliance with the Federal Clean Water Act. But, now most of that input and hours of work to put it in useable form, is wasted. This report, (as I understand it) now goes to the Interagency Review Board. We see the same kind of tactics in the Salmon Recovery and Forestry issues. Instead of working together for the common good and solving the problems, the issues are forced into the courts where there is no input. There is something wrong with our system that allows a few selfish individuals to destroy protection for the rest of us.

I am enclosing a page of facts from the July/August 1994 issue of "World Watch", which should sum up pretty quickly why I have no patience with "Cattlemen" or anyone else who does harm to our world.

Bobbie Moore

Bobbie Moore

(You can use this letter anyway you want)

COOPERATIVE EXTENSION
Washington State University

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January 3, 1995

Ms. Lynn Beaton
Department of Ecology
Shorelands Program
P.O. Box 47690
Olympia, WA 98504-7690

Dear Ms. Beaton:

The final report on the "State Wetlands Integration Strategy," dated November 1, 1994, has been reviewed by several in Cooperative Extension. We are pleased with the work of the six working groups and the final report.

I am pleased to forward, in behalf of WSU Cooperative Extension, the Statements of Support for the SWIS Wetlands Integration Strategy Report and the recommendations contained in the SWIS Education Work Group Report. I agree with the tenor of the final report that emphasizes local level planning and education over regulation.

Best wishes on the overall statewide acceptance of the report and recommendations and subsequent implementation.

Sincerely,

Harry B. Burcalow
Interim Director

717.HB8/bm
enclosures
cc: K. Baril
R. Butler
R. Hermanson
R. McDaniel
B. Simmons

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WETLANDS EDUCATION MATRIX

The Wetlands Education Matrix (pages 124 - 127) was developed by members of the SWIS Education Work Group. The work group identified thirty-seven "audiences," which affect or impact wetlands. These audiences were then ranked "high," "medium," or "low," depending on their potential to impact wetland resources across the state. The twenty-five highest-ranking audiences appear in the matrix.

The matrix contains the following information:

- **"Audience"**: Presents categories of wetland users which would benefit from greater information concerning the characteristics and functions of wetlands.
- **"Lead Educator"**: Indicates the agency or group that should focus on providing wetlands education to that specific audience.
- **"Type of Education"**: Outlines the education techniques and wetland issues that would be most effective to use with this audience.
- **"Advisor"**: Lists the agency or group that would best assist the lead educator in providing wetlands information to the specific audience.
- **"Technical Support"**: Lists the agency or group that should develop the primary education documents or resources for the target audience.

Organizations appear in the matrix under the following abbreviations:

AWC - Association of Washington Counties
CTED - Washington Dept. of Community, Trade, & Economic Development
DNR - Washington Department of Natural Resources
DOT - Washington Department of Transportation
EPA - U.S. Environmental Protection Agency
NAIOP - National Association of Industrial Office Parks
NRCS - Natural Resource Conservation Service
TNC - The Nature Conservancy
TPL - Trust for Public Land
USFWS - U.S. Fish and Wildlife Service
WAC - Washington Association of Cities
WaDOA - Washington Department of Agriculture
WFPA - Washington Forest Protection Association
WSU - Washington State University Extension Service

Wetlands Education Matrix

Audience	Lead Educator	Type of Education	Advisor	Technical Support
Wetland Property Owner	WSU, Conservation Districts, and other local education organizations	best management practices, stewardship, general awareness	State and Federal resource agencies	State and Federal resource agencies, Local Government
	Local Government	regulations		
	Local Government, Land Trusts	non-regulatory options	Ecology, NW Regional Land Trust, Trust for Public Land	
	WETNET (and other environmental groups)	citizen involvement		
Conservation District Boards	Conservation Districts	general awareness, action alternatives, importance of education programs	NRCS, Conservation Districts, Washington Conservation Commission	Washington Conservation Commission
Local Decision Makers	Local Government, Ecology	regulatory and non-regulatory programs, economic values of wetlands, general awareness	State and Federal resource agencies, CTED	Ecology, CTED
Developers	Peers	best management practices, innovative development practices, regulations, non-regulatory methods	State and Federal Resource Agencies, NAIOP	NAIOP, State and Federal Resource Agencies.
Land Trusts	NW Land Trust Regional Council, Conservation Districts	resource assessment, evaluating sites for establishing priorities	Ecology, Local Governments, Land Trusts	Land Trusts, Ecology

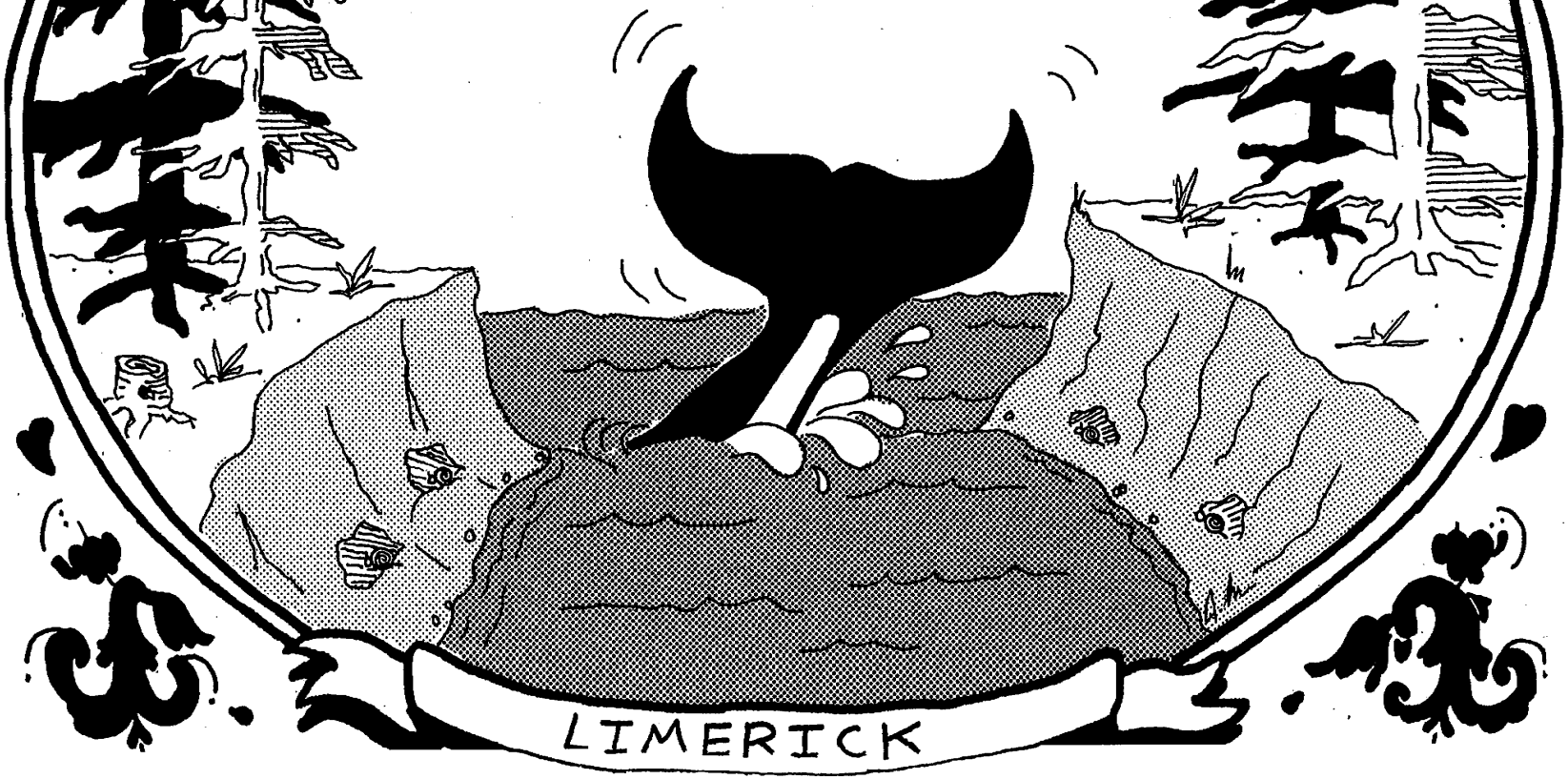
Audience	Lead Educator	Type of Education	Advisor	Technical Support
Agricultural Interest Groups	NRCS	definition issues, best management practices, regulations, general awareness	State and Federal resource agencies	NRCS
Timber Interests	WFPA Association	best management practices, regulations, general awareness	DNR, Ecology	DNR, WFPA
Environmental Groups	WETNET, Conservation Districts, WSU	general awareness, citizen involvement, action alternatives, regulations	State and Federal resource agencies	WETNET, Conservation Districts, WSU
State Decision Makers	Ecology, Peers	current policy issues, economic values, general awareness	State and Federal resource agencies	Ecology
Wetlands Consultants	Corps of Engineers, EPA	permitting, delineation issues	Society of Wetland Scientists	Corps of Engineers, EPA
	Peers (consulting, academic)	technical issues		Universities, State and Federal resource agencies
Hobby Farmers	Conservation Districts, WSU	best management practices, general awareness	State and Federal resource agencies	State and Federal resource agencies
Non-Elected Officials	WSU, Conservation Districts, or other local organization	general awareness, regulatory and non-regulatory protection techniques, action alternatives	State and Federal resource agencies	Local organizations and State and Federal resource agencies

Audience	Lead Educator	Type of Education	Advisor	Technical Support
Local Planners	Ecology	regulations, non-regulatory options	State and Federal resource Agencies	Ecology
	Corps of Engineers	delineation training	Corps of Engineers	Corps of Engineers
	WAC, AWC	legal issues	CTED, Ecology	AWC, WAC
Teachers	Ecology	general awareness, integrating wetlands into class curriculum.	Conservation Districts, State and Federal resource agencies	Ecology
Irrigation Districts	WSU, Conservation Districts, NRCS	general awareness, best management practices	State and Federal resources agencies	WSU, Conservation Districts
	Local Government	regulations	State and Federal resource agencies	Local Government, NRCS
	Local Government, Land Trusts	non-regulatory options (restoration, preservation)	Ecology, Federal resource agencies	NRCS, USFWS
Builders	Peers (Builders Organizations)	general awareness	State and Federal resource agencies	Peers (builders organizations)
	Local Government	regulations		Local Government
	Local Government, Land Trusts	non-regulatory options		State and Federal resource agencies, Local Government
Citizens	WSU, Conservation Districts, local organizations, special interest groups, State Parks	general awareness	State and Federal resource agencies	WSU, Conservation Districts Special Interest Groups (WETNET)
	Local Government	regulations	State and Federal resource agencies	Local Government
	Local Govvernment, Land Trusts	non-regulatory options	TPL, TNC	TPL, TNC, Land Trusts

Audience	Lead Educator	Type of Education	Advisor	Technical Support
Students (K-12)	Classroom Teachers	general awareness	Ecology, Nature Centers	Ecology
Agricultural - Large Lot	WSU, Conservation Districts, WaDOA, NRCS	general awareness, best management practices	State and Federal resource agencies	WSU, Conservation Districts
	Local Government	regulations		Local Government
	Local Government, NRCS	non-regulatory options	NRCS, USFWS, Ecology	NRCS, USFWS
Students (Higher Education)	College and University Faculty	general awareness	State and Federal resource agencies	College and University Faculty
Agricultural Consultant	WSU, Conservation Districts, WaDOA	general awareness, best management practices	State and Federal resource agencies	College and University Faculty
	Local Government	regulations		Local Government
	Land Trusts	non-regulatory options	Land Trusts	Land Trusts
Public Works Utilities	DOT, Ecology	general awareness, best management practices	State and Federal resource agencies	DOT
Green Growers	WSU, Conservation Districts, WaDOA	regulations, best management practices	State and Federal resource agencies	WSU, Conservation Districts
	Land Trusts, Local Government	preservation options	Ecology, NRCS, USFWS	Land Trusts, NRCS, USFWS
Pesticide Applicators	WSU, WaDOA	general awareness, best management practices, regulations	State and Federal resource agencies	WSU, WaDOA
Landscapers	WSU, WaDOA	general awareness, best management practices, regulations	State and Federal resource agencies	WSU, WaDOA

WETLANDS

THERE ONCE WAS A MAN NAMED DALE,
WHO THOUGHT HE'D ENHANCE A SMALL SWALE,
BUT HE GRADED TOO STEEP,
AND DREDGED IT SO DEEP,
THAT IT'S HOME TO FOUR SNAILS AND A WHALE!



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