AN ASSESSMENT OF WISCONSIN'S WETLAND PROTECTION PROGRAMS

Should the State Assume the Federal Wetland Fill Permit Program?

A Study by the Wisconsin Department of Natural Resources
Bureau of Water Regulation and Zoning

For the U.S. Environmental Protection Agency - Region V
Under Grant No. X-814852

January, 1991
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SUMMARY OF FINDINGS AND RECOMMENDATIONS

For detailed information on key points, see the sections of the Assumption Study report listed in parentheses in the text below.

Existing Program Authorities

Wisconsin's Water Regulation permit program was compared to the federal Section 404 permit program. We also examined the comparable features of other local and state wetland protection programs and activities.

- **Geographic jurisdiction:** Federal authority includes surface waters, contiguous and adjacent wetlands and isolated wetlands. State authority is generally limited to below the ordinary high water mark of waters that are navigable in fact. Exceptions are diversions from, dredging of an construction of dams on nonnavigable waters and grading on the bank and construction and maintenance of artificial waterways - connected or not - within 500-feet of a navigable waterway. Sixty to seventy percent of Wisconsin's wetlands are outside of state jurisdiction. (See Sections II and III.)

- **Activities regulated:** The federal program regulates discharges of dredged or fill material. This now (August 1993) includes "incidental discharges associated with excavation activities." The state regulates discharge of fill material, as well as dredging, grading on the bank, digging ponds, dams, diversion of water, and water levels and flows. Fills are not allowed except behind an approved bulkhead line or by legislative grant. (See Sections II and III.)

- **Permits:** The state requires individual permits for all regulated activities. (A streamlined process - general permits - for certain activities still requires individual application and permit.) The Corps of Engineers requires individual permits only for some federally regulated activities. A streamlined federal process--general permits--is available for "minor" activities (nationwide) and for activities that are regulated by the state. (See Sections II and III.)

- **Exemptions:** Both federal and state programs exempt most agricultural activities when part of an ongoing operation. The state exempts cranberry culture, construction of waterways next to or connected to navigable waterways in counties with 750,000 people or more, drainage for agricultural activities and most activities in lakebed grant areas. (See Sections II and III.)

- **Review criteria:** The Corps uses a stepped process for determining whether the activity is water dependent and whether a nonwetland alternative exists. If no alternatives exist then the proposal may be modified to minimize wetland impacts and impacts are mitigated. Projects are also evaluated based on a public interest review using 14 factors including both environmental and economic considerations. (See Section III.)

  State review is based on a public interest test, that is slightly different than the Corps of Engineers, as it is based on preserving water uses for the majority of people for the long term. Specific standards for issuing permits are found in the state statutes regulating individual activities. Economics are not a review criteria except for permits to change stream courses and to construct dams. Mitigation is

only acceptable for state Department of Transportation highway projects. (See Section II.)

- **Current DNR involvement in Section 404:** DNR comments on 404 permit notices as the state fish and wildlife agency under the Fish and Wildlife Coordination Act. The Corps is not bound by these comments. Through water quality certification (section 401) the DNR must grant, waive or deny certification that the project does not violate state water quality laws. The Corps is bound by this certification. Specific water standards for wetlands took effect August 1, 1991. Approximately 30% of the S401 certification requests are denied. (See Section II.)

- **Other agency involvement in Section 404:** EPA comments on 404 permit applications, has veto authority over issuance of permits with certain types of adverse impacts. EPA may also bring enforcement actions or levy administrative civil penalties directly against violators of Section 404. The U.S. Fish and Wildlife Service comments on permit applications and helps design protection and mitigation measures for fish and wildlife. The Corps is not required to follow their recommendations, only to consider them. (See Section II.)

- **Local shoreland-wetland zoning:** All wetlands of 5 acres or more which are shown on Wisconsin Wetland Inventory maps and are in the shoreland zone - within 1,000-feet of the OHWM of a lake, pond or flowage or within 300-feet from the OHWM of a river or stream or to the landward side of the floodplain, whichever distance is greater - are covered by state mandated county, city or village zoning.

  All development (broadly defined) in mapped areas requires a permit. Development is generally restricted to open space uses with limited fill allowed to enable permitted uses (for example, roads for crop cultivation, forestry and safe urban street systems are allowed). If an area is mapped in error or has no wetland values, it may be rezoned out of the wetland district with DNR approval. (See Section II.)

Existing Program Resources and Activity Levels

- **Budget:** The 1993 Corps budget for Section 10 and 404 permit activities in Wisconsin is $1.1 million. The 1993 WDNR budget for <u>all</u> water regulatory and zoning programs is $3.8 million.

- **Staff:** (Ch. 30 and 31 permitting, shoreland, wetland and floodplain zoning, dam safety and the wetland inventory.) Currently, the Corps has 15 staff people assigned full time to Section 404 activities in Wisconsin. WDNR has 9 water regulation section staff in the central office and 25 field staff that spend a major portion of their time on water regulation, zoning and wetland inventory activities.

  In 1993, these staff members actually spent a total of 64% of their time on water regulation permits and 13% of their time on shoreland-wetland zoning. There is some additional permit review time by other agency staff which are not included here because they are small and will likely continue independent of regulatory changes. (See Section II.)

- **Number of permit applications:** As an annual average for the years 1987-1989, the Corps reviewed 2,552 projects under section 404 each year in Wisconsin (1,912 nationwide permits, 365 general permits, 242 individual permits and 33 after-the-fact permits). For the same three year average, WDNR processed an average of 3,728 individual water regulatory permits each year. (See Section II.)

- **Local shoreland-wetland zoning:** The assumption study did not survey every municipality for staff, budget and activity levels. These factors can be generally characterized as follows. Counties, cities and villages across the state vary tremendously in budget, staff and activity level. Some villages have clerks only; many cities and villages have a building inspector; county staffs range from one to thirteen full time members. Local zoning staff are generally responsible for all local land use programs and in some cases sanitation and solid waste programs as well. (See Section II.)

Perceptions of Overall Program Effectiveness

- **Zoning Administrators:** These local program administrators feel that wetlands are diminishing in small increments. Most feel that "streamlining," or consolidation of permitting would improve protection but that the state would need additional staff to assume the program. They feel that local programs also need additional resources to get their work done. Common problems cited were recognizing wetlands, identifying wetland boundaries and understanding what is allowed and what is not. (See Section IV.)

- **Applicants:** All applicants surveyed felt wetlands need protecting and that a permit process is a likely mechanism. However, they didn't agree on which activities, or on size, or type of wetlands that should be regulated. The regulations should be consistent between agencies and levels of government, especially the interpretations of the regulations. What is and isn't a regulated wetland needs to be clarified, both on the wetland maps and in the definitions. Private property rights and economic concerns need to be considered in the permit decisions. Regulations need to be flexible enough to allow common sense in the decision making process. Awareness of the need to obtain permits varied between agencies. Everyone knew they needed a WDNR permit, half knew they needed a local permit and few knew they needed a Corps permit. An instruction book is needed to explain the permit process, how to work with all three agencies, what permits are needed, the steps in the process and where to go for help. (See Section IV.)

- **Wetland Users:** The majority of the wetland users surveyed felt that wetlands are decreasing in acreage and quality in Wisconsin. They felt that commercial development, residential development, farming and industrial development are the major causes. They feel that lack of awareness of the regulations and lack of understanding of the regulations contribute to the loss, as well as lack of enforcement and inadequate regulations. Most people surveyed said they were most familiar with WDNR regulatory programs, with only about 20% being familiar with local or federal regulatory programs. They knew little about the permit criteria or decision or comment procedures and only a few had commented on a 404 permit before. The majority of people were

aware of some WDNR enforcement action, but few were aware of a Corps or local action. The vast majority (91%) of the people surveyed thought regulations are needed to protect wetlands and about 33% thought WDNR should administer the regulations, 16% thought local agencies should administer the regulations and 8% felt that the Corps should. Tax incentives were rated the highest for additional methods that would be most or moderately effective at protecting wetlands. (See Section IV.)

- **State and local staff:** Agency staff at federal, state and local levels agree that wetlands are decreasing in quantity and quality. Staff do not believe that existing wetland programs are effective or efficient although many admit lacking detailed understanding of each other's programs. More state staff feel they understand the federal program than vice versa. There is variation among federal agencies in understanding of state and local programs.

  A common theme was that state standards are confusing; federal standards are clearer but are not applied.

  All agency staff feel that limited resources, largely staff time, is the factor hindering wetland protection. Other critical needs identified by staff at all levels are: time and clear procedures for monitoring both permitted and unpermitted activities; technical training and public information.

- **Compliance study:** Federal, state and local permits issued during 1988 in seven counties were field checked to determine whether they were carried out according to specified conditions. Overall, 56% of permitted activities were carried out according to permit conditions. Counties led in compliance (72%), followed by the Corps (57%) and then DNR (45%). DNR permits have the most specific conditions; Corps nationwide permits are the least specific. Erosion control conditions were the most commonly not met, followed by extra fill or other extra construction not authorized in the permit. (See Section IV.)

Assumption and Other Alternatives for Program Improvement

- **Assumption:** To assume the 404 program, the state must have authorities, jurisdiction and enforcement penalties equal to the federal regulations. Sufficient staff, funding and legislation has to be in place before the state can apply for assumption. No federal funding is available for assumption. Full assumption of the 404 program by WDNR using state permit procedures for the nationwide permit categories would require 22 additional staff and a first year increase in budget of just over $1,000,000. Assumption of the program, using the existing nationwide permit procedures would increase staff by 15 and the first year budget by about $700,000. (See Section V.)

- Independent of assuming the 404 responsibilities, the state could make additional changes in existing state wetland regulatory programs to make them more efficient and effective. (See Section V.) These changes include moderate to major "overhauls," as well as some additional general changes. Options presented include expanding local jurisdiction or state jurisdiction to all wetlands, implementing water quality standards for wetlands, and repealing certain activity exemptions.

Activities that could make positive changes in the programs regardless of changes in the regulations include: a joint federal-state-local tracking system, enhancing the wetland mapping inventory, a technical document/handbook, establish a more formal inter-agency coordination mechanism, real estate disclosure and financial incentives.

Selected Wetland Protection Initiatives

Based on the study data, recommendations of three advisory committees, and administrative review, the alternatives described below were selected for immediate recommendation to the Wisconsin Legislature's special committee on Surface Water Resources. This study committee is currently considering these recommendations for inclusion in legislation to be introduced in upcoming legislative sessions. Non-legislative alternatives that were highly ranked by the advisory committees and supported by study data will be proposed as part of individual program work plans and budgets.

STATE REGULATORY STANDARDS AND LOCAL ADMINISTRATION

1) Expand current shoreland wetland regulatory jurisdiction to include all mapped wetlands (shoreland wetlands are less than half of total state wetland acreage).

   Rationale:

   a) Builds on existing state/local partnership.
   b) Zoning procedures shared with other local land use controls.
   c) Integrates wetland decisions with other local land use decisions.
   d) DOT exemption & liaison process would continue.
   e) Current regulations apply to mapped shoreland wetlands five acres and greater in size. Updated wetland maps now being prepared will include those of two acres and larger. Smaller wetlands could be regulated at local option.

2) Modify permitted uses and provide design standards to assure that activities which are allowed in wetlands individually and cumulatively have minimal long term effects on wetland values. Allow municipalities to adopt regulations more restrictive than state standards.

   Rationale:

   a) Relatively few changes required.
   b) Design standards would provide project guidelines for applicants to follow.
   c) Rezoning after a determination of insignificant wetland value would continue to be a safety valve.
   d) Current regulations prohibit local adoption of more restrictive permitted use standards.

STATE OVERSIGHT MECHANISMS

1) DNR appeal of local wetland rezoning decisions should be to an administrative hearing examiner with subsequent judicial review of the administrative record (the administrative hearing would be a de novo hearing on the issue of compliance with rezoning criteria). The same

procedure should be used for initial ordinance adoption for noncompliant municipalities. Overturning of a local decision should result in an order for restoration of any illegally altered wetland (DNR should not have to commence a separate action to compel local enforcement).

Rationale:

a) Current quasi rule making procedure to overturn local amendment decisions involves legislative review which is unnecessarily complex, costly and time consuming and is not constrained by specific objective criteria.
b) The legislature has never overturned a DNR amendment decision.

2) Local wetland decisions should be automatically void if timely notice of petitions, hearings and decisions are not provided to DNR.

Rationale:

Absent notice, DNR is prevented from meeting appeal deadlines and opportunities to advise applicants and local government of project impacts and alternatives.

ENFORCEMENT MECHANISMS

1) DNR wardens should be authorized to assist local government in enforcement of local wetland regulations using civil citation procedures (as they currently do for Chs. 30 and 31). A mechanism for consultation with local zoning staff would be necessary to assure technical adequacy of complaints.

Rationale:

Expertise and assistance in civil prosecution would be provided to local government.

2) Full wetland restoration (acreage and function) should be a mandatory consequence of violation of wetland protection laws. Failure to obtain permits where the project could otherwise be authorized should require a monetary forfeiture.

Rationale:

Substantial disincentives are required for a credible enforcement program.

3) Provide for a penalty assessment to be levied as a percentage of civil forfeitures for violation of wetland regulations.

Rationale:

Revenue could be retained in a pool for distribution to local government to defer costs of program administration or for environmental education, maintaining professional standards of staff, etc.

4) Adopt a statewide schedule of minimum forfeitures.

Rationale:

Minimum forfeitures provide a credible disincentive and could be graduated based on wetland acres affected, prior convictions for violation of environmental laws, etc.

LOCAL ADMINISTRATION NEEDS

1) Require minimum professional standards for local zoning administrators and training/orientation for local decision making boards.

   Rationale:

   a) Would promote professional implementation of wetland and other local land use regulations.
   b) Professional standards raise salaries which attract more professionally trained personnel.
   c) Education and technical assistance for local boards would encourage local decisions which are consistent with statewide wetland policy.

2) Provide grants to municipalities in support of state mandated zoning. Grants should be tied to program certification and continuing education requirements for administrators and boards. (70 counties @ $10,000 = $700,000 & 450 cities & villages @ $2,500 = $1,125,000 & total of $1,825,000/yr.). Grant amounts could be stepped based on wetland development threat. Funding sources could include real estate transfer taxes, penalty assessments on civil forfeitures for violation of environmental regulations, surcharges on state and local permit fees, et al.

   Rationale:

   a) Positive fiscal incentives would help to defer local costs of administration.
   b) Linkage to local program certification and training requirements would promote program effectiveness and consistency.

3) Provide mapping and study grants to local units of government administering state wetland regulations. Funding sources would include those listed for administrative grants.

   Rationale:

   a) Such programs provide positive incentives.
   b) The lack of accurate mapping at appropriate scales has long been one of the problems associated with regulation of wetlands.

4) A uniform disclosure to accompany all land use and building permits advising applicants of environmental and other statewide regulatory requirements and appropriate contacts.

Rationale:

a) Would promote knowledge of and compliance with wetland and other regulations.
b) Would promote compatibility of state, county and town project approvals.

STATE PROGRAM SUPPORT, MANAGEMENT INFORMATION AND PUBLIC EDUCATION

1) Provide adequate fiscal and personnel resources for administration of wetland regulatory and management programs. Nine DNR FTE's (8 CSS @ $50,000 ea. 1st. year & $41,000 after & 1 LC @ $60,000/$51,000) and 1 Dept. of Justice Environmental Unit FTE ($60,000/$51,000).

Rationale:

Will provide required program effectiveness monitoring, oversight, technical assistance and enforcement.

2) Provide full funding for updating and digitizing of Wisconsin Wetland Inventory maps.

Rationale:

Allows monitoring of wetland acreage changes and related regulatory and management decisions about program effectiveness and regional ecological consequences.

3) Require disclosure of mapped wetlands in real estate transactions.

Rationale:

Alerts prospective buyers to environmental limitations of property as well as regulatory constraints.

4) Continue to encourage environmental ethics and ecological sciences training as part of primary, secondary and university education in Wisconsin's public schools.

5) Wetland acquisition and management programs should afford a high priority to restoration of former wetlands.

GENERAL WETLAND PROTECTION INCENTIVE

1) Provide a property tax credit for owners of mapped wetlands.

Rationale:

More evenly distributes tax burden for lands which support public interest resources.

INTRODUCTION: STUDY PURPOSE AND METHODS

Purpose of Study

The Clean Water Act [Section 404(g)] gives individual states the authority to assume administration of the federal permit program regulating the discharge of dredged and fill material into wetlands. The procedures governing state assumption of the program from the Corps of Engineers are specified by the Environmental Protection Agency (EPA). In response to nationwide concern over continuing wetland loss, EPA encourages states to study assumption of 404 responsibility as one possible way to stem the losses. In June 1988, the Wisconsin Department of Natural Resources (WDNR) received a grant from the U.S. Environmental Protection Agency to "assess the Department's capability of assuming the dredge and fill permit authority." The WDNR Bureau of Water Regulation and Zoning was charged with evaluating jurisdictional and administrative capabilities relating to dredge and fill permit authorities in wetlands and other surface waters. The Bureau also sought to determine if assumption of Section 404 responsibilities by WDNR would improve protection of Wisconsin's wetlands and to identify what changes or improvements would be needed in state programs prerequisite to Section 404 assumption or necessary for enhancement of existing state wetlands protection programs.

Method of Study

Three types of data were gathered to assess Wisconsin's ability to assume the Section 404 permit program: (1) comparison of program authorities; (2) surveys of perceived program effectiveness and (3) limited field compliance data. Three advisory committees, with members from affected agencies and interests, reviewed the methods and data, discussed the issues and made recommendations.

Program description information was gathered from existing statutes, codes literature and program files. EPA requires an analysis of the following state program features:

- Administrative structure
- Geographic jurisdiction
- Activities regulated
- Exemptions
- Permit procedure and criteria
- Surveillance and enforcement
- Staff requirements and training
- Public information
- Budget, staffing and workload

All program descriptions follow this format for ease of comparison. Actual effectiveness of existing programs was taken from data in agency records on wetlands areas affected, permits granted, and enforcement and surveillance actions taken. To estimate perceived effectiveness, the WDNR surveyed permit applicants, resource users, state and federal personnel, and local zoning personnel through mail and phone questionnaires. See appendix for survey forms.

Based on the results and recommendations, WDNR will recommend whether or not to apply to the EPA for assumption of Section 404 responsibilities. This study sought to evaluate the feasibility of assumption of the Section 404 program, and this report includes the analyses, conclusions, and recommendations by the WDNR based upon that study. If the State of Wisconsin decides to assume the program, an additional two to three years may be required to develop agreements and memoranda of understanding with the EPA as well as to complete any legislative changes necessary prior to receiving EPA Section 404 assumption approval.

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DESCRIPTION OF PROGRAMS

State Water Regulatory Program

ADMINISTRATIVE STRUCTURE

In addition to the Bureau of Water Regulation and Zoning with a total of 33 employees in the Madison offices there are six district offices and 16 area field offices with a total of 39 employees. Both district and area offices carry out the full range of departmental functions at the local level including individual permit processing. The area water management specialists make most permit decisions. The majority of the enforcement support for water regulation activities is provided by WDNR wardens (about 1 per county). The district water management supervisors are responsible for coordinating a variety of water regulation activities, including Chapter 30 & 31, Wis. Stats., permits and enforcement, local shoreland/wetland and floodplain zoning oversight, and wetland inventory updates. Program wide policy activities occur at the central office and the primary legal support for wetland/water regulation issues comes from the Bureau of Legal Services in the central office. The Bureau of Water Resources Management sets water quality standards and is responsible for areawide water quality plans. The Bureau of Wildlife Management has a program to advise property owners on managing wetlands and other habitats for wildlife. The entire agency is under the Natural Resources Board (seven members appointed by the governor) and under the direct oversight by the board-appointed Secretary. For a more complete list of bureaus and flow chart of authority see figure 1.

GEOGRAPHIC JURISDICTION

State authority over dredge and fill activities is generally limited to navigable waters below the ordinary high water mark (OHWM).

Navigability is the critical element that establishes public rights and, thereby, legal protection of a waterway. All navigable waters in the state of Wisconsin are under the jurisdiction of the WDNR through the authority of the water regulatory laws, Chapters 30 and 31, Wisconsin Statutes.

Section 30.10, Wis. Stats, declares all lakes, streams, sloughs,bayous, and marsh outlets which are navigable-in-fact for any purpose whatsoever to be navigable and public waters. Through their subsequent decisions, the Wisconsin Supreme Court established the test of navigability. Department staff determine such navigability from on site investigation and through navigation in fact, usually with a canoe. Generally a stream is navigable in fact if a person can propel the lightest watercraft in common use (e.g. a skiff) down the stream at some regularly recurring interval. The interval may be the occasional spring flood.

The delineation of the OHWM is the second critical element determining jurisdiction of Wisconsin water laws. The OHWM is the boundary between private uplands and areas where public rights of navigation predominate. The beds of natural lakes are publicly owned and held in trust by the state, while the beds of rivers are owned by riparians.

Department field staff determine the OHWM through on-site investigation and analysis of physical and biological indicators. Although the term OHWM was

used in a number of Wisconsin Supreme Court cases in the 1800's, the first definition of OHWM is found in the Wisconsin Supreme Court decision in Lawrence v. American Writing Paper Co. (1911), 144 Wis. 556, 562:

> ...Ordinary high-water mark, that is the point to which the presence and action of the water is so continuous as to leave a distinct mark by erosion, destruction of vegetation, or other easily recognized characteristic.

Three years later in Diana Shooting Club v. Husting (1914), 156 Wis. 261, 272, the Supreme Court redefined and expanded the definition to that in use today:

> By ordinary high-water mark is meant the point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation, or other easily recognized characteristic.

ACTIVITIES REGULATED

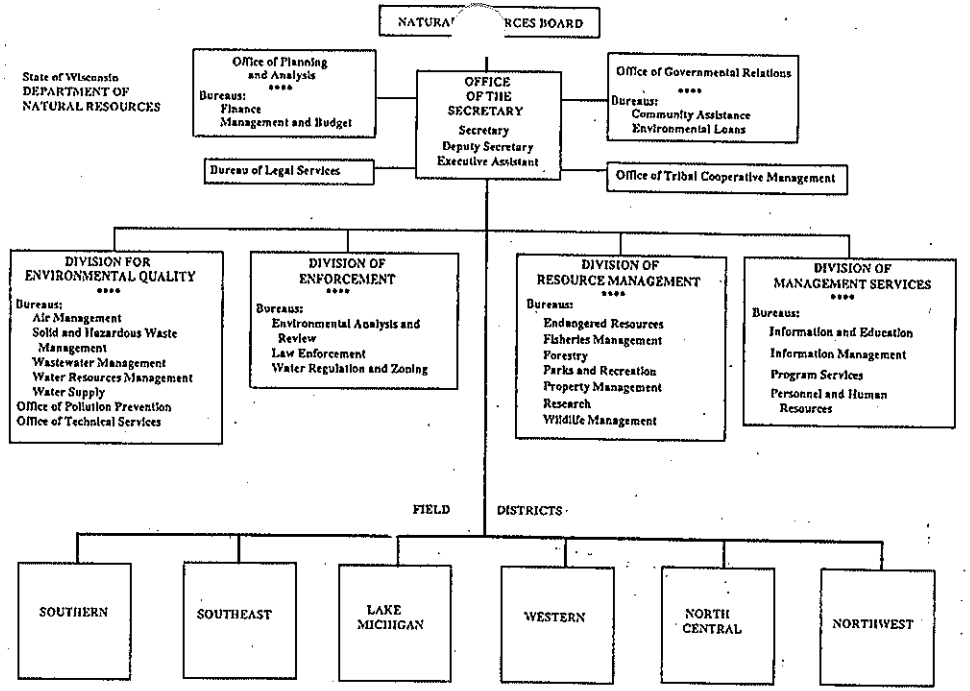
The activities which can have a significant impact on the waters and for which permit programs have been established are: dredging; pier construction; bridge and culvert construction; placement of sand, riprap or fish cribs; connection of any waterway to navigable waters; grading and pond construction adjacent to waterways; establishment of bulkhead lines; diversion of surface waters for irrigation; channel changes; placement of structures, including pipelines, on the bed of navigable waters; construction, maintenance and repair of dams; nonmetallic mining; and maintenance of level and flow of waters.

EXEMPTIONS

Wisconsin statutes exempt the following activities: cranberry growing [s. 94.26-94.35]; maintenance of existing agricultural drainage systems [s. 30.20(1)(c)] and limited road and utility construction [s. 182.017]; construction, dredging or enlarging any artificial or similar waterway where the purpose is connection with existing navigable watery or the artificial waterway is within 500 feet of an existing navigable waterway and grading of 10,000 square feet or more of the bank of a navigable waterway when the project is for the construction and repair of public highways, agricultural uses of land, and in those portions of navigable waters within any county having a population of 750,000 or more [s. 30.19]. Department of Transportation (WDOT) projects are also exempt if interdepartmental liaison procedures set up by a Memorandum of Understanding are followed [s. 30.12 (4), Wis. Stats., see Appendix for MOU between WDNR and WDOT.]

Submerged shorelands of Lake Michigan which have been granted by the state to a municipality are exempt from permit requirements for bulkhead lines, pierhead lines, placing structures and fills or the removal of material within the granted area (s. 30.05, Wis. Stats.).

Farm drainage ditches, defined as any artificial channel which drains water from land used for agricultural purposes, are not navigable and so not regulated unless they were navigable streams prior to being ditched [s. 30.10(4)(c)].



Wisconsin Department of Natural Resources
Division of Enforcement

Division of Enforcement
J. Fryatt, Administrator
266-0015
T. Thoresen, Deputy Admin.
266-7820

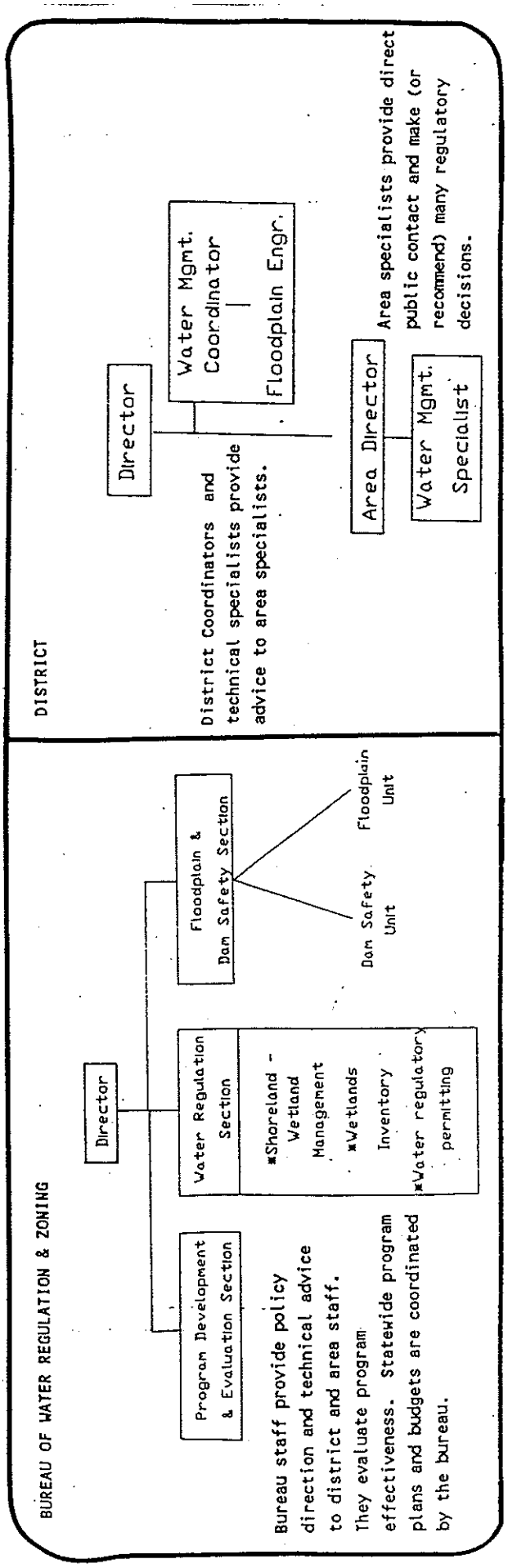
Bureau of Water Regulation and Zoning R. Roden, Director 266-8034
Water Regulation Section S. Hausmann, Chief 266-7360
Dam Safety/Floodplain Management Section L. Larson, Chief 266-1926
Dam safety inspection Permitting of physical alterations of navigable waters, including dredge disposal, bridges, dams Statewide wetlands mapping program Plan approvals for chapter 30-31 bridges and dams, bulkhead line maps and legal descriptions Floodplain, shoreland and wetland zoning ordinance and amendment approvals Floodplain management studies Implementation of NR 115, 116 and 117

Bureau of Law Enforcement R. Christensen, Director 266-1115
Enforcement and Response Section R. Lee, Chief 266-1369
Special Investigation Section 266-2141
Environmental Enforcement B. Hagman, Director 266-5883
Training of DNR conservation wardens Hunter safety program Boating safety program Snowmobile safety program ATV safety program Special investigations Development of enforcement strategies to enforce environmental protection laws, rules, permits, licenses

Bureau of Environmental Analysis and Review B. Braun, Director 266-2197
Environmental Review Section D. Gebken, Chief 266-0245
Environmental Analysis/Project Management Section G. Albright, Chief 266-6437
Administration of WEPA Chair interagency WEPA coordinating committee Investigation of public/private projects requiring environmental impact analysis Preparation of EIS's on major DNR actions Review of environmental activities on highly complex actions, including radioactive waste program Environmental liaison with DOT (including review of railroad grade abandonments) and other state and federal agencies

FIGURE 1: Department of Natural Resources Organization

FIGURE 1 Cont'd: Highlighting Water Regulatory Program Organization



PERMIT PROCEDURE AND CRITERIA

The water regulation permit process is shown in Figure 2.

The WDNR applies a public interest test to decide whether a permit should be granted. However, the test is basically limited to the public interest in the navigable waterway. Elements of the public interest are: wetlands protection (NR 1.95), fish and wildlife protection, water quality maintenance and protection, commercial and recreational navigation, natural esthetics, public water supplies and related factors.

Preservation of water quality is a major factor in permit decisions. Reviewers examine whether the construction and operation of the project will maintain uses of the waterbody for fishing, swimming, water supply, etc.

Permits are often issued with conditions to ensure that public interest values are maintained. Conditions may include management practices for erosion control, stabilization of affected areas, quality of backfill, removal and storage of excavated material and revegetation.

Sometimes professional staff in fisheries, wildlife, endangered resources, water quality and other areas provide specialized information used in permit review. Public hearings also generate information on how various water users will be affected by a project.

SURVEILLANCE AND ENFORCEMENT

Permit monitoring is carried out primarily by local conservation wardens. A copy of each issued permit is sent to the appropriate warden. Permittees are currently supposed to contact the surveillance officer (usually the warden) five days before construction begins and five days after completion. The actual process varies by district and sometimes by warden.

A database for all permits is available in area, district and central offices. The system provides immediate access to application status, site information, project description, permit decisions for land area and applicant, permit conditions, dates of surveillance, necessity for results of enforcement. Figure 3 is a sample of the database format.

We estimate that only major projects (less than 10% of those permitted) are inspected. Complaints are the primary trigger for follow-up site visits.

WDNR's goal in enforcement is to restore damaged waterways, and to secure forfeitures for unauthorized work. Several alternative enforcement tools are available to handle violations of water law.

Enforcement can be handled by the local district attorney, through the Attorney General's office, or through administrative hearing. All violations of Chapter 30 can be handled as civil offenses; only s. 30.12, Structures and Deposits in Navigable Waters..., violations can also be handled criminally.

Preliminary investigation is the responsibility of the Department's conservation wardens who are required to file an incident report for tracking purposes and to make the initial determination if a violation of Chapter 30 or 31 has occurred. Since the warden may not be an expert at OHWM

determinations, navigability, or water law, the area water management specialist is often called to help collect data and to determine if a violation exists.

If a violation has occurred, the warden has the authority (Section 29.05, Wis. Stats.), to order an immediate halt to any further work being done and to issue a citation on the spot. At the discretion of the warden, the violator may be given a period of time to restore the site and have the case dismissed if compliance follows.

The warden also has the option of taking the case to the District Attorney who will determine what action must be taken. Most violations involve structures or deposits in navigable waters. Wardens typically issue citations under civil enforcement provisions (section 30.15, Wis. Stats.). The evidence required for a civil conviction is much less than for a criminal conviction. When issuing a citation, the warden usually requests restoration under section 23.79 (3) unless the activity can be authorized by an after the fact permit.

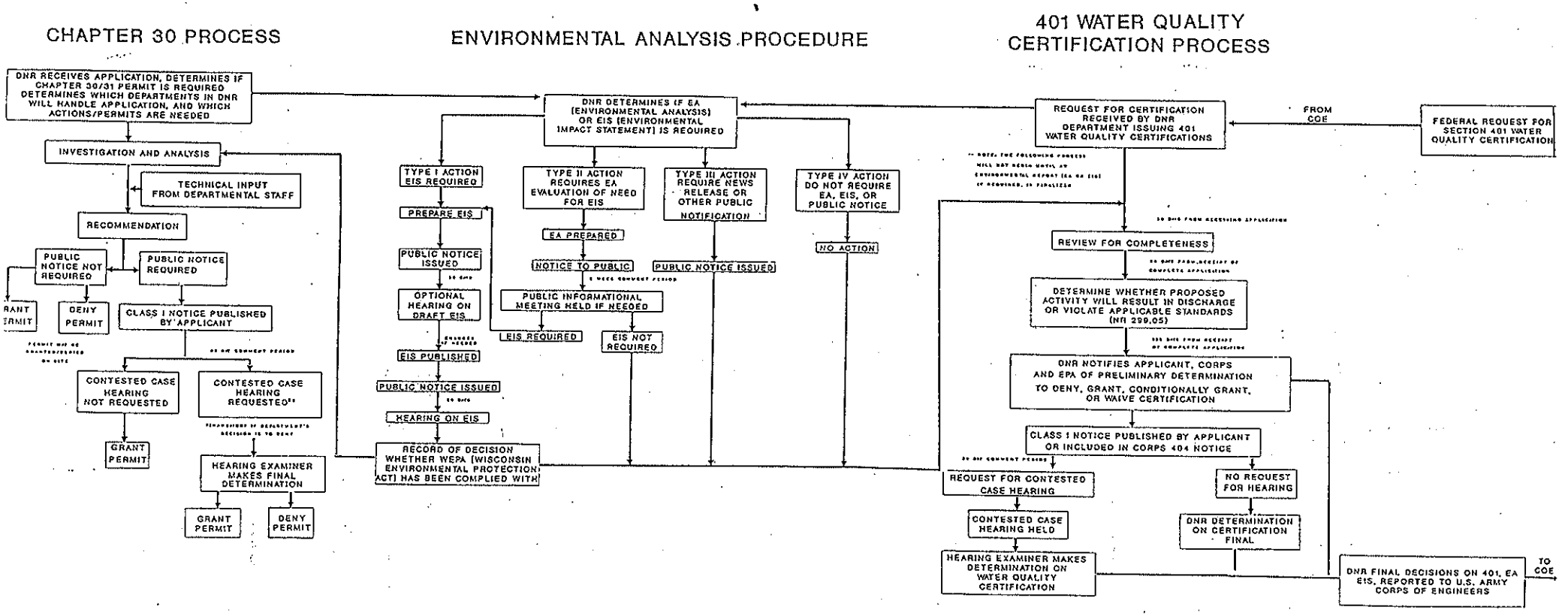
When there is little likelihood that the local judge will give a favorable decision or where the D.A. refuses to take action, the case file is submitted through the Water Regulation Section for an administrative hearing [Section 30.03(4)]. Abatement and restoration can be ordered as a result of this hearing.

The warden then follows the court directions or the administrative law judge's decision to determine if all required measures have been complied with. Monitoring of restoration is part of the final disposition. Once compliance is gained, the case is closed. Should compliance not occur, the case would again be taken to the District Attorney or referred to the Attorney General's office to initiate a contempt of court proceeding. Once the case has been taken to local court, the warden is required to file a form to update the statewide law enforcement database on complaint investigations and enforcement actions.

FIGURE 2:

GENERAL WATER REGULATORY PERMIT PROCESSES

STATE PROCESSES



*** NOTE: ANY DECISION CAN BE APPEALED (SECTION 227 OF WISCONSIN STATUTES)

Prepared January, 1990 by Sharlene Barendrecht

FIGURE 3: Water Regulation Permit Data Base Entry Forms, Showing Information Available

PERMIT/WETLAND SCREENS

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_File__Special__Oracle__Utilities__Help_
---------- _WATER_REGULATION_&_ZONING_ ----------
Q554001    * * * * WRZ PERMIT APPLICATION ENTRY SCREEN * * * *    10/20/93

PERMIT ID: _3 ▒ ____ _____ __        COUNTY CODE: __ _____
-----------------------------------------------------
APPLICANT: _____ _____ _
---OR---
COMPANY:  _____
-----------------------------------------------------
STREET: _____  PHONE: (___) _____
CITY: _____ STATE: WI  ZIP: _____  STATUTE: _____
WATERBODY CODE: _____ WATERBODY NAME: _____
BUSINESS: _  WETLAND: _  TOWNSHIP: __ RANGE/DIR: __ _ SECTION: __
QTR: __  QTR/QTR: __  QTR/QTR/QTR: __  QTR/QTR/QTR/QTR: __ LOT:__
APPLICATION REC'D DATE: _____  PUBLIC NOTICE ISSUED DATE: _____
PUB. NOTICE PUBL. DATE: _____  PERMIT EXPIRATION DATE: _____
APPLICATION DECISION DATE: _____  APPLICATION DECISION CODE: _
COMPLIANCE INSPECTION DATE: _____  PROJECT COMPLETED IND:  _
LAST UPDATE DATE: 10/20/93
COMMENTS: _____ >
Values:__SD_SE_NC_NW_LM_WC_WD_____
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_File__Special__Oracle__Utilities__Help_
---------- _WATER_REGULATION_&_ZONING_ ----------
Q554008          * * *  WETLAND - IMAGE 2 SCREEN  * * *          10/20/93
+-----------------------------------------------------+
|      PERMIT ID: __3 SD 1993 001_____ __             |
+-----------------------------------------------------+  | _____
APPLICANT: _____ _____ _                               |  |
---OR---                                               |  |
COMPANY:  SDFFDSF_____                                 |  |
+-----------------------------------------------------+  |
+-----------------------------------------------------+
-------------------------------------------------------------------------
CORP REFER NO (CENCS-CO-R): ▒▒▒▒▒▒▒▒▒▒
WILL PROPOSED PROJECT AFFECT WETLANDS: _
TYPE OF WETLAND AFFECTED (WWI CLASSIFICATION): _____ _____ _____
ACTIVITY WETLAND/WATER DEPENDENT: _  WAS THERE A PRACTICABLE ALTERNATIVE: _
ESTIMATED ACRES OF WETLAND IMPACTED (DIRECT AND/OR INDIRECT): _____
WAS WETLAND IMPACT BENEFICIAL=B, ADVERSE=A, OR SIGNIFICANTLY ADVERSE=S: _
COMPLIANCE WITH NR 103 ACHIEVED: _        LAST UPDATE DATE: 10/20/93

COMMENTS: _____

Enter_Corp_reference_no_(CENCS-CO-R)_____
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PERMIT REPORTS SCREEN

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|                        WZ_Application_Permits                          |
|                                                                        |
|                           Report Selection                             |
|                                                                        |
|  __1._List_of_permits_by_district,_area,_county,_statute,_waterbody,_appl.
|  __2._Application_summary_with_options_of_monthly_qtrly_yrly/specify_year.
|  __3._Quarterly_report_of_applications_pending_____________________    |
|  __4._Notices_not_published_with_X_days_of_issue___________________    |
|  __5._List_of_apps_pending_more_than_6_months______________________    |
|  __6._Workload_analysis_report_____________________________________    |
|  __7._Report_sorted_by_waterbody_or_statute_or_dec_date._____________  |
|  __8._Report_of_permits_with_missing_wetland_info__________________    |
|                                                                        |
|                      Enter your choice: 1________                      |
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QUERIES

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+------------------------------------------------------------------------+
|                        WZ_Application_Permits                          |
|                                                                        |
|                            Query Permits                               |
|                                                                        |
|              __1._Query_Permit/Wetland_by_Applicant_Name_____          |
|              __2._Query_Permit/Wetland_by_Permit_(docket)_number       |
|              __3._Query_Permit/Wetland_by_Company_name_____            |
|              __4._Query_Permits_by_Waterbody_____________              |
|              __5._Query_Wetland_Image_2_____________________           |
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WATER QUALITY CERTIFICATION

§401 of the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. 1341, authorizes States (as well as eligible Indian Tribes) to grant, deny, or condition a "water quality certification" for a federally-permitted or licensed activity that may result in a discharge to the waters of the United States, including wetlands.

The Wisconsin Department of Natural Resources (WDNR) is authorized by state statute to conduct the §401 water quality certification program for federally-permitted and licensed activities which occur in state waters. The DNR §401 certification program is described in state regulations codified at Wis. Adm. Code NR 299.01 et seq.

Scope of the §401 certification program. The WDNR certification program applies to any federally-permitted or licensed activity which may result in any discharge into waters of the State. "Waters of the State" are defined by statute and regulation as:

> [T]hose portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface or ground water, natural or artificial, public or private, within the state or its jurisdiction.

Applicant Requirements. Wisconsin's regulations require submission of an application to the WDNR with a "complete description of the activity for which certification is sought", including detailed information on the proposed activity and any discharge which may result from it, a detailed description of any proposed treatment of effluents, proposed discharge monitoring methods, and a description of water dependency and practicable alternatives.

Timeframe for Review. Wisconsin's §401 certification regulations require, within 60 business days of receipt of a "compete application," a preliminary determination whether the certifying agency has "reasonable assurance" that the proposed activity will result in a discharge and will comply with all applicable water quality standards and requirements of state law. Wis. Adm. Code NR 299.04. The agency must make a determination within 120 days of receipt of a "complete application" whether to deny, grant, conditionally grants, or waive certification. Wis. Adm. Code NR 299.05(a). Most decisions to grant or conditionally grant certification do not become final until public notice, comment, and hearing opportunities have been exhausted.

Public Participation. Wisconsin's §401 regulations require that, for most decisions to grant or conditionally grant certification, the agency must notify the applicant, the federal permitting or licensing agency and "known interested persons." The regulations require the applicant to publish notice of the decision in a Class I newspaper, including a statement apprising the public of the right to seek a hearing. Any person whose "substantial interests may be affected" by the agency determination may seek a contested case hearing within 30 days after publication of the notice. Wis. Adm. Code NR 299.05.

Standards for Certification Decisions. Wis. Adm. Code's §401 regulations state generally that it is the policy of the State to:

> (a) Deny certification for any activity where the department does not have reasonable assurance that any discharge will comply with effluent limitations or water quality related concerns or any other appropriate requirements of state law as outlined in s. NR 299.04;
>
> (b) Grant or grant conditionally certification for any activity where the department has reasonable assurance that any discharge will comply with effluent limitations or water quality related concerns or any other appropriate requirements of state law as outlined in s. NR 299.04; or
>
> (c) Waive certification for any activity which the department finds will result in no discharge, any wastewater discharge associated with an activity which will be regulated by permit authority under ch. 147, Stats., or any activity that does not fall within the purview of the department's authority.

Wisconsin's State Water Quality Standards for Wetlands. Wisconsin's §401 certification program has been in place for over a decade. Its §401 regulations were first promulgated in 1981.

The impetus for state wetland water quality standards began in 1989, when the WDNR was directed by the Natural Resources Board to develop state wetland water quality standards. The Wisconsin Public Intervenor had also petitioned the WDNR to develop wetland standards. Finally, in 1990, EPA directed the states, as part of its 1991-1993 triennial review, to adopt minimum water quality standards for wetlands. The Wisconsin DNR received some EPA grant funds to assist in the development of its standards and for training and implementation.

Wisconsin has adopted state wetland water quality standards which: (1) define wetlands as "waters of the state;" (2) designate uses that protect the structure and function of wetlands; (3) establish aesthetic narrative criteria (the "free froms") and narrative biological criteria; and (5) extend the antidegradation policy and implementation methods to wetlands, including, where appropriate, the designation of critical wetlands as "areas of special natural resource interest."

The Effect of the Wisconsin §401 Certification Program on Current Regulatory Processes. As noted above, the FWPCA §401 was first enacted by Congress in 1972, and Wisconsin's §401 certification program has been in place for over a decade. Consequently, this program is not a new one. However, the effect of the new wetland water quality standards and additional staffing has been to increase the number of meaningful certification decisions in which the DNR is actually granting, denying, or conditioning its certification of federally-licensed and permitted activities.

Wisconsin's §401 certification program, with its new wetland water quality standards, is proving to be very effective in protecting state wetlands. The effectiveness of the program would be further improved if the Corps would expand the scope of activities it regulates under §404, and honor Wisconsin's denial of certification for certain NWPs. These changes would facilitate

increased coordination between the WDNR and the Corps, thereby improving federal and state program efficiency.

The future success of the Wisconsin §401 program will depend largely on the State's continued political and financial commitment to wetlands protection. In particular, the program must be adequately staffed to conduct efficient and effective permit review.

STAFF QUALIFICATIONS AND TRAINING

Water management staff are selected for their general knowledge of natural physical and ecological processes and to a larger degree their problem-solving and communication skills.

Training of water management specialists is primarily through an initial period of close supervision and work with experienced water regulation staff. All new water regulation staff attend a two day introductory training session.

Staff rely heavily on several handbooks for learning standards and procedures (Water Regulation Guidebook, Floodplain-Shoreland Guidebook and Dam Safety Handbook). Each staff member maintains a basic set of reference books including wetland plant keys, delineation and assessment manuals.

Staff training is continuous. Annual meetings and occasional special sessions are conducted by experienced program staff. All staff are encouraged to participate in training courses offered through outside vendors.

PUBLIC INFORMATION

A variety of brochures and audio-visual programs are available to describe the water regulation program. Three items are specific to wetlands. Area and district staff distribute materials on request or through meetings and mailings for target audiences. A list is available by writing or calling the Bureau of Water Regulation and Zoning.

The Water Regulation program has a written long-term public information plan. Bureau staff prepare materials themselves as time permits and seek grants or other staff assistance to conduct major education and information projects.

BUDGET, STAFFING AND WORKLOAD

Currently the WRZ program annually processes about 3,500 permit applications, 2,500 violation investigations, and 39 contested case hearings. This workload is handled by:

Administrative staff	2
Technical/field staff	35
Technical/bureau staff	7
Enforcement staff	72+ (conservation wardens)
Legal/bureau staff	1

In 1993, the Water Regulation and Zoning program budget was $3.8 million (not including wardens or attorney). Approximately $1.8 million of the total budget is spent on the water regulation and wetland inventory programs.

State Mandated Local Zoning Programs

State law (s. 59.971, s. 61.351, s. 62.231) requires counties, cities and villages to adopt zoning ordinances for wetlands within a corridor along navigable waters. See Figure 4.

Local ordinances must at least meet minimum statewide standards (NR 115, 117). The DNR assists local governments with developing appropriate zoning ordinances and has review authority over any rezoning requests. To date 70 counties (Milwaukee and Menomonee excepted) and about two-thirds of the cities and villages have adopted wetland ordinances. Eventually about 450 cities and villages will have wetland ordinances (at least all municipalities with wetlands of 5 acres).

ADMINISTRATIVE STRUCTURE

County governments are required by the state law to designate a zoning administrator. City and villages are not required to designate a zoning administrator (859.971). Thus, zoning staff can range from a single person with multiple local government duties (clerk, building inspector, etc.) to large staffs including separate positions for inspectors, planners, permit reviewers and biologists or engineers.

In addition to professional staff, zoning programs are administered by locally appointed plan commissions and boards of adjustment or appeal, as well as elected general governing councils or boards. These groups review appeals of staff decisions, decisions requiring public hearing and changes in zoning district boundaries or standards.

The WDNR has specific oversight and assistance responsibilities assigned by the state shoreland-wetland law. These are described under subsequent sections of this description. Local zoning assistance and oversight are provided by water regulation and zoning staff.

WDNR reviews and formally approves local ordinances that comply with the minimum state standards. The Department must adopt an ordinance for any municipality that does not adopt its own ordinance or that adopts an ordinance less restrictive than the state standards. Local governments must administer DNR-adopted ordinances and reimburse the agency for the cost of adoption.

GEOGRAPHIC JURISDICTION

Local governments are required to regulate development in wetlands that have an identified boundary on the Wisconsin Wetland Inventory map, that are in the shoreland zone (300 feet of the OHWM or the floodplain of a navigable river or stream and within 1,000 feet of a navigable lake, pond or flowage, measured from the OHWM).

Local governments have the authority to regulate beyond this minimum requirement, including below the OHWM.

ACTIVITIES REGULATED

Local governments must require some type of permit for all development under administrative rule. Development is defined in the model ordinance and most local ordinances as:

> "Any man-made change to improved or unimproved real estate, including but not limited to, the construction of buildings, structures or accessory structures; the construction of additions or substantial alterations to buildings, structures or accessory structures; the placement of buildings or structures; ditching, lagooning, dredging, filling, grading, paving, excavation or drilling operations; and the deposition or extraction of earthen materials."

Local ordinances must specify a list of allowable activities. All others are prohibited. Some non-development activities are specifically allowed without a permit under certain conditions. For all other activities, a permit must be issued by either the zoning administrator or local plan committee (for conditional uses) as specified in the ordinance.

The lists of activities are in Figure 5.

Prohibited activities can only take place in mapped wetlands through rezoning. Rezoning can only take place if it's determined that the activity would have no significant adverse impact on any wetland function. The wetland functions to be addressed are listed in the administrative rule and in local ordinances. They are as follows:

1. Storm and floodwater storage capacity;
2. Maintenance of dry season stream flow, groundwater discharge to wetlands, groundwater recharge from wetlands or groundwater flow through wetlands;
3. Filtering or storage of sediments or other pollutants that would otherwise drain into navigable waters;
4. Protection of shorelines against erosion;
5. Fish spawning, breeding, nursery or feeding areas;
6. Wildlife habitat;
7. Areas of special recreational, scenic or scientific interest, including scarce wetland types.

Local elected governing bodies make rezoning decisions based on these criteria with DNR review. DNR has the authority to supersede local rezoning decisions. This process is described under the upcoming Permit Procedures and Criteria section of this report.

FIGURE 4:

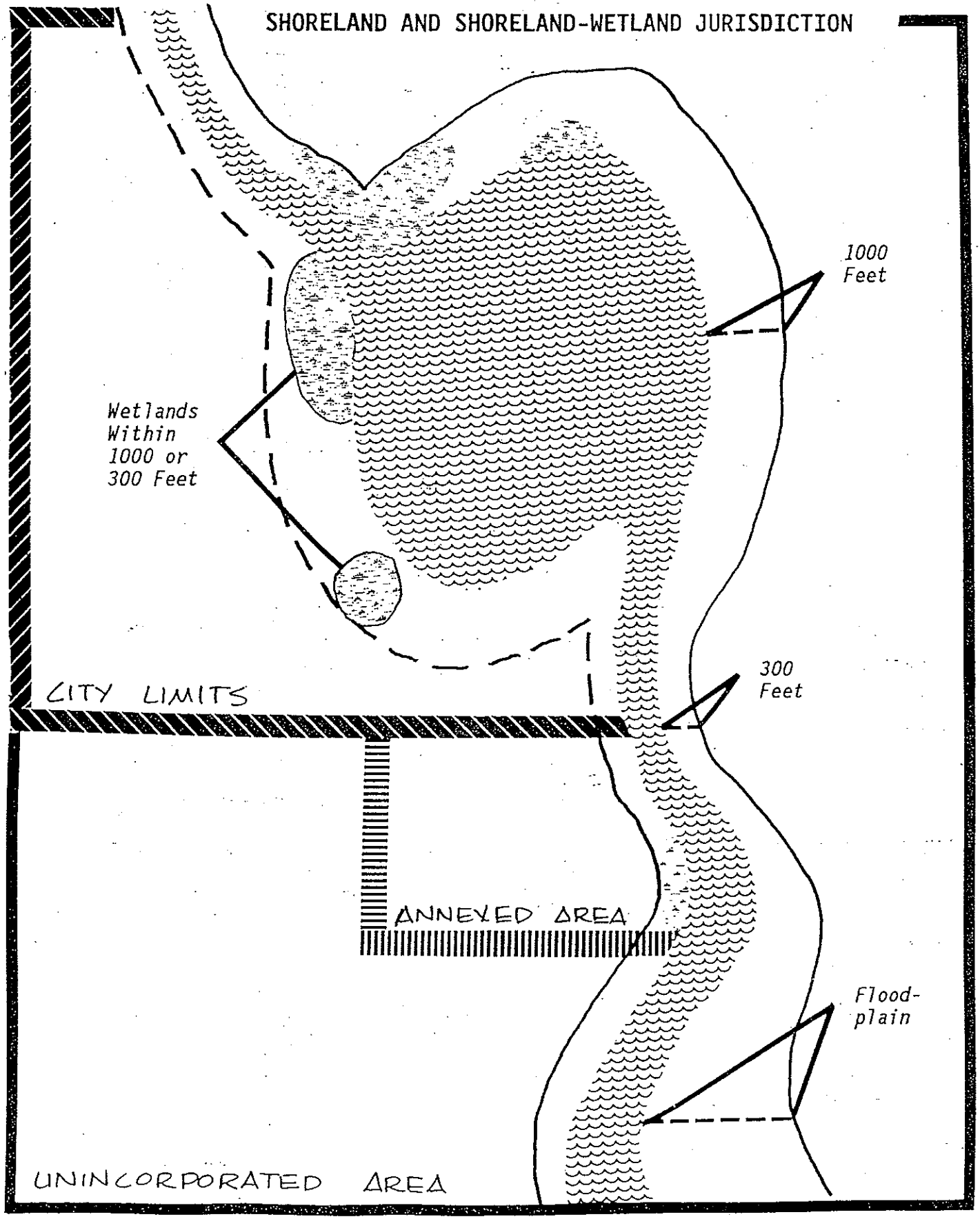

SHORELAND AND SHORELAND-WETLAND JURISDICTION
1000 Feet
Wetlands Within 1000 or 300 Feet
300 Feet
CITY LIMITS
ANNEXED AREA
Flood-plain
UNINCORPORATED AREA

FIGURE 5: Permitted Uses of Shoreland-Wetlands in Unincorporated Areas

Recreational Uses - Hiking, fishing, trapping, swimming, boating and hunting including the construction of blinds for waterfowling.

Wild Crop Harvest - Marsh hay, wild rice, berries, etc., so long as natural reproduction is unaffected. Sphagnum moss raking is permitted but peat mining is prohibited since it involves substantial excavation and may harm wetland values.

Agricultural Cultivation and Pasturing - Fencing to confine pastured stock is permitted. Construction of agricultural outbuildings and other structures is prohibited. The maintenance of existing, functional agricultural drainage systems is permitted. Maintenance is defined as activity necessary to preserve the existing agricultural use of land. For example, pasture land cannot be deep-ditched and drain tiled to convert it to production of row crops. Currently, sealed drain tiles to drain lands outside the shoreland-wetland district are prohibited and require rezoning of the tile corridor.

Forestry/Silviculture - Planting, thinning and harvesting of timber and firewood gathering. Temporary, minor dams and diking or drainage necessary to preserve the timber stock during abnormal conditions is permitted.

Cranberry Cultivation - Flooding, ditch, dike and dam construction for cranberry culture are permitted subject to applicable state statutes, the federal 404 regulatory program and general shoreland zoning provisions.

Piers, Docks, Wharfs and Walkways - These uses acknowledge a riparian property owner's right to access the shoreline for navigation. Construction must minimize harm to wetlands. For example, on seasonally wet soils, wood chips or half logs provide a usable walkway. In a deep marsh, an elevated walkway on piles rather than filling is appropriate.

Existing Highways and Bridges - Maintenance and reconstruction along the existing highway right of way is permitted.

Roads for Agriculture and Forestry - Access roads for agricultural cultivation or forestry are permitted provided:

- The road is necessary to provide access.
- There is no practical upland alternative.
- The road cross section is the minimum necessary to provide reasonable access.
- Culverts or bridges are used to maintain wetland integrity and values.
- Road design and construction minimizes impact on wetland values (described as rezoning criteria on page 4.36). For example, large culverts or bridges may in some cases provide adequate fish access to spawning marshes which would otherwise be landlocked by road construction.
- Construction and residential access roads are prohibited unless the corridor is rezoned.

Accessory Buildings - Nonresidential buildings used exclusively in conjunction with raising of wetland or aquatic fish or animals or some other use compatible with wetland values provided that:

- The building is essential to the permitted use.
- There is no practical upland alternative.
- Building design and construction must minimize adverse impacts on wetland values (see the rezoning criteria).
- Any fill or excavation is limited to that necessary to provide structural support for the building.
- The building may not exceed 500 square feet.
- The building is not designed for human habitation.

Parks, Fish and Wildlife Habitat Areas - Includes public and private facilities and game farms, fur farms and fish hatcheries.

- Private facilities must be exclusively for the permitted use.
- Ditching, pond, dike and dam construction are permitted only if they enhance habitat or wetland values.

Boat Access Sites - Public and private boat access sites include boat launch ramps, navigation access channels and piers. A property owner may build the type of access that minimizes the impact on wetlands at the site. The construction must meet all state and federal laws and rules. (DNR staff should see Chapters 100-120 of Water Regulation Handbook, ss. 30.12, 30.19 and 30.20, Stats. and applicable administrative rules, and s. 404 USC, for directions.)

Public Utilities and Railroads - Construction and maintenance of electric, gas, telephone, water and sewer lines and related transmission facilities by public utilities and cooperatives and construction and maintenance of railroads are permitted provided that:

- There is no practical upland alternative,
- Projects are designed and constructed to minimize adverse impacts on wetland values/rezoning criteria.

Statutes provide an exemption from local zoning for certain major electrical generating facilities and high voltage transmission lines which have obtained a certificate of public convenience and necessity from the Public Service Commission. Currently, oil transport pipelines are not explicitly permitted and require rezoning. Flood and stormwater detention structures and excavation are prohibited, unless wetland assessment and rezoning determine that the wetland has no other significant values.

Additional Permitted Uses of Shoreland-Wetlands in Incorporated Areas

Public boat launching ramps are permitted. No private boat access sites - and no other types of public boat access sites - are permitted.

Construction of some new roads is permitted:

- Roads necessary for the continuity of the municipal street system.
- Roads necessary to provide essential utility and emergency services.
- Roads to reach uses permitted in shoreland-wetlands.

The construction standards are the same as for agricultural and forestry roads. Roads to provide access to development which is not permitted in shoreland-wetlands are prohibited.

Construction of closed drain tiles through shoreland-wetlands to drain lands outside of the shoreland-wetland zoning district is permitted without rezoning (unlike current NR 115 standards for counties).

EXEMPTIONS

Many activities in wetlands are not covered by the local zoning program because of its limited jurisdiction. The only real exemptions are for Department of Transportation projects when the project is reviewed under a liaison agreement with WDNR and for nonstructural agricultural activities along farm drainage ditches. Lands along farm drainage ditches are only exempt if all three of the following conditions are met:

1. The lands are not in the shoreland of another navigable river or stream;7
2. The farm ditch in question was not a navigable stream before ditching; and
3. The lands are maintained in nonstructural agricultural use (i.e., crop or pasture).

Cranberry culture is a permitted use in shoreland wetlands but activities are limited to those necessary for the production of cranberries and activities remain subject to the general shoreland zoning requirements (e.g., setbacks, filling, grading and excavating, and vegetation removal along navigable waters).

PERMIT PROCEDURES AND CRITERIA

The local permit process is generally described in Figure 6. Jurisdictional determinations and permit decisions are made by county, city and village zoning administrators along with local zoning boards and planning committees. Notices of hearings and written decisions are required to be sent to DNR for review. DNR staff provide comments for consideration at local hearings.

DNR has basically the same rights as any other aggrieved party to appeal local decisions in hopes of having them reversed. Upon discovery of an improper decision, DNR must appeal either to the local zoning board (represented by DNR legal counsel) or to circuit court (by referral to the Attorney General). The rezoning process provides a mechanism for DNR adoption of a superseding amendment, with legislative review, where a rezoning is approved locally that does not meet the criteria.

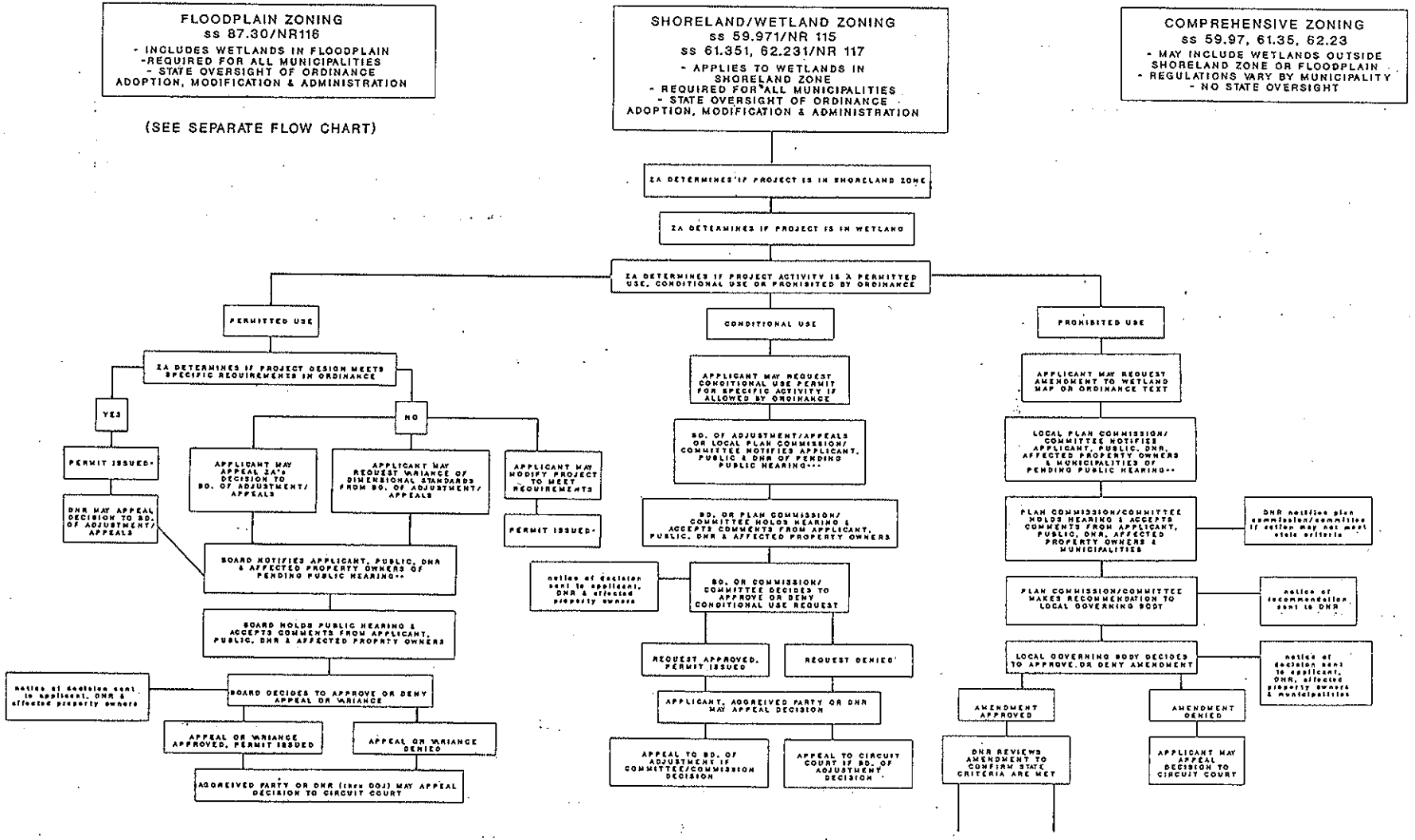
SURVEILLANCE AND ENFORCEMENT

The level of surveillance and enforcement activity varies between local jurisdictions based on the staff and resources available in both planning and zoning functions and legal counsel. No statewide data is available on the number of cases or other measures of the level of effort devoted to surveillance and enforcement by local governments. Gathering this type of data was beyond the scope of the survey work done for this study.

FIGURE 6:

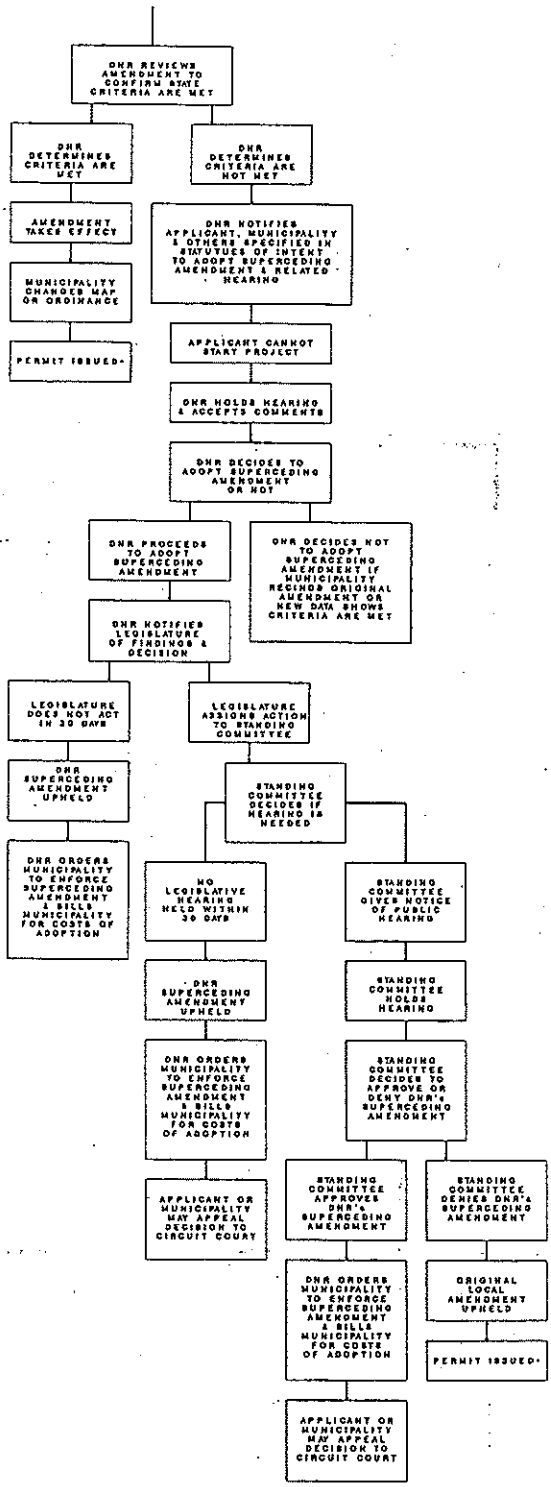
GENERAL LAND USE ZONING PERMIT PROCESSES RELATING TO WETLANDS

LOCAL (County/City/Village) PROCESSES



(CONTINUED ON REVERSE)

(CONTINUED FROM REVERSE)



NOTE: ZA = Zoning Administrator;
Municipality = County, City &/or Village;
Bd. of Adjustment = County Zoning Review Board
Bd. of Appeal = City/Village Zoning Review Board;
Local Plan Commission/Committee = County or City Planning Committee or Commission.

* NOTE: An Aggrieved Party May Appeal Any Permit Issuance

** NOTE: Class II Notice Required

*** NOTE: Class I or II Notice Required, Depending on Municipality.

Wisconsin Department of Natural Resources
Prepared April 1990 - J. Ott

State surveillance and monitoring of local activity consists of reviewing local decisions, including some actions of zoning administrators, and conditional use and rezoning decisions of local boards and committees. Local decisions are reviewed by DNR Water Regulation and Zoning staff. The volume of these decisions and the current staffing level have made statewide tracking of these reviews impossible. No statewide data is available on the number of decisions reviewed or on the number of enforcement actions pursued. The number of individual appeals in progress at any point in time has typically been between six and twelve.

If a municipality fails to administer or enforce its ordinance so that the state minimum standards are met, the department must seek a court order (writ of mandamus) against the municipality. The Department cannot undelegate or take over local zoning responsibility where the local government fails to administer properly.

STAFF REQUIREMENTS AND TRAINING

Requirements vary greatly by locality. Zoning administrators are typically required to have some knowledge of land use planning and of zoning procedures, either through training or experience. Many ZAs are certified sanitarians and soil testers. There is no uniform curriculum or certification program for the majority of zoning job areas.

DNR offers annual workshops on aspects of the state-mandated zoning programs, including wetlands. Periodic training is given to local planning and zoning committees. Detailed handbooks on zoning procedures and state-mandated program standards are provided by DNR for zoning staff as well as boards and committees. DNR's quarterly newsletter and occasional program guidance memos are the formal mechanisms for providing zoning administrators with new information. Several self-help training aids, such as videotapes and workbooks, have been produced as time and funds allowed. The voluntary Wisconsin County Code Administrators Association provides some support to DNR for production of materials.

PUBLIC INFORMATION

Many zoning administrators make presentations to groups on request. A few local governments have prepared public information materials related to wetland zoning requirements. Local governments largely depend on DNR materials for use as handouts. The materials are generally available to zoning administrators in quantity at their request. The items currently available are the Water Regulation and Zoning publications. A list is available by calling or writing the Bureau of Water Regulation and Zoning.

BUDGET, STAFFING AND WORKLOAD

Again, tremendous variation and lack of statewide data characterize the budget, staffing and workload of local zoning offices. The Wisconsin County Code Administrators Association surveyed numbers and salary of local zoning staff in 1989. Numbers range from 1 to 13. Salaries range from $16,500 to $75,000. No figures for total budgets, numbers of permits or proportion of effort devoted to wetland zoning are available. Anecdotal workload data gathered in the survey of zoning administrators conducted for this study merely confirmed the high degree of variability.

Federal Section 404 Program

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." In keeping with this goal, section 404 seeks to regulate the discharge of dredged and fill material into waters of the United States, including wetlands, and authorizes the Chief of Engineers to issue permits (40 CFR Part 232.2q). The COE evaluation is fundamentally different from that of the state. The Corps' philosophy and process revolve around balancing interests of the individual or group proposing the project, against the public interest. The Section 404 (b)(1) guidelines are a major factor in determining whether a permit is issued or denied. The WDNR's regulatory approach, on the other hand, considers environmental protection of State waters as the primary determinant. The COE offers the following comment:

> "It should be indicated that, for a permit to be issued, the project must comply with the 404(b)(1) guidelines and must not be contrary to the public interest. These are separate, if generally related, evaluations, and normally proceed concurrently."

The details of administration of the Section 404 program by the COE are discussed below.

GEOGRAPHIC JURISDICTION

The COE has authority to issue permits for activities which result in the discharge of dredged or fill material into waters of the U.S. defined as follows:

> All waters which are currently used or were used in the past, or will be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
>
> All interstate waters, including interstate wetlands
>
> All other waters such as intrastate lakes, rivers, streams (including intermittent streams) mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, play lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce.
>
> All impoundments of waters defined as waters of the US
>
> Tributaries to waters identified above.
>
> The territorial sea
>
> Wetlands adjacent to the above.

ACTIVITIES REGULATED

Under the CWA, individual permits may be required for the discharge of dredge or fill into waters of the United States. The Corps may also issue general permits on a nationwide, regional and state basis under Section 404(e)(91).

The Corps will process the application using the simplest or lowest level of permitting. The levels of permitting (from simplest to most complex) are: nationwide permit; statewide general permit; letter of permission; and individual permit.

A. **General Permits (GP)** -- Under the CWA the Corps has authority to issue general permits on a nationwide, regional and statewide basis for categories of activities similar in nature that will cause only minimal individual and cumulative adverse environmental impacts.

General permits do not require individual application or review.

Typical projects covered under general permits include: navigational markers, utility structures, bank stabilization projects, minor dredge and fill projects, and boat docks.

1. **Nationwide Permits (NWP)** -- Currently the Corps has 40 nationwide permits (4 are vacant or "reserved"). Wisconsin has conditionally granted water quality certification on 12 of these, denied the 4 "reserved" nationwides and granted certification on all other 24 subject to general conditions. The Corps Division Engineer can take discretionary authority to require an individual permit on an individual case basis.

2. **Statewide** -- There is one state general permit for Wisconsin. This state general permit requires a permit application, unlike the other general permits. The permit is only valid if all conditions of the general permit are met. If the general permit conditions are not met, the activity requires an individual permit.

   The statewide general permit issued for the State of Wisconsin is GP-001-WI, which is for activities authorized or approved by Wisconsin Department of Natural Resources.

B. **Letters of Permission (LOP)** -- These permits are issued through an abbreviated process. LOP's are used in cases that are subject to Section 10 of the Rivers and Harbors Act of 1899 (navigable waters of the United States) and that, in the opinion of the District Engineer, will be a minor project, will not result in "significant individual or cumulative impacts on environmental values, and should not encounter "appreciable opposition". A written application is required. DNR and FWS concurrence, as required by the Fish and Wildlife Coordination Act, is achieved usually through telephone contact by the Corps. No published public notice is required for a LOP.

C. **Individual Permits** -- An individual permit is required where the proposed project or activity is not authorized by either a nationwide permit or other general permit.

The Corps evaluates individual permit applications based on two standards: (a) the EPA Section 404(b)(1) guidelines and (b) the public interest factors. In addition, under NEPA, the Corps prepares an environmental assessment.

The Corps must determine whether the proposed project complies with the 404(b)(1) guidelines. The guidelines state that "no discharge of dredge or fill material shall be permitted if there is a practical alternative to the discharge which would have less adverse impacts on the aquatic ecosystem". Also under the guidelines, the project must be water dependent -- that is, it must require access or proximity to the water. If the project is not water dependent, it is assumed that other workable options exist (unless proven otherwise) and the permit must be denied.

In the public interest review process, the Corps uses three general review criteria to determine if the project is "contrary to the public interest". The criteria include: (1) the public and private needs; (2) the availability and practicality of alternative sites and methods; and (3) the extent and permanence of beneficial and detrimental effects (both private and public) of the project. The following public interest factors are considered: economics; aesthetics; environmental quality; historical value; fish and wildlife values; flood hazards; land use; wetlands; shore erosion; mineral needs; property ownership; navigation; recreation; water supply; water quality; energy needs; safety; food production; and the needs and welfare of the people.

An individual permit action requires a public notice. The Corps is not required to hold a public hearing but may do so if requested or if it believes a hearing would result in the gathering of and it likely important new information.

EXEMPTIONS

Activities exempted from 404 regulation are: normal farming; forestry and ranching activities, including cultivation; soil conservation activities; maintenance of dikes, dams and levees; construction of farm ponds, irrigation ditches; and farm or forestry roads. These activities are not exempted from the requirements of the law if they are intended to bring wetlands into a new use "where the flow or circulation of navigable waters may be impaired or the range by such waters may be reduced" (i.e., conversion of the wetland into an upland area). Also any activity without a discharge or fill material (i.e., draining, excavating, flooding, clearing, etc.) is not regulated.

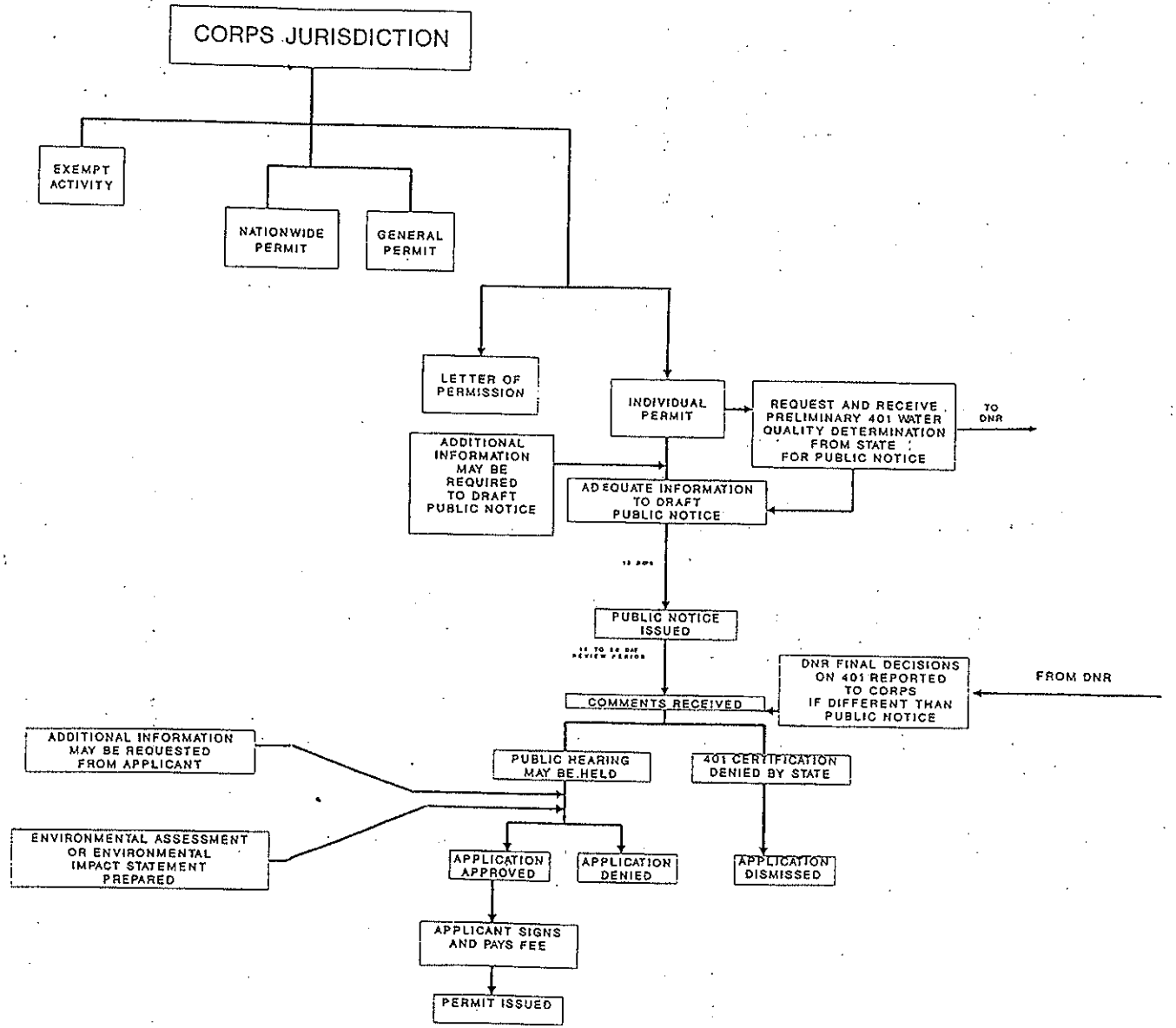
INDIVIDUAL PERMIT PROCEDURES AND CRITERIA

Figure 7 illustrates the Section 404 permit process. Each permit is assigned to a project manager who handles that project from initial application until final action. Upon receipt of a complete application, a public notice is issued providing up to thirty days for comment or request for public hearing. The applicant has the right to respond to any comments. The District Engineer may arrange meetings between applicants and commentors. COE staff may provide information on the project or site, mediate differences, or gather information to aid in the decision making process. An environmental assessment or impact statement must be prepared. The COE typically makes a decision within 60 days of receipt of a complete application. If a permit is warranted, the District

FIGURE 7:

GENERAL WATER REGULATORY PERMIT PROCESSES

FEDERAL PROCESS



Engineer has the discretion to determine the duration of the permit or any necessary special conditions. If the decision is to deny the permit, the applicant is informed in writing of the reasons.

The decision to issue a Section 404 permit is based on an evaluation of the anticipated and cumulative impacts of the proposed activity, and its intended use, on the public interest. Permit decisions are generally made by weighing the reasonably expected benefits of the project against the reasonably foreseeable detriments.

In evaluating a proposed project, the COE must determine whether the proposed project complies with the 404 (b)(1) guidelines which state that:

> "No discharge of dredge and fill material shall be permitted if there is a practical alternative to such discharge that would have less adverse impacts on the aquatic ecosystem."

Water dependency according to the guidelines, is defined as requiring access or proximity to water. If a project is determined not to be water dependent, it is presumed that other alternatives exist (unless proven otherwise), and the permit must be denied.

In addition to evaluation under the Section 404(b)(1) guidelines, the COE must also conduct the project through what is known as the public interest review process, to determine whether the project is "contrary to the public interest." The COE assesses public and private needs, the availability of alternative sites and methods, and the extent and permanence of beneficial and detrimental effects (both public and private) of the project. This review is a balancing process which determines whether any foreseeable adverse impacts to the environment are offset by positive public benefits from the proposed activity. Factors taken into consideration include economics, aesthetics, general environmental concerns, wetlands, cultural resources, fish and wildlife, flooding, current land use, navigation, shore erosion and accretion, water quality, energy needs, safety, food and fiber production, mineral needs, and the general needs and welfare of the people.

The decision to issue a permit is to reflect the national concern for both the utilization and protection of natural resources. The weight and importance of each factor is largely determined by its relevance and value within a particular proposal. Therefore the weight afforded each factor varies with each proposal; what is weighted heavily in one project may be inconsequential in another. The COE is also required to give full consideration to the comments of any state, federal, or local agencies, as well as experts within their field of expertise. Final permits or denials are a result of this balancing process.

The Memorandum of Agreement (MOA) between the EPA and the COE governing enforcement of the Section 404 program recognizes that no net loss of wetlands functions and values may not be achieved in every permit action. Specifically, the MOA recognizes that mitigation may not be required if such action is not practicable, feasible, or would result in only inconsequential environmental benefits. Mitigation is also generally not stipulated if the EPA and the COE agree that the proposed discharge is necessary to avoid environmental harm (i.e., to prevent contamination) or if they agree that the

discharge can reasonably be expected to result in environmental gain or insignificant environmental losses.

In making this determination, COE project managers may consider, among other things, the nature of the wetland's functions, the cumulative effects on the watershed or ecosystem, and the ownership of wetlands in the contiguous areas (protected if public ownership or permanent easement).

The COE will first make a determination as to whether potential impacts have been avoided to the maximum extent practicable. The remaining unavoidable impacts will then be mitigated to the extent appropriate and practicable by requiring specific steps to minimize impacts on the aquatic ecosystem. Finally, compensatory mitigation may sometimes be required for unavoidable adverse impacts which remain after appropriate and practicable minimization. Compensatory actions(restoration or enhancement of existing wetlands or creation of wetlands) is required where practicable in areas adjacent or contiguous to the discharge site. If on-site compensation is not practicable, off-site compensation may be required in the same geographic area or if possible, in the same watershed. Simple purchase or preservation of existing wetlands resources may be accepted as compensatory compensation in certain but rare circumstances.

COMPLIANCE

The COE's enforcement program involves investigation of unauthorized activities as well as supervision of permitted activities. Upon notification of an activity and verification of lack of authorization, the COE will request voluntary restoration. If the person responsible for the illegal activity refuses to voluntarily restore and won't cease work the COE will issue a cease and desist letter, and will then determine if restoration work is required. EPA is notified of the activity and may choose to have the case forwarded to them for civil or criminal penalties. If EPA does not request the case and the COE determines that immediate legal action is not warranted, it will request the party to submit an application for a permit.

While the COE does not have the manpower to maintain a formal follow-up program, inspections are generally made at some time during the permitted activity, and if necessary, a permit can be modified, suspended, or revoked.

Monitoring and enforcement of section 404 program requirements in the St. Paul District is generally carried out by summer crews. Five hundred and sixty one (561) permit inspections were conducted by the St. Paul District in 1989, either by the summer crews, through inspections by project managers or as part of some other district activity.

In pursuing identified violators, the COE has used primarily administrative procedures to attempt problem resolution rather than relying on civil or criminal remedies.

The COE points to staff and budget constraints as the primary reasons for not taking a more active role in surveillance and enforcement. The EPA, which has independent enforcement authority, has used such authority sparingly.

Other Federal Agency Involvement

U.S. ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) shares joint responsibility (with the COE) for Section 404. The EPA developed the original guidelines for implementing the program as well as the guidelines for state assumption. Currently, the EPA develops evaluation policies and technical environmental guidelines, establishes jurisdictional scope of waters, interprets section 404 exemptions, and shares enforcement responsibilities with the COE. The COE is required to adhere to EPA guidelines when making permit decisions, and EPA regional staff review individual permit applications, providing comments and recommendations to the COE. EPA strategy also includes establishing guidelines for and facilitating transfer of the Section 404 program to qualified states. In addition to these responsibilities, the EPA has the authority to prohibit the use of any defined area as a disposal site for dredged or fill material, to veto permit decisions if such a project would cause "unacceptable adverse impacts on municipal water supplies, fish and wildlife habitat, and recreational uses," and to order restoration of wetlands that are filled without a permit. The EPA has used its authority sparingly and has indicated that staff and funding levels for the Section 404 program limit the extent to which it can participate.

In 1990, the EPA received funds for State Wetlands Program Development in Section 104(b)(3) of the Clean Water Act. Grants have been issued to states or tribes for the development of wetland protection programs. The EPA is also involved with an advance identification program under Section 404(b)(1). This joint COE-EPA effort is designed to assess and identify those wetlands that are generally unsuitable for receiving fill.

U.S. FISH AND WILDLIFE SERVICE

The Fish and Wildlife Service (FWS) is responsible for conserving, enhancing, and protecting fish and wildlife and their habitats for the continuing benefit of people through Federal programs relating to birds, endangered species, marine mammals, inland sport fisheries, and research activities. The FWS is significantly involved in the Section 404 program. Under the Fish and Wildlife Coordination Act (FWCA) federal agencies are required to consult with the FWS. The COE's Section 404 permit review process includes coordination of certain project proposals with the FWS. The FWS comments are directed at the conservation of wildlife resources by the prevention of their direct and indirect loss and damage. The FWS may recommend mitigation, in accordance with the USFWS Mitigation Policy, for habitat losses when considered warranted. The FWS may also recommend that projects be modified or permits denied. The COE must give "equal consideration" to FWS views when evaluating a project and is required to include fish and wildlife comments in written Section 404 permit decisions; however, a permit may be issued over an unresolved objection of the FWS. A Memorandum of Agreement between the Department of the Interior and the Department of the Army outlines the procedures involved in elevating a permit decision, through a conflict resolution process, to higher authorities within each agency. The process proceeds from the field level, culminating with the Assistant Secretary of the Army for Civil Works and the Assistant Secretary of the Interior. The Corps has final authority on the permit decision.

The strongest wetland protection tool of the FWS is the Endangered Species Act. This act enables the FWS to make binding recommendations on projects authorized under Section 404 which would otherwise endanger the continued existence of a federally listed endangered species.

In the early 1970s, FWS surveillance for illegal activities was routine. Current FWS policy for violations is to call the COE, send a map of the site, and the date they noticed the activity. The COE is not consistent in their submittal of surveillance reports to the FWS nor do they coordinate with the FWS on permit violations. Currently some violation reports are provided to the FWS; routine investigatory information is not forwarded to the FWS. The FWS has no independent enforcement mechanisms.

While the FWS does not administer any wetland regulations, it does administer several other wetland protection programs. Under the Small Wetlands Acquisition Program, FWS can acquire perpetual easements or purchase wetlands that have high waterfowl production value, and under the Wetland Restoration Program and provisions of the Food Security Act (Farm Bill), FWS provides funds and technical expertise to restore wetlands.

The FWS was also authorized to conduct a National Wetlands Inventory (NWI) to determine the number of remaining wetlands and the percentage lost. The NWI uses the products of the Wisconsin Wetland Inventory as its inventory for Wisconsin.

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COMPARISON OF STATE AND FEDERAL PROGRAMS

Geographic Jurisdiction

State jurisdiction is generally limited to navigable-in-fact waters below the ordinary high water mark (OHWM). While specific activities above the OHWM that affect navigable waters are regulated, non-navigable waters, including contiguous and adjacent wetlands above the OHWM and isolated non-navigable waters are not regulated.

State-mandated local zoning applies to wetlands five acres and larger within 300' or the floodplain limits of navigable streams and within 1,000' of lakes, ponds and flowages (measured from the OHWM).

COE jurisdiction extends beyond the OHWM of surface waters to the limits of adjacent wetlands as well as to isolated wetlands. The COE jurisdiction is described as "waters of the U.S."

Wetland and OHWM definitions in state and federal programs are similar.

See Figures 8 and 9 for comparison of jurisdictions.

ACTIVITIES REGULATED

The state regulates most physical alterations of navigable waterways. Both dredging and discharges of dredged fill material are regulated, as are channel changes and enclosures, diversion of water, and construction of new waterways. Fills are generally prohibited.

State-mandated local zoning prohibits most uses except for open space and wetland-related uses unless the wetland is re-zoned. The permitted uses are described earlier in this report. Only minor filling necessary to exercise the permitted uses is allowed.

Under Section 404 of the Clean Water Act, the COE regulates the discharge of dredged and fill material into waters of the U.S.

While the COE permits fills, state law generally allows only structures (defined by the courts as having form, shape, and utility). By this definition, fills are not included. Some minor filling is permitted (1) behind approved bulkhead lines, and (2) in submerged shorelands along Lake Michigan which have been granted by the state legislature to a municipality.

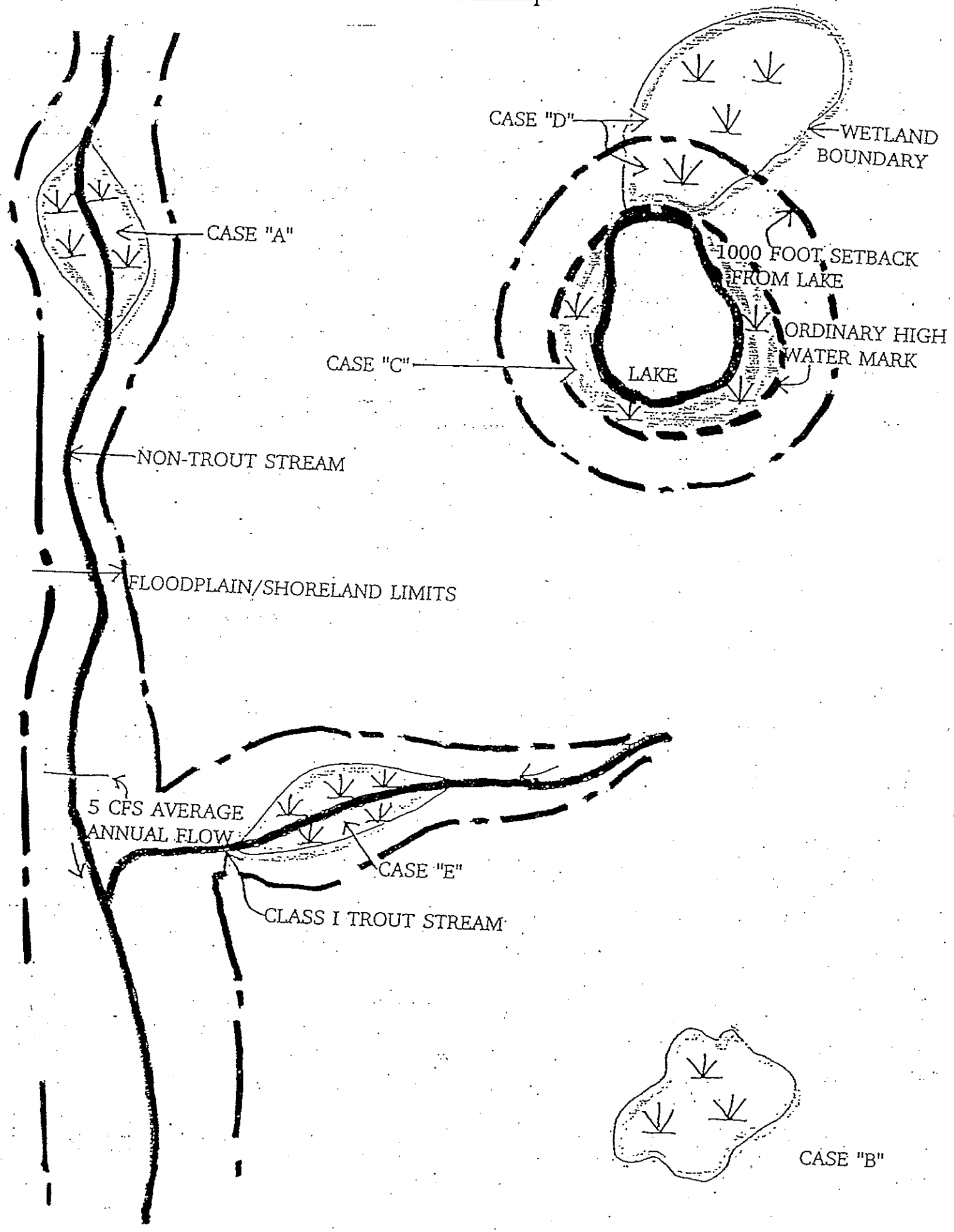
EXEMPTIONS

The state does not regulate or prohibit:

a) the placement of structures or deposits in the submerged shorelands of Lake Michigan, the title to which has been granted by the legislature to a municipality.

b) farm drainage ditches unless it can be shown that the ditches were navigable streams before ditching.

FIGURE 8: Wetland Jurisdictional Examples



SIMPLIFIED SUMMARY OF WETLAND FILLING ACTIVITIES REGULATED UNDER EXISTING FEDERAL, STATE AND LOCAL AUTHORITIES

WETLAND JURISDICTION EXAMPLE	SECTION 404 CLEAN WATER ACT - CORPS OF ENGINEERS			STATE	LOCAL
	NATIONWIDE PERMIT	DISCRETIONARY NATIONWIDE/INDIVIDUAL	INDIVIDUAL PERMIT	CHAPTER 30	ZONING
CASE "A" Headwater Wetland	Yes if less than 1 acre	Yes if between 1 and 10 acres	Yes if 10 acres or greater	Yes if fill is in excess of 10,000 square feet or below the ordinary high water mark of a navigable stream	Yes if 5 acres or greater and within 300 feet of a navigable stream
CASE "B" Isolated Wetland	Yes if less than 1 acre	Yes if between 1 and 5 acres	Yes if 5 acres or greater	Yes if a navigable wetland	Yes if 5 acres or greater and within 300 feet of navigable stream or 1000 feet of a lake
CASE "C" Wetland located below ordinary high water mark of lake	Yes if lake-wetland complex is less than 1 acre	Yes if lake-wetland complex is between 1 and 5 acres	Yes if lake-wetland complex is 5 acres or greater	Yes	No. Wetlands located below ordinary high water mark of navigable waters not regulated under local zoning
CASE "D" Wetland adjacent to lake partially within shoreland zone	Yes if lake-wetland complex is less than 1 acre	Yes if lake-wetland complex is between 1 and 5 acres	Yes if lake-wetland complex is 5 acres or greater	Yes if fill is in excess of 10,000 square feet	Yes if wetland within the shoreland zone is 5 acres or greater and within 1000 feet of a lake
CASE "E" Wetland adjacent to Class I trout stream[1]	No. Individual permit is required	No. Individual permit is required	Yes. Any size wetland is regulated	Yes if fill is in excess of 10,000 square feet or below the ordinary high water mark of a navigable stream	Yes if wetland within the shoreland zone is 5 acres or greater and within 300 feet of stream

[1] Other Case "E" scenarios include wetlands in or adjacent to gnated wild and scenic rivers, trout lakes, environmental corri
state ntific or natural areas and any calcareous fens identified by the Department.

FIGURE 9: COMPARISON OF JURISDICTION

FEDERAL (SECTION 404)	STATE (CHAPTERS 30 & 31)	LOCAL	COMMENTS/NEEDS
AUTHORITY			
• Section 404 of the Clean Water Act (33 U.S.C. 1344) (hereinafter referred to as section 404) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice and opportunity for public hearing, for the discharge of dredged or fill material into the waters of the United States at specified disposal sites. [33 CFR s. 320.2(f)]	• State authority for regulating physical alterations (both dredging and discharges of dredged or fill material) to waterways is found in Chapters 30 and 31, Wis. Stats. • State authority to regulate water and sewage, solid waste, hazardous waste and refuse, and money in waters of the state is found in Chapter 144. • State authority to regulate discharges of pollution to waters of the state is found in Chapter 147.	• State statutes require counties, cities and villages to zone wetlands in shorelands adjacent to navigable waters (counties s. 59.971, villages s. 61.351, and cities s. 62.231).	
JURISDICTION			
• The term "waters of the United States" and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR Part 328. [33 CFR s. 323.2(a)]	• State authority is generally in navigable waters of the state (with additional authority to regulate waterways or ponds constructed within 500 feet or connected to navigable waters and grading in excess of 10,000 square feet on the bank of a navigable waterway).	• Mapped wetlands of 5 acres or larger in size which are located in shorelands of navigable waters are required to be zoned. Shorelands are defined as lands within 1,000 feet of the ordinary high-water mark (OHWM) of a navigable lake, pond or flowage or within 300 feet of the OHWM or the floodplain, whichever is greater, adjacent to navigable river or stream.	• State authority is limited to navigable-in-fact waters. This means there must be sufficient open water to meet that test. Many wetland types are not navigable-in-fact and therefore are not within state jurisdiction.
• (a) The term "waters of the United States" means (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and solid in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purposes by industries in interstate commerce: (4) All impoundments of water otherwise defined as waters of the United States under the definition; (5) Tributaries of waters identified paragraphs (1) (1)-(4) of this section; The territorial seas;	• Any waterbody with a discernable bed and banks is navigable in fact which is capable of floating any boat, skiff or a canoe, of the shallowest draft used for recreational purpose. . . on a regularly recurring basis including during periods of high water such as spring floods. DeGayner v. DNR 70 Wis. 2d 936 (1975) • Declarations of Navigability are found in s. 30.10, Wis. Stats.: (1) LAKES. All lakes wholly or partly within this state which are navigable in fact are declared to be navigable and public waters, and all persons have the same rights therein and thereto as they have in and to any other navigable or public waters. (2) STREAMS. Except as provided under sub. (4)(c), all streams, sloughs, bayous and marsh outlets, which are navigable to the extent that no dam, bridge or other obstruction shall be made in or over the same without the permission of the state. (3) ENLARGEMENTS OR IMPROVEMENTS IN NAVIGABLE WATERS. All inner harbors, turning basins, waterways, slips and canals created by any municipality to be used by the public for purposes of	• Navigability and ordinary high-water mark are defined the same as in the state program.	

FEDERAL (SECTION 404)	STATE (CHAPTERS 30 & 31)	LOCAL	COMMENTS/NEEDS
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section.	navigation, and all outer harbors connecting interior navigation with lake navigation, regulation that navigable streams are subjected to as regards improvement, use and bridging. 4(c) Notwithstanding any other provision of law, farm drainage ditches are not navigable within the meaning of this section unless it is shown that the ditches were navigable streams before ditching. For purposes of this paragraph, "farm drainage ditch" means any artificial channel which drains water from lands which are used for agricultural purposes. (s. 30.10, Wis. Stats.)		
• Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States. [33 CFR s. 328.3(a)]	• There is a similar exemption to state jurisdiction. • Definition of "waters of the state" is found in s. 144.01(19) and s. 147.015(20): "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage system and other surface or groundwater natural or artificial, public or private within the state or under its jurisdiction. . .		• Definition applies only to authorities granted in Chapters 144 and 147.
WETLAND DEFINITION			
• The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands general include swamps, marshes, bogs, and similar areas. [33 CFR s. 328.3(b)]	• "Wetland" means an areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions. (s. 23.32(1), Wis. Stats.)	• Shoreland wetland programs use the state wetland definition.	• The National Wetland Inventory has accepted Wisconsin Wetland Inventory Maps as official NWI Maps.
• The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands." [33 CFR s. 328.3(c)]	• State authority does not extend beyond the ordinary high water mark (except for waterways or ponds constructed within 500 feet or connected to navigable waters, and grading in excess of 10,000 square feet on the bank of a navigable waterway).		• Federal authority extends to the boundary of contiguous and adjacent wetlands of surface waters.
ORDINARY HIGH-WATER MARK			
• The term "ordinary high water mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. [33 CFR s. 328.3(e)]	• "By ordinary high-water mark is meant the point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation or other easily recognized characteristic." Diana Shooting Club v. Husting 156 Wis. 261 (1914)	• Same definition as state program.	

FEDERAL (SECTION 404)	STATE (CHAPTERS 30 & 31)	LOCAL	COMMENTS/NEEDS
LIMITS OF JURISDICTION			
Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters: (1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or (2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands. (3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland. [33 CFR s. 328.4(c)]	• Water must be navigable-in-fact. • State authority does not extend beyond the ordinary high water mark (except for waterways or ponds constructed within 500 feet or connected to navigable waters, and grading in excess of 10,000 square feet on the bank of a navigable waterway).	• Wetlands less than 5 acres in size and those landward of the shoreland zone are only regulated at option of local government. • Cranberry culture and agriculture activities are permitted uses of shoreland wetlands under state rule standards. • Shoreland wetland programs allows non-conforming uses established before the zoning regulations were effective to continue although expansion is limited. • Few local governments, if any, exert significant control over development of non-shoreland wetlands. • State authority limited to navigable-in-fact waters and the ordinary high water mark of those waters. Thus many contiguous and adjacent wetlands are not regulated. In addition, isolated wetlands which are not navigable-in-fact are also not regulated by the state.	

c) constructing, dredging, enlarging, or connecting any natural or artificial waterway to existing navigable water or grading in excess of 10,000 sq. ft. on the bank of navigable water 1. expressly for agricultural purposes, 2. for the construction and repair of public highways or 3. within any county having a population of 750,000 or more (Milwaukee county).

d) all cranberry activities except those which involve filling of navigable waters.

e) maintenance of currently serviceable authorized structures.

f) municipal highway bridge construction/reconstruction providing specified state standards are met.

g) DOT activities covered by interdepartmental liaison procedures.

Local zoning applies to all development except:

a) DOT activities covered by interdepartmental liaison procedures.
b) Federal activities on federally-owned lands.
c) Lands adjacent to agricultural drainage ditches when the ditch was not a navigable stream before ditching, the lands are maintained in cultivation or pasture and the land is not in the shoreland of another navigable waterway.
d) Power plants or transmission lines if the Public Service Commission has issued a certificate of Public Conveniences and Necessity (CPCN).

The COE does not regulate or prohibit:

a) normal farming, silviculture, forestry, and ranching activities encompassing plowing, seeding, cultivating, minor drainage, and harvesting for food, fiber, and forest products (all of which must be an ongoing activity).

b) maintenance, including the reconstruction of currently serviceable structures, such as dams, dikes, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures.

c) construction or maintenance of farm livestock ponds or irrigation ditches (not including the construction, but including the maintenance of drainage ditches);

d) construction of temporary sedimentation basins for construction sites which do not involve the placement of fill material into waters of the US.

e) construction or maintenance of farm roads, forest roads, or temporary roads used for moving mining equipment provided that Best Management Practices (BMPs) for erosion control are used.

See Figure 10 for detailed comparison.

FIGURE 10: Comparison of Federal, State, Local Activities Regulated

FEDERAL	STATE	STATE-MANDATED
PART 323-PERMITS FOR DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES		
§ 323.1 General.		
This regulation prescribes, in addition to the general policies of 33 CFR Part 320 and procedures of 33 CFR Part 325, those special policies, practices, and procedures to be followed by the Corps of Engineers in connection with the review of applications for DA permits to authorize the discharge of dredged or fill material into waters of the United States pursuant to section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344) (hereinafter referred to as section 404). (See 33 CFR 320.2(g).)	State authority for physical alterations of waterways is found in Chapters 30 and 31, Wis. Stats. Discharges of dredged or fill material are regulated as well as dredging, channel changes, diversions, lands and flow, structures, dam construction and maintenance.	144.26 general authority 59.971, Stats., and NR 115 County SL/WL 61.351 and 62.231, Stats., and NR 117 - SL/WL for cities and villages. State mandated zoning - need administration at least as restrictive as state standards and state (DNR) oversight and review of local decisions. Permitted uses of SL/WL's established. All others prohibited unless WL rezoned after evaluating of WL functions. WL's with significant functions/values may not be rezoned.
Certain discharges of dredged or fill material into waters of the United States are also regulated under other authorities of the Department of the Army...	State has permitting authority for these activities and waters even though these programs are not assumable.	
§ 323.2 Definitions. For the purpose of this part, the following terms are defined:		
(a) The term "waters of the United States" and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR Part 328.	Wetlands below OHWM of nav. waters and contiguous WL's affected by enlargements of waterways or filling and grading of banks.	(a) Mapped WL's of 5 acres or larger in size located in SL are regulated. SL = land within 1,000 feet of OHWM of nav. lake, pond or flowage or within 300' of OHWM or floodplain of nav. river or stream. (b) Lake, pond and flowage "lumped" under single jurisdictional category: No particular significance to set.
(b) The term "lake" means a standing body of open water that occurs in a natural depression fed by one or more streams from which a stream may flow, that occurs due to the widening or natural blockage or cutoff of a river or stream, or that occurs in an isolated natural depression that is not a part of a surface river or stream. The term also includes a standing body of open water created by artificially blocking or created by artificially blocking or restricting the flow of a river, stream, or tidal area. As used in this regulation, the term does not include artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water for such purposes as stock watering, irrigation, settling basins, cooling, or rice growing.	No formal definition, although working definition is similar.	

FEDERAL	STATE	STATE-MANDATED
(c) The term "dredged material" means material that is excavated or dredged from waters of the United States.	"Dredged material" means any material removed from the bed of any waterway (below OHWM) by dredging", NR 347.03(13), Wis. Adm. Code.	Discharges to WL's defined in terms of permitted uses... all other activities prohibited. Generally only the minimal amount of filling necessary to exercise the permitted use is authorized.
(d) The term "discharge of dredged material" means any addition of dredged material into the waters of the United States. The term includes, without limitation, the addition of dredged material to a specified discharge site located in waters of the United States and the runoff or overflow from a contained land or water disposal area. Discharges of pollutants into waters of the United States resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill) are not included within this term and are subject to section 402 of the Clean Water Act even though the extraction and deposit of such material may require a permit from the Corps of Engineers. the term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products (See § 323.4 for the definition of these terms). The term does not include de minimis, incidental soil movement occurring during normal dredging operations.	State law (s. 30.12) prohibits placement of fill to convert waterways to uplands but "structures" may be authorized.	
(e) The term "fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of any waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under section 402 of the Clean Water Act.	No state definition of "fill". 30.12 prohibition may not "deposit any material" without authorization.	
(f) The term "discharge of fill material" means the addition of fill material into waters of the United States. The term generally includes, without limitation, the following activities: Placement of fill that is necessary for the construction of any structure in a water of the United States; the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs. The term does not include plowing,	All activities mentioned except for "site development fills" require permits. Fills are generally prohibited. Section 30.12, Stats., allows permits only for structures - "shape, form and utility." A general exemption exists to submerge shore lands in Lake Michigan which have been granted by the State to a municipality. "Nothing in this chapter relative to the establishment of bulkhead or pierhead lines or the placing of structures or deposits in navigable waters is applicable to submerged shore lands in Lake Michigan, the title to which has been granted by the state to a municipality." (§ 30.05)	

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cultivating, seeding and harvesting for the production of food, fiber, and forest products (See § 323.4 for the definition of these terms). (g) The term "individual permit" means a Department of the Army authorization that is issued following a case-by-case evaluation of a specific project involving the proposed discharge(s) in accordance with the procedures of this part and 33 CFR Part 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR Part 320. (h) The term "general permit" means a Department of the Army authorization that is issued on a nationwide or regional basis for a category or categories of activities when: (1) Those activities are substantially similar in natural 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 of the action are individually and cumulatively minimal. (See 33 CFR 325.2(e) and 33 CFR Part 330.)	All state permits require individual application and review, including state general permits (NR 322, Wis. Adm. Code). A general permit (GP-001) exists which authorizes specific activities when that activity is authorized, permitted or approved by the Department.	(g) Permits required for all "new development" (h) Some maintenance activities which comply with established standards do not require permits (in this sense they are similar to "general" permits).
§ 323.3 Discharges Requiring permits. (a) General. Except as provided in § 323.4 of this Part, DA permits will be required for the discharge of dredged or fill material into waters of the United States. Certain discharges specified in 33 CFR Part 330 are permitted by that regulation ("nationwide permits"). Other discharges may be authorized by district or division engineers on a regional basis ("regional permits"). If a discharge of dredged or fill material is not exempted by § 323.4 of this Part or permitted by 33 CFR Part 330, an individual or regional section 404 permit will be required for the discharge of dredged or fill material into waters of the United States.		Exempted Activities Include: Recreation such as hunting, fishing, trapping and hiking. Forestry, included limited water level manipulation and some road construction. Harvesting wild crops. Pasturing livestock, including fence construction. Agricultural cultivation, including maintenance of existing drainage systems. Some limited construction of small buildings needed to support open space or wetland preservation uses. Pier, dock and walkway construction. Development of parks, recreation areas, and fish and wildlife habitat improvement projects. Limited utility construction. Limited road construction for farming and forestry.

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		Limited railroad construction. All other activities not designated permitted uses are prohibited unless wetland rezoned to delete, wetland from zoning district map. Criteria for rezone decision is "no significant adverse impact" on designated wetland functions/values.
(b) Activities of Federal agencies. Discharges of dredged or fill material into waters of the United States done by or on behalf of any Federal agency, other than the Corps of Engineers (see 33 CFR Part 209.145), are subject to the authorization procedures of these regulations. Agreement for construction or engineering services performed for other agencies by the Corps of Engineers does not constitute authorization under the regulations. Division and district engineers will therefore advise Federal agencies and instrumentalities accordingly and cooperate to the fullest extent in expediting the processing of their applications.	State requires federal agency to obtain state permit from federal agency except where activity specifically exempted from state regulation by federal law. State also "regulates" under § 401, CWA. DOT bridge and highway exemptions.	All ind. state projects require permits unless specifically exempted e.g. DOT, some federal facilities.
§ 323.4 Discharges not requiring permits.		
(a) General. Except as specified in paragraphs (b) and (c) of this section, any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under section 404;		Maintenance activities for existing structures and uses which meet standards and open space uses which do not constitute "new development," i.e. don't involve discharges.
(1)(i) Normal farming, silviculture and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, as defined in paragraph (a)(1)(iii) of this section. (ii) To fall under this exemption, the activities specified in paragraph (a)(1)(i) of this section must be part of an established (i.e., on-going) farming, silviculture, or ranching operation and must be in accordance with definitions in § 323.4(a)(1)(iii). Activities on areas lying fallow as part of a conventional rotational cycle are part of an established operation. An operation ceases to be established when the area on which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operations. If an activity takes place outside the waters of the United States, or if it does not need a section 404 permit, whether or not it is part of an established farming, silviculture, or ranching operation.	Farm drainage ditches are not navigable and therefore not regulated unless it can be shown that the ditches were navigable stream before ditching. "Notwithstanding any other provision of law, farm drainage ditches are not navigable within the meaning of this section unless it is shown that the ditches were navigable streams before ditching. For purposes of this paragraph, "farm drainage ditch" means any artificial channel which drains water from lands which ar used for agricultural purposes. (§30.10(c)) Agricultural exemption to construct, dredge, enlarge any waterway, to connect any natural or artificial waterway to existing navigable water or grade in excess of 10,000 sq. ft. on bank of navigable water. "(1) Permits Required. Unless a permit has been granted by the department or authorization has been granted by the legislature, it is unlawful: (a) To construct, dredge or enlarge any artificial waterway, canal, channel, ditch, lagoon pond, lake or similar waterway where the purpose is ultimate connection with an existing navigable stream, lake or	Ag cultivation only. No new drainage, structures or fills except ag and forestry roads which meet standards designed to minimize impacts where no upland alternative is available.

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(iii)(A) Cultivating means physical methods of soil treatment employed within established farming, ranching and silviculture lands on farm, ranch, or forest crops to aid and improve their growth, quality or yield. (B) Harvesting means physical measures employed directly upon farm, forest, or ranch crops within established agricultural and silvicultural lands to bring about their removal from farm, forest, or ranch land, but does not include the construction of farm, forest, or ranch roads. (C)(1) Minor Drainage means: (i) The discharge of dredged or fill material incidental to connecting upland drainage facilities to waters of the United States, adequate to effect the removal of excess soil moisture from upland cropland. (Construction and maintenance of upland (dryland) facilities, such as ditching and tiling, incidental to the planting, cultivating, protecting, or harvesting of crops, involve no discharge of dredged or fill material into waters of the United States, and as such never require a section 404 permit.);	other navigable waters, or where any part of the artificial waterway is located within 500 feet of the ordinary high-water mark of an existing navigable stream, lake or other navigable waters. (b) To connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake or similar waterway with an existing body of navigable water, for navigation or any other purpose. (c) To grade or otherwise remove top soil from the bank of any navigable stream, lake or other body of navigable water where the area exposed by such grading or removal will exceed 10,000 square feet. (1m) Exception. Subsection (1) does not apply to any of the following: (a) The construction and repair of public highways. (b) any agricultural uses of land. (c) Any navigable inland lake located wholly or partly in any county having a population of 750,000 or more. (d) Those portions of navigable streams, Lake Michigan or Lake Superior within any county having a population of 750,000 or more. (e) Any work required to maintain the original dimensions of an enlargement of a waterway authorized under sub. (1)(a) or (b)." s. 30.19, Wis. Stats.	
(ii) The discharge of dredged or fill material for the purpose of installing ditching or other such water control facilities incidental to planting, cultivating, protecting, or harvesting of rice, cranberries or other wetland crop species, where these activities and the discharge occur in waters of the United States which are in established use for such agricultural and silvicultural wetland crop production;	All cranberry culture activities exempted by state law - § 94.26, except fills in navigable waters.	
(iii) The discharge of dredged or fill material for the purpose of manipulating the water levels of, or regulating the flow or distribution of water within, existing impoundments which have been constructed in accordance with applicable requirements of CWA, and which are in established use for the production of rice, cranberries, or other wetland crop species. (The provisions of paragraphs (a)(1)(iii)(C)(1)(ii) and (iii) of this section apply to areas that are in established exclusively for wetland crop production as well as areas in established use for conventional wetland/non-wetland crop rotation (e.g., the rotations of rice and soybeans) where such rotation results in the cyclical or intermittent temporary dewatering of such areas.)		

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(iv) The discharges of dredged or fill material incidental to the emergency removal of sandbars, gravel bars, or other similar blockages close or constrict previously existing drainageways and, if not promptly removed, would result in damage to or loss of existing crops or would impair or prevent the plowing, seeding, harvesting or cultivating of crops on land in established use for crop production. Such removal does not include enlarging or extending the dimensions of, or changing the bottom elevations of, the affected drainageway as it existed prior to the formation of the blockage. Removal must be accomplished within one year of discovery of such blockages in order to be eligible for exemption.	No exemption. Expedited permit processing can be used.	
(2) Minor drainage in waters of the U.S. is limited to drainage within areas that are part of an established farming or silviculture operation. It does not include drainage associated with the immediate or gradual conversion of a wetland to a non-wetland (e.g., wetland species to upland species not typically adapted to life in saturated soil conditions), or conversion from one wetland use to another (for example, silviculture to farming). In addition, minor drainage does not include the construction of any canal, ditch, dike or other waterway or structure which drains or otherwise significantly modifies a stream, lake, swamp, bog or any other wetland or aquatic area constituting waters of the United States. Any discharge of dredged or fill material into the waters of the United States incidental to the construction of any such structure or waterway requires a permit.	Farm drainage ditches exempted (§30.10(c)). Constructing farm ditches also exempted (§30.19(lm)(b)	
(D) Plowing means all forms of primary tillage, including moldboard, chisel, or wide-blade plowing, discing, harrowing and similar physical means utilized on farm, forest or ranch land for the breaking up, cutting, turning over, or stirring of soil to prepare it for the planting of crops. The term does not include the redistribution of soil, rock, sand, or other surficial materials in a manner which changes any area of the waters of the United States to dry land. For example, the redistribution of surface materials by blading, grading, or other means to fill in wetland areas is not plowing. Rock crushing activities which result in the loss of natural drainage characteristics, the reduction of water storage and recharge capabilities, or the overburden of natural water filtration capacities do not constitute plowing. Plowing		

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as described above will never involve a discharge of dredged or fill material.		
(E) Seeding means the sowing of seed and placement of seedlings to produce farm, ranch, or forest corpos and includes the placement of soil beds for seeds or seedlings on established farm and forest lands.		
(2) Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design. Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.	Similar policy.	
(3) Construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance (but not construction) of drainage ditches. Discharges associated with siphons, pumps, headgates, wingwalls, weirs, diversion structures, and such other facilities as are appurtenant and functionally related to irrigation ditches are included in this exemption.	Construction of farm ponds and ditches exempt., s. 30.19(lm)(b)	
(4) Construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the U.S. The term "construction site" refers to any site involving the erection of buildings, roads, and other discrete structures and the installation of support facilities necessary for construction and utilization of such structures. The term also includes any other land areas which involve land-disturbing excavation activities, including quarrying or other mining activities, where an increase in the runoff of sediment is controlled through the use of temporary sedimentation basins.		
(5) Any activity with respect to which a state has an approved program under section 208(b)(4) of the CWA which meets the requirements of sections 208(b)(4)(B) and (C).		
(6) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained in accordance with best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the United States are not impaired, that	No exemption. No recognition of temporary in state law.	Farm and forestry roads are permitted use provided no upland alternative available and they meet construction standards designed to minimize impacts. No distinction between temp. and permanent roads.

the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized. These BMPs which must be applied to satisfy this provision shall include those detailed BMPs described in the state's approved program description pursuant to the requirements of 40 CFR Part 233.22(i), and shall also include the following baseline provisions:

(i) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the U.S. shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions;

(ii) All roads, temporary, or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the U.S.;

(iii) The road fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows;

(iv) The fill shall be properly stabilized and maintained during and following construction to prevent erosion;

(v) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within waters of the United States (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself;

(vi) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the U.S. shall be kept to a minimum;

(vii) The design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body;

(viii) Borrow material shall be taken from upland sources whenever feasible;

(ix) The discharge shall not take, or jeopardize the continued existence of, a threatened or

endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species;

(x) Discharges into breeding and nest areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exist;

(xi) The discharge shall not be located in the proximity of a public water supply intake;

(xii) The discharge shall not occur in areas of concentrated shellfish production;

(xiii) The discharge shall not occur in a component of the National Wild and Scenic River System;

(xiv) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts; and

(xv) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

(b) If any discharge of dredged or fill material resulting from the activities listed in paragraphs (a)(1)-(6) of this section contains any toxic pollutant listed under section 307 of the CWA such discharge shall be subject to any applicable toxic effluent standard or prohibition, and shall require a Section 404 permit.

(c) Any discharge of dredged or fill material into waters of the United States incidental to any of the activities identified in paragraphs (a) (1)-(6) of this section must have a permit if it is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject, where the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced. Where the proposed discharge will result in significant discernible alterations to flow or circulation, the presumption is that flow or circulation may be impaired by such alteration. For example, a permit will be required for the conversion of a cypress swamp to some other use or the conversion of a wetland from silvicultural to agricultural use when there is a discharge of dredged or fill material into waters of the united states in conjunction with construction of dikes, drainage ditches or other works or structures used to effect such conversion. A conversion of a Section 404 wetland to a non-wetland is a change in use of an area of waters of the United

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States. A discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States. (d) Federal projects which qualify under the criteria contained in section 404(r) of the CWA are exempt from section 404 permit requirements, but may be subject to other state or Federal requirements.		

Permit Procedures

Flow charts for state, local and federal permit evaluation are in the program description section of this report. The key differences between the procedures are in the public notice given.

The state while having the discretion to issue a notice in any case is only required by statute to issue public notices for the following:

a) placement of structures in navigable waters.

b) diversion of water from lakes and streams.

c) construction, dredging, or enlargement of any artificial waterway that is or will be connected to a navigable waterway.

d) alteration or straightening of a navigable stream.

e) enclosure of navigable waters.

f) construction of dams.

g) grading in excess of 10,000 square feet on the bank of a navigable waterway.

State public notice is provided to the clerk of each municipality in which the project is located, and to all other people required by law to receive such notice. The Department also provides a copy of the notice to the applicant, who must publish it as a Class 1 notice (ch. 985, Wis. Stats.) in an official newspaper that is likely to give adequate notice in the project area. The applicant must then file proof of publication with the WDNR. The public notice period (30 days) begins with publication.

Under local zoning, ordinance amendments, variances and conditional uses require public notice and hearing. Local governments have some flexibility to determine which of the permitted uses require a conditional use permit. Public notices are published at least two weeks in advance of hearings.

The COE requires public notice for each individual permit review. On an average notice is given to about 100 parties. The notice period is not less than 15, nor more than 30 days from the date of issuance.

Permit Review Criteria

State review is limited to effects on the environment and riparian and other users' rights. Factors, such as economics that the COE considers in their review, are not used by the state except for dams and channel changes. Compensatory mitigation is only a factor for Department of Transportation projects.

Local decisions, like those of the state, are based on environmental and water use impacts. Standards are set in local ordinances and must be at least as restrictive as state standards. Compensatory mitigation is not a factor.

The concept of compensatory mitigation is an integral part of the COE permit evaluation process.

DNR Involvement in Section 404: WDNR comments on Sec. 404 public notices as the state fish and wildlife agency through the Fish and Wildlife Coordination Act. The Corps does not have to accept or act on the comments. Through water quality certification pursuant to Section 404 of the Clean Water Act, the Department can grant, deny or waive certification that the project does not jeopardize water quality standards.

Enforcement Mechanisms

The WDNR enforcement program uses conservation wardens located locally to monitor permits and enforce regulations. Follow-up inspection is done for major projects only; surveillance for unpermitted activity occurs as part of other activities. No formal mechanism exists for discovering unpermitted activity. Violators face either civil or criminal actions, and county circuit courts may order forfeitures, abatement and restoration. There is no administrative mechanism to assess penalties, but administrative orders can be enforced by the Attorney General's office through the circuit courts.

Local zoning can be enforced by the local government through citations and by complaints filed in circuit court. While it cannot usually act directly against the violator, the state has several avenues to ensure that local governments properly carry out shoreland-wetland zoning: appeal of zoning administrator decisions to the local zoning board; appeal of zoning board decisions to circuit court; and mandamus order from circuit court requiring local enforcement action through the Department of Justice. Penalty levels for local zoning violations vary widely, but are typically lower than the state penalties. Surveillance is not usually done because of staff limitations. Most enforcement is as a result of complaints.

Both the COE and the EPA can assess administrative penalties as well as issue cease-and-desist orders. Class I and II Administrative Penalties have a maximum limit of $10,000 per violation, with ceilings of $25,000 and $125,000, respectively. Violations of § 404 provisions can also be pursued by the COE through the U.S. Attorney's office in the federal court system. The maximum penalty per violation is the same as the state's ($10,000). Summer crews usually monitor permitted projects.

Budget and Staffing

The Corps 1993 budget for Section 404 activities in Wisconsin was approximately $1,000,000. The WDNR budget for 1993 for all water (regulation and zoning programs was $3.8 million. Local zoning office budgets vary widely; detailed information is not available.

Currently, the COE has 15 staff assigned to Section 404 activities in Wisconsin. WDNR has 61 people program wide, of which nine are in the water regulation section in the central office and 35th the field offices working in areas comparable to Section 404. There is some additional permit review/comment and enforcement time by other agency staff (U.S. FWS, WDNR Bureaus of Wildlife and Fish Management, Law Enforcement, etc.) which are not included here because they will likely continue to be involved, independent of regulatory responsibilities. Staffing of local zoning offices varies widely.

At least one person in each of the 70 counties and about 450 cities and villages has some responsibility for shoreland-wetland zoning.

As an annual average for the years 1986-1989, the COE reviewed 2,552 applications each year in Wisconsin (1,912 nationwide permitted activities, 365 authorized by general permit and 575 individual permits including 3 after-the-fact projects. For the same three years, WDNR processed an average of 3,728 water regulatory permits each year. No estimate of local zoning workload was available.

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State-Federal Coordination Mechanisms

The following list describes the coordination mechanisms between WDNR & the Corps:

- A joint Chapter 30-31/404 permit application is used by both agencies (See appendix). The applicant fills out one form and returns it to either agency, but primarily to WDNR.

- The COE's general permit GP-001 (See appendix) was developed jointly with WDNR to shorten the COE permit approval process for certain activities adequately covered by WDNR under Chapter 30-31. The agencies have a coordination agreement guiding the implementation of GP-001 (See appendix).

- WDNR provides the COE with determinations of whether federal activities (including Section 404 & 10 permit decisions, harbor maintenance dredging and FERC dam licensing) will meet state water quality standards; WDNR is given the responsibility to grant or deny water quality certification for Section 404 permits for certain activities and locations under Section 401(a) of the Clean Water Act and NR 299, Wis. Adm. Code.

- Section 401(a) requires any applicant for a federal permit or license to conduct an activity which may result in a discharge to navigable waters (of the U.S.) to obtain a certification/permit from the state that such discharge will comply with applicable provisions of the Federal Clean Water Act and appropriate state laws. These provisions relate to limitations on discharge of wastes, achievement of water quality standards, and protection of designated water uses. WDNR is the state agency responsible for issuing certification and must issue, deny, or waive certification within a reasonable time. Section 401 provides for automatic waiver after one year from date of application. However, a federal permit cannot be granted if state certification is denied, and any conditions of certification must become conditions of the federal permit.

- These regulations do not guide the state as to how the certification should be made. Section 401 does require the state to establish procedures for applications, and if necessary for public hearings on applications. The state must also set effluent limitations and monitoring requirements to ensure compliance with any applicable limitations and performance standards or with any other appropriate requirement of state laws. See appendix for draft standards.

- WDNR provides comments to the COE in response to public notices, especially for projects where the Department doesn't have water quality certification authority (i.e. above the ordinary high water mark).

- The Corps provides a monthly summary of permit actions to the WDNR.

- WDNR sends copies of Chapter 30-31 decisions to the Corps.

- Each agency sends copies of the public notices for permit applications to the other agency.

- DNR, with the State Coastal Management Program, determines whether 404 projects are consistent with the Wisconsin Coastal Management Plan. The Federal Coastal Zone Management Act requires that all federal actions comply with regulations that are part of a federally approved plan. Both state water regulations and local shoreland wetland zoning are part of Wisconsin's plan. The plan applies in the 15 counties bordering Lakes Michigan and Superior.

WDNR & US FWS also coordinate in a number of ways:

- A Memorandum of Understanding (See appendix) between the agencies guides the coordination, information exchange and resolution of differences of opinion needed to implement the federal Fish and Wildlife Coordination Act (FWCA). The FWCA requires that fish and wildlife concerns receive equal consideration with other concerns in federal actions affecting wetlands and water resources, including issuing Section 404 permits.

- Also based on the FWCA, WDNR's Bureau of Environmental Analysis & Review comments to the COE on projects other than those requiring a Section 404 permit.

With the Environmental Protection Agency (EPA) taking a more active role in Section 404, new mechanisms are being set up between WDNR and EPA:

- WDNR Section 401 water quality certification decisions for 404 permits are forwarded to EPA.

- WDNR comments on Section 404 permits are forwarded to EPA and vice versa.

- EPA and WDNR have been involved in several cooperative projects, including a special Wetland Inventory for the Green Bay area, a program information delivery system, water quality standards for wetland implementation and training and are currently involved in a monitoring surveillance project (under an EPA wetland program development grant.)

EFFECTIVENESS OF PROGRAMS

This section is the narrative summary of the results of opinion surveys of permit applicants, zoning administrators, wetland users and owners, and federal and WDNR personnel involved with wetlands programs in Wisconsin and a field survey of compliance with a small sample of permits. The data was used by the Department, with the input of the interagency, citizen advisory, and WDNR technical committees, to gauge the effectiveness of current wetland protection programs and to develop alternatives for improving existing programs, including possible assumption of federal Section 404 permit responsibilities.

Perceived Effectiveness Surveys

The surveys were conducted by phone, mail and in-person interviews. While the total of people surveyed is a small percentage of the people who use, regulate, develop and protect wetlands, the common themes in the responses are believed to be consistent with the larger population. The survey methods used would constitute the first step in an exhaustive survey research project. As such, they cannot be viewed as conclusive in and of themselves but are a corroborator of other information, such as committee concerns and recommendations, results of institutional and legal analysis and field compliance data. Numeric and graphic presentations of survey results are found in the appendix.

PERMIT APPLICANTS

The people surveyed were chosen at random from the list of people throughout the state who applied for, but were not necessarily granted, federal, state, or local wetland permits in 1988. Seven COE 404 permit applicants, seven DNR Chapter 30 applicants and six county zoning applicants were interviewed by telephone. Activities ranged from building a pond for mitigation of another project, to draining culverts and constructing parking lots. Boat landings and accesses and swimming beaches were the most common. All of the respondents had to apply for at least two permits, one of which was the §404 permit; the others were required to obtain either a state or local permit or both. When asked if they knew beforehand that they would need a permit, many said they didn't know at all, or that they knew only about the WDNR permit. Only half knew beforehand that they needed a local permit, and very few knew they needed a COE permit.

All of the applicants believed that wetlands need to be protected, frequently mentioning the need to protect wetlands for wildlife habitat. Most thought that the permit program was the most appropriate method, but believed that their specific operation should be exempt. Many applicants also believed that there should be some flexibility in the regulations, including a greater amount of protection for wetlands in cities, more flexibility in the definitions and delineation, and less stringent regulations in areas farther than 300' from the shore. All of the respondents felt that at least some wetlands should be protected, with over one half thinking all wetlands should be protected. Many suggested that the government should purchase wetlands to protect them.

Most people picked up their applications from the DNR or the local zoning office. DNR staff, contractors or consultants, attorneys, and the COE office

in St. Paul all assisted applicants with filling out the forms or completing the drawings necessary.

Over one half of the respondents said they had no problems filling out the permit application forms. Those who did have problems cited the drawings, lack of coordination between the agencies (leading to requirements for more and more information), little contact with the Corps, and lack of knowledge of personnel involved in the process (including a zoning official who informed one applicant he needed a sanitary permit, neglecting to mention the required shoreland permit, and a local assessor who didn't recognize wetlands delineated on official maps as wetlands) as the major concerns.

Almost all applicants had some "surprises" during the process, including learning which agencies were involved, the interactions between agencies and what the requirements for a public notice and comment period were.

The biggest problems most applicants faced were waiting for their permits and settling the differences between what they wanted and what the agencies would allow. Most applicants had to modify their plans, either by adding mitigation, or by decreasing the size of their project or relocating parts of it.

The permit applications generally took one to six months to process, but one controversial dredge and fill permit took over 5 years. Most applicants felt too many agencies were involved and that the process took too long.

Many believed the programs would be more effective if only one agency was involved, or if regulations between agencies or levels of government were more consistent.

The following ideas for improvement were consistent among all three groups of permit applicants:

The most common recommended change was to involve fewer agencies. Several commented that the process would be handled more effectively and efficiently if only one agency were involved. Most noted disagreement between agencies over interpretation of regulations and definitions.

About one half said that they had trouble understanding the regulations and did not know what to do or where to go to get help.

Most applicants felt that an interagency manual covering regulations, application processes, and definitions was needed. Many suggested a separate instruction manual explaining how to fill out the application, how to do the required drawings, and how and where to get help.

Currently there is much disagreement among applicants about which activities and which wetlands are or should be regulated. There is a need for a clear outline of what is regulated by whom.

Many suggested changes to the permit review process, such as considering private property rights and business needs, the limitations of the construction season, and benefits of the project to the wetland and environment.

Over one half of the people commented that they would not make mitigation a permit requirement because it was like "buying a permit."

WETLAND USERS

The wetland user opinion survey was conducted both by mail and by in-person interviews conducted during site visits to wetland areas with public access. A questionnaire was sent to a total of 1,621 members of wetland user groups (the Great Lakes Indian Fish and Wildlife Commission, the Wisconsin Wetlands Association, The Wisconsin Wildlife Federation, the Wisconsin Waterfowlers Association, the Wisconsin Association of Environmental Educators, the Wisconsin Farm Bureau Federation, the Wisconsin Cranberry Growers Association, and the Land Improvement Contractors of America, Wisconsin Chapter). Results of both survey methods were combined.

Over half the survey responses came from rural areas, with the greatest number coming from the DNR's Southern District. Hiking was the number one wetland use, with canoeing a close second. Fifty-four percent of the people surveyed didn't own wetland property. Fifty-eight percent of those who did said their wetland amounted to 25% or less of their total acreage. Seventy-five percent of the owners said they use at least a part of their wetland as a natural area, and 78% leave the area undrained.

Those surveyed were asked to rate the importance of wetland values as high, medium and low. High value was placed on wildlife habitat (83%), water quality protection (77%) and flood and stormwater control, and very low to no value was placed on timber production (23%), agricultural food production (farming) (22%), and wastewater treatment.

Seventy-three percent of the people interviewed said they thought wetland acreage in Wisconsin is decreasing, and 56% think the quality of wetlands is declining. Many attributed this loss of quality and acreage to commercial development (61%), residential development (52%), and farming and industrial development (50% each).

Over half of those surveyed perceived changes in Wisconsin wetlands. The changes they noticed varied with the area, but they included changes in water levels and water quality. Most respondents believed that changes in wetland quality could be attributed to lack of knowledge about wetland regulations, inadequate enforcement, inadequate regulations, and the belief that violators would not be caught.

An overwhelming percent believed that regulations were needed to protect wetlands, and 87% believed land use planning was needed to protect wetlands. Only 8% believed that coordination between agencies was good, and 48% believed that such coordination was poor or needed improvement.

Half had read DNR brochures on wetlands, but only 18% had read anything about local programs. About twenty percent of the respondents watched for public notices of a COE, DNR, or local project. Sixty percent of the people interviewed were aware of some DNR enforcement action, while only 15% were aware of a Corps enforcement action, and 10% were aware of a local action.

Over one half (55%) of the people knew what mitigation was, but they didn't agree on how effective it was in protecting wetlands. The greatest number of

people (47%) thought that restoration should be added to permit conditions. Enhancement was rated second highest as a permit condition (41%), with replacement third (36%) and creation as the last alternative (30%).

Tax incentives were rated the highest among those methods of wetland protection that were most or moderately effective (50%). Other options that were marked as effective by survey respondents were the state permitting programs (49%), and land use planning (46%).

ZONING ADMINISTRATORS

The ZA survey was conducted by phone interview, using a series of open-ended questions in order to collect ideas on problems with and potential improvements to existing wetland programs. A total of six zoning administrators, three from counties, and three from cities or villages, were interviewed.

In general, because of the original legislative deadlines for adoption of wetland ordinances, counties have more years of experience with wetland programs than most cities or villages. Therefore, when we chose zoning administrators to survey, geographic distribution was somewhat sacrificed in favor of potential richness of information. Although the sample size was small, the responses we received were very informative, and provided useful ideas for program improvements. A summary of that information follows.

Commonly less than 10% of the total land area of the municipality is wetland (one county was about 50% wetland). Many also have one or two larger wetland areas not associated with a river, lake or stream, and a few smaller isolated areas.

The ZA's felt that few people in their districts understood the values of wetlands (other than for limited recreational and aesthetic purposes) or recognized their benefits. Most ZA's said that people primarily wanted to use wetlands for development. There is little perceived change in wetland acreage. The ZA's that do see change feel that the wetlands are changing because of secondary development -- the shoreland is disappearing, and people are developing the remaining marginal parcels for access to lakes. All county and most city and village programs have adopted at least the minimum state standards for wetland protection, although some developed their own ordinances first and later adopted the state model.

The most common problems involved defining wetland boundaries; helping people understand what wetlands are, why they are regulated, and which uses are permitted; and obtaining support from local public officials. One ZA noted that he got more support from the League of Women Voters than from elected officials. Other problems were lack of knowledge on the part of the ZA concerning wetland regulatory programs, functions, values, and exempted activities. Training in 404/401 procedures would be useful. ZA's often refer people to the local DNR office. Most of the ZA's have little involvement with the COE section 404 process beyond referral. They receive the public notices, and file them, but rarely comment.

The zoning administrators indicated that, while they get some technical support from the DNR and Corps, they could accomplish more with additional funding for staff support, training, and equipment (especially computers).

Most (5 of 6) of the zoning administrators think that state assumption of the §404 program might streamline the process, but expressed concern that if the state assumed the program with only the existing staff they would become overloaded. They feared that coordination and contact with the ZA's would suffer.

Most believed that tax credits or deferments would be helpful to promote wetland conservation, as would changing assessments to reflect actual values of land as wetland (rather than the value of potential development).

AGENCY PERSONNEL

Agency staff at federal, state and local levels agree that wetlands are decreasing in quantity and quality. Staff do not believe that existing wetland programs are effective or efficient although many admit lacking detailed understanding of each other's programs. More state staff feel they understand the federal program than vice versa. There is variation among federal agencies in understanding of state and local programs.

A common theme was that state standards are confusing; federal standards are clearer but are not applied.

All agency staff feel that limited resources, largely staff time, is the factor hindering wetland protection. Other critical needs identified by staff at all levels are: time and clear procedures for monitoring both permitted and unpermitted activities; technical training and public information.

Field Compliance Survey

The sites of federal, state and locally permitted projects involving wetlands were visited to gauge actual compliance with permits. Permits issued in 1988 in seven Wisconsin Counties were surveyed (Dane, Door, Jackson, Manitowoc, Price, Waukesha, and Waupaca). The data collected included the type of permit (Corps, DNR, county), location, description of the permitted project and conditions, date the activity started, date of completion, conditions not met, and other comments or observations (See appendix).

Limited term staff, knowledgeable in basic ecology and familiar with the counties to be surveyed, collected the information. Site visits were made between August and December 1989.

In 1988, the Corps issued 473 §404 permits, and WDNR issued 659 Chapter 30 permits in these seven counties. County shoreland-wetland zoning permit numbers were not available.

Just under 75% of the 404 permits were issued as nationwide permits, 17% were general permits, and 10% were individual permits. Of the 242 permit sites visited, 65% (157) had federal permits, 25% (60) had state permits, and 10% (25) had county permits. A total of 162 (67%) of the sites were in wetlands.

Wildlife enhancement activities, mostly ponds, were the most common activity permitted. A total of 29 wildlife enhancement permits were issued, 15 state (1/2), nine federal (1/3) and five county (1/6). Nineteen utility crossing permits of various types were issued, mostly (14) under Section 404. Eleven cranberry related permits were issued, all under federal regulations. Eleven

commercial fills (9/federal and one each state and county), ten residential fills (70%/federal and 30%/county), and nine road constructions (mostly federal) were permitted. Other commonly occurring activities (6 each) were: lake dredging, channel dredging and various bridges. Unusual activities included a pond for a fire department water source, a golf course, and fill for a wastewater holding tank.

At the time of the survey, three-fourths (120) of the surveyed projects found to be in wetlands had been started or completed, and 56% (67) of these completely met the conditions included in the permits. The extent of the non-complying activities for an individual site varied from minor to significant. Compliance ranged from 72% (13) for the county, to 57% (39) for the federal, and 45% (15) for the state. Note that some time still remained in the construction season to complete remaining conditions; the conditions on the federal nationwide permits are very general; and the conditions on the state permits are usually more specific than on the federal or county permits.

Of the 53 sites where conditions were not met at the time of the survey, the major condition not met was the requirement for seeding and mulching for erosion control. Lack of seeding and mulching occurred in over one-third (19) of the noncomplying sites. Other common problems were slopes steeper than permitted (8), extra area filled (7), and mitigation not completed (5). Extra activities started that were not included on the permits included a ditch, a pond, a cranberry bed, a culvert, and extra nesting islands. Problems that occurred that could lessen wildlife use of the permitted enhancement projects included four ponds of the wrong size or shape and improperly spread dredge spoils. Potential erosion and receiving water impacts could result from observed problems such as tar in the fill, missing retention basin, and missing riprap around an outfall structure.

Of the permits that were reviewed and field checked during the survey, seven were applied for after the fact. Four of those were granted, two were denied, and one was withdrawn after its issuance was contested by WDNR.

Lack of information on project site location (particularly for federal nationwide permits) was the greatest problem encountered by the survey staff. Other observations of the survey staff included:

- A major loss of wetlands occurs when a federal permit is issued for a new road because of the many small residential fills that are subsequently permitted under a nationwide permit.
- All permits should include specific requirements and a schedule for erosion control practices.
- Permit records should include accessible information on numbers of permits, specific site locations, and presence of wetlands (the current level of information makes sites very difficult, and at times impossible, to find).
- Computerized records are needed at the local level.
- Cross reference of permit numbers from other agency permits is needed.

ANALYSIS OF ALTERNATIVES

Description of Alternatives

Three major alternatives were explored -- no change; assumption of the §404 program and enhancement of existing programs. The advantages and disadvantages were gathered from the study advisory committees.

NO CHANGE

The first alternative assumes that no changes would be made to state, state mandated or federal programs. Programs would continue to operate as described in earlier sections of this report.

Advantages:	No increase in program costs. More "safety nets", federal, state and local. No legislative action required.
Disadvantages:	Continued loss of wetlands. Continued difficulty in interagency coordination. Doesn't solve applicant confusion. Continuous double or triple permitting for project. Doesn't solve limited geographic jurisdiction.

ASSUMPTION

The State of Wisconsin would propose to operate the Section 404 permit program as follows:

- Permits would be processed using the procedure and criteria for Chapter 30 permits.
- All permits would be processed individually.
- A general permit or similar process would be explored to avoid duplication of the local zoning permit process.
- Monitoring should be increased.

Advantages:

Removes need for both federal and state permits - one less regulatory agency.
Two sets of permitting standards (state and local) rather than three (federal, state and local).
Local presence, permitting and enforcement (user accessibility).
Protect most wetland resources of the state.
More protective criteria.
Opportunity for meaningful public involvement.
Changes in nationwide permits (elimination of nationwide).
Better accountability for regulatory decisions affecting resources.
Home rule.

Disadvantages:

DNR overburden.
Costs - where will money come from?
DNR more subject to political pressure.
Policy of agency - DNR doesn't recognize development/economic value can exceed natural values.
EPA reporting requirements, EPA oversight.
Corps permits still required for Section 10 waters.
Future alterations may be necessary to meet changing state/federal laws and regulations.
Fractured accountability levels (Corps, EPA, State).

ENHANCEMENT OF EXISTING WETLAND PROTECTION PROGRAMS

Enhancement of existing programs could take place at three levels: a major program overhaul; a moderate overhaul; and general changes.

Major Program Overhaul

Changes in Jurisdiction -- A major program overhaul means significant expansion of jurisdiction to potentially include all wetlands. A major expansion of jurisdiction could occur either through a state permit program or a local zoning approach.

Under both state and local approaches, a variety of options exist for expanded geographic jurisdiction. The main possibilities are listed below:

1. Wetlands five acres and larger beyond shoreland zone.
2. Wetlands two acres and larger in shoreland zone.
3. All wetlands two acres and larger (beyond shoreland zone)
4. All wetlands by definition, regardless of size or location.
5. One of above options plus a buffer zone around wetlands.

While the environmental effect, cost and administrative ease of these options varies, for comparison purposes these expansion options are lumped. Some of the advantages and disadvantages of expanded jurisdiction are summarized below.

Advantages: Review of activities in more wetlands
Functions of smaller wetlands protected

Disadvantages: Increased cost to administer program
More activities will require multiple permits

Comparison of State and Local Level Approaches -- Under a state approach, DNR would review applications and issue permits for activities in wetlands throughout the expanded jurisdiction. Existing Chapter 30 authority, standards and procedures could be used or a new set of standards could be developed. Section 404 permits would still be required. Local zoning permits might still be required. This option would require an increase in state staff and costs.

Under a local approach, counties, cities and villages would be required to amend shoreland-wetland ordinances to reflect expanded jurisdiction. Local governments would continue to apply wetland standards to decisions. Section 404 permits would still be required. Chapter 30 permits for activities below the OHWM would still be required. This option would increase local costs (state cost sharing or grants may be needed). Some increase in state staff would be needed to maintain the oversight function.

State: Fewer offices involved so greater uniformity.

Local: More staff to deliver information and ensure compliance.
Local involvement so more local understanding of decisions.

MODERATE PROGRAM OVERHAUL

General permit for activities regulated under state-mandated local zoning.

Currently, a general permit is automatically given by the COE for activities regulated by the state under Chapter 30. A similar general permit could be developed for some activities regulated locally under minimum statewide standards.

Advantages: Streamlining for applicant
Uniformity of criteria and procedures
Less potential intergovernmental conflict

Disadvantages: Time required to develop
Unequal level of protection due to local variation

Codify Chapter 30, Water Regulation Sections

Administrative code standard requirements could be developed for application, review (either numerical or performance standards) and issuance.

Advantages: Increased regulatory certainty
Increased statewide consistency
Easier decision making (less judgement required)

Disadvantages: Time and cost to develop
Loss of regulatory flexibility to accommodate unique circumstances or regional differences

Some criteria can't be readily defined by rule, e.g., "public interest"

Streamlined State Oversight of Local Zoning

There are several streamlining options: Appeal of local decisions to a administrative hearing examiner with judicial review based on the hearing record only; require that local decisions be void if timely notice is not provided to DNR; authorize DNR to represent itself in judicial appeals or expand DOJ Environmental Unit staff; establish administrative mechanism for DNR to correct omissions from wetland maps.

Advantages: Reduces staff time required for zoning oversight.
Quicker settlement of enforcement actions.

Disadvantages: Time to develop.
Potential additional cost for legal staff.

Enhance Wetland Enforcement Options

A wide range of changes are possible: Authorize conservation wardens to enforce local wetland ordinances (in consultation with zoning staff); make full wetland restoration a mandatory consequence of wetland violations; establish mechanisms for making temporary injunctions (stop work orders) easier to obtain; include prosecution of state mandated zoning as a mandatory duty of district attorneys; establish a mechanism for state prosecution of violations of state water quality standards.

Advantages: Greater deterrent to violation through successful enforcement.
Less environmental damage through faster enforcement.

Disadvantages: Potential increased workload for district attorneys.

Adequate staffing of existing programs

As under existing regulations, wetland losses will continue if there are not sufficient staff at state and local levels to process permits, follow up on violations and oversee and assist local governments.

Advantages: Time available for early consultation with developers
Quicker - yet more thorough - permit review

Disadvantages: Cost

Regularize Wetland Inventory Update Program

Wetland Inventory maps would be updated on a regular schedule (10 year cycle). A fund would be established within the inventory so that the inventory could produce maps at scales tailored to local zoning needs.

Advantages:	Accurate wetland loss information would be available. Quicker, more accurate answers for applicants.
Disadvantages:	Cost to state.

Technical Documentation

More detailed handbooks on procedures used in wetland related determinations and in permit decisions could be developed. Handbooks on Water Regulations, Zoning and Wetland Delineation and Assessment presently exist but need updating.

Advantages:	More consistency in decisions. Better understanding of decisions.
Disadvantages:	Cost to prepare and produce. Decreased flexibility to accommodate unique sites or circumstances

Mandatory Real Estate Disclosure

Mandatory disclosure language in real estate transaction documents would create professional responsibility for realtors and lenders to inform buyers of wetlands and wetland restrictions.

Advantages:	Sale price of properties may more closely reflect development potential
Disadvantages:	Realtors and lenders must obtain appropriate maps.

Advisory Committee Recommendations

Figure 11 below summarizes the recommendations of three advisory committees. The appendix contains committee memberships and detailed individual recommendations.

FIGURE 11: Advisory Committee Recommendation Summary

Interagency	DNR Technical Staff	Citizens
Do not assume	Assume	Do not assume
Support major overhaul primarily at state level, some support for change at local level	Support major overhaul at state level	Support major overhaul at both state and local levels (with dissention)
Support moderate changes to codify chapter 30, streamline state oversight of local zoning	Support moderate changes to codify Chapter 30, streamline state oversight of local zoning	Support moderate changes to streamline state oversight of local zoning
Support general changes to joint application form; technical documentation; enhanced inventory; professional staff development	Support general changes to joint application; joint permit tracking; enhanced wetland inventory	Support general changes to professional staff development; joint permit application form; enhanced wetland inventory; real estate disclosure; subdivision review and tax credits (some dissention except on joint permit application)

Fiscal Analysis

A detailed fiscal analysis of Section 404 assumption was prepared for this study. At that time, state water quality standards for wetlands had not been adopted. An estimate of their adoption was included in the original study (figure 12). Preliminary data on NR103 workload confirms the accuracy of that estimate. Therefore, while not updating the dollars figures below, since 1991 we believe the basic estimates of workload are accurate. Estimates for some other alternatives have been developed through workload analysis or grant proposals. Figures 12 (Assumption) and 13 (Other Alternatives) contain the results of these analyses.

Figure 12 shows the projected first year and on-going costs of state administration of the Section 404 program. Data for these projections are based on the following assumptions:

1. Current procedures for processing permits would not be altered.

2. Section 404 Nationwide permits would be new work, but most of the activities covered by nationwide permits would be considered simple permit activities under state workload definition.

3. Section 404 Individual Permits would not be entirely new workload because state staff are already doing Section 401 Water Quality certification on these permits. However, the processing time would increase as these permits deal with projects covered under the 404 general permit program which is currently part of the COE workload. Assumption of these permits would increase the number of complex permit activities as defined by the state workload definitions.

4. After-the-fact permits are the same as 404 individual permit actions and would be new workload.

5. WDNR will maintain the same level of monitoring and surveillance as the COE.

6. Section 404 General Permit processing is work that the staff is already doing.

Work time of current WDNR wetlands staff is totally committed to existing programs. WDNR would need additional staff in order to assume administration of the 404 program.

In Figure 12, three scenarios are presented. The first assumes that all permit applications will be processed individually. The second assumes that the section 404 Nationwide permits would be adopted by the state and handled as simple permits. The third assumes that wetland quality standards are also enforced.

FIGURE 12: Workload and Cost of Assumption

	404 assumption and use of existing permit-granting procedures	404 assumption and use of a combination of state and federal procedures	adoption and use of state water quality standards for wetlands
Personnel			
Permitting	$638,893(14)	$365,080(8)	$136,905(3)
Legal	$41,745(1)	$41,745(1)	$41,745(1)
Clerical	$156,149(7)	$156,149(7)	$22,307(1)
Hearings	$20,000	$20,000	$25,000
Enforcement	136,905(3)	136,905(3)	---
Public Notices	$12,100	$12,100	$12,100
Information Management	$8,000	$8,000	$8,000
Annual Total	$904,709	$667,936	$246,054
First Time Expense	$230,500	$171,540	$ 26,400
First Year Total	$1,135,209	$839,476	$272,454
Number of Positions	(25)	(19)	(5)

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Personnel

State assumption of the Section 404 program would increase the WDNR permit load by approximately 2,200/year, an anticipated additional 20,000 hours of processing time and a comparable amount of time devoted to technical inquiries, correspondence, and preliminary investigations. In addition to the time demands on technical personnel, there will be a substantial increase in the amount of clerical time needed to type, track, file and maintain office procedures.

Because of increased authority and enforcement activity an annual increase of 150 violations is also expected, assuming the permit/violations ratio remains constant. This means increased field work, review time, restoration planning, and processing, and could conceivably require assistance from the Division of Enforcement, as well as increasing workload devoted to additional correspondence, surveying activities, and contested case hearings. The estimated increase is conservative based on current COE enforcement capabilities and records.

The anticipated additional violations would impose new workload demands on the Division of Enforcement for site investigation, correspondence with experts and attorneys, legal research, interviews with suspects and witnesses and contested case hearings.

Public Notices

An increase in permit applications would also mean an increase in required public notices. The WDNR is required to give public notice of permit applications requiring public review, preparation of a draft general permit, consideration of a major modification to an issued permit, scheduling of a public hearing, issuance of an emergency permit. All such notices must be mailed to the applicant, any other jurisdiction with authority, owners of adjacent property and all persons who have specifically requested such notification. Notice must also be provided in at least one other way (usually an advertisement in the regional papers) reasonably expected to cover the area affected by the activity.

EPA requires that the state conduct a full public interest review for all significant permit actions (defined as Individual review by the COE). About a fifth of the expected increase in permits associated with 404 assumption require some level of public notification.

Other conditions of assumption with workload implications

As a condition of state assumption, the EPA requires that states routinely submit copies of permits, significant actions taken in regard to such permits, and any supporting material that might prove necessary/relevant. EPA also requires an annual report from any state assuming the 404 program. The State of Michigan, the only state to have assumed the §404 program, estimates that reporting to EPA takes at least 600 hours per year. It is also important to note that the EPA would maintain oversight responsibility for the state administration of the Section 404 program and has the legal authority to overrule any state decision and to render its own findings.

Public Hearings

Funding for public hearings is entered as an assumption cost because the WDNR anticipates an additional eleven hearings per year based on current COE averages. It is also possible that disgruntled permit applicants might be more willing to take on the state DNR than the federal COE.

First Time Expenditures

The first time expenses listed in table 12 refers to set up costs such as purchase of data processing equipment, field supplies, additional routine office supplies as well as the one time expenditures associated with record transfers, required public hearings, and the public rule making process which can involve the services of the Attorney General (AG), administrative law judges, water management specialists, and affiliated state personnel.

If the State approves assumption of the section 404 program, two to three years work will be required to prepare documents, reports, and agreements required by the EPA. Such assignments will involve the state AG's office as well as the use of water management staff dedicated only to the project at hand. The work is expected to require 1 FTE.

Access to current and historical permit actions is an important component of state assumption of the 404 program. EPA requires only that the COE effect orderly transfer of pending permit records. There is no legal obligation for the COE to provide any current or historical permit files.

These permit records are necessary reference materials and could significantly improve the overall efficiency of permit review. Ready access to historic permit files reduces permit review time by providing clues to project impacts, historical perspectives of particular permits or resources, and advance warning of problems.

The costs of transferring the COE 404 records involve storing, moving, and reorganizing two years worth of paper files (at any given time only two years' worth of paper records are available); storing, copying, and reorganizing eight years of microfilm records; transferring, storing, reorganizing, and distributing computer files. The total transfer costs are estimated at $8,000.

Funding Alternatives

CURRENT WETLAND PROGRAM FUNDING

The present Chapter 30/31 and local zoning oversight programs are funded by general purpose revenue and by Wisconsin Coastal Management Program grants. While permit fees (maximum of $75/permit) are collected for most activities (placement of riprap is exempted, as are government activities), fees are deposited into the state general fund and are not used directly to support the program.

Forfeitures collected for violations must be deposited, by law, in the state school fund in order to discourage excessive or inequitable rulings which would otherwise economically benefit the state.

If the state assumes the Section 404 program, it is the legal responsibility of the state to adequately finance the program. Prior to assumption, the state must prove it has adequate funding to administer the program.

POTENTIAL FUNDING SOURCES

Possible funding strategies for an improved or expanded program include:

1. Federal grants

   There are no funds available, nor are any grant programs being proposed for the administration of the 404 program.

2. Jurisdictional determination fees

   Applicants would pay the cost of delineating wetland boundaries, conducting impact analyses, etc.

3. Permit fees

   A permit fee funding policy would make applicants responsible for all costs generated by the state in processing the permit. WDNR does not currently have the necessary legislative authority for this policy.

4. Impact fees

   Under an impact fee system, permits would be similar to a bank loan, but not only would the applicant pay the principal(the permit processing fee), but also the interest (mitigation costs and the impact fee).

5. Monitoring fees

   Permit holders would pay for the cost of surveying or monitoring their project.

6. User fees

   Surcharges would be placed on outdoor recreation licenses, fees, and taxes. Examples would include hunting and fishing licenses, taxes on the sale of outdoor recreation licenses, "stamp" programs, etc.

7. Real estate transfer fees

   A special fee would be collected in the course of all real estate transfers. Much of real estate transfer occurs in developing areas where wetland protection is most urgent.

8. Fines

   The state would collect fines for violations of wetland regulation. Any revenue so generated from 404 violations remains the property of the state as long as the EPA determines that such enforcement is in compliance with the 404 program and that the fines are appropriate to the violations. EPA has the absolute authority to begin its own enforcement proceedings and collect any resulting fines should it find

the state negligent in its enforcement standards or levying of fines. EPA recommends that the state have statutory authority to levy administrative penalties in addition to its mandatory authority to impose civil and criminal fines.

9. General purpose revenue

State revenues from taxing would be allocated to wetland protection programs. The rationale for this funding source is that wetland protection is in the general public interest for water quality, flooding, health, and other reasons.

FIGURE 13: Comparison of Needs to Implement Alternatives

	Needs to Implement				
Alternative	Legislative Change	Rule Change	Funds	Staff	Other
Assumption	Yes, major change to basic authority	Yes	>$1,000,000	25	
Major Overhaul	Yes, modify	Yes	$520,000	11	$1,125,000 grant program to local governments
Moderate Overhaul	No	Yes	$175,000	5	

Michigan Assumption Experience

In Michigan, as in Wisconsin, state and federal agencies had overlapping regulatory authority over dredge and fill activities. After broadening of state authority, working with the EPA and COE, the State of Michigan assumed the Section 404 program in August 1984. The state expected a reduction of time delays for issuance of permits, with a corresponding reduction in the use of funds. The risk was believed to be the loss of dual enforcement of the program.

In the years since assumption, professional staff have noticed the following results:

The process of permit approval has become quicker, more exhaustive and in some cases more stringent. MDNR provides on-site review for every permit application, due to the extra resources allocated to the MDNR. Michigan has also managed to eliminate nearly all duplicative state and federal permits for projects on inland waters. Regulations seem more reasonable to the public and there is more perceived support for the program. Because the state has authority over more than the dredge and fill aspects of environmental impact, the overall project can be more thoroughly examined for multiple impacts.

The greatest difficulties still arise from enforcement. The wetland program remains highly controversial. Individuals and organizations claim that they were unaware of regulations, and the MDNR has been very reluctant to enforce violations. In many cases, county prosecutors have been aggressively opposed to the Section 404 program, making enforcement all but impossible. In

contrast, the COE was more isolated from state and local politics, and when pursued, its enforcement was more effective.

The Michigan Section 404 program is still limited by funding. The wetlands inventory program lacks adequate funding, and the MDNR is forced to function without an accurate assessment of the resource they are charged with protecting.

Isolated wetlands still are not regulated, partly due to inadequacy of mapping, but also to lack of jurisdiction over wetlands under five acres in size, some of which are important as habitat for migratory waterfowl. Interestingly, the MDNR does have authority to regulate any wetland deemed "essential to the preservation of the natural resources of the state."

The Michigan program uses a different standard for project alternatives than the Corps. In Michigan, alternatives must be "feasible and prudent." Federal regulations assume that alternatives exist for non water-dependent activities and applicants must demonstrate that no practicable alternative exists in order to receive approval. Applicants have argued successfully that if redesigning the project for another site increased costs, then location at such a site is not a prudent alternative. MDNR has not been able to adequately define the terms.

Overall the state program seems roughly as effective as the federal program at preventing wetland loss, but due to rising controversy and lack of funds, it is uncertain whether MDNR will be able to continue to administer the program effectively.

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FINAL RECOMMENDATION

Do Not Assume

Because the DNR has an established water regulatory program that is similar to the 404 program, the DNR would have little trouble meeting the regulatory components of the 404 assumption requirements. However, because the 404 jurisdiction extends significantly beyond the state's, major statutory changes would be required. A complicated and politically unattractive system of "trust" and "nontrust" waters, each with their own permittable activities would be created. Thus, jurisdictional limitations pose a serious deterrent to 404 program assumption.

Federal funds are neither authorized nor appropriated for state 404 programs. Although the Clean Water Act authorizes use of other water quality program funds for 404 programs, the diversion of these funds is unattractive.

The existing 404 program is complex and at times cumbersome. State assumption would include these administrative, jurisdictional and procedural complexities. Reporting requirements and additional EPA oversight and involvement would increase these burdens.

Other alternatives exist that can achieve federal state-land program streamlining and consistency without losing the state and federal "backstop" of wetland permit decisions. In addition a better state wetlands program can be achieved by adopting water quality standards for wetlands (done in 1991) and pursing new legislation and regulations which reflect state concerns and policies.

In summary, until additional funding becomes available and jurisdictional problems are resolved, 404 program assumption remains technically and legally feasible but impractical.

Pursue Major Program Overhaul

The effectiveness studies and advisory committees collectively indicate that more than just moderate changes are needed in Wisconsin's wetland protection programs. The set of initiatives described below require legislative action that is being sought. DNR has requested resources in the state budget to address some of the fundamental problems confirmed and quantified through this study. Working with the agencies and others who helped with this study, DNR will develop a strategy to carry out other highly ranked alternatives as resources can be obtained.

STATE REGULATORY STANDARDS AND LOCAL ADMINISTRATION

1) Expand current shoreland wetland regulatory jurisdiction to include all mapped wetlands (shoreland wetlands are less than half of total state wetland acreage).

   Rationale:

   a) Builds on existing state/local partnership.
   b) Zoning procedures shared with other local land use controls.
   c) Integrates wetland decisions with other local land use decisions.

d) DOT exemption & liaison process would continue.
e) Current regulations apply to mapped shoreland wetlands five acres and greater in size. Updated wetland maps now being prepared will include those of two acres and larger. Smaller wetlands could be regulated at local option.

2) Modify permitted uses and provide design standards to assure that activities which are allowed in wetlands individually and cumulatively have minimal long term effects on wetland values. Allow municipalities to adopt regulations more restrictive than state standards.

Rationale:

a) Relatively few changes required.
b) Design standards would provide project guidelines for applicants to follow.
c) Rezoning after a determination of insignificant wetland value would continue to be a safety valve.
d) Current regulations prohibit local adoption of more restrictive permitted use standards.

STATE OVERSIGHT MECHANISMS

1) DNR appeal of local wetland rezoning decisions should be to an administrative hearing examiner with subsequent judicial review of the administrative record (the administrative hearing would be a de novo hearing on the issue of compliance with rezoning criteria). The same procedure should be used for initial ordinance adoption for noncompliant municipalities. Overturning of a local decision should result in an order for restoration of any illegally altered wetland (DNR should not have to commence a separate action to compel local enforcement).

Rationale:

a) Current quasi rule making procedure to overturn local amendment decisions involves legislative review which is unnecessarily complex, costly and time consuming and is not constrained by specific objective criteria.
b) The legislature has never overturned a DNR amendment decision.

2) Local wetland decisions should be automatically void if timely notice of petitions, hearings and decisions are not provided to DNR.

Rationale:

Absent notice, DNR is prevented from meeting appeal deadlines and opportunities to advise applicants and local government of project impacts and alternatives.

ENFORCEMENT MECHANISMS

1) DNR wardens should be authorized to assist local government in enforcement of local wetland regulations using civil citation procedures (as they currently do for Ch. 30). A mechanism for consultation with

local zoning staff would be necessary to assure technical adequacy of complaints.

Rationale:

Expertise and assistance in civil prosecution would be provided to local government.

2) Full wetland restoration (acreage and function) should be a mandatory consequence of violation of wetland protection laws. Failure to obtain permits where the project could otherwise be authorized should require a monetary forfeiture.

Rationale:

Substantial disincentives are required for a credible enforcement program.

3) Provide for a penalty assessment to be levied as a percentage of civil forfeitures for violation of wetland regulations.

Rationale:

Revenue could be retained in a pool for distribution to local government to defer costs of program administration or for environmental education, maintaining professional standards of staff, etc.

4) Adopt a statewide schedule of minimum forfeitures.

Rationale:

Minimum forfeitures provide a credible disincentive and could be graduated based on wetland acres affected, prior convictions for violation of environmental laws, etc.

LOCAL ADMINISTRATION NEEDS

1) Require minimum professional standards for local zoning administrators and training/orientation for local decision making boards.

Rationale:

a) Would promote professional implementation of wetland and other local land use regulations.
b) Professional standards raise salaries which attract more professionally trained personnel.
c) Education and technical assistance for local boards would encourage local decisions which are consistent with statewide wetland policy.

2) Provide grants to municipalities in support of state mandated zoning. Grants should be tied to program certification and continuing education requirements for administrators and boards. (70 counties @ $10,000 = $700,000 & 450 cities & villages @ $2,500 = $1,125,000 & total of $1,825,000/yr.). Grant amounts could be stepped based on wetland development threat. Funding sources could include real estate transfer

taxes, penalty assessments on civil forfeitures for violation of environmental regulations, surcharges on state and local permit fees, et al.

Rationale:

a) Positive fiscal incentives would help to defer local costs of administration.
b) Linkage to local program certification and training requirements would promote program effectiveness and consistency.

3) Provide mapping and study grants to local units of government administering state wetland regulations. Funding sources would include those listed for administrative grants.

Rationale:

a) Such programs provide positive incentives.
b) The lack of accurate mapping at appropriate scales has long been one of the problems associated with regulation of wetlands.

4) A uniform disclosure to accompany all land use and building permits advising applicants of environmental and other statewide regulatory requirements and appropriate contacts.

Rationale:

a) Would promote knowledge of and compliance with wetland and other regulations.
b) Would promote compatibility of state, county and town project approvals.

STATE PROGRAM SUPPORT, MANAGEMENT INFORMATION AND PUBLIC EDUCATION

1) Provide adequate fiscal and personnel resources for administration of wetland regulatory and management programs. Nine DNR FTE's (8 CSS @ $50,000 ea. 1st. year & $41,000 after & 1 LC @ $60,000/$51,000) and 1 Dept. of Justice Environmental Unit FTE ($60,000/$51,000).

Rationale:

Will provide required program effectiveness monitoring, oversight, technical assistance and enforcement.

2) Provide full funding for updating and digitizing of Wisconsin Wetland Inventory maps.

Rationale:

Allows monitoring of wetland acreage changes and related regulatory and management decisions about program effectiveness and regional ecological consequences.

3) Require disclosure of mapped wetlands in real estate transactions.

Rationale:

Alerts prospective buyers to environmental limitations of property as well as regulatory constraints.

4) Continue to encourage environmental ethics and ecological sciences training as part of primary, secondary and university education in Wisconsin's public schools.

5) Wetland acquisition and management programs should afford a high priority to restoration of former wetlands.

GENERAL WETLAND PROTECTION INCENTIVE

1) Provide a property tax credit for owners of mapped wetlands.

Rationale:

More evenly distributes tax burden for lands which support public interest resources.

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STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 1

COMPLETE LIST OF ALTERNATIVES FOR IMPROVING WISCONSIN WETLAND PROGRAMS SUGGESTED BY STUDY COMMITTEE MEMBERS AND STAFF

PART OF A STUDY FUNDED BY THE EPA AND WDNR

NOTE:

1. This is a complete list of ideas suggested throughout the study of committee members and staff of ways to improve the effectiveness and efficiency of wetland protection and regulation programs in Wisconsin.

2. The ideas are presented here grouped into four categories: Legislative, Administrative, Funding, and Professional Training and Technical Support. Each of the categories are further divided into: Changes to Existing Programs and New Programs.

3. This complete list was used by each of the 3 study committees to develop committee recommendations for program changes. The recommendations from each committee appear in the final study report.

ALTERNATIVES

CATEGORY OF ALTERNATIVES	CHANGES TO EXISTING PROGRAMS	NEW PROGRAMS
LEGISLATIVE	___Require that state and Federal governments give the DNR money to carry out whatever programs they're given. ___Set base standards and guidelines at agency level, endorsed by legislature, but direct actual design solutions to professionals in the private sector; don't try to institute uniform Best Management Practices, rather allow for innovative design at the project base. ___Require DNR approval (rather than superseding) of wetland rezoning decisions; petitioner must document lack of adverse impact. ___Provide adequate state staff to support local programs with training, informational materials, administrative assistance and enforcement, and to fully implement current state wetland regulatory and management programs. ___Strengthen the role §401 water quality certification plays in wetland protect - write wetland water quality standards. ___Resolve inconsistency between chapter 30.19 agricultural ditch exemptions and Chapter 88 drainage district laws. ___Improve both Swampbuster and the Farm Bill by taking out the loopholes. ___Follow these steps in wetland program development: 1) define the program objectives. 2) Categorize the wetlands by type and importance. 3)Define use category areas (residential, industrial, etc.). 4) develop brief, clear, specific standards for projects in each category with the help of professionals from each field. 5) Use uniform enforcement, and make regulators accountable. 6) Promote private stewardship. ___Achieve full funding for the Wisconsin Wetland Inventory map update program. ___Write "custom tailored" regional decision criteria into regulations. ___Require permits for channel changes and enlarging waterways in counties with populations over 850,000 as is required in other counties. ___Develop "general" chapter 30 and 31 permits for certain activities and areas (similar to the General permits of the Corps).	___Require natural resource planning on a county/municipality level, and require that the plan be used as a base for local zoning decisions. Make sure that DNR review is consistent with master plan as well. ___Require that state and Federal governments give the DNR money to carry out whatever programs they're given. ___Prioritize wetlands of the state and include categories of "untouchable" wetlands. ___Expand state regulatory jurisdiction to include all wetlands, not just those included in the beds of waterways and all activities substantially affecting wetlands. ___Establish water quality standards for all state wetlands. ___Establish anti-degradation policy and guidelines for wetlands. ___Make implementation of nonpoint source pollution control legislation mandatory. ___While stressing wetlands avoidance, establish a clear mitigation sequence with steps that are to be followed in order - i.e. total avoidance, minimization, decreasing project size/scope, re-orient building/project on same site. Make implementation mandatory. ___Require mitigation for all projects that receive permits. ___Allow the option of creating a mitigation bank with "credit" for acres created within the highway corridor as part of the project design (not just acres created at a separate mitigation site). ___Make private sector professionals responsible for project design to meet state standards. ___Increase local jurisdiction to all wetlands two acres or larger. ___Establish a state system of administrative penalties which can be implemented at the request of local government. ___Designate Primary Environmental Corridors statewide. ___Include buffer areas around wetlands as part of wetland protection. ___Establish a mapping and technical assistance grant program for municipalities. ___Require that failed mitigation projects be re-done. ___Provide that mitigation projects cannot be subsequently altered other than to improve their quality as wetlands.

CATEGORY OF ALTERNATIVES	CHANGES TO EXISTING PROGRAMS	NEW PROGRAMS (cont.)
LEGISLATIVE		___Create a system similar to that of sustainable agriculture, using tax incentives, preferential tax treatment, etc. to encourage private wetland protection. ___Create a wetland or broader "natural land" tax credit that features: 1) forgiveness of taxes on mapped wetlands (or for designated critical types). 2) A tax credit on a per wetland acre basis to be applied against any property tax balance due. 3) A long-term preservation commitment. 4) A recapture provision where back taxes, credits, and interest would become due it wetlands were altered. ___Require use of a uniform statewide building/land use permit form which advises applicants about environmental and other regulatory requirements and which is shared with appropriate agencies. Alternately, add a clause in the present state building permit which alerts people that they may need other permits, and tells them to contact their local zoning official, area DNR office, and the Corps of Engineers if they are in or near a wetland, river, lake, stream, or pond. ___Have one permit application which DNR reviews and routes to all other applicable agencies for the right permits (including sanitary permits, building permits, zoning permits, state chapter 30 and 31 permits and Corps §404 permits).

CATEGORY OF ALTERNATIVES	CHANGES TO EXISTING PROGRAMS	NEW PROGRAMS
ADMINISTRATIVE	___Make No Net Loss an administrative policy. ___Write "custom tailored" regional decision criteria into the regulations. ___Include both economic and environmental concerns in the permit decision making process. ___Set base standards and guidelines at agency level, endorsed by legislature, but direct actual design solutions to professionals in the private sector. Don't try to institute uniform Best Management Practices, rather, allow for innovative design at the project base. ___Consider the comprehensive impact of the project on the total wetland system (biology, hydrology, habitat, etc.) ___Make DNR comment on §404 permits mandatory. ___Change the wetland definition to treat wetlands as a dynamic system whose characteristics change with time and weather. ___Continue to use decentralized decision making with uniform decision criteria - attempt to achieve uniform decisions. ___Evaluate existing §401 water quality certification standards, and write new standards for wetlands. ___Establish uniform enforcement of regulations and programs. ___Achieve consistency within section 208 water quality planning and Non-point Source planning. ___Strengthen the current NR 1.95 wetland policy and prioritize department project selection (i.e., state funded watershed projects) that need protection. ___Allocate the limited county and DNR staff and resources to target the most sensitive or developmentally threatened wetlands in the state first. ___Improve reporting of local zoning decisions to DNR office. ___Place more field staff at the local level. ___Require permits for channel changes and enlarging waterways in counties with populations over 850,000 as is required in other counties. ___Develop "general" chapter 30 and 31 permits for certain activities and areas (similar to the general permits of the Corps). ___Change administrative priorities to make wetlands a higher priority within staff workload. ___Create a short form "ticketbook" which can be used to cite chapter 30/31 violations in the field. ___Publish a joint notice with the Corps for all dual permit applications. ___Establish a regional GIS/permit tracking system to allow field staff to check potential cumulative impacts and numbers of permits in an area before issuing the permit. ___Set up an interactive database management system between the central office and the district and area offices, so all offices can have access to view each other's files.	___Include buffer areas around wetlands as part of wetland protection. ___Establish a wetland quality monitoring program which utilizes permit records, wetland determinations, W.E.T. determinations, volunteers, and research efforts - this will become a clearinghouse for wetland information statewide. ___Provide that mitigation projects cannot be subsequently altered other than to improve their quality as wetlands. ___Prioritize the wetlands of the state and be sure to include some categories of valuable wetlands that are not to be touched and will be completely protected. Address the 5-6 major functions which will cover the greatest percentage of the process (i.e. water quality protection addresses nutrient and sediment removal and storage.) ___Establish water quality standards for all state wetlands. (This would give the state the ability to oversee federal wetland regulatory actions.) ___Establish a net gain policy as part of a comprehensive long-term wetland protection and restoration policy. ___Establish a program to designate special resource areas where land and water use regulations and tax incentives would protect outstanding resources including wetlands. ___While stressing wetlands avoidance, establish a clear mitigation sequence with steps that are to be followed in order - i.e. total avoidance, minimization, decreasing protect size/scope, re-orient building/project on same site. Make implementation mandatory. ___Require mitigation for all projects that receive permits. ___Allow the option of creating a mitigation bank with "credit for acres created within the highway corridor as part of the project design (not just acres created at a separate mitigation site). ___Create a DNR liaison mechanism similar to the DNR/DOT one for other public works projects. ___Establish a state system of administrative penalties which can be implemented at the request of local government. ___Include buffer areas around wetlands as part of wetland protection. ___Establish a wetland quality monitoring program which utilizes permit records, wetland determinations, W.E.T. and H.E.P. determinations, volunteers, and research efforts - this will become a clearinghouse for wetland information statewide. ___Provide that mitigation projects cannot be subsequently altered other than to improve their quality as wetlands. ___List all DNR employees who work with wetlands (from all bureaus), and make this list available. ___Establish a new DNR wetland newsletter for staff and public information which includes information from other states and federal actions.

CATEGORY OF ALTERNATIVES	CHANGES TO EXISTING PROGRAMS	NEW PROGRAMS
FUNDING	___Provide adequate staff to support local programs with training, information materials, administrative assistance, and enforcement. ___Achieve full funding for the Wisconsin Wetland Inventory Map program. ___Place more field staff at the local level.	___Provide grants to local governments for wetland zoning program improvement initiatives. ___Establish a mapping and technical assistance grant program for municipalities. Provide them with the technical expertise and cost-share money to put their current wetland maps on the same scale as the other maps they use, and help them interpret the wetland maps. ___Establish long-term monitoring for wetland vegetation, soils, hydrology, and habitat use. This information could then be used to identify both new and more effective mitigation/restoration techniques, as well as areas where better techniques are needed. ___Establish a grant program to underwrite the cost of voluntary wetland restoration (not that required by a mitigation plan). The cost would be shared by the state and the community benefitting from a wetland restoration. The landowner would receive technical assistance, and the actual grant could be for the cost of design and provision of contractor/construction crews and equipment. ___Provide state support for implementation of the conservation title (swampbuster, multi-year set-aside) of federal farm legislation.

CATEGORY OF ALTERNATIVES	CHANGES TO EXISTING PROGRAMS	NEW PROGRAMS
PROFESSIONAL TRAINING AND TECHNICAL SUPPORT	___Record acres of wetland affected and acres lost in the chapter 30/31 computer permit files.	___Establish a comprehensive wetland information and education program. ___Establish a mandatory training course for local Board of Adjustment and Planning and Zoning Committee members - may be correspondence course; must be completed before member can vote. ___Establish a mapping and technical assistance grant program for municipalities to provide them with the technical expertise and cost-share money to put their current wetland maps on the same scale as the other maps they use, and help them interpret the wetland maps. ___Establish if long-term monitoring is needed for wetland vegetation, soils, hydrology, and habitat use. This information could then be used to identify both new and more effective mitigation/restoration techniques, as well as areas where better techniques are needed. ___Establish a wetland quality monitoring program which utilizes permits, wetland determinations, W.E.T. (Wetland Evaluation Technique) determinations, volunteers, and research efforts. This program should also serve as a clearinghouse for information for all agencies and individuals. ___Provide free technical assistance to people wishing to restore/preserve wetland habitats. ___Establish a grant program to underwrite the cost of voluntary wetland restoration (not that required by a mitigation plan). The cost would be shared by the state and the community benefitting from a wetland restoration. The landowner would receive technical assistance and the actual grant could be for the cost of design and provision of contractor/construction crews and equipment. ___License and bond contractors. ___Provide a guidebook to wetland regulations and programs for permit applicants and others who wish to get involved in the process. ___Provide training on wetlands for the DNR Information and Education staff. ___Establish a mechanism for exchanging wetland zoning ideas and problems between counties.

CATEGORY OF ALTERNATIVES	CHANGES TO EXISTING PROGRAMS	NEW PROGRAMS
PHILOSOPHY AND ATTITUDES	___Balance both environmental and economic concerns - recognizing that we will continue to have economic growth, but need to consider environmental concerns also. ___Mitigation can be used as part of intelligent planning for the resource, but we don't want to "give away the shop" by allowing development anywhere just because the project can be mitigated. ___Clarify the legal standards for determining the taking issue. ___Base policy on resource use rather than resource protection. ___Reduce the complexity of regulations. ___Focus on the scientific rather than the engineering aspects of mitigation and resource planning. ___Change administrative priorities to make wetlands a higher priority within staff workload.	___Recognize that sound development can occur in wetlands. ___Focus on "no net loss."

STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 2

SUMMARY OF PERMIT APPLICANT SURVEY RESULTS

PART OF A STUDY FUNDED BY THE EPA AND WDNR

INTRODUCTION

This report is a summary of the results of an opinion survey of people who applied for wetland regulatory program permits in Wisconsin. It compliments additional opinion surveys of people who use wetlands, local zoning administrators, and state and federal agency personnel involved with wetland programs in Wisconsin. The surveys are part of Wisconsin Department of Natural Resources' (WDNR) study of various wetland protection programs in the state.

Through the study, a variety of types of data were collected about the jurisdictions, authorities, workload, etc. of the local, state and federal agencies with wetland protection programs in Wisconsin. The data was used by the Department, with the help of three committees, to develop alternatives for improving the effectiveness and efficiency of existing programs. The alternative of assuming federal permit responsibilities was also examined.

The permit applicant surveys were conducted by phone interview. A total of 20 people were surveyed. The people were randomly chosen from the lists of people who applied for federal, state, or local wetland permit or zoning actions throughout the state in 1988. Seven Corps section 404 permit applicants, 7 WDNR chapter 30 permit applicants, and 6 county or local zoning permit applicants were interviewed. The survey group included both people whose permits were granted and people whose permits were denied.

The survey was designed to provide ideas from the applicant's point of view on how to improve existing programs. Therefore, the survey format used open ended questions. A relatively small number of samples was adequate to provide useful information.

The following report includes 1) a narrative interpretation of the survey responses for the Corps, WDNR and local permit applicants, 2) a list of the common trends in responses, 3) additional helpful comments and 4) numerical tables summarizing the data results.

RESPONSES OF THE 7 CORPS PERMIT APPLICANTS SURVEYED

I. Types of Permits

The people surveyed said they needed permits for four types of activities: building ponds, building roads, filling low areas on their property and expanding a building. All of the respondents had to get at least two permits, one of which was the §404 permit, the others may be either a state or local permit or both. The most common reason for choosing a wetland site over another site was "I owned it". When asked if they knew beforehand that they needed a permit many said they didn't know at all, or that they knew about one type of permit, but didn't know about the others.

II. The Permit Process

Most people picked up their applications from the WDNR or the local zoning office. WDNR staff, contractors or consultants, attorneys, and the COE office in St. Paul all assisted applicants with filling out the forms or completing the drawings necessary.

Over one half of the respondents said they had no problems filling out the permit application forms. Those who did have problems cited the drawings, lack of coordination between the agencies - leading to requirements for more and more information, little contact with the Corps and a zoning official who didn't adequately explain the procedures as the major concerns.

Almost all applicants had some "surprises" during the process, including: learning which agencies were involved, how the agencies coordinated the programs, and what the requirements for a public notice and comment period were.

The permits generally took one to six months to process, one controversial dredge and fill permit took over 5 years. Most applicants said the process took too long and should only take one month at the most.

The biggest problems most applicants faced was waiting for their permits, and settling the differences between what they wanted and what the agencies would like to see.

Most applicants had to modify their plans, either by adding mitigation, or by decreasing the size of their project, or relocating parts of it.

III. Things that Should or Should Not be Considered in the Process

Common themes were that private property rights and business needs deserved more consideration, and that construction season should also be considered, especially in the time frame of the approval process. One person commented that they were glad that someone has to consider the good of the environment.

IV. Applicant Satisfaction with the Permit Process

Many people felt frustrated or angry at the end of the permit process or that the process was a hassle. They felt too may agencies were involved and the process took too long. Several could not see the need for federal involvement in what they considered a private project. Others said they were satisfied, and mentioned that they had received help and explanations from agency staff, especially WDNR.

V. Changes to Make in the Permit Process

Over one half of the people commented that they would not make mitigation a permit requirement because it was like "buying a permit". Others said that they thought it should be included "if that's what it takes to get a permit".

The most common recommended change was to involve fewer agencies in the permit process. Several people commented that the process would be handled more effectively and efficiently if only one agency were involved. It was also suggested to explain the full process to the applicant at the beginning, so there would be no "surprises" later. Others said they just wished the process would move faster. Another common comment was that "I think wetlands should be regulated but my type of activity should be exempt".

VI. Types of Information Used and/or Needed

Most often applicants got their wetland information from agency handouts.

People thought they had enough information on wetlands but thought there should be a handbook on "How to Get Through the Regulatory Maze" or a layman's guide to wetland regulatory programs. There is a need for clear delineation of what is regulated and by whom, and also for local officials and state field personnel to know the process and be able to guide people through it.

VII. Protection of Wetlands

All of the respondents felt that at least some wetlands should be protected, with over one half thinking all wetlands should be protected. Most of the applicants said that they could see the need for a permit process, but many said that the government should also view purchase of wetlands as an option for wetland protection. Several felt that the permit process was the best way to go about protecting wetlands, but that their specific operation should be exempt.

RESPONSES OF THE 7 WDNR PERMIT APPLICANTS SURVEYED

I. Types of Permits

Activities ranged from building a pond for mitigation of another project, to drainage culverts and parking lots. Boat landings and accesses and swimming beaches were the most common. Most people picked these sites because they owned them and wanted to improve their shoreline, while others wanted to increase the re-sale value of the property. All of the applicants said they knew they needed permits before they began the construction process.

Over half of the applicants needed to apply for more than one type of permit. The second one was usually a Corps permit, and if they needed three, the third was a local permit.

Almost all of the applicants got their application from the local WDNR office and worked closely with WDNR staff members to finish their applications, although some got conflicting answers from different bureaus within the department.

Processing time for the applications ranged from less than a month [for over one third of the respondents] to six months, nine months, and even five years for one controversial permit.

II. The Permit Process

Half of the respondents had trouble completing their application, citing problems with the drawings, the need for additional information, and the amount of time needed to complete the application. Many people had "surprises" during the process, including: a local assessor who didn't recognize the wetlands delineated on official maps as wetlands [which would decrease the property value and lower the assessment]; lack of intradepartmental coordination on answers, which led one applicant to believe the permit was approved when, in fact, it was denied. About one half of the applicants said they had trouble understanding the regulations. The biggest problems were understanding the environmental concerns, and which activities were regulated, and disagreement within and between agencies.

None of the applicants had changes made to their project after the application was submitted.

III. Things that Should or Should Not be Considered in the Process

Benefits of the project to the wetland and environment and the need to review WDNR wetland maps for accuracy were the most common themes. People felt that either their land was not wetland, or if it was, that not as much of it was wetland as what was mapped. One person commented that they wanted to know how they were supposed to estimate what the project would cost before it was begun. Several commented on the permit fee. They either thought there should be just one fee, or that the fee was OK. One person added that the beneficial economic impact of the project should be considered. Two others commented that the beneficial environmental or wetland impacts of the project should be considered.

IV. Applicant Satisfaction with the Permit Process

Most applicants were satisfied with the permit process. Those that were dissatisfied didn't understand the process and thought that it was too slow (those whose permits took six months or longer). One person felt internal WDNR coordination was poor (the fish manager and the game manager couldn't agree on the project, and gave the applicant conflicting opinions).

V. Changes to Make in the Permit Process or Program

Comments in this area range from no changes are needed, and everything is "just common sense" to "the logic of the regulations is absurd". One person commented that the state should have more authority over the federal government agencies involved, and that the state needs better guidelines to achieve more consistent decisions.

VI. Information Used and/or Needed

All of the applicants said they received some sort of information either from agency pamphlets or staff, fish and wildlife groups, or through magazines and articles.

VII. Protection of Wetlands

All of the applicants said that wetlands need to be protected, and most thought that the permit program was the most appropriate method. Many emphasized the need to protect wetlands for wildlife habitat; however, many also said there needs to be some flexibility in the regulations, including: a greater amount of protection for wetlands in cities, more flexibility in the definitions and delineation, and don't make the regulations as strict in areas greater than 300 feet from the shore. One person commented that the permit program is "a good start but that we need more protection at higher levels".

RESPONSES OF THE 6 LOCAL PERMIT APPLICANTS SURVEYED

I. Types of Permits

Activities covered a variety of uses, but most were associated with houses or driveways. One was a waterfowl pond, and one person wanted to level out dredged material piles.

Permit types ranged from conditional uses to re-zoning with one after-the-fact permit. People gave a variety of reasons for choosing a wetland area. Two owners cited ownership of the property. One person constructed a wildlife pond in an area that was originally a pond and had been drained for some time because he wished to restore it to its natural state.

About half of the people didn't know they needed a permit, many said they found out from the local zoning official. Only one person assumed he needed a permit, and called the local WDNR office to find out.

Most people got their applications from the local zoning office, with two from the WDNR office. Half of the people didn't get any help with their permit application. Those who did got help from the local zoning administrators, the local WDNR, or a contractor. One person stated that while he needed a sanitary permit, he neglected to inform him that he that he needed a shoreland permit as well.

II. The Permit Process

Only one of the six applicants noted any problems completing the applications. Most had some complaints about the process they went through. Some of the "surprises" people mentioned included knowing the area was a wetland, knowing local zoning applied to their site, problems with the zoning officials, either in getting technical help, or information on what types of permits were necessary. Others cited inter-agency coordination between Corps and WDNR, reaching WDNR contact people. One person had his county permit approved "on the spot" after filling it out and then the county later denied that he had a permit, which, in turn delayed his Corps permit for almost a year.

Most people's permits were processed in less than four months, while a few took from one to two days to one year to be finalized.

The biggest problems people faced were: not understanding the process, not knowing what to do next and where to get help, differences in Corps and WDNR opinions, finding out a permit was needed after the structure was built and "everyone [every agency] wanting to have something to say".

All of the projects except the after-the-fact permit were changed in some way.

III. Things that Should or Should Not be Considered in the Process

Additional concerns that should be included In the process were private rights, overall cost of the permit process (one person spent $300.00 for permits and another $300.00 for survey work before his permit was issued), and that the contractors should be monitored more closely after the permits are granted to be sure that they are doing the work as specified in the permit. The number of people commenting on the permit should also be reduced.

IV. Applicant Satisfaction with the Permit Process

Half of the people were dissatisfied with the local permitting process, either because they didn't understand the regulations and the process, or because they felt they didn't get enough help from local zoning officials.

V. Changes to Make in the Permit Process or Program

The respondents had a variety of suggestions for improving the permit process. Making regulations consistent both statewide and nationwide was the major concern of the applicants, so that they don't receive conflicting answers from state and federal agencies. Another suggestion was to add a section to the new statewide building permit stating what other permits might be needed for the project and who to contact and attach the permit to the application forms. Two more suggestions were to have the Zoning Administrator check the area in question for wetlands before handing out the permit forms and have just one department which coordinates wetlands so that "one side can't play off against another".

VI. Information Used and/or Needed

The type of information that almost all of the respondents requested was a "How to Get Through the Maze" handbook on the regulations and the permit process. One person suggested that the local Zoning Administrator should have a handout on wetlands and the local shoreland, floodplain and wetland protection programs and how they apply.

VII. Protection of Wetlands

All of the applicants agreed that it was important to protect wetlands, but not all of them agreed on the degree of protection they needed. One person stated that wetlands should be protected but that his land was not a wetland [although even the consultant he hired stated it was]. Others stated that "wetlands need equal protection from big developers as from small homeowners" and that "we should go back and rescind all of the [wetland related] permits which were otherwise acceptable in the past".

Another comment was that a private agency might be better able to protect wetlands than a public [and presumably politically organized] agency.

SUMMARY OF COMMON TRENDS

The following ideas were consistent among all three groups of permit applicants:

1. Wetlands need protecting, the permit process is a likely mechanism, but there is disagreement about which activities and wetlands should be regulated.

2. There is a variable level of knowledge of the need for permits. Everyone knew they needed a WDNR permit, about half knew they needed a local permit, and few knew they needed a Corps permit.

3. An instruction book is needed on how to get through the permit process, including sections on working with all three agencies, when which type of permit is needed, what the steps in the process are, and where to go for help.

4. An instruction book is also needed for filling out the permit applications, especially how to do the drawings.

5. The regulations should be consistent between the agencies and levels of government, especially the interpretations of regulations.

6. What is and isn't a regulated wetland needs to be clarified and consistent, in both the wetland maps and the definitions.

7. The programs would be more efficient if only one agency was involved.

8. Local officials and state field staff need training about the permit process and how to provide technical and administrative assistance to applicants.

9. Private property rights and economic concerns need to be considered in the permit decisions.

10. Enough flexibility is needed in the regulations to allow common sense in making decisions especially when weighing different economic/environmental balances In different areas of the state (city v. rural, northern v. southeastern, shoreland corridors v. upland wetland etc.).

ADDITIONAL HELPFUL COMMENTS FROM RESPONDENTS

1. Maybe there could be one private, presumably less political, institution overseeing wetland regulation programs, rather than the variety of public, more political ones currently used.

2. A clause should be added to the statewide building permit form that states what other permits may be needed for the project and where to go for further information.

3. The programs need to be changed to treat individual landowners the same as larger developers who are more experienced with how to get around the regulations and know where to go for help.

4. WDNR programs should be improved by: a) assuring consistency between bureaus {fisheries, wildlife, water quality, water regulation, etc.}; b) clarifying what are/are not wetlands using the maps and definitions; and c) have staff return phone calls sooner.

5. Improve local programs by: a) telling the applicant at the time he applies for any permit, what other permits might be needed; and b) having the zoning administrator check the wetland maps at the time the person asks for an application to give a general idea if the proposed site is a wetland or not.

PERMIT APPLICANT SURVEY RESPONSES
SURVEY GROUP = 20 (7 CORPS + 7 WDNR + 6 LOCAL)

I. TYPES OF PERMITS

A. TYPES OF PERMITS EACH APPLICANT NEEDED

ACTIVITY	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
FISH/WILDLIFE POND	2	-	1	3
DRIVEWAY/CULVERT	-	-	3	3
LOW AREA FILL	2	-	-	2
ROAD/HIGHWAY/BRIDGE	2	-	-	2
BOAT ACCESS/LANDING	-	2	-	2
SPOIL DISPOSAL	-	1	1	2
BEACH IMPROVEMENT	-	2	0	2
MITIGATION POND	-	1	-	1
PARKING LOT/CULVERT/ROAD	-	1	-	1
BUILDING EXPANSION	1	-	-	1
HOUSE [AFTER THE FACT]	-	-	1	1

B. NUMBERS OF PERMITS EACH APPLICANT NEEDED

# OF PERMITS NEEDED	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
1	-	4	4	8
2	5	2	2	9
3	2	1	-	3

C. REASON FOR CHOOSING SITE

REASON	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
OWNED LAND	5	2	2	9
NOT SURE	1	1	1	3
IMPROVE VIEW/LAKE FRONTAGE	-	2	-	2
WANTED HOUSE NEAR CREEK	-	-	1	1
RESTORE NATURAL POND	-	-	1	1
PRESENT SPOILS DEPOSIT SITE	-	-	1	1
ONLY SPACE FOR EXPANSION	1	-	-	1
IMPROVE RESALE VALUE	-	1	-	1
NEEDED PARKING LOT	-	1	-	1

I. TYPES OF PERMITS

(Continued)

D. KNOWLEDGE OF NEEDING A PERMIT BEFORE STARTING PROJECT

YES/NO	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
YES	2	7	3	12
NO	5	-	3	8

II. PERMIT PROCESS

A. WHERE APPLICANT GOT APPLICATION

LOCATION	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
CORPS OFFICE	1	1	-	2
WDNR OFFICE	5	5	2	13
LOCAL ZONING OFFICE	2	0	4	6
REGIONAL PLANNING COMMISSION	-	1	-	1

B. WHERE APPLICANT GOT HELP FOR APPLICATION

LOCATION	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
WDNR OFFICE	3	3	1	7
NO ONE	1	2	3	6
CONTRACTOR/SURVEYOR	2	1	1	4
LOCAL ZONE/ENGINEER OFFICE	1	1	1	3
CORPS OFFICE	2	-	-	2
REGIONAL PLANNING COMMISSION	-	1	-	1
ATTORNEY	1	-	-	1
CONSULTANT	1	-	-	1
EVERYONE (FWS, PUBLIC INTERVENOR, ETC)	-	1	-	1

II. PERMIT PROCESS

(Continued)

C. NUMBER OF DIFFICULTIES APPLICANT HAD COMPLETING APPLICATION

NUMBER OF DIFFICULTIES	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
NONE	4	3	5	12
SOME	3	3	1	7

D. TYPES OF DIFFICULTIES APPLICANT HAD COMPLETING APPLICATION

DIFFICULTIES	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
COMPLETING DRAWINGS	1	1	1	3
PROVIDE MORE ON IMPACTS	1	2	-	3
LONG PREPARATION TIME	1	-	-	1

E. NUMBER OF "SURPRISES" APPLICANT HAD DURING PROCESS

NO. OF SURPRISES	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
NONE	1	3	1	5
SOME	6	4	5	15

F. TYPES OF "SURPRISES" APPLICANT HAD DURING PROCESS

TYPES OF SURPRISES	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
NUMBER OF AGENCIES INVOLVED	4	-	-	4
PUBLIC NOTICE NEEDED	2	-	-	2
THAT AREA WAS WETLAND	-	-	2	3
THAT COUNTY WETLAND ZONING EXISTS	-	1	3	3
ALL THE PAPERWORK	1	-	1	2
THAT PROJECT WOULD HARM AREA	-	1	-	2
THAT AGENCIES DIDN'T AGREE ON PERMIT APPROVAL	-	2	1	2
MITIGATION NEEDED	1	-	-	1
THAT PROJECT WAS DISMISSED	-	-	1	1

(Continued)

II. PERMIT PROCESS

G. AMOUNT OF DIFFICULTY APPLICANT HAD UNDERSTANDING REGULATIONS

DIFFICULTIES	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
NONE	3	4	5	11
SOME	5	3	1	9

H. AMOUNT OF TIME TAKEN TO PROCESS APPLICATION

TYPE OF PERMIT	TIME TO PROCESS PERMIT 1 MO. OR LESS	2 MO.	3 MO.	4 MO.	6 MO.	MORE THAN 6 MO	TOTAL
CORPS	1	3	1	2	1	1	9
WDNR	3	1	1	1	1	2	9
LOCAL	2	1	1	1	-	1	6
TOTAL	6	5	3	4	2	4	24

I. BIGGEST PROBLEM ENCOUNTERED GETTING PERMIT

PROBLEM	TYPE OF PERMIT CORPS	WDNR	LOCAL	TOTAL
UNDERSTANDING THE PROCESS	2	-	1	3
UNDERSTANDING ENVIRONMENTAL CONCERNS/ACTIVITIES REGULATED	1	2	-	3
LENGTH OF TIME TO PROCESS PERMIT	2	1	-	3
KNOWING WHERE TO GO FOR HELP WITH PERMIT	-	1	1	2
THE AMOUNT & TYPE OF INFORMATION NEEDED	2	-	-	2
THE NEED FOR MITIGATION	2	-	-	2
PAYING FOR AN AFTER-THE-FACT PERMIT	-	-	1	1
PROJECT DENIED	-	-	1	1
NONE	-	2	1	1

III. THINGS THAT SHOULD OR SHOULD NOT BE CONSIDERED IN PERMIT PROCESS

A. ADDITIONAL THINGS THAT SHOULD BE CONSIDERED IN THE PERMIT PROCESS

ADDITIONAL CONSIDERATION	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
NONE	1	4	-	5
PRIVATE PROPERTY RIGHTS	2	-	1	3
BENEFITS OF PROJECT TO WETLAND/ENVIRONMENT	1	2	2-	2
NOT SURE WHAT WAS CONSIDERED SITE SPECIFIC WETLAND DETERMINATIONS	-	1	1	2
ENVIRONMENTAL CONCERNS	1	-	-	1
BUSINESS NEEDS	1	-	-	1
CONSTRUCTION SEASON	1	-	-	1
TYPE OF WETLAND	-	1	-	1
LOCAL IMPACTS (# OF WETLANDS vs DEVELOPMENT PRESSURE)	-	1	-	1
ELEVATION ABOVE SHORELINE (ie CONSTRUCTION ON A CLIFF)	-	-	1	1
OVERALL COST OF TOTAL PERMITS NEEDED FOR PROJECT	-	-	1	1
MONITORING CONTRACTOR DURING CONSTRUCTION	-	-	1	1
NOT SURE	1	-	-	1

B. THINGS THAT SHOULD NOT BE CONSIDERED IN THE PERMIT PROCESS

CONSIDERATION	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
NONE	1	3	1	5
NOT SURE	2	-	1	3
NOT SURE WHAT WAS INCLUDED	2	-	1	3
TOO NARROW WITH INTERPRETATION OF REGULATIONS	-	1	1	2
TOO MANY PEOPLE INVOLVED	-	-	1	1

IV. APPLICANT SATISFACTION WITH THE PERMIT PROCESS

A. APPLICANT SATISFACTION WITH THE PROCESS

SATISFACTION	TYPE OF PERMIT CORPS	WDNR	LOCAL	TOTAL
SATISFIED	2	7	2	11
NOT SATISFIED	4	2	3	9

B. REASONS FOR BEING SATISFIED WITH THE PROCESS

REASONS	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
PROMPT SERVICE	-	1	-	1
HELPFUL STAFF AND INFORMATION	-	2	-	2

V. CHANGES TO MAKE IN THE PROCESS OR PROGRAM

A. CHANGES TO MAKE IN THE PROCESS OR PROGRAM

CHANGES	TYPE OF PERMIT CORPS	WDNR	LOCAL	TOTAL
LESS AGENCIES	5	1	1	7
CONSISTENT DECISIONS WITHIN/BETWEEN AGENCIES	-	1	4	5
EXPLAIN THE FULL PROCESS EARLY TO THE APPLICANT	2	1	1	4
NONE	-	3	-	3
TELL APPLICANT EARLY IN THE PROCESS IF SITE IS A WETLAND	-	-	2	2
AGENCY(S) SHOULD ONLY MAKE 1 REQUEST FOR INFORMATION	1	-	-	1
GIVE APPLICANT COMPLETE LIST OF ALL PERMITS NEEDED AT THE BEGINNING	-	-	1	1
SHORTEN PERMIT PROCESSING TIME	1	-	-	1
STAFF SHOULD USE COMMON SENSE WHEN REVIEWING APPLICATIONS	-	-	1	1
EXEMPT PRIVATE ROADS FROM REGULATIONS	1	-	-	1
EXEMPT HIGHWAYS	1	-	-	1
EXEMPT TILLING PRIVATE YARDS	1	-	-	1
GIVE HELP/CREDIT FOR RESTORATION/ IMPROVEMENT OF PRIVATE WETLANDS	-	-	1	1
APPLY REGULATIONS ONLY TO "IMPORTANT" WETLANDS	1	-	-	1
CONSIDER ECONOMIC CONCERNS	-	1	-	1
PUT MORE PRESSURE ON PEOPLE WHO DESTROY WETLANDS	-	-	1	1

B. SHOULD MITIGATION BE REQUIRED FOR PERMIT APPROVAL

REQUIRED	SURVEY GROUP CORPS	WDNR	LOCAL	TOTAL
DON'T KNOW	2	1	3	6
NO	4	-	-	4
YES	1	-	-	1

STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 3

SUMMARY OF ZONING ADMINISTRATOR SURVEYS

PART OF A STUDY FUNDED BY THE EPA AND WDNR

INTRODUCTION

The following pages contain a narrative summary of the results of an opinion survey of county, city, and village zoning administrators (ZA's). The purpose of the survey was to gather Ideas for improving wetland protection and regulation programs in Wisconsin. The ZA's were surveyed because of their knowledge of local wetland zoning ordinances.

This survey is one part of a larger study being conducted by WDNR under a grant from the EPA to study various wetland protection programs in the state of Wisconsin. The study began in October of 1988. A variety of types of data are being collected through the study including: comparisons of federal, state and local programs' jurisdictions and authorities; numbers of permit actions; opinions of people involved with wetland programs and wetland users.

With the help of three committees, we will be developing alternatives to the current methods of wetland protection including: changing administrative policy, drafting ideas for new legislation, assuming Section 404 CWA administration, strengthening state programs, and/or developing new incentives for wetland protection. The full range of alternatives will be presented in the final study report. The report will serve as a decision making tool for WDNR administrators and others interested in wetland protection and regulation programs in Wisconsin.

The zoning administrator's survey was conducted by phone interview, using a series of open-ended questions. Because our purpose was to collect ideas on problems and solutions with existing programs, a small sample size was sufficient to gather useful Information within our short study timeframe. A total of six zoning administrators, three from counties, and three from cities or villages, were interviewed. These six were chosen to meet a combination of criteria -

1. wide geographic distribution
2. information rich sources (i.e. active administrators)

In general, because of the original legislative deadlines for adoption of wetland ordinances, counties have more years of experience with wetland programs than most cities or villages. Also, some cities and villages have more years of experience with the program than others. Therefore, when we chose city and village zoning administrators to survey, geographic distribution was somewhat sacrificed in favor of potential richness of information.

Although the sample size was small, the responses we received were very informative, and provided useful ideas for program improvements. What follows is a summary of that Information.

A. INFORMATION ON WETLAND TYPES AND ACREAGE

WETLANDS IN THE ADMINISTRATORS' DISTRICTS

All (6/6) of the municipalities of the ZA's we interviewed have shoreland wetlands. Commonly $<10\%$ of the total land area of the municipality is wetland (one county was about 50% wetland). Many also have one or two larger wetland areas not associated with a river, lake or stream, and a few smaller isolated areas.

WETLAND USES/VALUES

The ZA's felt that few people in their districts recognize all the values of wetlands. They reported that people in their districts recognize limited recreational and some aesthetic values of wetlands. Most ZA's said that people mostly want to use wetlands for development. One ZA stated that most

of the wetland values listed in NR 117[1] don't exist anymore" [probably because the wetlands are so fragmented].

HOW ARE WETLANDS CHANGING?

There is little perceived change in wetland acreage. The ZA's that do see change feel that the wetlands are changing because of secondary development - the shoreland is all gone, and people are developing the remaining marginal[2] parcels for access to lakes etc.. The ZA's also stated that wetlands are changing because people don't understand the value of wetlands, or recognize their benefits.

B. INFORMATION ON LOCAL WETLAND REGULATION PROGRAMS

HOW DOES YOUR ORDINANCE DEAL WITH STATE STANDARDS?

All county and most city and village programs have adopted at least the minimum state standards, some developed their own ordinances first and later adopted the state model. All of the ZA's we surveyed said their ordinances followed the model.

DO YOU USE WI WETLAND INVENTORY MAPS?

All of the Zoning Administrators we surveyed use the Wisconsin Wetland Inventory maps to some degree. Other maps used are DOT base maps, conservancy maps, and USGS soils maps.

ZONING ACTIONS

Most of the ZA's estimated that less than 5% of the zoning actions they encountered were wetland related. One ZA said about 10% were wetland related.

COMMON PROBLEMS

The most common problems were defining wetland boundaries. People understand what wetlands are and why they are regulated, which uses are permitted uses, and lack of support from local public officials. Other problems were lack of knowledge of wetland regulatory programs, and wetland functions and values on the part of the ZA, and knowing which activities are exempt. Some feel the exemptions should include county, town, or village roads as well as state and federal road projects.

WHERE DO YOU GET YOUR SUPPORT?

The zoning administrators indicated they get some technical support from the DNR and Corps. Funding from the municipalities is "O.K. but the ZA's feel that they could accomplish more with additional funding for staff support, training, and equipment (computers, etc.). Some ZA's (2/6) receive backing for their decisions from the planning and zoning committee, others say this is the last

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[1] NR 117 lists the values of wetlands as storm and bad water storage capacity; maintenance of dry season stream flow, groundwater discharge and recharge; filtration and storage of sediments and other pollutants; shoreline erosion protection; fish and wildlife habitat; and value as special recreational and scientific are as.

[2] Marginal in this sentence means site development is limited by the physical characteristics of the land (i.e. low-lying wetland ares, rock outcroppings, etc.).

place they get support. One ZA noted he got more support from the League of Women Voters and local environmental groups than from the county board.

HOW LONG HAVE YOU ADMINISTERED WETLAND REGULATORY PROGRAMS?

Answers ranged from 2 to 20 years, with no common time span. The average was about 6 years.

WHAT INFORMATION IS NEEDED?

More information is needed on the permit process - especially who an applicant should contact to Initiate a permit; more information on the s. 404 permit program, what activities are exempt, and under what circumstances; training on 404/401 procedures would be useful. The ZA's also expressed a desire for more information on the values of wetlands to give to the public.

C. THOUGHTS ON STATE AND FEDERAL WETLAND REGULATORY PROGRAMS

INVOLVEMENT IN CHAPTER 30

ZA's refer people to the local DNR office, but said that people often change their projects so they won't have to get a permit. Applicants often have questions about wetlands below the Ordinary High Water Mark (OHWM), and ZA's may not know exactly where the OHWM is.

EXPERIENCE WITH SECTION 404

One ZA felt that the "COE [section 404] process seems cumbersome, but probably necessary." Most (4/6) of the ZA's have little involvement wit the COE section 404 process beyond referral. They receive the public notices, and file them, but rarely comment.

THOUGHTS ON WISCONSIN'S ASSUMPTION OF THE s. 404 PERMIT PROCESS

Most (5/6) of the zoning administrators think that state assumption/streamlining of the s. 404 process would be an improvement. One ZA had some concerns about the state-federal communication and coordination between agencies. Comments included: "Great, but people applying for permits want a balance of views," (otherwise the state would have authority over all three wetland programs); "Bureaucracy fatigues people"; and "streamlining would help". A major concern was that if the DNR assumed the program with only the existing staff, they would become overloaded, and that coordination and contact with the county and local ZA's would suffer.

D. THOUGHTS ON WETLAND MITIGATION

IS MITIGATION REQUIRED BY LOCAL ZONING?

Only one ZA said mitigation was required by local zoning, the rest stated that they "don't take trades, or don't require it.

IS MITIGATION AN EFFECTIVE WETLAND PROTECTION TOOL?

All of the ZA's said that the effectiveness depends on the goal of the mitigation. Mitigating endangered species habitat can be a problem. Mitigation "should be an option if nothing else can be done."

E. OTHER COMMENTS

1. There will be much more activity In the future because the city is hemmed in by wetlands.

2. Please send short reminders/informational sheets to local elected officials to remind them of environmental Issues.

3. Tax credits or deferments would be helpful to promote wetland conservation, as would getting assessments changed to reflect actual land values (value as wetland not developable area).

4. The DNR needs to continue Its support and training of zoning administrators. Even more training would be beneficial.

STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 4

SUMMARY OF WETLAND USER OPINION SURVEY

PART OF A STUDY FUNDED BY THE EPA AND WDNR

INTRODUCTION

The following report is a narrative summary of the results of an opinion survey of people who use wetlands in Wisconsin. The survey is part of a larger study being conducted by WDNR under a grant from the EPA to study various wetland protection programs in the state of Wisconsin. The study began in October of 1988.

A variety of types of data are being collected through the study including: comparisons of federal, state, and local programs' jurisdictions and authorities; numbers of permit actions; opinions of people involved with wetland programs and wetland users. With the help of three committees, we will be developing alternatives to the current methods of wetland protection including: changing administrative policy, drafting ideas for new legislation, assuming Section 404 administration, strengthening state programs, and developing new incentives for wetland protection.

The wetland user opinion survey was conducted in two parts: 1. a mail questionnaire sent to members of groups interested in wetlands. 2. site visits to seven wetlands with public access to survey people visiting specific wetlands.

The mail questionnaires were sent to a total of 1,621 people. The people selected to receive the survey were members of the groups represented on the study's Citizen Advisory Committee. The people surveyed were formed into four groups based on interest. The groups received color coded surveys. Six hundred forty-five surveys were returned.

COLOR	GROUPS	SENT	RETURNED (total for color)	RECORDED (total for color)
Yellow	WI Wetland Assoc.	381	142	101 (Due to recording error)
Blue	WI Cranberry Growers	152		
	WI Farm Bureau Fed.	199		
	LICA WI chapter	66	184	100
Green	WI Wildlife Federation	202		
	WI Waterfowlers	234		
	WI Assoc. of Envir. Educators	279	311	100
Buff	Great Lakes Indian Fish and Wildlife Comm.	108	8	8

To simplify the analysis and remove some bias associated with the uneven number of responses per group, 100 returns for the three larger groups were randomly selected for analysis. All eight of the Native American group were included. This gave us a mixed sample of 309 responses on which the following summary is based.

The site visits were conducted in seven relatively well-used wetland areas distributed around the state. The sites were chosen to represent a variety of wetland types, uses and proximities

to populated areas. Each site was visited for one weekend morning or afternoon during the period of late May to early September. We recognize use patterns of these wetlands vary throughout the year, with spring and fall typically being the periods of heaviest use. However, time constraints limited us to the summer months, which we thought would also give us a greater variety of types of uses.

The table below summarizes the locations, dates, and numbers of responses received at each of the seven sites.

SITE	DNR District/Location (nearest city)	DATE/TIME	#Of Responses
Horicon Marsh	Southern/Waupun	May 27 - all day	11
Sheboygan Marsh	South East/Sheboygan	June 10 - afternoon	12
Chequamegon Bay	North West/Ashland	June 25 - afternoon	5
Woodland Dunes	Lake Michigan/ Two Rivers	June 26 - morning July 7 - afternoon	2
Green Say Wildlife Sanctuary	Lake Michigan/ Green Bay	August 10 - all day	17
La Crosse Marsh	Western/ LaCrosse	August 27 - afternoon	14
Necedah National Wildlife Refuge	North Central/ Necedah	August 2 - afternoon	3

There was great variability in the number of visitors and responses in the sites. The following summary is based on these sixty-four responses.

PART ONE:

RESULTS OF THE MAIL SURVEY OF INTEREST GROUPS

INFORMATION ABOUT THE RESPONDENTS AND HOW THEY USE WETLANDS

Over half the survey responses come from rural areas, with the greatest number coming form the southern district.

Hiking was the number one wetland use, with canoeing coming in a close second. On the low side, building others houses had the least responses. (only 5% of the people said yes.) The impacts of these uses on wetlands was ranked. Education had the highest number of very beneficial- beneficial rankings with 40%. Canoeing received the most neutral rankings (40%), and building houses (either yours or others) received the most detrimental-very detrimental rankings (34%).

Over half (58%) of the people surveyed stated that they belonged to an environmental organization interested in wetlands.

Frequency of wetland use varied. 88% of the people polled answered the question, and of these, 50% used wetlands either daily or weekly, 38% used them monthly or yearly.

Ownership of the wetlands used varied as well, 32% of the people used wetlands they owned the most, while township wetlands were used least (21%).

Fifty-four percent (54%) of the people surveyed didn't own wetland property, while 43% said they did. Most wetland owners (58%) said their wetland amounted to 25% or less of their land. Of the wetland owners, only ten percent (10%) said their wetland amounted to 75% or more of their land. Seventy-five percent (75%) of the wetland owners said they use at least part of their wetland for a natural area. Nine percent (9%) use their wetland for single family homes, two percent (2%) use it for multiple family residences, two percent (2%) have subdivided their wetland for commercial use, and one percent (1%) for industrial use. Seventy-eight percent (78%) of the owners left their wetland untiled, while 42% ditched their wetlands. Thirty-five percent (35%) of the owners excavated their wetlands to provide open water areas.

People gather information on wetlands in many ways. Three quarters of the people interviewed said they get their information from magazines, 72% from newspapers, and 71% from newsletters. Fifty-eight percent (58%) of the people said they got wetland information from DNR publications, while 13% said they used EPA publications, and 4% used Corps information. One half of the people surveyed got information on wetlands from television programs.

THOUGHTS ON WHAT IS HAPPENING TO WETLANDS IN WISCONSIN

Seventy-three percent (73%) of the people interviewed said they thought wetland acreage In Wisconsin is decreasing, and 56% think the quality of wetlands is getting worse. They attribute this loss of quality and acreage to commercial development (61%) Residential development (52%) farming and industrial development (50% each). The action they chose as having the least impact on the decline was too much management (regulation) (31%).

Fifty-eight percent (58%) of the people thought that the most severe impacts of decreased

wetland acreage and quality were more sediment in rivers, and 57% thought it would be more sediment in lakes. Fifty-five percent (55%) thought less natural beauty was a severe or very severe impact of wetland loss. Less nongame wildlife, less groundwater recharge, and more flooding were all considered severe or very severe impacts by at least 50% of the people surveyed. Recreational area was thought to be the least impacted by decreased wetlands acreage and quality by 17% of the people surveyed.

Changes in wetland quality and acreage were attributed to lack of knowledge about the regulations by 61% of the people, while 57% thought that people didn't understand the regulations. Other reasons were inadequate enforcement (56%), inadequate regulations (52%) and that people didn't think they'd get caught if they violated the regulations (54%).

Improved farming practices (30%) and good private stewardship (28%) were attributed with some to most of the perceived increase in numbers of acres or quality of wetlands in Wisconsin.

Wetland functions were rated very highly, with the very high to high value going to wildlife habitat (83%), water quality protection (77%) and flood and stormwater control, and the very low to no value going to timber production (23%), agricultural food production (farming) (22%), and wastewater treatment (3%).

THOUGHTS ON EXISTING WETLANDS REGULATORY PROGRAMS

DNR programs are most well known by the people we surveyed. Sixty-six percent said they were most familiar with DNR, 22% were most familiar with local, and 21% were most familiar with the Corps programs.

One half (50%) of the respondents had read handouts or brochures on the DNR wetland permitting program, 47% read brochures or handouts on the Corps programs, while only 18% had read anything on the local programs. Over one quarter (28%) of the respondents had applied for a Corps permit, while only 14% had applied for a DNR permit, and 11% for a local permit. Twenty percent (20%) of the respondents watched for public notices of a Corps project, 23% watched for notices of a DNR project, and 17% watched for notices of a local project.

Over one third (37%) of the respondents didn't know whether there was adequate notice of public hearings for Corps, DNR or Local projects.

People also didn't know if they had adequate access to background information on a project. Forty-two percent (42%) didn't know for the Corps, 35% didn't know for the DNR, and 38% didn't know for Local projects. Thirty-six percent (36%) of the people thought that there was adequate access for DNR projects.

Fifteen percent (15%) of the people said they made written comments on a Corps permit. Nineteen percent thought these comments would be considered, 15% thought they were not considered, 42% didn't know, and 8% said the question was not applicable. (Note: A greater number of people said they thought their comments were considered than the number of people who said they commented. Therefore, further analysis is needed to correlate these

answers). Fourteen percent (14%) of the people said they commented on a DNR permit, 28% thought these comments would be considered, 16% didn't think these comments were considered, and 35% didn't know. Eight percent (8%) said the question was not applicable. Nine percent (9%) of the people said they commented on a local project, 28% said they thought the comments were considered, 10% said they thought the comments were not considered, 34% didn't know, and 14% said the question was not applicable.

Sixty percent (60%) of the people interviewed were aware of some DNR enforcement action, while only 15% were aware of a Corps enforcement action, and 10% were aware of a local action.

Over one third (36%) of the people said they knew someone who was cited for a violation of a wetland regulation, however, they varied as to whether the action was too strong, too weak, or just right. Many said they didn't know.

When asked which agency they felt most effectively protected wetlands, 43% of the people answered DNR, 9% answered Corps, 7% answered local, and 11% answered some sort of combination.

THOUGHTS ON WETLAND REGULATION

An overwhelming 91% of the people surveyed thought regulations are needed to protect wetlands. Over one half said that all of the activities listed which occur in wetlands should be regulated. Housing and industrial development both received 84%, with a close third going to commercial development. Wastewater treatment, roadbuilding, and filling were the next highest percentages, with 77%, 73% and 70% respectively.

Eighty seven percent (87%) of the people thought that land use planning was needed to protect wetlands, and 52% thought that the planning should be at a combination of levels.

When asked what agency should administer wetland regulatory programs, over one third (37%) of the people responded DNR, and one third (33%) responded a combination of agencies, 16% thought that local agencies should administer the programs, and eight percent thought the Corps should administer the programs.

Only eight percent (8%) of the people thought that coordination between the agencies was good or very good, 12% thought it was adequate. By far the largest number of people (48%) thought the coordination was poor, very poor, or needed improvement.

People were asked what they thought should be considered in granting or denying a permit for activities in wetlands. The highest concern was water quality (72%), with type of wetland (71%) groundwater discharge/recharge value (70%) and fish and wildlife value (69%) and significant adverse impacts of the project (69%) all receiving many votes. Those things thought to be least important to consider were the ordinary high water mark of the water body (38%) navigability of the water body (34%), and cost of the project (27%).

Two thirds (66%) of the people thought that state and federal endangered species should be considered when granting/denying permits. When asked what categories of endangered

species should be considered, 72% thought that state and federal endangered species should be considered, 63% thought that state threatened species should be considered, and 82% thought that federal threatened species should be considered.

Most people didn't know if simplifying the regulatory process would increase effectiveness in protecting wetlands (on avg. 33%), of those who did have an opinion, on average, 32% thought that simplifying the process would improve effectiveness, while on average 12% didn't think that simplifying the process would improve its effectiveness.

More people were dissatisfied (41% Corps, 39% DNR, 32% local) with the way private rights and public trust are balanced by the present programs than were satisfied (20% DNR, 17% local, 16% Corps) with the balance.

THOUGHTS ON WETLAND MITIGATION AND PROTECTION

Over one half (55%) of the people knew what mitigation was, but they didn't agree on how effective it was in protecting wetlands. Fourteen percent (14%) thought it is effective, 13% thought it isn't effective, 20% thought it is under certain circumstances, and 32% didn't know.

The greatest number of people (47%) thought that restoration should be added to a permit before granting it. Enhancement was rated second highest as a permit condition (410/o), with replacement third (36%) and creation as the last alternative (30%).

Tax incentives were rated the highest among those methods of wetland protection that were most or moderately effective (50%). Other effective options were state permitting programs (49%), and land use planning (46%). Deed restrictions rated highest in the very ineffective to no effect category with 11%.

CONCLUSIONS

Further interpretation of the results and comparisons of differences among groups of respondents are shown in the charts on the following pages.

Overall the survey results provide useful and interesting information.

Some of the results were surprising. The importance people placed on the need for regulations to protect wetlands is significant. The follow-up question becomes "what should be regulated, and how?"

The results of this survey should serve only as a guideline, to be used in conjunction with other information on overall program effectiveness, workloads, and program administrators and permit applicants opinions of the programs. These surveys cannot be used as conclusive information in and of themselves, because of the shortness of the survey timeframe, and the limited and well-informed population that was selected for the study.

EDITORIAL COMMENTS

One half of the respondents had read handouts or brochures on the DNR wetland permitting program, 47% read brochures or handouts on the Corps programs, while only 18% had read anything on the local programs - this may be due to the fact that most local programs don't have handouts, but put their information in public notices.

Over one third of the respondents didn't know whether there was adequate notice of public hearings for Corps, DNR or Local projects. - This may be linked to the number of people who watch for public notices... see above - "Thoughts on Existing Regulatory Programs".

People were asked what they thought should be considered in granting or denying a permit for activities in wetlands. Those things thought to be least important to consider were the ordinary high water mark of the water body (38%) navigability of the water body (34%), - both of which are now used to determine state jurisdiction, and cost of the project (27%) - often thought to be of great importance by the permit applicant.

Two thirds (66%) of the people thought that state and federal endangered species should be considered when granting/denying permits. When asked what categories of endangered species should be considered, 72% thought that state and federal endangered species should be considered, 63% thought that state threatened species should be considered, and 82% thought that federal threatened species should be considered. ** We would like to point out here that endangered means "in danger" of becoming extinct - like the passenger pigeon, while threatened means that the species is threatened with becoming endangered, often because of loss of habitat. **

GRAPHS

The following pages contain graphs of responses to certain questions. On all graphs, group abbreviations are as follows:

Total = total for all respondents
E = total for Environmental [yellow] group
A/D = total for the Agricultural/Developmental [blue] group
R/W = total for the Recreational/Wildlife/Educational [green] group
NaA = total for the Native American Concerns [buff] group

Some graphs have been divided into the four groups to show the variance, and in some instances the homogeneity among the groups' opinions.

On all graphs, the symbols represent the following groups

Total

Environmental

Agricultural/Developmental

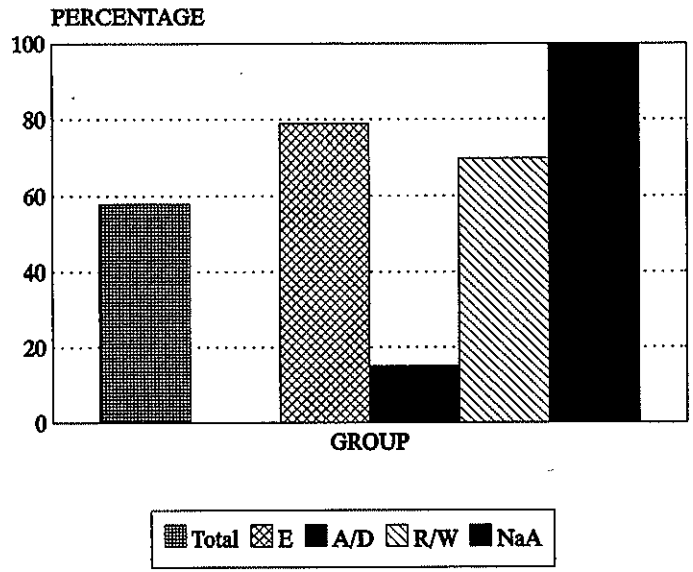
Recreational/Wildlife /Educational

Native American Concerns

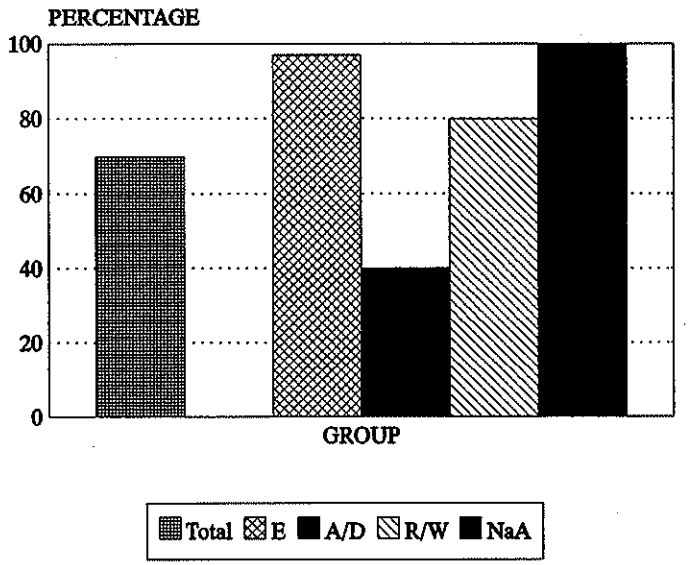
THE BAR GRAPHS REPRESENT THE PERCENTAGE FOR EACH GROUP

ON ALL STACK GRAPHS, THE STACKS EQUAL THE TOTAL PERCENTAGE OF RESPONDENTS

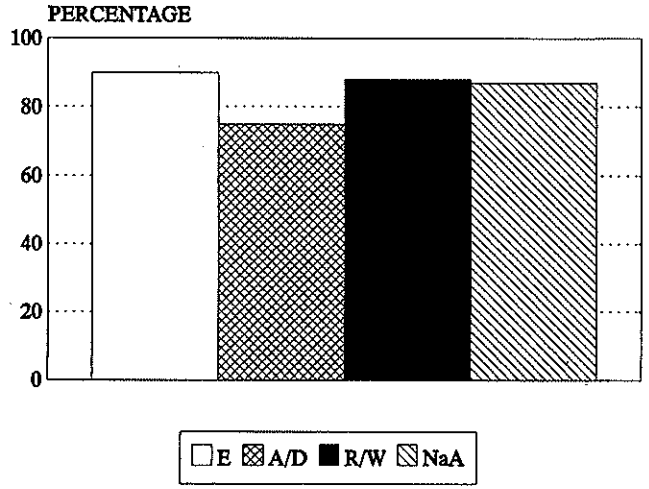
QUALITY OF WETLANDS IS: DECREASING



ACRES OF WETLANDS ARE: DECREASING

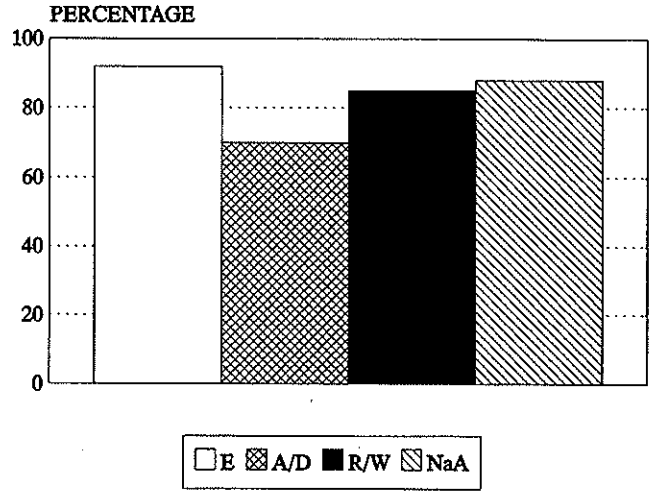


INDUSTRIAL DEVELOPMENT



BREAKDOWN BY GROUPS

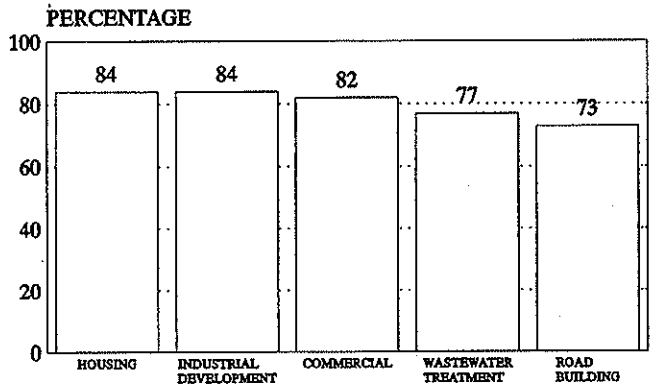
COMMERCIAL DEVELOPMENT



BREAKDOWN BY GROUPS

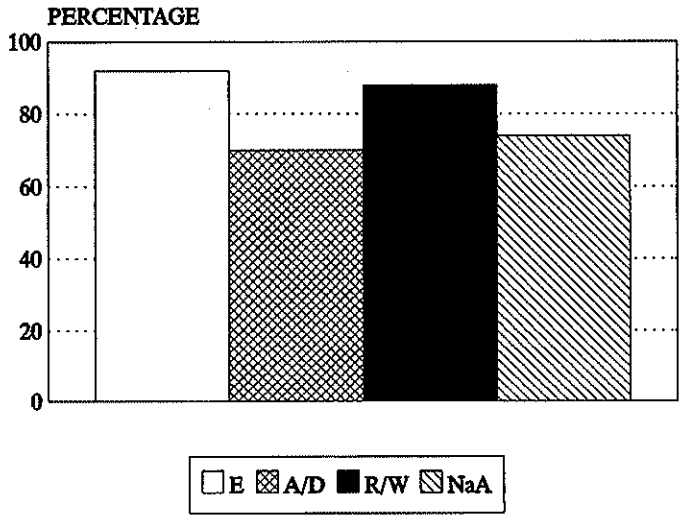
WHICH ACTIVITIES DO YOU THINK SHOULD BE REGULATED?

[TOP 5 ANSWERS]



TOTAL FOR ALL GROUPS

HOUSING DEVELOPMENT

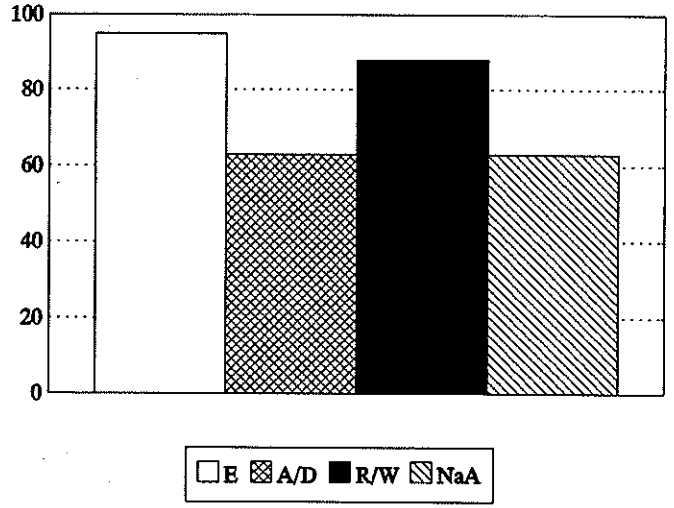


BREAKDOWN BY GROUPS

ROAD BUILDING

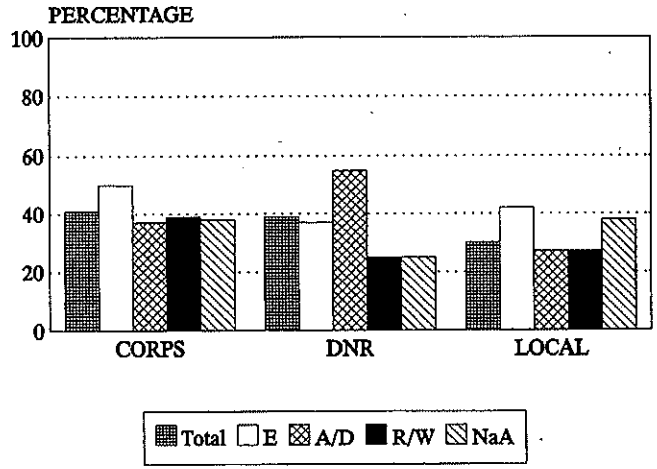
BREAKDOWN BY GROUPS

WASTEWATER TREATMENT

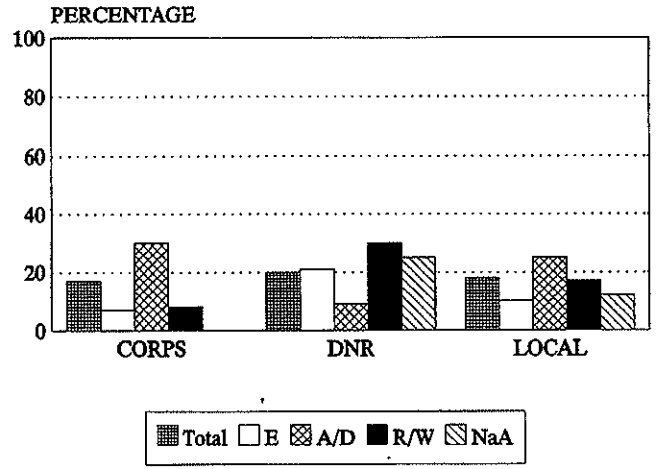


BREAKDOWN BY GROUPS

DOES THIS PROGRAM PROPERLY BALANCE PRIVATE RIGHTS AND PUBLIC TRUST? NO



DOES THIS PROGRAM PROPERLY BALANCE PRIVATE RIGHTS AND PUBLIC TRUST? YES

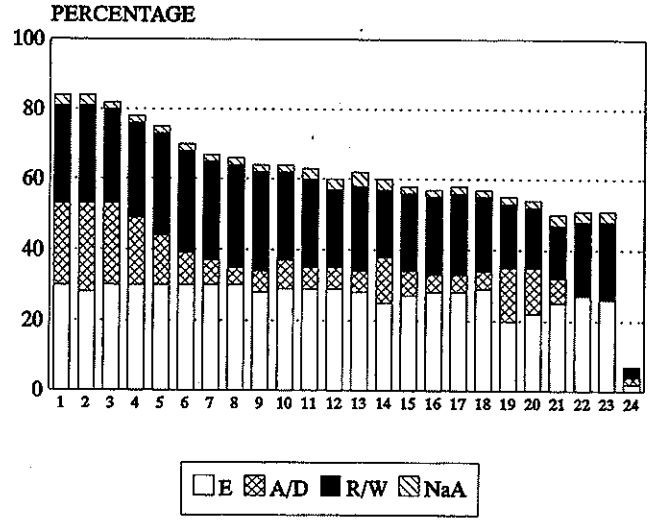


Key to Activities which should be regulated

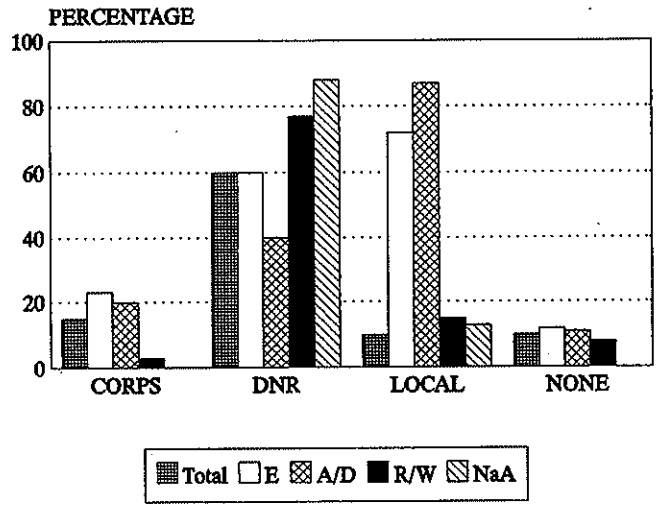
1. housing development
2. industrial development
3. commercial development
4. wastewater treatment
5. roadbuilding
6. filling
7. draining
8. dredging
9. ditching
10. peat mining
11. cropping
12. muck farming
13. tiling
14. hunting
15. commercial forestry
16. sod farming
17. grazing
18. bridging
19. fishing
20. recreation
21. stormwater control
22. cranberry growing
23. haying
24. NONE

PLEASE NOT THAT FOR ALL ACTIVITIES, OVER 50% OF THE RESPONDENTS SAID THAT THEY SHOULD BE REGULATED

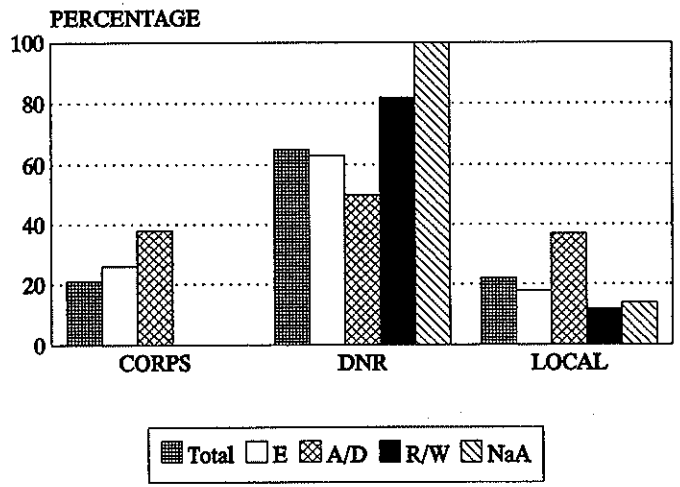
Which activities should be regulated?



WHICH AGENCY'S ENFORCEMENT ACTIONS ARE YOU MOST AWARE OF?



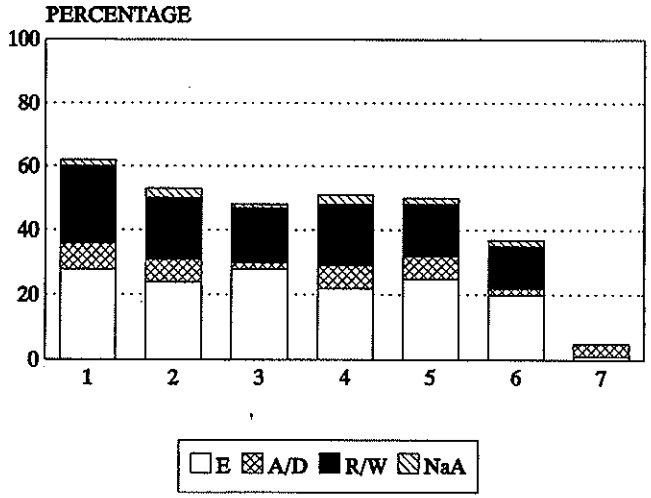
WHICH PROGRAM ARE YOU MOST FAMILIAR WITH?



KEY TO CAUSES OF WETLAND LOSS

1 COMMERCIAL DEVELOPMENT
2 RESIDENTIAL DEVELOPMENT
3 FARMING
4 INDUSTRIAL DEVELOPMENT
5 ROAD BUILDING
6 NOT ENOUGH MANAGEMENT {REGULATION}
7 TOO MUCH MANAGEMENT {REGULATION}

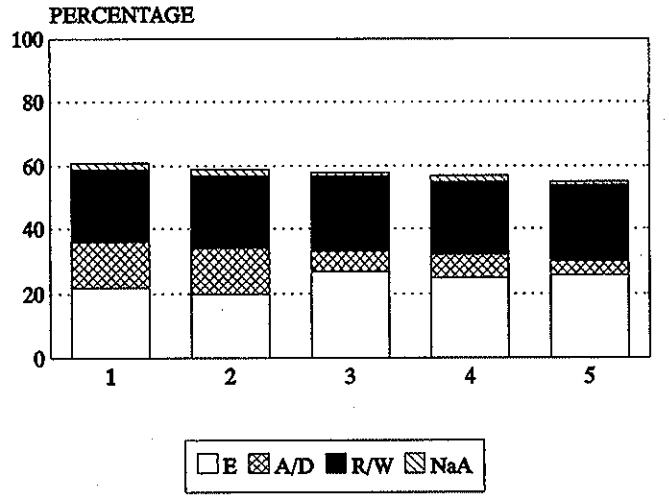
CAUSES OF LOSS OF WETLAND ACREAGE AND QUALITY



KEY TO REASONS QUALITY/QUANTITY ARE CHANGING

1. PEOPLE DON'T KNOW ABOUT REGULATIONS
2. PEOPLE DON'T UNDERSTAND THE REGULATIONS
3. ENFORCEMENT OF THE REGULATIONS ISN'T ADEQUATE
4. PEOPLE DON'T THINK THEY'LL GET CAUGHT
5. THE REGULATIONS AREN'T ADEQUATE

REASONS WETLAND QUALITY/QUANTITY ARE DECREASING

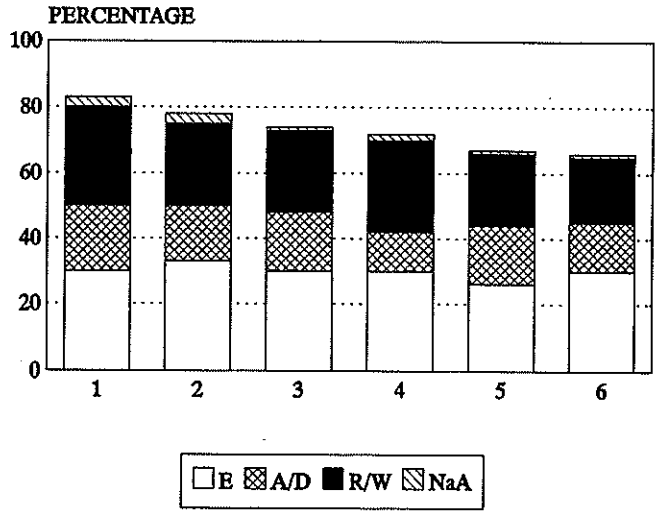


KEY TO WETLAND FUNCTIONS

1 WILDLIFE HABITAT
2 WATER QUALITY PROTECTION
3 FLOOD/STORMWATER CONTROL
4 ENDANGERED/THREATENED SPECIES
5 GROUNDWATER RECHARGE
6 SEDIMENT FILTERING

Which wetland functions are valuable?

{Very High to High Value}



PART TWO:

SUMMARY OF THE ON-SITE WETLAND USER SURVEY

ACTIVITIES PEOPLE USE WETLANDS FOR

The greatest number of people used wetlands for hiking (63%), fishing (53%), or canoeing (42%). Other common uses were hunting, birding, and education. Biking, camping, and photography were the most common additions to the list of activities.

FREQUENCY OF WETLAND USE AND NUMBER OF USERS

The greatest number of people use wetlands weekly (41%). One half of the respondents (50%) said they use wetlands daily or weekly and one half monthly or yearly.

The average number of people per group was 6, but this answer was skewed, most groups had 1-3 people in them. [One group had 150 people which threw off the answer.]

When asked how often they visited the particular wetland they were being surveyed in, most people (61%) responded monthly or yearly. Eight percent (8%) said it was their first visit.

PERCEIVED CHANGES IN WETLANDS AND THEIR CAUSES

People were asked if they had noticed any changes in the wetland they were surveyed in since they first visited it. Over one half (52%) responded that they had. The changes they perceived varied with the wetlands but they include changes in water levels and water quality, changes in management resulting in a "wilder" appearance and more birds, and that areas were being filled in.

The perceived reasons for the changes ranged from management techniques, to human pollution, to greater concern for the environment and more people who care. Changes in natural conditions [drought or increased rainfall] were also noted.

IMPORTANCE OF HAVING LAWS WHICH PROTECT WETLANDS

Ninety-one percent (91%) of the respondents said that it was moderately to very important to have laws which protect wetlands. [This reflects the percentage of people who responded to the same question on the mail survey].

ADDITIONAL COMMENTS ON WETLAND AND WETLAND PROTECTION

Comments ranged from "Keep them [wetlands] the way they are" to "[wetland protection laws are slightly - moderately important, but] DNR's going crazy on it. Many people commented on the need to maintain them for multiple uses, and the need to keep them unpolluted, and not overused.

People expressed the feeling that the areas are important for wilderness, and that we need to find "the correct balance to exist within nature". They were concerned about local apolitical development influenced and also the need "to protect natural areas for our grandchildren".

Management of the wetland areas also drew many comments from respondents. People noted that the areas were important for migrating waterfowl, and that the remaining wetlands

should be managed "to make up for losing wetlands to other uses".

EDITORIAL COMMENTS

Green Bay Wildlife Sanctuary serves as a good wetland educational tool for many people.

LaCrosse Marsh users seem more aware than the average wetland users of developmental pressure on the marsh - probably because of the amount of local publicity on the marsh.

We would like to note that both surveys reflected the great importance people put on the need for regulations to protect wetlands.

PART THREE

SUMMARY OF WETLAND OWNER AND NON-OWNER RESPONSES

SUMMARY OF RESPONSES---WETLAND USER SURVEY
NON-OWNERS

THE SUMMARY OF RESPONSES IS GIVEN IN NUMERIC FORM WITH PERCENTAGES IN PARENTHESES [%]. ALL PERCENTAGES HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.

SURVEY GROUP: TOTAL FOR ALL NON-OWNERS
TOTAL NUMBER OF RESPONSES: 175

A. INFORMATION ABOUT YOURSELF AND HOW YOU USE WETLANDS

1. Do you live in a:

city	67	[38%]
suburb	13	[7%]
small town	25	[14%]
rural area	63	[36%]

2. Which DNR district do you live in?

NWD	10	[6%]
NCD	9	[5%]
WD	21	[12%]
SED	34	[19%]
SD	81	[46%]
LMD	14	[8%]

3. Do you use wetlands for:

	YES		NO	
Canoeing	104	[59%]	61	[35%]
Hiking	108	[62%]	58	[33%]
Fishing	76	[43%]	90	[51%]
Hunting	67	[38%]	51	[29%]
Birding	100	[57%]	66	[38%]
Haying	4	[2%]	164	[94%]
Cranberry growing	1	[1%]	166	[95%]
Grazing	2	[1%]	163	[93%]
Cropping	3	[2%]	166	[95%]
Food gathering	21	[12%]	146	[83%]
Erosion Control	13	[7%]	153	[87%]
Flood Control	12	[7%]	155	[89%]
Building your house	0	[0%]	166	[95%]
Building other houses	1	[1%]	165	[94%]
Road building	1	[1%]	166	[95%]
Education	65	[37%]	101	[58%]
Trapping	11	[6%]	154	[88%]
Timber production	7	[4%]	160	[91%]
Nothing	9	[5%]	159	[91%]

4. How would you rate the impacts of these uses?

	VERY BENEFICIAL-BENEFICIAL		NEUTRAL		DETRIMENTAL-VERY DETRIMENTAL	
Canoeing	38	[22%]	78	[45%]	3	[2%]
Hiking	40	[23%]	73	[42%]	12	[7%]
Fishing	49	[28%]	56	[32%]	13	[7%]
Cranberry Growing	46	[34%]	4	[3%]	14	[10%]
Grazing	21	[16%]	7	[5%]	28	[21%]
Cropping	17	[13%]	5	[4%]	24	[18%]
Food gathering	17	[10%]	35	[20%]	17	[10%]
Erosion Control	58	[33%]	7	[4%]	6	[3%]
Flood Control	58	[33%]	7	[4%]	9	[5%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
NON-OWNERS

Building your house	0	[0%]	8	[5%]	64	[37%]
Building other houses	0	[0%]	8	[5%]	64	[37%]
Road building	2	[1%]	9	[5%]	61	[35%]
Education	81	[46%]	18	[10%]	1	[1%]
Trapping	24	[14%]	50	[29%]	24	[14%]
Timber production	13	[7%]	10	[6%]	44	[25%]
Nothing	7	[4%]	9	[5%]	2	[1%]

5. What types of clubs or groups do you belong to that are interested in wetlands:

recreational	34	[19%]
environmental	117	[67%]
hunting	41	[23%]
fishing	22	[13%]
civic	10	[6%]
work related	48	[28%]
none	12	[7%]

6. How often do you use wetlands:

daily	15	[9%]
weekly	53	[30%]
monthly	57	[33%]
yearly	21	[12%]

7. Who owns the wetland you use?

	MOST		SOMETIMES		LEAST	
You	6	[3%]	0	[0%]	5	3%]
Another private owner	43	[25%]	43	[25%]	20	[11%]
City or village	12	[7%]	17	[10%]	34	[19%]
Township	2	[1%]	23	[13%]	46	[26%]
County	21	[12%]	66	[38%]	23	[13%]
State	62	[35%]	35	[20%]	8	[5%]
Federal government	26	[15%]	59	[34%]	19	[11%]
Don't Know	5	[3%]	6	[3%]	8	[5%]

8. Do you own wetlands?

No	168	[96%]
Yes	0	[0%]

a. What percentage of your property is wetland?

1-10%	11-25%	26-35%	36-50%	51-75%	76-100%
0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]

b. How was your wetland identified?

yourself	0 [0%]
property description	0 [0%]
Swampbuster	0 [0%]
Wisconsin wetland map	0 [0%]

c. What use do you make of your wetland?

open space	2	[1%]
natural area	2	[1%]
game production	1	[1%]
timber production	2	[1%]
farming:		
cropping	0	[0%]
grazing	3	[2%]
hay	0	[0%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
NON-OWNERS

subdivide for:

single family residences	0	[0%]
multiple family residences	0	[0%]
commercial use	0	[0%]
industrial use	1	[1%]

lease for:

farming	1	[1%]
game production	0	[0%]
development	1	[1%]

d. Is your wetland tiled?

Yes	5	[3%]
No	3	[2%]

e. Is your wetland ditched?

Yes	1	[1%]
No	3	[2%]

f. Is your wetland impounded (flooded)?

Yes	1	[1%]
No	3	[2%]

g. Is your wetland excavated to create open water?

Yes	1	[1%]
No	3	[2%]

9. Where do you get your information about wetlands?

Newspaper(s)	130	[74%]	
Magazine(s)	142	[81%]	
Newsletter(s)	130	[74%]	
Technical Journal(s)	44	[25%]	
Agency publication(s)			
ACOE	7	[4%]	
DNR	105	[60%]	
County	16	[9%]	***
EPA	25	[14%]	
UWEx	28	[16%]	
Television program(s)	95	[54%]	
Radio program(s)	43	[25%]	

10. Do you think more information is needed?

Yes	101	[58%]
No	23	[13%]
Don't know	11	[6%]

B. YOUR THOUGHTS ON WHAT IS HAPPENING TO WETLANDS IN WISCONSIN

1. Do you think the number of acres of wetlands in Wisconsin is:

increasing	7	[4%]
decreasing	137	[78%]
staying the same	14	[8%]
don't know	10	[6%]

2. Do you think the quality of wetlands in Wisconsin is:

getting better	15	[9%]
getting worse	113	[65%]
staying the same	22	[15%]
don't know	14	[8%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
NON-OWNERS

3. If you think wetland acreage is decreasing, or wetland quality is worsening, what do you think is the cause?

	VERY SEVERE TO SEVERE		MINOR NO IMPACT	
farming	100	[57%]	14	[8%]
commercial development	134	[77%]	6	[3%]
road construction	100	[57%]	10	[6%]
residential development	109	[62%]	9	[5%]
industrial development	107	[61%]	5	[3%]
not enough management (regulation)	73	[42%]	18	[10%]
too much management (regulation)	7	[4%]	65	[37%]

4. what do you think are the impacts of decreased wetland acreage and quality, and how severe are they?

	VERY SEVERE-SEVERE		MODERATE		MINOR-NO IMPACT	
more flooding	98	[56%]	29	[17%]	17	[10%]
more sediment in rivers	114	[65%]	23	[13%]	9	[5%]
more sediment in lakes	113	[65%]	21	[12%]	10	[6%]
fish production	95	[54%]	32	[18%]	0	[0%]
game production	82	[47%]	26	[15%]	22	[13%]
fur production	74	[42%]	22	[13%]	28	[16%]
less non-game wildlife	117	[61%]	19	[10%]	11	[6%]
less groundwater discharge	68	[39%]	24	[14%]	19	[11%]
less groundwater recharge	98	[56%]	20	[11%]	16	[9%]
less open space	101	[58%]	30	[17%]	14	[8%]
less recreational area	99	[57%]	42	[24%]	15	[9%]
less natural beauty	134	[77%]	24	[14%]	13	[7%]

5. Why do you think the changes in wetland quality or acreage are occurring?

	MOST-SOMEWHAT IMPORTANT		LEAST-NOT IMPORTANT	
People don't know about the regulations	110	[63%]	27	[15%]
People don't understand the regulations	120	[69%]	35	[20%]
The regulations are not adequate	112	[64%]	53	[30%]
People don't think they'll get caught if they violate regulations	120	[69%]	41	[23%]
People don't care about paying the penalty if they get caught	89	[51%]	72	[41%]
Enforcement of the regulations is not adequate	120	[69%]	21	[12%]

6. If you feel the number of acres or quality of wetlands is improving in Wisconsin, what do you think is the cause?

	MOST-SOME IMPACT		LEAST-NO IMPACT	
better fish management	34	[19%]	9	[5%]
better wildlife management	41	[23%]	6	[3%]
improved farming practices	39	[22%]	10	[6%]
careful land development	38	[22%]	8	[5%]
better pollution control	41	[23%]	8	[5%]
good land use regulations	40	[23%]	6	[3%]
adequate public acquisition	27	[15%]	11	[6%]
good private stewardship	38	[22%]	8	[5%]

7. Which functions do you think are valuable?

	VERY HIGH-HIGH		MEDIUM-LOW		VERY LOW-NO VALUE	
scenic open space	114	[65%]	40	[23%]	6	[3%]
wildlife habitat	156	[89%]	10	[6%]	1	[1%]
flood and stormwater control	131	[75%]	28	[16%]	5	[3%]
natural food production (non-farming)	86	[49%]	62	[35%]	13	[7%]
fish and game production	122	[70%]	39	[22%]	2	[1%]
agricultural food production (farming)	26	[15%]	89	[51%]	40	[23%]
water quality protection	143	[82%]	16	[9%]	4	[2%]
shoreland erosion control	116	[66%]	37	[21%]	3	[2%]
endangered/threatened species habitat	142	[81%]	15	[9%]	3	[2%]
scientific and educational	127	[73%]	26	[15%]	8	[5%]
groundwater recharge	117	[67%]	25	[14%]	5	[3%]

groundwater discharge	94	[54%]	35	[20%]	6	[3%]
sediment filtering	121	[69%]	32	[18%]	3	[2%]
wastewater treatment	57	[33%]	16	[9%]	25	[14%]
timber production	10	[6%]	84	[48%]	47	[27%]

C. YOUR THOUGHTS ON EXISTING WETLANDS REGULATORY PROGRAMS

1. Which program are you the most familiar with?

Corps	11	[6%]
DNR	126	[72%]
Local	30	[17%]

2. What is your experience with these existing wetlands permitting and zoning programs?

	CORPS		DNR		LOCAL	
Read brochures/handouts on the program	103	[59%]	84	[48%]	21	[12%]
Read brochures/handouts on the regulations	71	[41%]	74	[43%]	22	[13%]
Read newspaper/magazine articles on the program	61	[35%]	75	[43%]	22	[13%]
Read newspaper/magazine articles on the regulations	69	[39%]	69	[39%]	36	[21%]
Applied for a permit	55	[31%]	15	[9%]	13	[7%]
Made written comments on a permit	21	[12%]	21	[12%]	16	[9%]
Testified on a permit	15	[9%]	14	[9%]	10	[6%]
Reported a violation or problem	11	[6%]	22	[13%]	10	[6%]
Know someone who violated a regulation	17	[10%]	31	[18%]	14	[9%]
Watch for legal or public notices of wetland projects	33	[19%]	39	[22%]	27	[15%]
No experience with the program	33	[19%]	11	[6%]	23	[13%]

3. Do you feel there is adequate notice of public hearings for permits in the programs?

Corps:	Yes	25	[14%]
	No	54	[31%]
	Don't know	79	[45%]
DNR:	Yes	50	[29%]
	No	47	[27%]
	Don't know	65	[37%]
Local:	Yes	36	[21%]
	No	53	[30%]
	Don't know	72	[41%]

4. Do you feel you have adequate access to background project information if you want to review a certain project?

Corps:	Yes	27	[15%]
	No	44	[25%]
	Don't know	89	[51%]
DNR:	Yes	55	[31%]
	No	38	[22%]
	Don't know	71	[41%]
Local:	Yes	41	[23%]
	No	42	[24%]
	Don't know	79	[45%]

5. If you make any comments on proposed projects do you think they are considered during the review of the permit application?

Corps:	Yes	16	[9%]
	No	28	[16%]
	Don't know	84	[48%]
	Not applicable	19	[11%]
DNR:	Yes	41	[23%]
	No	21	[12%]
	Don't know	71	[41%]
	Not applicable	19	[11%]

Local:	Yes	36	[21%]
	No	19	[11%]
	Don't know	68	[39%]
	Not applicable	29	[17%]

6. For which agency are you most aware of wetland related enforcement actions?

Corps	8	[5%]
DNR	108	[62%]
Local	14	[8%]
None	19	[11%]

7. If you know someone who was cited for a violation of a wetland regulation, was the enforcement action:

	Too strong		Just right		Too weak		Don't know		N/A	
Corps	4	[2%]	3	[2%]	15	[9%]	30	[17%]	63	[36%]
DNR	8	[5%]	8	[5%]	31	[18%]	21	[12%]	61	[35%]
Local	3	[2%]	1	[1%]	24	[14%]	24	[14%]	63	[36%]

8. Which agency do you feel most effectively protects wetlands?

Corps	6	[3%]
DNR	90	[51%]
Local	12	[7%]
None	18	[10%]
Don't know	26	[15%]
Combination	21	[12%]

D. YOUR THOUGHTS ON WETLAND REGULATION

1. Do you think regulations are needed to protect wetlands?

Yes	165	[94%]
No	5	[3%]

If Yes, what functions should be protected:

shoreland erosion control	133	[76%]
endangered species habitat	144	[82%]
fish and wildlife habitat	153	[87%]
water quality functions	152	[87%]
flood and stormwater control	137	[78%]
scientific and educational	126	[72%]
aesthetics	107	[61%]
open space	102	[58%]
recreational	108	[62%]
groundwater discharge/recharge	134	[77%]
sediment filtering	124	[71%]
wastewater treatment	88	[50%]

2. Which activities that occur on wetlands do you think should be regulated?

fishing	117	[67%]	
hunting	123	[70%]	
recreation	102	[58%]	
grazing	120	[69%]	
cropping	125	[71%]	
haying	109	[62%]	
cranberry growing	111	[63%]	***
wastewater treatment	143	[82%]	
housing development	152	[87%]	
none	7	[4%]	
roadbuilding	140	[80%]	
stormwater control	99	[57%]	

muck farming	126	[72%]
sod farming	126	[72%]
commercial forestry	123	[70%]
industrial development	150	[60%]
commercial development	150	[86%]
peat mining	130	[74%]
filling	144	[82%]
dredging	137	[78%]
draining	139	[79%]
tiling	128	[73%]
ditching	134	[77%]
bridging	123	[70%]

3. Do you think land use planning is needed to protect wetlands?

Yes	159	[91%]
No	18	[10%]
Don't know	4	[2%]

b. If yes, at what level?

Federal	7	[4%]	***
State	34	[19%]	
Local	27	[15%]	
Combination	103	[59%]	

4. Which agency do you think should administer wetland regulatory programs?

Corps	5	[3%]
DNR	73	[42%]
Local	26	[15%]
None	5	[3%]
Combination	63	[36%]

5. Do you think the coordination between the agencies which presently control wetlands is:

very good	0	[0%]
good	16	[9%]
adequate	17	[10%]
poor	28	[16%]
very poor	12	[7%]
needs improvement	39	[22%]
don't know	54	[31%]

6. Do you think current wetland regulations are:

	CORPS		DNR		LOCAL	
impossible to understand	12	[7%]	3	[2%]	4	[2%]
difficult to understand	35	[20%]	42	[24%]	2	[1%]
understandable	7	[4%]	46	[26%]	14	[8%]
easily understandable	2	[1%]	10	[6%]	8	[5%]
very easily understandable	1	[1%]	4	[2%]	8	[5%]

7. Which of these do you think should be considered in granting or denying a permit?

size of wetland	122	[70%]
type of wetland	123	[70%]
quality of wetland	128	[73%]
aesthetics	80	[46%]
erosion control	129	[40%]
abundance/scarcity of wetlands in the area	118	[67%]
fish and wildlife value of wetland	133	[76%]
flood and stormwater control	124	[71%]
groundwater discharge/recharge value	132	[75%]

location of wetland (urban, suburban, rural)	93	[53%]
state endangered species	131	75%]
federal endangered species	129	[74%]
water quality	138	[79%]
navigability of water body	66	[38%]
ordinary high water mark of water body	71	[41%]
scientific and educational value of wetland	115	[66%]
open space availability	81	[46%]
recreational value of wetland	100	[57%]
type of project	115	[66%]
water dependency of project	93	[55%]
size of project	83	[47%]
cost of project	47	[27%]
size of project relative to size of wetland	93	[53%]
significant adverse impacts of project	121	[69%]
cumulative impact of project	121	[69%]
the availability of alternative locations	109	[62%]

8. Which categories of endangered species should be considered in granting or denying permits?

State:

All	81	[46%]
Endangered	53	[30%]
Threatened	49	[28%]
Watch	6	[3%]
None	2	[2%]

Federal:

All	91	[52%]
Endangered	45	[26%]
Threatened	99	[57%]
Rare	7	[4%]
None	8	[4%]

9. Do you think simplifying the regulatory processes would increase effectiveness in protecting wetlands?

	Permitting						Commenting						Administering					
	Y		N		DK		Y		N		DK		Y		N		DK	
Corps	48	[27%]	0	[0%]	71	[41%]	60	[34%]	16	[9%]	61	[35%]	61	[35%]	14	[8%]	66	[38%]
DNR	49	[28%]	30	[17%]	67	[39%]*	57	[33%]	15	[9%]	60	[34%]	62	[35%]	15	[9%]	75	[43%]
Local	46	[26%]	26	[15%]	81	[46%]	54	[31%]	19	[11%]	64	[37%]	56	[32%]	19	[11%]	67	[38%]

10. Do you think wetland protection programs properly balance private rights with public trust?

	Yes		No	
Corps	20	[11%]	65	[37%]
DNR	36	[21%]	55	[31%]
Local	26	[15%]	53	[30%]

E. YOUR THOUGHTS ON WETLAND MITIGATION

1. Do you know what wetland mitigation is?

Yes	95	[58%]
No	70	[42%]

2. Do you think mitigation is effective in protecting wetlands?

Yes	28	[16%]
No	24	[14%]
Don't know	58	[33%]
Under certain circumstances	32	[18%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
NON-OWNERS

3. Which of these mitigation options do you think are appropriate to add to a permit before granting it?

	Yes		No		Don't know		Sometimes	
Creation	58	[33%]	26	[15%]	32	[19%]	27	[15%]
Restoration	95	[54%]	13	[7%]	19	[11%]	20	[11%]
Enhancement	69	[39%]	15	[9%]	33	[19%]	23	[13%]
Replacement	74	[42%]	24	[14%]	26	[15%]	24	[14%]

4. What do you think are the most effective methods for wetland protection?

	MOST-MODERATELY EFFECTIVE		SOMEWHAT EFFECTIVE-INEFFECTIVE		VERY INEFFECTIVE-NO EFFECT	
Federal permitting programs	69	[39%]	65	[37%]	4	[2%]
State permitting programs	97	[55%]	40	[23%]	4	[2%]
Local zoning	90	[46%]	58	[33%]	6	[3%]
Tax incentives (breaks)	83	[47%]	51	[29%]	11	[6%]
Land use planning	86	[49%]	58	[33%]	0	[0%]
Conservation easements	75	[43%]	56	[32%]	3	[2%]
Land trust	58	[33%]	63	[36%]	8	[5%]
Deed restriction	56	[32%]	67	[38%]	16	[9%]
mitigation	43	[25%]	73	[42%]	13	[7%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

THE SUMMARY OF RESPONSES IS GIVEN IN NUMERIC FORM WITH PERCENTAGES IN PARENTHESES [%]. ALL PERCENTAGES HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.

SURVEY GROUP: TOTAL FOR ALL WETLAND OWNERS
TOTAL NUMBER OF RESPONSES: 134

A. INFORMATION ABOUT YOURSELF AND HOW YOU USE WETLANDS

1. Do you live in a:

city	15	[11%]
suburb	4	[3%]
small town	16	[12%]
rural area	98	[73%]

2. Which DNR district do you live in?

NWD	11	[8%]
NCD	28	[21%]
WD	34	[18%]
SED	13	[10%]
SD	25	[19%]
LMD	21	[16%]

3. Do you use wetlands for:

	YES		NO	
Canoeing	54	[40%]	78	[58%]
Hiking	53	[40%]	77	[57%]
Fishing	63	[47%]	68	[51%]
Hunting	71	[53%]	59	[44%]
Birding	50	[37%]	80	[60%]
Haying	15	[11%]	115	[86%]
Cranberry growing	30	[22%]	99	[74%]
Grazing	17	[13%]	113	[84%]
Cropping	19	[14%]	110	[82%]
Food gathering	18	[13%]	113	[84%]
Erosion	16	[12%]	116	[87%]
Flood Control	28	[21%]	103	[77%]
Building your house	6	[4%]	126	[94%]
Building other houses	4	[3%]	128	[96%]
Road building	6	[4%]	125	[93%]
Education	35	[26%]	96	[72%]
Trapping	34	[25%]	98	[73%]
Timber production	27	[20%]	104	[78%]
Nothing	1	[1%]	128	[96%]

4. How would you rate the impacts of these uses?

	VERY BENEFICIAL-BENEFICIAL		NEUTRAL		DETRIMENTAL-VERY DETRIMENTAL	
Canoeing	29	[22%]	45	[34%]	1	[1%]
Hiking	25	[19%]	47	[35%]	4	[3%]
Fishing	50	[37%]	27	[20%]	0	[0%]
Hunting	58	[43%]	32	[24%]	2	[1%]
Birding	32	[24%]	36	[27%]	1	[1%]
Haying	21	[16%]	8	[6%]	17	[13%]
Hunting	52	[30%]	34	[19%]	20	[11%]
Birding	47	[27%]	69	[39%]	6	[3%]
Haying	11	[6%]	15	[9%]	38	[22%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

Cranberry Growing	18	[10%]	7	[4%]	34	[19%]
Grazing	7	[4%]	12	[7%]	50	[29%]
Cropping	5	[3%]	8	[5%]	53	[30%]
Food gathering	19	[14%]	27	[20%]	7	[5%]
Erosion control	47	[35%]	5	[4%]	2	[1%]
Flood Control	62	[46%]	6	[4%]	0	[0%]
Building your house	3	[2%]	8	[6%]	42	[31%]
Building other houses	3	[2%]	8	[6%]	40	[30%]
Road building	6	[4%]	7	[5%]	34	[25%]
Education	54	[40%]	13	[10%]	2	[1%]
Trapping	44	[33%]	23	[17%]	6	[4%]
Timber production	29	[22%]	8	[6%]	22	[16%]
Nothing	6	[4%]	5	[4%]	1	[1%]

5. What types of clubs or groups do you belong to that are interested in wetlands:

recreational	26	[19%]
environmental	62	[46%]
hunting	38	[28%]
fishing	25	[19%]
civic	18	[13%]
work related	47	[35%]
none	15	[11%]

6. How often do you use wetlands:

daily	50	[37%]
weekly	36	[27%]
monthly	16	[12%]
yearly	23	[17%]

7. Who owns the wetland you use?

	MOST		SOMETIMES		LEAST	
You	94	[70%]	17	[13%]	4	[3%]
Another private owner	16	[12%]	51	[38%]	4	[3%]
City or village	6	[4%]	9	[7%]	18	[13%]
Township	2	[1%]	9	[7%]	18	[13%]
County	6	[4%]	20	[15%]	20	[15%]
State	15	[11%]	38	[28%]	16	[12%]
Federal government	7	[5%]	26	[19%]	18	[13%]
Don't Know	4	[3%]	0	[0%]	2	[1%]

8. Do you own wetlands?

No	0	[0%]
Yes	134	[100%]

a. What percentage of your property is wetland?

1-10%	11-25%	26-35%	36-50%	51-75%	76-100%
44 [33%]	35 [25%]	12 [9%]	16 [12%]	10 [7%]	13 [10%]

b. How was your wetland identified?

yourself	105	[78%]
property description	31	[23%]
swampbuster	8	[6%]
Wisconsin wetland map	49	[37%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

c. What use do you make of your wetland?

open space	58%	[43%]
natural area	101	[75%]
game production	66	[49%]
timber production	31	[23%]
farming:		
cropping	46	[34%]
grazing	21	[16%]
hay	15	[11%]
subdivide for:		
single family residences	12	[9%]
multiple family residences	3	[2%]
commercial use	3	[2%]
industrial use	1	[1%]
lease for:		
farming	11	[8%]
game production	3	[2%]
development	1	[1%]

d. Is your wetland tiled?

Yes	26	[19%]
No	104	[78%]

e. Is your wetland ditched?

Yes	56	[42%]
No	73	[54%]

f. Is your wetland impounded (flooded)?

Yes	44	[33%]
No	81	[60%]

g. Is your wetland excavated to create open water?

Yes	47	[35%]
No	81	[60%]

9. Where do you get your information about wetlands?

Newspaper(s)	91	[68%]
Magazine(s)	89	[66%]
Newsletter(s)	89	[66%]
Technical Journal(s)	41	[31%]
Agency publication(s)		
ACOE	6	[4%]
DNR	73	[54%]
County	28	[21%]
EPA	14	[10%]
UWEx	35	[26%]
Television Program(s)	60	[45%]
Radio program(s)	36	[27%]

10. Do you think more information is needed?

Yes	58	[43%]
No	29	[22%]
Don't know	35	[26%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

B. YOUR THOUGHTS ON WHAT IS HAPPENING TO WETLANDS IN WISCONSIN

1. Do you think the number of acres of wetlands in Wisconsin is:

increasing	10	[7%]
decreasing	88	[66%]
staying the same	20	[15%]
don't know	13	[10%]

2. Do you think the quality of wetlands in Wisconsin is:

getting better	29	[22%]
getting worse	60	[45%]
staying the same	23	[17%]
don't know	16	[12%]

3. If you think wetland acreage is decreasing, or wetland quality is worsening, what do you think is the cause?

	VERY SEVERE TO SEVERE		MINOR TO NO IMPACT		
farming	53	[40%]	19	[14%]	
commercial development	56	[42%]	4	[3%]	
road construction	49	[37%]	12	[9%]	
residential development	53	[40%]	10	[7%]	
industrial development	47	[35%]	8	[6%]	
not enough management (regulation)	40	[30%]	16	[12%]	
too much management (regulation)	13	[10%]	31	[23%]	***

4. what do you think are the impacts of decreased wetland acreage and quality, and how severe are they?

	VERY SEVERE-SEVERE		MODERATE		MINOR-NO IMPACT	
more flooding	55	[41%]	28	[21%]	15	[11%]
more sediment in rivers	65	[49%]	20	[15%]	15	[11%]
more sediment in lakes	62	[46%]	22	[16%]	16	[12%]
fish production	32	[24%]	29	[22%]	41	[31%]
game production	56	[42%]	20	[15%]	21	[16%]
fur production	49	[37%]	25	[19%]	18	[13%]
less non-game wildlife	52	[39%]	20	[15%]	20	[15%]
less groundwater discharge	62	[46%]	15	[11%]	20	[15%]
less groundwater recharge	58	[43%]	13	[10%]	17	[13%]
less open space	46	[34%]	20	[15%]	28	[21%]
less recreational area	24	[18%]	23	[17%]	36	[27%]
less natural beauty	37	[28%]	17	[13%]	24	[18%]

5. Why do you think the changes in wetland quality or acreage are occurring?

	MOST-SOMEWHAT IMPORTANT		LEAST-NOT IMPORTANT	
People don't know about the regulations	80	[60%]	19	[14%]
People don't understand the regulations	57	[43%]	17	[13%]
The regulations are not adequate	50	[37%]	18	[13%]
People don't think they'll get caught if they violate regulations	47	[35%]	23	[17%]
People don't care about paying the penalty if they get caught	36	[27%]	36	[27%]
Enforcement of the regulations is not adequate	54	[40%]	32	[24%]

6. If you feel the number of acres or quality of wetlands is improving in Wisconsin, what do you think is the cause?

	MOST-SOME IMPACT		LEAST-NO IMPACT	
better fish management	27	[20%]	19	[14%]
better wildlife management	36	[27%]	17	[13%]
improved farming practices	55	[41%]	4	[3%]
careful land development	44	[33%]	8	[6%]
better pollution control	40	[30%]	13	[10%]
good land use regulations	38	[28%]	15	[11%]
adequate public acquisition	24	[18%]	23	[17%]
good private stewardship	49	[37%]	7	[5%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

7. Which functions do you think are valuable?

	VERY HIGH-HIGH		MEDIUM-LOW		VERY LOW-NO VALUE	
scenic open space	71	[53%]	38	[28%]	5	[4%]
wildlife habitat	100	[75%]	23	[17%]	1	[1%]
flood and stormwater control	97	[72%]	20	[15%]	2	[1%]
natural food production (non-farming)	34	[25%]	59	[44%]	16	[12%]
fish and game production	78	[58%]	36	[27%]	2	[1%]
agricultural food production (farming)	43	[32%]	44	[33%]	28	[21%]
water quality protection	95	[71%]	22	[16%]	1	[1%]
shoreland erosion control	78	[58%]	28	[21%]	5	[4%]
endangered/threatened species habitat	76	[57%]	30	[22%]	6	[4%]
scientific and educational	61	[46%]	46	[34%]	5	[4%]
groundwater recharge	88	[64%]	24	[18%]	2	[1%]
groundwater discharge	86	[64%]	24	[18%]	2	[1%]
sediment filtering	82	[61%]	28	[21%]	3	[2%]
wastewater treatment	30	[22%]	52	[39%]	14	[10%]
timber production	13	[10%]	72	[54%]	25	[19%]

C. YOUR THOUGHTS ON EXISTING WETLANDS REGULATORY PROGRAMS

1. Which program are you the most familiar with?

Corps	41	[31%]
DNR	58	[45%]
Local	28	[22%]

2. What is your experience with these existing wetlands permitting and zoning programs?

	CORPS		DNR		LOCAL	
Read brochures/handouts on the program	43	[32%]	70	[52%]	34	[25%]
Read brochures/handouts on the regulations	42	[31%]	64	[48%]	32	[24%]
Read newspaper/magazine articles on the program	36	[27%]	68	[51%]	37	[28%]
Read newspaper/magazine articles on the regulations	25	[19%]	50	[37%]	33	[25%]
Applied for a permit	33	[25%]	28	[21%]	20	[15%]
Made written comments on a permit	26	[19%]	23	[17%]	13	[10%]
Testified on a permit	14	[10%]	15	[11%]	12	[9%]
Reported a violation or problem	11	[8%]	13	[10%]	12	[9%]
Know someone who violated a regulation	14	[10%]	19	[14%]	19	[14%]
Watch for legal or public notices of wetland projects	29	[22%]	33	[25%]	25	[19%]
No experience with the program	8	[6%]	3	[2%]	9	[7%]

3. Do you feel there is adequate notice of public hearings for permits in the programs?

Corps:	Yes	45	[34%]
	No	33	[25%]
	Don't know	43	[32%]
DNR:	Yes	48	[36%]
	No	36	[27%]
	Don't know	41	[31%]
Local:	Yes	50	[37%]
	No	35	[26%]
	Don't know	37	[28%]

4. Do you feel you have adequate access to background project information if you want to review a certain project?

Corps:	Yes	47	[35%]
	No	38	[28%]
	Don't know	42	[31%]
DNR:	Yes	55	[41%]
	No	37	[28%]
	Don't know	36	[27%]

Local:	Yes	54	[40%]
	No	33	[25%]
	Don't know	39	[29%]

5. If you make any comments on proposed projects do you think they are considered during the review of the permit application?

Corps:	Yes	43	[32%]
	No	19	[14%]
	Don't know	46	[34%]
	Not applicable	7	[5%]
DNR:	Yes	44	[33%]
	No	27	[20%]
	Don't know	38	[28%]
	Not applicable	7	[5%]
Local:	Yes	49	[37%]
	No	13	[10%]
	Don't know	37	[28%]
	Not applicable	13	[10%]

6. For which agency are you most aware of wetland related enforcement actions?

Corps	35	[26%]
DNR	68	[53%]
Local	15	[12%]
None	11	[8%]

7. If you know someone who was cited for a violation of a wetland regulation, was the enforcement action:

	Too strong		Just right		Too weak		Don't know		N/A	
Corps	7	5%]	9	[7%]	12	[9%]	29	[22%]	33	[25%]
DNR	21	[16%]	7	[5%]	13	[10%]	27	[20%]	25	[19%]
Local	3	[2%]	5	[4%]	17	[13%]	32	[24%]	29	[22%]

8. Which agency do you feel most effectively protects wetlands?

Corps	23	[17%]
DNR	43	[32%]
Local	9	[7%]
None	15	11%]
Don't know	18	[13%]
Combination	12	[9%]

D. YOUR THOUGHTS ON WETLAND REGULATION

1. Do you think regulations are needed to protect wetlands?

Yes	117	[87%]
No	15	[11%]

If Yes, what functions should be protected:

shoreland erosion control	90	[67%]
endangered species habitat	88	[66%]
fish and wildlife habitat	93	[69%]
water quality functions	99	[74%]
flood and stormwater control	92	[69%]
scientific and educational	63	[47%]
aesthetics	57	[43%]
open space	58	[43%]
recreational	64	[48%]
groundwater discharge/recharge	94	[70%]
sediment filtering	86	[64%]
wastewater treatment	63	[47%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

2. Which activities that occur on wetlands do you think should be regulated?

fishing	60	[45%]
hunting	64	[48%]
recreation	70	[52%]
grazing	62	[46%]
cropping	67	[50%]
haying	49	[37%]
cranberry growing	52	[39%]
wastewater treatment	96	[72%]
housing development	108	[81%]
none	5	[4%]
roadbuilding	86	[64%]
stormwater control	59	[44%]
muck farming	64	[48%]
sod farming	58	[43%]
commercial forestry	62	[46%]
industrial development	109	[81%]
commercial development	104	[78%]
peat mining	67	[50%]
filling	73	[54%]
dredging	65	[49%]
draining	70	[52%]
tiling	59	[44%]
ditching	65	[49%]
bridging	58	[43%]

3. Do you think land use planning is needed to protect wetlands?

Yes	111	[83%]
No	10	[7%]
Don't know	6	[4%]

b. If yes, at what level?

Federal	13	[10%]
State	16	[11%]
Local	26	[19%]
Combination	57	[43%]

4. Which agency do you think should administer wetland regulatory programs?

Corps	21	[16%]
DNR	40	[30%]
Local	24	[18%]
None	3	[2%]
Combination	40	[30%]

5. Do you think the coordination between the agencies which presently control wetlands is:

very good	2	[1%]
good	8	[6%]
adequate	20	[15%]
poor	18	[13%]
very poor	19	[14%]
needs improvement	31	[23%]
don't know	32	[24%]

6. Do you think current wetland regulations are:

	CORPS		DNR		LOCAL	
impossible to understand	10	[7%]	10	[7%]	3	[2%]
difficult to understand	34	[25%]	36	[27%]	25	[19%]
understandable	26	[19%]	27	[20%]	22	[16%]

easily understandable	3	[2%]	4	[3%]	7	[5%]
very easily understandable	0	[0%]	1	[1%]	4	[3%]

7. Which of these do you think should be considered in granting or denying a permit?

size of wetland	83	[62%]
type of wetland	95	[71%]
quality of wetland	82	[61%]
aesthetics	49	[37%]
erosion control	79	[59%]
abundance/scarcity of wetlands in the area	77	[57%]
fish and wildlife value of wetland	81	[60%]
flood and stormwater control	85	[63%]
groundwater discharge/recharge value	85	[63%]
location of wetland (urban, suburban, rural)	73	[54%]
state endangered species	74	[55%]
federal endangered species	74	[55%]
water quality	83	[62%]
navigability of water body	40	[30%]
ordinary high water mark of water body	47	[35%]
scientific and educational value of wetland	59	[44%]
open space availability	47	[35%]
recreational value of wetland	56	[42%]
type of project	88	[66%]
water dependency of project	57	[43%]
size of project	62	[46%]
cost of project	35	[26%]
size of project relative to size of wetland	61	[46%]
significant adverse impacts of project	92	[69%]
cumulative impact of project	78	[58%]
the availability of alternative locations	55	[41%]

8. Which categories of endangered species should be considered in granting or denying permits?

State:

All	36	[27%]
Endangered	53	[40%]
Threatened	28	[21%]
Watch	3	[2%]
None	19	[14%]

Federal

All	43	[32%]
Endangered	44	[33%]
Threatened	20	[15%]
Rare	6	[4%]
None	19	[9%]

9. Do you think simplifying the regulatory processes would increase effectiveness in protecting wetlands?

	Permitting						Commenting						Administering					
	Y		N		DK		Y		N		DK		Y		N		DK	
Corps	48	[36%]	47	[35%]	36	[27%]	44	[33%]	17	[13%]	36	]27%	46	[34%]	18	[13%]	37	[28%]
DNR	50	[37%]	16	[12%]	34	[25%]	48	[36%]	18	[13%]	31	[23%]	43	[32%]	18	[13%]	35	[26%]
Local	44	[33%]	13	[10%]	30	[22%]	41	[31%]	16	[12%]	36	[27%]	39	[27%]	15	[11%]	39	[29%]

10. Do you think wetland protection programs properly balance private rights with public trust?

	Yes		No	
Corps	28	[21%]	63	[47%]
DNR	26	[19%]	65	[49%]
Local	28	[21%]	46	[34%]

SUMMARY OF RESPONSES---WETLAND USER SURVEY
OWNERS

F. YOUR THOUGHTS ON WETLAND MITIGATION

1. Do you know what wetland mitigation is?

Yes	75	[56%]
No	50	[37%]

2. Do you think mitigation is effective in protecting wetlands?

Yes	15	[11%]
No	17	[13%]
Don't know	40	[30%]
Under certain circumstances	30	[22%]

3. Which of these mitigation options do you think are appropriate to add-to a permit before granting it?

	Yes		No		Don't know		Sometimes	
Creation	36	[27%]	18	[13%]	26	[18%]	21	[15%]
Restoration	51	[38%]	10	[7%]	21	[15%]	22	[16%]
Enhancement	57	[42%]	10	[7%]	24	[17%]	18	[13%]
Replacement	37	[28%]	21	[15%]	20	[14%]	17	[13%]

4. What do you think are the most effective methods for wetland protection?

	MOST-MODERATELY EFFECTIVE		SOMEWHAT EFFECTIVE-INEFFECTIVE		VERY INEFFECTIVE-NO EFFECT	
Federal permitting programs	41	[31%]	44	[33%]	15	[11%]
State permitting programs	53	[40%]	35	[26%]	15	[11%]
Local zoning	48	[36%]	38	[28%]	21	[16%]
Tax incentives (breaks)	72	[54%]	27	[20%]	10	[7%]
Land use planning	55	[41%]	32	[24%]	10	[7%]
Conservation easements	50	[37%]	35	[26%]	12	[9%]
Land trust	40	[30%]	29	[22%]	19	[14%]
Deed restriction	40	[30%]	28	[21%]	19	[14%]
mitigation	31	[23%]	35	[26%]	11	[8%]

STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 5

SUMMARY OF COMMENTS RECEIVED FROM ALL SURVEYS

PART OF A STUDY FUNDED BY THE EPA AND WDNR

COMMENTS RECEIVED FROM PARTICIPANTS IN WETLAND USER SURVEY

TYPES OF INFORMATION NEEDED:

0001 Benefits of wetlands for public education

0002 1) on the importance of preserving wetlands and not draining or filling them. 2) on benefits to farmers who have already tiled their wetlands if they restore them. 3) on regulations affecting proposals for development. (Most local zoning bodies and citizens are profoundly ignorant of federal and state wetland regulations that may affect the property they are dealing with.)

0004 More publicity on benefits of wetlands. Public needs to become more aware. Also, more info. on general processes which occur in wetlands and on wetland restoration.

0006 Education of public especially their use as flood control areas and water purification.

0007 Positive values of wetlands, why they are fun and good places. Need for protection and proper management Difference between true wetlands and flooded areas, flora, fauna, hydrology etc. Needs to get out to the folks who don't see all the items I do. Need to got their feet wet - start young.

0008 Current projects involving wetlands.

0011 Newspapers - reach general public, school environmental ad. programs.

0012 How people can influence DNR's decisions on wetlands. Need for a comprehensive wetlands policy in Wisconsin.

0014 Values to public

0015 Educational - primary grade level

0016 More info on T.V. news and in newspapers and popular magazines to help people understand values of wetlands

0017 Education - schools, adult leisure

0018 To increase people's awareness and understanding of way wetlands need protection, management, and restoration.

0021 Info directed at Joe Homeowner and his peers in language we can comprehend.

0023 More would help - specific aspects of special wetlands and projects.

0024 Information should be gotten to general public - not environmentalists who already are aware of the value of wetlands.

0026 Free classes at Cherokee marsh or arboretum.

0027 There is enough information, - its just convincing people its important enough.

0028 Newspaper

0029 On the tremendous value of the resource.

0030 Critical analysis of public sector "mitigation"

0031 Continuous information is needed for the public

0032 Need info. for the general public from brochures to displays to videos etc.

0037 Free classes.

0039 Environmental, phenological value

0041 Environmental values of wetlands.

0042 Effects of impacts [on wetlands]

0044 Educational programs to all teachers.

0046 Regarding the essential life (human) support necessities provided by wetlands -what is the effect on the biosystem when wetlands are destroyed. Hammer away at this.

0047 What should be done about it.

0049 Information on stopping wetland degradation.

0051 Local developments in local newspapers

0063 Written and oral - t.v.

0056 From a professional agency

0057 About benefits and uses - newspaper articles, T.V., video, FIELD DAYS open to public - sponsored by local conservation groups, about programs presentations at meetings - Local

zoning, realtors, developers; more fact sheets and brochures in Co./city UWEX. offices. Need more pretty pictures.

0058 Detrimental effects of losing and disturbing wetlands.

0059 Educate on needs for wetlands.

0062 Accurate and applicable information is always needed!

0065 Care and management of the wetlands.

0066 School - elementary, H.S. and community education classes - soil and water conservation agencies, university extension county/state offices, vcr's available for rental/ reach larger population on merits of wetlands.

0068 How to develop wetlands.

0069 Hands-on education type programs - esp. kids.

0070 Where people can get info. on how to improve wetlands for game management.

0073 Educational

0074 Availability

0080 Impact of acid rain on wetlands and the actual and factual contribution of catalytic converters to acid rain. Factual education of the public can have a reversing effect on wetland condition.

0085 People need to know the benefit of wetlands and their place in the ecosystem - education is one key.

0087 All types of media - more on commercial T.V. and radio.

0093 Always no matter what it is.

0094 Educate public on regulatory requirements and definition of wetlands.

0096 The delicacy of life there and our impact on it.

0097 Much information available for those who want it. The difficult part is to inform those who feel uninvolved.

0099 More information for the general public so they can be better educated on the abuse of wetlands.

0101 Public reporting assumes any work in a wetland is detrimental, should indicate many projects preserve and protect wetlands.

0109 Beneficial aspects of wetlands

0111 Need more info. about areas in danger of being lost, more help in preserving and restoring them.

0113 More often, current info, publicize violators and reward positive works.

0116 Family filers and workbooks

0119 Television programs promoting wetlands and its use.

0121 Technical

0123 Good education on benefits

0124 Public awareness

0125 "Special" TV programs to educate public - maybe more in schools

0129 Neg. Impact Info.

0131 How important wetlands are to the entire ecosystem - they should never be filled and drained for development.

0132 Short TV ad type info. on wetland benefits and functions.

0136 Don't plow dry potholes.

0138 What wetlands do for environment.

0139 Continue educating public on importance of the wetlands.

0140 Through educational agencies.

0143 Wildlife and recreational benefits.

0144 Can be distributed through local environmental groups.

0145 Continued school programs.

0146 How to reduce impacts on streams especially by agricultural, industrial - munic. and recreational uses.

0147 The great value of wetlands is to the earth's environment.
0149 More about human impacts and implications
0151 Locations
0153 The tremendous value/diversity of life they possess.
0154 Particularly geared toward young people.
0160 Local newspapers with articles of importance - not put on the back page.
0161 General to inform the public.
0163 Value of wetlands and our dependence on them.
0165 Public information
0166 Seminars in the public school systems (grades 7-12)
0167 Education on what grow[s] what the need [is]
0168 Newsletter
0169 All types
0175 More information about value of wetlands to fisheries, water quality and erosion control.
0176 The absolute need for these communities, how our lives affect them; impact, and how they effect our lives; water quality, wildlife, aesthetics, hunting, fishing, flood control.
0177 Develop public awareness I.C.F. does a good job through the crane count!
0180 Values of wetlands, results if all wetlands lost - equal to $$.
0181 General public information on the value of wetlands and their scarcity.
0182 General info. regarding the value of wetlands to the general public.
0184 Technical info about specific wetlands and different types in Wisconsin - DNR studies.
0191 Keep emphasizing the importance of preserving wetlands
0193 For schoolchildren, county officials
0194 How to recognize high-quality wetlands; wetland restoration. how citizens can get involved in stopping wetland destruction/resorting and creating wetlands.
0195 Conservation value of maintaining wetlands.
0197 Public T.V.'s nature is most often about far away places. I suppose that's where the film makers want to go. We need more about our own Wis. natural areas and flora and fauna.
0198 Information on the good that wetlands do for the ecosystem, information on what makes a wetlands, information on why drained wetlands can't just go back to their natural state at some future date.
0199 Education in our schools must take a more active role - it should be a required study program.
0200 Value of wetlands anti-ATV.
0201 People who are not environmentalists are unaware of how much more valuable natural wetlands are than artificial (dammed) ones. Also, people usually don't realize how useless mitigation is.
0202 A basic course in ecology in grades 1-12 that teaches people what their place is on our planet. I don't know if such a course is required these days. It should be required in every grade form 1-12, along with other required courses. Education of youth is of the greatest importance.
0203 Better dissemination of information.
0207 a) Programs and articles making wetlands interesting to the layman, b) programs, articles, extension materials, working models and curricula designed to enable adults and children to understand wetlands.
0209 Values of wetlands; importance of conservation /preservation
0212 The public is unaware of wetland purpose and importance.
0214 Information to reach typical people who-normally have no incentive to learn about wetlands most people are ignorant about how important a marsh is.
0215 For general public (newspaper, TV, radio) Maybe a Hollywood movie with popular stars set in wetland setting! Whatever will reach the general public.
0218 Explaining what a wetland is, why it is valuable.

0221 Info. which could got to owners of wetlands listed on the DNR wetland maps.
0222 Benefits to general public - losses to state when wetlands are converted History of flooding versus wetland filling etc.
0224 Better definitions of what[Is wetlands.
0225 The complications of swampbuster provisions in our current legislation is causing problems with farmers who want to tile wetlands that are being cropped.
0232 Information about excavating - permits- who to contact.
0237 Newsletter for ASCS
0241 The details of the programs.
0238 To clarify recent wetlands ruling and legislation - too many farmers are afraid to drain cropland because it may be wetlands they don't want to bother to have SCS come and O.K their land for drainage. A big scare is evident in the farm community.
0245 Can always use more info, but accurate, not prejudiced.
0250 Factual, proven information rather than headline grabbing by incompetents seeking to further a cause or vendetta.
0263 Make people aware needs and its function.
0265 Public should be made aware of the fact that wetlands have a purpose.
0266 More on the benefits of cranberry growing does for our wetlands, flood control, game production, fish production, etc.
0271 Information explaining the value to the state's wetlands of cranberry growers activities.
0272 We must have more effective educational programs.
0273 What wetlands are and what they do for environment.
0274 More newsletters explaining what wetlands really are.
0277 More people must know that wetlands can be used and enjoyed for a variety of activities - including agriculture- without being destroyed.
0286 Cities must be informed as to what they can do.
0287 Most information available is put out by people who do not understand what makes the world go around. [do you think more information is needed? no.
0290 Impact of wetlands (both increasing and decreasing them) to our area and state.
0294 Information on beneficial uses of wetlands.
0297 Far more education on positive aspects and positive impact cranberry growers have on wetlands they are concerned with.
0303 Accurate information.
0305 More people, including the DNR and conservation groups should visit cranberry marshes and loam of the positive thing that cranberry growers are doing for wetlands and the plants and wildlife in them.
0309 More info. and exposure is needed about industries and undertakings that are creating and expanding wetlands and aquatic habitat.

PROTECTION OF WETLANDS

0002 Upland wetlands are inadequately protected. Also the DNR does not adequately use its existing powers of enforcement. For example, on most 404 permit applications, it merely passes. There is some protection, to be sure, but both the powers and enforcement are inadequate at all levels.
0031 Small wetlands areas are not regulated and are apt to disappear.
0047 Fines should be larger for companies large or small.
0066 Protection through parka and tax-forfeited lands that are unavailable for construction - hold in trust
0075 I feel by protecting wetlands all functions of the wetlands are protected. The functions are not discrete units to be separated out and labelled as "good" or "best" - all interconnected.
0101 Too many are filled or drained, should be used in a non-destructive manner.
0102 "Replacement" is not protection or even possible. SAVE THE MUCK!

0150 Corps destroy wetlands

0176 [most effective methods of wetland protection] Enforcement of federal, state and local rules.

0180 Need incentives more than additional regulation or more enforcement.

0194 Public education about the values of wetlands e.g. in the public school, universities etc. Break the hold of special interests (agriculture, industry) on government from the town board level on up to the DNR and the federal EPA.

0195 I feel the DNR and Corps usually rubber stamp development projects. [in re: which agency most effectively protects wetlands.]

0201 Corps harms wetlands, I suspect the DNR does much more than the others, but don't know what authority the DNR has.

0222 DNR does an OK job but don't cover filling of wetlands or if they do the Corps for some reason duplicates the effort

0228 Lot people know the value of small and large wetlands through ASCS.

0229 [which agency most effectively protects wetlands.] Local and with more common sense.

0240 [which agency most effectively protects wetlands] Corps - if something needs to be done they do it - DNR drags their asses.

0245 [most effective protection methods] private owner concern, info and cooperation between agencies and owners.

0256 [which agency protects most effectively] DNR and local, permits required for changes.

0258 [which agency protects most effectively] Corps for larger streams, others local.

0290 [which agency protects most effectively] - combination- both have specific duties of enforcement and protection. [does not specify which agencies are referred to as both]

0292 -combination- in some instances one or the other.

0294 [which agency protects most effectively] DNR should but does it?

0305 [which agency protects most effectively] All are needed - I feel the Corps and locals are more objective toward cranberry farmers and industries than the DNR. [most effective protection methods] All of the above with the federal government taking the lead and controlling program for uniformity between states.

0309 [which agency protects most effectively] I feel the Corps has the most well rounded program for wetlands but more DNR input is needed especially from game managers,

WETLAND INCREASES/DECREASES

0002 Wetlands are increasing only where farmers who formerly tiled their fields are reversing this process. But the increase in wetlands here cannot compensate for the increasing loss of wetlands in other areas.

0004 People don't understand the importance, beauty, and benefits of wetlands. Other issues become more important than preservation of wetlands.

0012 [under other reasons for decrease in wetland acreage and quality] Politization of state agency administration under Thompson administration. Another impact of decreased wetland acreage and quality - creation of useless urban sprawls - more shopping centers when our central cities are empty. [another reason for changes in wetland quality and acreage] Staffing too limited and policy inadequate. Based on total acres not wetlands quality at best.

0030 Local autonomy results in wetland loss.

0032 Introduction of exotics and too many people.

0036 development.

0040 Big developers get exceptional treatment - are able to negotiate for land they want to develop -sometimes public is behind them. Puts pressure on leg. bodies. [on reasons for increase in acres/quality] more publicity of the value of wetlands especially marshy areas - those traditionally "less glamorous" yet so valuable wetlands.

0049 people don't care about wetlands, people who own wetlands have to pay property taxes on them so they consider them as a liability.

0069 Elitist opinions that people (individuals) own property and therefore it is their right to do

with it as they please.

0089 I see wetlands being filled in eagle river for building spots/ commercial sites, why?

0090 Trying to control lands that should not be even considered "wetlands" because they are only "wet" land.

0101 Regulations have been applied to try to prevent any projects in wetlands as a prohibition, not as a regulation (to modify project to be non-destructive) [The] beat way to protect wetlands is to teach owners to use them nondestructively, then encourage them to, do it. If regulations try to block all work, private owners will ignore or fight them.

0103 People must be educated and punished if they break rules

0111 Declining quality due to runoff of agricultural pesticides/ herbicides.

0113 Too little enforcement of current regulations.

0117 Natural woods, channeling dead trees

0118 Greedy commercialism, overuse

0119 Economics in farming to use all the land possible, building in water planes.

0132 Not enough concern by city planning commissions.

0135 In some cases I think they (DNR) worries too much about a 1 acre plot more than it does about 100 acres. Seems to me that whoever (big business, cities) has the money to spend on lawyers can got things changed.

0146 DNR fish planting and fish poisoning is a major impact. Please note flooding is a natural process which is instrumental in the maintenance of certain wetland types - I assume you mean permanent - man-induced flooding as in impoundments over open marshes and dam construction by Corps and impoundments of river drainages. [ed. note: This is not at all what was meant in this question. We were trying to elicit how severe people felt the listed results of decreased wetland acreage were, not what the impacts of the listed items would be on wetlands as this person assumed.] [other reasons for wetland loss are] People just don't care. Citizen awareness, and to assist LE personnel.

0151 Poor water control

0154 Impact on natural habitat is very severe (affects food chain)

0156 People are draining wetlands to create more farmland.

0158 People still don't understand why wetland (all of them) are important for the system.

0163 [cause of decr. acreage/quality] garbage disposal (landfills)

0166 [cause of decr. acreage/quality] Lack of knowledge in is area is big factor.

0174 $'a overcomes care and concern for wetlands.

0175 Majority of people don't care.

0176 Larger, better quality wetland may be improving, suburban and urban wetland getting worse. State, federal, county and local enforcement, Lack of local involvement and concern [are causes of lo"], concerned citizens feel helpless due to federal, state and local laws and politics. [Additional impacts of wetland lo" are] endangered and threatened species, long term impact on healthy ecosystems, and taking from future generations. Medium sized corporations don't care about paying the penalty if they are caught, politicians are not fully aware of long term impacts, and wetlands still have a bad name.

0182 # of acres decreasing quality of existing improving (?)

0184 [cause of wetland acreage/quality decreases] Taxes : they encourage owners to develop or after wetlands. Taxes: should be influenced by how well land is maintained for watershed quality - to encourage natural plant cover and discourage development. i.e. Pay for breaking down the watershed. Public opinion, though slowly changing, is not solidly behind saving our wetlands.

0188 A wetland marsh was graveled over behind me - no fine was imparted as a penalty - the people were scolded by the DNR and then promptly continued to fill the marsh.

0189 [on impacts of decr. acreage/quality] All of the above. To rank these is inane! Problem is the agencies that administer our natural resources have been co-opted into the utilitarian mode. Someone has to begin to take a more holistic approach. All environmental

degradation is related. Our nation is ecologically illiterate. Wetlands are not valued in this culture, except than occasional for utilitarian functions. There is no understanding of how the environment globally is a totality.

0191 We are on the mailing list to receive the ACOE notices for the Wis.-Minn. district There are too many ATF (after the fact) permits granted. More monitoring is needed and more severe penalties must. be applied to prevent uncontrolled destruction.

0194 [causes of decreases in acreage and quality] Non-point source pollution is degrading water quality, Acid precipitation, increasing urbanization increased runoff and consequent degradation of wetlands, Carp. [impacts of decreased wetland acreage/quality] more species becoming endangered, climate change, more mosquitoes with lower water levels (fewer predators on mosquito larvae). Agribusiness and big business in general calls the tune at the DNR.

0198 We can't seem to learn to look to the future.

0199 People are apt to think money talks and when they think they see an example of this they lose respect for the regulations. [causes of increased wetland acreage/quality] environmental organizations are really calling attention to this problem and its danger.

0201 No enforcement of 'swampbuster' law. [results in wetland loss]. [On impacts of decr. acreage or quantity] Water quality suffers, decreased wetland acreage usually changes the types of flooding and often decreases the amount of flooding, in both cases the results are harmful. [why changes are occurring] The Army Corps of Engineers is too willing to grant permits for wetland degradation.

0207 [reason for changes in wetland acreage/quality] [People] not knowing nor caring about wetland values. Enforcement of the regulations is not adequate because site-specific wetland assessments, valuations, functions, are not used as criteria for decision making.

0214 [cause of wetland lose] very little active enforcement of zoning restrictions. [an impact of decreased wetland acreage] [increased] pesticide and fertilizer runoff.

0215 Personal gain is thought to be [of] higher value than public good.

0220 Regulations are not strong enough to stop powerful interests e.g. highway building.

0221 Need more education of wetland owners. Not enough education on land use (politicians need to better understand the importance of wetlands. (developers too).)

0222 Our quality of life is severely impaired each time we significantly alter any natural system for a short term benefit. People don't understand the reasons for regulation and the perceived economic impact on individuals can be severe - i.e. I pay taxes on that land, I should be able to use it any way I want if it is [quality/no. of acres improving] - C.R.P. regulations, Fish and Wildlife service, DNR enforcement, environmental movement gaining strength.

0227 People are paying plenty of tax on this land, and feel they should be able to have some say in how they can use it

0228 I think less restrictions should cranberry people or and firm which make wetlands

0231 Wetlands are increasing due to farmland being put back into wetlands.

0233 I don't think they are changing that much.

0235 [on reasons for wetland increases] Government putting in set aside and 10 year programs.

0238 Local farmers felt paying the fine was worth the improvements they made to their farms. [this comment under enforcement actions in section D]

0240 You over regulate the average farmer.

0242 I don't feel fish are increasing due to spearfishing.

0244 Too many people.

0245 Regulations aren't focused on the right issues - such as business and residential filling of wetlands.

0255 Regulations are aimed at protectors of wetlands like cranberry growers not at destroyers like shopping malls, condos, golf courses.

0261 I do not believe the quality of wetlands is changing. Cities are encroaching on wetlands. I

feel wetlands are remaining the same neither improving nor deteriorating.

0263 [no. of acres decreasing] because of the 1988 drought. [quality getting better] lose grazing.

0266 [acres/quality increasing] because of the increase in cranberry acres.

0271 I don't believe the state's wetlands are decreasing. Cranberry growers create wetlands.

0272 [reasons for decreases] dryland farming.

0282 I believe we made some progress the last few years.

0284 [reasons for changes in quality or acreage] to try and make a living at farming. [number of acres of wetlands increasing/ quality improving because] too much public acquisition.

0289 Dry conditions throughout the area largest contributor.

0294 In our area roads and industrial uses seem to have priority over all else and it doesn't seem to matter if they are being built on wetlands and the results.

0296 Lot mother natural alone. [reasons for changes] The rich never pay compared to the poor class people.

0297 [reasons for loss] Political expediency causes far too much management and regulatory attempts on farming impact on wetlands. When far more acres are lost and damaged to wetlands occurs from commercial, residential and industrial development. (impacts of decreased acreage] All the above are severely impacted. there needs to be a differentiation between wetlands that have been impacted positively by some types of operation. Regulatory agencies need to recognize this fact. [why changes are occurring] Enforcement appears to be politically motivated. (improving acreage and quality] again there are many areas of wetland that have been significantly improved, but are not recognized as such. The only interest is to have more regulation.

0303 [reasons for changes in quality and acreage] The people who make the regulations and enforce them often don't know what is really going on in the real world beyond their desk and paperwork. Plus many in these positions don't have their act together.

0305 [wetland quality] getting better in some places, worse in others.

0309 Not enough emphasis is placed on activities that increase wetlands acreages in self sustaining ways.

WETLAND REGULATIONS

0002 Legislation to make the acquisition of conservation easements easier for a private or quasi-public body to acquire [is needed]. Also tax incentives for preserving wetlands must be significant to persuade owners that it is economically wise for them to individually preserve their wetlands. Federal restrictions needed to ensure "no net loss". State regulations must protect wetlands better and monitor and regulate local zoning bodies better. I am not too happy with CORPS regulation, but the record of the DNR has, if anything, been worse. Local boards don't know the regulations and are not penalized for failing to comply. More monitoring of zoning and enforcement needs to be done by federal and state agencies. I would recommend taking away zoning authority from counties that fall to comply. Local regulations are enforced through zoning regulations it is my observation that local zoning boards pay almost no attention to whether the area is a wetland when they zone. The prevailing view locally continues to be: me person should be free to do what he wants with his land". And:" I know Joe Blow and find it good politics to let him do what he wants. If the state doesn't like R, let the DNR enforce the regulation."

0003 How can one understand [regulations] when one does not know which agency to go to?

0006 I favor tax credits to wetland owners - especially farmers.

0007 [question was if you know someone who was cited for a violation of a wetland regulation, was the enforcement action ... too strong, too weak, don't know ...] No Follow up. Those who are involved in commenting on permits (including our office @ DNR) NEVER got any follow-up information. We never know if our info was used, if the project went through, etc. There should be a monthly/quarterly bulletin reporting on status of all 404 permit requests to go to everyone who receives notices. Same should be done with chapter 40 and

local zoning request changes.

0010 [Wetland protection programs] worry too much about private rights.

0011 Regulate chemicals added and amount of area to be farmed On wetlands]. [recreational activities should be regulated] not silent sports canoeing, hiking, and cross country skiing have little impact. But motor craft ex: jet skis and snowmobiles and small power boats these ... really churn up the peat and throw a wake in wetland creeks and open waters, decreasing water quality and habitat. Current regulations are understandable but difficult to implement, not enough time to respond to requests for review of permit requests. - also not enough staff to check out and reply to requests.

0012 [wetland regulation] Should be local/DNR combo. DNR with teeth, local with staffing. Relying on local zoning doesn't do it and DNR can't get to field enough to protect. I believe wetland as a whole needs to be protected. more than the fragments listed above [qu El] that mentality is part of the problem. Can't just protect and manage pieces. [nothing but fishing, hunting and recreation should be allowed to take place in wetlands.] if I didn't check it, it shouldn't be allowed at all. Only the checked items should be regulated activities on wetlands. Others shouldn't happen - regulated in activities. DNR needs to have a comprehensive holistic policy that it enforces and local staffing should follow through. If feds involved, shouldn't be Corps or EPA. F+W Service better choice.

0014 [need] Federal support for state oversight of local regs.

0015 State and federal regulations must be strengthened.

0018 Need a no net loss policy or a not gain policy.

0021 These agencies [Corps, DNR Local] are politically oriented and will respond to the strongest source of pressure.

0023 There is no local that I know of - I live in an area that loves to develop at any cost on re to which agency should administer reg program] DNR or DNR in combination with Feds other than-Corps (who are in the business of doing major stupid projects).

0065 I think all levels need to cooperate but state seems to have the best control [under land use planning]

0066 A federation of all [DNR and Local] with wilderness society, World wildlife fund, Nature conservancy, Audubon, national Wildlife federation. [should administer wetland regulatory programs.]

0076 Regulations sometimes don't make sen" and are not applied with common son".

0088 The checks and balances [of the three agencies] sometimes prevent the one agency's "pet project" or "hands tied behind the back" from becoming problematic. Some of the "public good" or 0 availability of suitable alternatives language is ambiguous and may be inequitably and capriciously applied.

0100 Save all wetlands

0101 Not every wetland needs to perform every function - work must be allowed in private wetlands, in the manner which best preserves the wetlands function without preventing development COE, DNR and Local government need not be the one doing the regulating-teach farmers, industry how to use wetlands in least destructive manner. Regulation does not require prohibition. Enforcement and policy does not match what laws they are supposedly enforcing actually say. (DNR and Local)

0106 All levels, because of the diverse range of activities currently found at different levels. [DNR as administer of regulatory programs] if there had to be one agency

0107 Purple loosestrife control program needed; protect plant communities

0124 Living in an area that is regulated by DNR, Army Corps and Fish and Wildlife - I find it difficult to sort out what regulations apply - who's authority has precedence - etc. etc.

0129 Diversity [needs to be protected by regulations]

0133 15 and 20 day public review periods doesn't cut it. They need to be at least 30 days. We get no notice of 401 cert. actions before they're made. No opportunity for citizen comment on shoreland wetland re-zone decisions made by DNR.

0135 The only complaint I have is when existing wetland are covered. new wetlands are formed usually taking up what was once productive land and reducing the value of a property and restricting the use of it.

0139 DNR protects wetlands most effectively, however their techniques could also be improved. Not enough man-power to enforce rules.

0146 The Corps should not be regulators, they should be regulated!

0150 On recreation - A.T. vehicles destroy marshes should not be allowed.

0154 Mutual efforts are needed because many wetlands have different landowners.

0155 I feel they all [options to qu E2] need to be regulated to a degree so the wetlands are not destroyed.

0165 [need regulations for] Loosestrife eradication.

0166 [need protection for] Native medicines. Environmental organizations should be involved in administration of wetland regs. as well as DNR.

0171 DNR and LCO Conservation work together.

0174 Courts too lenient.

0176 Most important need is stiff regulations/penalties.

0182 Absent landlords such as WP&L allow wildlife violations and DNR can't do anything about it

0184 Once wetlands are gone - they're gone I Can't be protected and regulated too much.

0187 Application of chemicals [should be regulated.]

0189 Management and regulations are very different. At this time neither is being done well from an ecological - holistic point of view.

0191 Difficult to judge form the Corps bulletins how adequate the enforcement actions are but it always seems that there is a large portion of after - the -fact permits granted.

0198 People need the regulations because they don't, in some cases, even understand the feasibility of their project. For example, farmers wanting to put in a tile line that can't work like they think it will.

0199 What ever can be left to occur naturally should be - re- regulating in the everglades is such a disaster. man so often does not know best.

0201 [re:wetlands programs] What does the DNR do? [re: enforcement] if it were left to our local government, we'd have a K-mart parking lot on a wetland by an important river. [re: wetland regs] Wetlands work much better when they have a natural edge, and a normal - depth profile. Impounded wetlands are usually good for Canada Geese, but little else, and prevent potentially helpful (for agriculture etc.) flooding. Mitigation should be a last resort

0202 I really don't know much about these wetland protection programs.

0207 In all cases the legal requirements do not provide for preliminary meetings and efforts to educate citizens before the hearings at/after which decisions are based/made. (a basic failing of our present institutions.) Both applicant and notifier are at fault for lack of details and lack of adequate notification of key [?word?] with enough lead time (recommend 1 year lead time)

0209 Don't know but simplifying usually helps as long as you don't take the tooth out.

0221 [on attaining background project information] Very hard to got ahold of DNR makes it very tough.

0230 Common good sense would solve most problems - work with the public not just enforce the laws.

0233 Most of the above should be regulated, However, the "swampbuster" definition of wetlands encompasses too many non-wetland areas.

0238 [on which activities should be regulated] if these activities were regulated by the size of the affected area, then I would favor regulation (now production only) [areas referred to are tiling and ditching.]

0245 [on enforcement] 2 different cases DNR citation was totally out of line. [which agency should administer programs] Mostly Corps - DNR is too prejudiced toward public use

projects.

0261 Regulations should be used to prevent loss of wetlands.

0266 I think we need some regulations but DNR has over done it to the point that it turned into the biggest joke in the country.

0267 [regulations are] impossible to live with for the average farmer.

0272 I believe in many cases wastewater treatment threatens wetlands and needs looking into.

0273 As far as cranberry growers they are trying honestly to regulate themselves and are doing a good job on the whole. [wetlands] should not be drained for dry farming but cranberry farming preserve and help wetlands.

0277 All of the above [listed in El] are part of wetlands. The problem with current wetland management is that the public doesn't understand what they are or how to manage them. Wetlands can be mufti-use areas.

0281 They [wetlands] should be drained to got rid of the mess and insects that brood in the swamps.

0291 [who should administer] all have a reason for being.

0294 [what should be protected] depletion of acreage.

0297 [what functions should be protected.] Again all the above functions need to be protected, however there needs to be recognition that some farming in wetlands is very beneficial for all the above reasons, and far too much effort is being made to ' control and regulate by state agencies.
[which activities should be regulated] again the danger here is the typical "shotgun" approach to regulation rather than an objective, rational approach that is not politically motivated. [wetland regs are] -understandable - Most regulations are understandable in the written word, however much of the reasoning behind the regulation is difficult to understand. Typical bureaucratic thinking.

0302 Common sense application of regulations for all of the listed. [functions, qu El.] I feel that for the most part housing, industrial and commercial development have to be carefully regulated in wetland areas. Some areas mapped wetland are not as fragile as others.

0305 All current wetland regulations are understandable to difficult for me as a consulting engineer in that business and in most cases virtually impossible for my clients to understand.

0309 More programs are needed to increase wetlands habitat

AGENCY COORDINATION

0007 More communications early on, better identification, delineation and protection of high quality wetlands. Got rid of programs that finance wetland destruction.

0014 no overlap and more comprehensive jurisdiction.

0015 Local has too much autonomy on zoning controls which are too political

0019 more consistent approaches to issuing permits, requiring mitigation and enforcement.

0021 Orientation needs to be geared toward discouraging development of wetlands. Should be tougher to get Corps permits even for private owners.

0027 I've read about the drainage the Corps causes in other states against DNR wishes.

0031 Consistency in regulations.

0043 Consistent policies and interpretations of law

0045 Guidelines on how to prosecute offenders to the full extent of the law

0048 [needs improvement] aaaabecause we are a forming community and when they say you can't farm 50' within a ditch or crook this is wrong.

0051 Someone needs to show the consequences of a particular wetland use and there should be local commissions to be informed.

0054 More responsibility as to notifying what each expects.

0057 Clarify roles of each agency, clarify jurisdiction and activities regulated, have one permit, have routine staff contact times.

0066 Need[s] to exist

0069 Enforcement, permitting procedures, similar standards for permits.
0070 Force the Corps to care about wildlife etc. and forget about damming.
0071 Need consistent state and federal laws that can be administered locally.
0075 Got the feds to the sites more often so not just a paper exercise.
0076 Overlap should be eliminated, Corps only should administer.
0078 [coordination is poor] Same as #4, Fed. regs are often too broad to serve state and local needs. Local and state [should administer wetland reg. programs] not necessarily DNR, maybe in conjunction with housing[?] and ag.
0080 More emphasis on consultation and implementation through local agencies.
0081 One agency does not seem to know what the other is doing.
0083 Work together, less red tape.
0084 More communication
0085 Cooperation between agencies is a must!
0088 Adequate staff to conduct programs needed. Faster yet thorough stepwise review of permit applications.
0090 Local and DNR must classify wetlands on the some level or quality.
0101 DNR has too much impact without enough rational reason for what they seek to do. (Block all projects in wetlands)
0107 Agreement on mitigation measures required. Memo of understanding between DOT and DNR needs drastic strengthening. Policy on mitigation (established procedures) needs to be developed with common understanding
0109 More interdepartmental cooperation through increased and more effective communication and standardization of regulations
0112 Lots of ways - better oversight, better watchdogging, more stringent penalties, more emphasis on environmental issues and lose of general habitat.
0114 More working together - every one should work together
0116 Too many chiefs, pointing fingers - "just say no!"
0119 More cooperation between Corps and DNR - Maybe we need a director of wetland restoration to coordinate the efforts of all agencies.
0120 Agency personnel are continually "power struggling" among each other and should focus more on the problem at hand.
0129 Dump the corp - enough Make work projects that seem to only benefit development
0131 Develop one set of guidelines for all wetland management.
0133 A better qualified staff, more clear direction form the DNR administration, better technical assistance to the local units of government for implementation of the present program. The Corps should be out of it. [wants EPA and DNR to administer regs.]
0146 Corps needs more policing much more education is needed to be coordinated by all!
0154 Better communication and use of duplicative resources.
0158 Decisions must be made on a biocentric basis not a homocentric. All activities must be considered - not just man's activities.
0159 More unified approach to wetlands protection.
0161 Stop degrading wetlands, restore all as possible.
0165 Maybe form a wetland management committee.
0166 Start with education for private and industrial land developers.
0169 Each [agency] must set down regulations that all follow.
0171 All should work together or at least keep one another informed of plans.
0174 Stronger regs to enforce local ordinances, RE: wetland abuse - serving penalties for abusers, benefits for protectors.
0176 [Corps and DNR] These agencies seem to listen to what each others comment might be - though they both seem to do an inadequate job. Local governments really need to got more involved in protection of their resources, the other agencies should also be involved with area wide planning, it's our future! The power of legal authority should be the most

effective with a federal agency and it will be the same across the nation, state administration could work but the level of protection may vary from state to state. Enforce the regulations and hold strong on the penalties.

0177 Closer liaison with fed - state - local govt.

0179 More cooperation

0181 Local zoning admin. need to be more aggressive in regulating wetlands with support/backup of state and Corps.

0184 They are little more than rubber stamps in some instances and too often one defers to the other and nothing gets done.

0185 Wetland values are not being maintained, so I have to assume something is wrong with the present setup.

0189 [Coordination] depends on geographic area and personalities.

0191 Put more DNR pressure on county, township and local governmental bodies to adhere to wetland regulations.

0193 The Corps of Engineers and county boards don't understand the function and importance of wetlands They loan toward development and business interests.

0195 Agency commitment to wetland protection.

0197 DNR should not automatically approve Corps decisions.

0198 Somehow make responses more timely, coordinate efforts better, know more about local issues.

0201 [re: land use planning] Federal first, then state. Fads don't have as much economic incentive to moss up wetlands. Locals have the most. So give fed$ the most power, since they'll be more likely to do what's right. Except don't have the Army Corps of Engineers involved.

0202 Corps should be able to supersede DNR in making more stringent regulation where necessary.

0204 Need a network - local is too small scale, Corps is too distant. [Need] a better link between agencies.

0206 Wetlands aren't even defined the same among agencies - this is a basic 1st step in coordination.

0207 Corps covers more wetlands, is less subject to local politics and listens to other federal agencies, especially F+W service. Local support for protection necessary for Corps to deny actions that endanger wetlands. [We need] a) citizen and youth education about how ecological and economic systems work and are interrelated. b) Extension experts to advise property owners and units of government. c) Private sector consultants d) much better communication between levels and units needed - must be required. All (a,b,c,) require education programs to train teachers, extensions, and consultants and agency people.

0214 Needed most is local supervision and stiff enforcement. A person should not have to contact 3 different agencies to got info. or permits to do one thing. Usually got 3 different stories. [Wetland regs are difficult to understand] because we often hear different interpretations of the same thing from each agency.

0218 Include ASCS swampbuster cooperation, protect existing wetlands.

0221 The agencies should have the same set of standards to work from and regulate on an equal basis i.e. the Corps should not grant a permit if the DNR does not. etc.

0222 Corps is too slow, and DNR gets too slow at times. The combination is good because it keeps the other honest. Local Stinks.

0227 More control at local level as every situation is different

0228 Land owners of wetland should pay little or no tax on them.

0229 I don't think there is much cooperation between groups.

0230 More communication and cooperation between agencies.

0232 Very slow in processing permits.

0235 Communication.

0236 Work together on permit
0238 Local enforcement and interpretation with state guidelines, federal planning for large affected areas.
0240 DNR is a pain in the ass they think everybody else is wrong they are the only one with the answers.
0253 More cooperation is needed.
0258 Consider the private ownership.
0259 DNR and Corps do not have adequate local information and knowledge of most problems.
0260 More personal contacts with wetland owners.
0263 Consideration for farming when high organic soil is needed for food production.
0266 Got the DNR out of it.
0267 I believe the Corps or DNR will never make a decision in favor for a farmer.
0268 More communication.
0272 I tend to believe more education and information for property owners would improve the agencies effectiveness.
0274 More cooperation between the two [Corps and DNR]
0277 Corps, DNR, Local all try to do the same job - only one la necessary.
0282 I feel the Corps programs are outdated, many times a make work program.
0285 Let the local government control.
0286 Cities must got involved.
0287 Eliminate the DNR.
0291 Need to set up specific order of rank of who has priority in passing judgments on violations and abuses.
0294 It has to be a unified effort
0296 When you ask the same question to the agencies you got three different answers.
0297 The state DNR apparent need to take more control from the Corps is very ill advised and disruptive.
0298 More research is needed. Regulations frequently announced first, research done afterwards. Agency that does the research, or receives complaints should share with agency that grants permits.
0302 The DNR is over enthusiastic about and with their narrow agenda.
0305 All levels should be involved - federal state and local - with federal setting the guidelines for uniformity.
0306 Get the DNR out.
0307 DNR wants complete control.
0309 The DNR needs to be more receptive to wetlands increasing activities.

VALUES TO BE CONSIDERED IN GRANTING/DENYING PERMITS

0012 Cumulative values lost due to project - without minimizing Non-monetary values and w/out discounting the future. Use 7th generation approach.
0031 I don't think size should make a difference. wetlands are continually being lost because they are smaller than the size being regulated. In our area a wetland housing yellowheaded blackbirds was bulldozed and lost as a wetland because It was not large enough to meet the size requirement to be regulated.
0049 None - [because] there should be no more permits issued to negatively affect wetlands. The only permits should be ones to enhance the quality of the wetland i.e. to make them better all around. NO MORE DEGRADATION! PERIOD!
0075 Alternative locations should be considered first! I find this hard to answer. I dislike the approach of having to justify the existence or continued existence of a wetland just as much as I dislike having to justify my own or any other living being's existence.
0076 Key is impact of project either positive or negative positive impact of project.
0078 I'm not convinced permits can save a species in a changing environment.

0089 All should be considered - but no permits granted to alter wetlands period. Permits allow loopholes and people got around the permit to alter wetlands.

0101 These have to be considered, but in modifying projects - not in denying them.

0107 [These should also be considered when granting/denying permits] possible mitigation measures; non-game wildlife species; air quality; historic value [of the wetland soil]

0133 All decisions on granting or denying wetland filling and draining should be based upon whether or not a public harm would be created by granting the permit (Note: to me loss of a species (end. or threat) is also a public harm).

0176 Long term studies [on cumulative impact of project] and long term effects [of project].

0184 I'm afraid I'm of the opinion that all existing wetlands should be frozen and only limited uses be allowed in some wetlands that will allow for its long term health.

0195 All our remaining wetlands need protection.

0197 All wetlands should be preserved if they are part of a system intermittent wetlands should be preserved as wildlife stopovers (ephemeral ponds, etc.).

0198 We have lost so much acreage already that R's time to close the flood gates!

0206 Irreversibility of projected actions.

0207 Downstream impacts, the availability of alternative locations and designs, identity specific concerns and functions and see that they are maintained or enhanced within the site area - at least within the watershed, when possible. This requires a) site-specific assessments, b) review of alternatives, c) bonding for performance in all three (a,b,c) at all three levels - design, construction, management, d) monitoring before and after for 3-5 years. Funding shared by proponent and agency for a,b,d.

0221 All wetlands should be protected on an equal basis.

0222 These are all important - A tiny (1 acre or less) wet hole in a crop field is probably not significant compared to the problems caused by it But many small wet holes in a field are probably important and a permit should be required to alter this condition. Our goal should be to preserve and restore wetlands.

0244 [if the wetland is used] To grow food to feed the too many people.

0261 If use of wetland is consistent with wetlands purpose and there is not net loss of wetlands!

0280 Believe navigability needs re-defining.

0294 [Significant adverse impacts of project] on neighbors of that project.

0302 All of the above have to be considered but the ones checked I feel are most critical before giving approval to a project on wetlands. [When considering endangered species, it] depends on the importance of the species. To hold up a bridge project for example to protect a clam is ludicrous.

0309 The most emphasis should deal with weather there is an increase or decrease in wetland habitat for all species not just a select few.

BALANCING PRIVATE RIGHTS AND PUBLIC TRUST

0013 Too easy to got a permit from the CORPS, DNR really has no authority, Local- Neighbors regulating neighbors just doesn't make it. It's only an exercise in futility. DNR enforcement authority too cumbersome and expensive to force locals to do it right. therefore we'll maintain status quo. Looks good on paper but that's about it. Statewide perspective.

0014 Corps - no - No enforcement and mitigation, water dependency and alternatives tests ignored. DNR - no - need more technical knowledge and staff, Local - no - tend to be too exposed to political and social pressures.

0015 Corps - no - too many permits are granted contrary to public trust, DNR no - too many permits granted, local, private "rights" weighed too heavily

0019 Corps - no - they don't even consider "public trust, DNR - should not be a balance, should protect the public trust Local - typically political decisions that simply try to got development and add to the tax base.

0020 Wetlands are not being protected enough [by all programs]

0021 Corps projects in the long run tend to be self - perpetuating i.e. a filled wetland is later dredged at double cost to the taxpayer. DNR is politically regulated and most responsive to pressure. Tend to be sportsmen oriented and shortsighted. Local - citizens have most input, but again politically oriented, and development oriented.

0022 Corps - no - Money Talks DNR - no - Politics, Local - no - politics and money

0023 Corps is pro development, DNR pro-game and knuckles under to dev. Local very pro dev.

0026 Private rights prevail too often in all three branches.

0029 Corps- no - Development (progress) is all important public trust be damned. DNR - yes - tries to [balance], Local - no - more jobs! we need more jobs !!I This is the cry that always goes up.BS.

0030 Corps - no - ACOE is an oligarchic, monolithic arm of technology. DNR no - lack of administrative support for district operatives from GEF2. Local - no - Parochialism of public officials.

0031 Corps - no - I think they give in to private rights rather than to public trust. DNR - yes - I think they try to do this. Local - no - they may feel the economic aspect is more important than the long range detrimental effect on the environment.

0032 Corps, DNR - no - [They] don't have staff and $ to examine projects sufficiently - therefore permit usually given too easily.

0040 Too often local govt bodies are much like private landowners - only interested in private or small comforts o - as opposed to more global and long lasting regulations. o = spraying for weeds - as opposed to more long range attempts at preventing wood growth - or lobbying to compromise regs for faster roads i.e. Madison's Beltline Highway.

0045 Corps - yes - do o.k., DNR - no - [regulations] tend not to be forcefully applied in all cases. Local - no - tend to support business over public trust (Qu. of tax base mentality)

0046 Public trust supersedes private rights in this area they are not equal.

0049 If there was a "balance" here, why would [we] have lost 80% of our wetlands since Wisc. was settled? The prop" tax is one of the biggest culprits here.

0051 Corps - no - it appears that the Corps accepts everything and is biased toward private development. DNR - yes - Newspaper reports give me this idea. Local - no - I see wetlands disappearing.

0054 Corps - yes - DNR - no - DNR loans too heavy toward public trust. Local - no - are afraid of violating state and federal rules.

0056 Corps -no- They usually don't know individual situations.

0057 Corps - no - too many permits granted - developers destroy too many wetlands for private economic gain and public loss.

0058 Corps, DNR and Local are all weak-kneed toward private interest.

0065 Many small communities are not concerned with wetland protection.

0066 Corps - no - These folks can be trusted for commercial, transportation interests - not their realm to deal with environmental trust DNR sometimes when the goal is protecting, accruing wetlands for public stewardship. Local Yes - see DNR.

0068 Corps - no - large bureaucracy

0069 Corps - yes - although there always seems to be some exemption for proposed developments.

0070 Corps - no - self perpetuating programs. DNR- They try but regulations are often ambiguous. Local - who knows?

0071 Corps - no - not enough consideration to all areas mentioned in #7 [things to be considered in granting and denying a permit] DNR- same Local-same, too much consideration to agriculture and industry.

0075 I think when someone buys a wetland they have done just that - bought a wetlands We need to eradicate the perspective of buying wetland acres cheaply and then being able to turn around and claiming being deprived of being able to capitalize on investment. It is not just the public trust and private rights that need to be balanced - preservation of the natural system must take precedence but is not often considered at all or weighed heavily.

0076 DNR - no - No consideration of positive impact of project, tilt towards recreational user.

0078 I feel regulations are necessary and hope legislators are using all information available to make regulations affecting the quality of life, public and private.

0080 Corps - no - in the past condemnation powers have been used unwisely, causing local resentment instead of cooperation. DNR - The same as above [Corps] except the past few years has seen some improvement in securing local support Local - yes- citizens have more input and accessibility to their local government, and they are the tax payers who are providing or will be providing the funds in one form or another for these projects.

0081 DNR -no- the past history of DNR land condemnation.

0085 Wetlands are a vital resource which, unfortunately, most private landowners would not protect without public protection programs.

0087 Corps, DNR and Local -no - decisions are normally based on politics not proper biological assessment.

0088 Corps- yes and no - sometimes, particularly in the past, has a "cave in" reputation for the "bigboys projects". Local - sometimes put private enterprenuerialship above public trust.

0089 Landowners feel they are fighting government. They want to drain their wetlands.

0090 I am convinced local rags are out in left field!

0093 Corps DNR Local - yes - public opinion

0096 DNR - I think they put too much emphasis on the public's wants. Local too much politics.

0100 Keep the Corps out.

0101 Corps - yes- Work to mediate objection with planners desire to develop/improve wetlands DNR tend to just try to block all projects without scientific basis. Local tend to either ignore wetlands or just block all projects.

0107 The Corps almost never rejects project permits, look at their record. DNR - no - DNR is too influenced by political considerations. Local - no - variances are often granted to zoning regulations by local boards concerned mostly with economic development

0112 Corps - no -Too many bureaus to pass on a program or creation, DNR sometimes - more than 50% of the times. Local - yes - Local officials are easily accessible to the public, so they have to give time to the local sentiment opinions.

0113 Corps - no - Economic orientation, DNR - yes - if enforced, Local- Don't know of any programs at local level.

0123 Corps does as it wishes, Somewhat the DNR will work with private owners, Local, if its in their best interest

0128 Corps - they don't care, DNR and Local - responsible to citizens

0129 Corps DNR and local - all seem to be oriented to specific or special interests el

0130 Corps DNR and Local - sometimes, it depends upon each situation

0132 Local - no - too much politics at local level.

0133 Corps - no - because the 404 program doesn't clearly indicate what benefits to society are being protected and how should they be weighted in the process. DNR - yes- The functions of wetlands they relate to the program, are clearly spelled out in the rules. If the program was expanded to better cover the states wetlands, this would be an excellent model. Local- no - They don't always know what (or why) they're trying to protect wetlands. They tend to got confused.

0134 Local - no - don't know, too much local bias - needs more objectivity.

0138 Corps - no - Corps has a history of not fulfilling their promises of considering wildlife and wetlands. DNR - no - seem to back off under political pressure. Local - no - put some local interests ahead of ecological interests.

0140 Corps, DNR, Local,- no - if they did we would not have the controversy.

0143 Corps - Rs a close call, but the charter of the organization emphasizes development too much. DNR - yes- DNR people really care, but get too much political pressure form governor - this is also a close call. Local - no - Too development oriented and tries to please those with money too much.

0146 Corps - no - many quality river bottom wetlands are still being destroyed in the name of public trust! DNR - yes - on a smaller scale steams are better protected except when impoundments are man-made. Local - no - Local zoning laws are easily changed to encourage damage, development and long-term alteration. Many local examples available for most recognized wetland types!

0149 DNR - yes - different considerations are made for individual situations.

0150 Corps - no - mostly interested in commercial aspects. DNR - yes - Don't know of any reason to complain. Local - yes - same.

0151 DNR - no - too severe

0158 Corps - no - it appears the Corps is too political (pork barrel projects) - I ? the interests and purpose.

0159 Corps - Too much value is given to private rights at expense of public areas. DNR - same as above, Local - don't know

0166 Corps - More such (should] be given for the natural state of being.

0169 I really don't know, I would have to look closer at all agencies and their programs.

0175 Generally I feel private rights are given too much weight whenever we speak of protecting our resources.

0176 Corps - yes - actions taken are usually more than fair. DNR - yes - [but] this agency can be too lenient Local - no - these guys are in the clouds when it comes to environmental regulations.

0177 Corps - no - balance seems to be toward permit approval.

0184 Corps - no - error on the side [of] private rights too much - they should error on the side of environment.

0185 Corps - no - Public issues [should be] more important than one person or co's economic gain. DNR - no - Needs to be more emphasis on protection of wetlands; laws need revising. Local - no - unsure, they vary so much.

0186 Corps - no - all agencies have to consider the economic effects if permit not allowed.

0190 Corps, DNR, Local - no - there is not enough regulation or enforcement.

0191 Corps, DNR, Local - no - if they are properly balanced why is the amount of wetland in continuous decline? At this crucial point public trust outweighs the value of public to destroy wetlands.

0193 Corps - no - Does not really consider values of wetlands inclined to O.K development. DNR - no - Knows better but frequently yields to development pressures for P.R. reasons. Local - no - inclined toward development. Ignorant of values of wetlands, think development will bring more property taxes and jobs.

0195 In all cases private rights receive far too much emphasis.

0197 DNR - no - upland wetlands not protected. Local - no - upland wetlands not protected, too easy to got a variance.

0198 Corps, DNR, Local, - no - the public trust has been secondary.

0199 Corps - no - it seems too easy to got a permit - as if no one really checks. DNR - no - I don't know of course, but it often seems - who is asking or if it is a business - governs. Local - no - same as DNR

0201 Corps - no - Private landowners have too much Free reign to mess up wetlands that affect other people and the ecosystems heavily. DNR - don't know. Local - no - same as above [Corps] but even more accentuated. Business is king.

0204 Corps - ? - not always fair, some got away with things while others are penalized.

0205 Corps, DNR, Local- - Public trust comes up short in most cases.

0207 Corps, DNR, Local - no - because at present there is no assessments to establish where each project stands with respect to a balance point, not a compensation procedure where public rights protection results in loss of owner equity.

0210 DNR - yes - adequate hearing process in my experience.

0211 Corps - no - public trust often not adequately protected. Local - no While the language of

ordinance is good, too often zoning board decisions on conditional use permits, after - the - fact and variances result in inadequate protection.

0214 Corps - yes - in theory but not always in practice. DNR - no - not enough enforcement. Local - no - Most people ignore the rules and are not punished.

0218 Corps, DNR, and Local, Would like to see wetlands protected, but with compensation for loss of a right

0220 Corps - no - too engineering oriented, sympathetic. Local - no - too politically sensitive.

0221 Corps, DNR. Local - yes - All of the above - Just vs. Marinette Co.

0222 Corps, DNR - no - too much development of wetlands allowed all we are doing is slowing sown the conservation process. Local - ? - Local is ruled by the good old boys too too often. resource matters are seldom of first concern.

0227 Corps, DNR - no - Local -yea- Any time control gets too far away the balance between public and private gets throw[n] toward the favor of the public.

0228 Corps, DNR, Local - yes - M no tax break&

0229 Corps, DNR, Local - no - These agencies make it difficult for wetland owners to improve their property.

0230 Corps -yea- Most of their projects are of benefit to a majority of people. DNR - no - DNR has stockpiled money for years from permit fees and has the power of god. All politics. Local - no - Selective people got to do whatever they want while others are denied.

0232 Corps, DNR, Local, - no - too much control of private land.

0234 Corps - no - to much regulation - disregarding private rights. DNR - no Disregard of owner rights, unreasonable restrictions.

0236 Local - no - do not know who is local.

0245 DNR - no - DNR too concerned with public rights on private property should regulate detrimental uses to nature only.

0246 DNR - no -1 think the DNR owns enough wetlands.

0253 DNR - No - they will not cooperate with landowners.

0254 Corps - yes - careful consideration is usually given on road projects. DNR - no - could do more to protect the wetlands from filling in for housing and industry. Local - yes - Seem to have a good grasp on the need for wetlands.

0259 Corps, DNR - No - Landowner pays taxes on value of land - does not get a tax break for public input.

0260 Corps - no - More individual organization and not as considerate of public. DNR - yes - Try hard to do good and feel they do alright even though many people feel DNR is bad letters. Local - yes - more people oriented.

0263 Corps - no - private use also benefits public indirectly. DNR - no - private benefits usually overlooked with little cost to public sector. Local - no - more local hearing needed.

0271 DNR - no - DNR not interested in private rights.

0272 DNR - no - lack of education

0275 Corps - no - who own the land private or state or county or federal.

0277 Corps, DNR, local - no - All three agencies overlook the fact that the landowner is often the best caretaker of his/her property.

0279 Corps - no - regulation makers are too far removed from the actual project. DNR - no - DNR fools they are gods who have to answer to no one. Local - no - most local officials don't know what they are trying to interpret.

0280 Corps and DNR - no - Private individuals seem to have little say.

0281 Your mind is made up before time and you people do as you dam please.

0283 Corps, DNR, Local, - no - weak in private rights.

0284 Corps - there is too much emphasis placed on public trust.

0287 Corps- yes - They generally use good common sense. DNR - no - they are overbearing egotistic and completely incompetent a better name would be Do Nothing Right. Local - yes - they are made up by people who understand local conditions.

0293 Corps - no - Corps doesn't realize the impact on private rights. DNR - no - DNR wants to control everything their way regardless of private or public rights. Local - yes - Local are more in tune with what is going on in the project area.

0296 Corps - no - it takes them too long to study the outcome or reason. DNR - no - They should know the answer and report back soon. Local - Yes - you can go to them and got the answer the same day.

0297 Corps, DNR - no - in my experience with the above it would appear that the agencies have not accepted the responsibility of educating themselves and more important the public on some aspects of wetland protection. Politics seems to be the approach which is unfortunate for all.

0302 Corps - no - read my other comments.

0307 Corps- yes - Most Corps people make rational judgements on laws. DNR - no - too many power hungry chiefs. Local - yes - handle mostly simple matters.

WETLAND MITIGATION

0002 Mitigation can impound an equivalent volume of water from that lost; but the species diversity is seldom as good in cases when "mitigation" involves creation or replacement of wetlands. "Enhancement" does not always enhance. It usually just changes the kinds of plant and animal species using the wetlands Too often it represents a value-judgement on which are the "desirable" species - e.g. pond ducks, rather than marsh wrens. Normally I do not support "replacement" as a satisfactory alternative except perhaps in a few cases such as bridge building.

0007 [mitigation] gives developers, etc. excuses to destroy. Mitigated wetland[s] are not ecological equivalents of undisturbed wetlands. [Mitigation] should only be allowed if wetland destruction is inevitable (eg. water dependent etc.)

0008 [Mitigation is] often necessary, but should not be [the] first alternative. Restoration and replacement [should be required for a permit] only if [the] permit first considers all alternatives and proper allowance to most appropriate interaction between wetland and activity stressed in permit activity.

0009 Its too hard to get all quality of the replaced wetlands A created wetland is not as valuable as an existing wetland with its evolved assets.

0011 I think it [mitigation] is an excuse for destroying wetlands in some cases, but should be used if the destruction will happen anyway. Not enough is known yet about creation and restoration, you cannot "create" a wetland of [the] same quality as one that took nature 10,000 years to create. Many values will be lacking. Many traditional "enhancement" practices are actually detrimental to the wetlands ex: digging duck ponds in a sedge meadow - this is not enhancement - R increases diversity, but not quality for the species that are supposed to be there.

0012 Its an effective tool for destroying wetlands. They can't be replaced by man-made wetholes and values can't be replaced in a fragmented way and equal the whole that was lost[creation, restoration, enhancement, and replacement] are fallacies.

0013 [mitigation in the form of restoration and enhancement should be allowed] only if a determination is made that is consistent with NR 1.95.

0014 [mitigation] could be used to address cumulative impacts for "minor" projects. [the categories of mitigation should be used] only if project meets appropriate standards. e.g. no alternatives, water dependency, public interest, etc. Need mitigation policy 1) in kind value replacement 2) on site 3) no net loss of acreage and value

0015 [appropriate] when use of wetlands is unavoidable for public projects.
Can wetlands really be created: Don't use mitigation just to grant permits which are avoidable.

0016 [no replacement, the wetland] shouldn't be allowed to be lost in the first place.

0017 Its better than nothing, but not completely effective. Depends on type of project, location

etc. DNR should determine option on a case-by case basis.

0018 mitigation should be based on a no not loss policy at a minimum, and preferably a not gain policy with an - goal set over a 5 year period.

0019 Creation is not an exact science - many efforts fall. Enhancement is often to create waterfowl habitat and not consider other things.

0023 I think mitigation is much too often considered an acceptable alternative. I consider it an altogether absolute LAST RESORT!!! How are turtles, butterflies, etc, supposed to find and live in some distant fake wetland when theirs gets destroyed?

0024 at this time I don't believe our expertise is good enough to restore or create a wetlands

0029 Once we've killed a living thing, and wetlands are living, we can't rebuild it. Attempted creation is the typical mitigation measure.

0030 Not enough known; used as excuse to defuse opposition to wetlands destruction. Severely degraded wetlands can be restored but currently only few people in the private sector have the expertise and judgement to do the job properly.

0031 A great deal is still not known about mitigation. [Use of mitigation options] this depends on the situation in each permit being considered.

0032 [Mitigation is effective in protecting wetlands under certain circumstances] but often not-often improve another nearby wetlands [use of mitigation techniques) needs to be decided on a project by project basis enhancement is too offered up as mitigation when no one really knows what + and - really are no follow - up studies to see results.

0034 [Mitigation] hasn't been proven to work yet

0040 This is what concerns me the most I don't know how effective any of these schemes will be - it would definitely have to be a "case-by-case consideration - I also don't think the "experts" know how well any of these will work either.

0043 [Mitigation is effective] when mitigation is better than values lost.

0045 [Mitigation is effective] when all else falls. All or some [mitigation options] are appropriate if wetland is to be minimally impacted by perturbations.

0057 [Mitigation should be used] if clearly designed to create a wetland of equal or greater size and the same or better values.

0059 All [forms of mitigation] have their place in compromise.

0062 [Types of mitigation to be required] depends on permit

0069 You can't mitigate everything - sometimes you have to just say no! Why should now wetlands need to be created - leave the existing one as it is. - I question the ability to 'create' wetlands anyway.

0071 Worked in Madison to got road and protect as much wetland as possible. Can't create something this is too valuable - like an endangered species.

0075 I do not believe wetlands can be created. We do not understand the workings - or all the parts. I feel mitigation is just an attempt to falsely justify destruction.

0087 Mitigation depends on the circumstances.

0088 [Mitigation is appropriate] sometimes, when a net gain for the public can be realized. Not every single wetland loss need be mitigated. What about incalculable losses occurring all around in other habitat types. Creation - you will replace some other habitat type by doing this. Restoration - Generally good, especially for violations or unpermitted activities. Enhancement -.should be short-term gains without consistent management over time. Replacement protects another wetland but does nothing for the one damaged or lost.

0089 Can we really create or replace wetlands that are millions of years old?

0090 I would have to examine individual cases.

0094 In kind, well-designed mitigation if project impacts have been reduced as much as possible. Significant enhancement at a ratio of $>1:1$

0096 [Creation and replacement are appropriate] if the lost wetland is large-Impact and that a now one would destroy another ecosystem that is important to the area.

0101 Mitigation needs to adapt to the type of project e.g. filling a whole wetlands should require

creation of a now one, but a project which enhances some wetland values may provide its own mitigation.

0102 ...In some cases, because its better then nothing. SAVE ORIGINAL MUCK! True replacement is beyond human capacity.

0106 Pros and cons of each case should be weighed for the best public good.

0107 Mitigation measures need to be on a more then I to I basis - 10 acres of creating now wetland does not equal the 10 acres lost

0112 [Replacement should sometimes be used] when its possible to do so in the immediate area (within I or 2 miles)

0124 Difficult to assess this in abstract - each case must be considered all [forms of mitigation] are appropriate under certain conditions.

0133 When small areas of highly disturbed wetlands are impacted, then mitigation MU be appropriate.Mitigation, however, should not be used as an excuse to issue the permit!

0143 The public generally loses out with this type of trade. Creation is risky, expensive the results often poor. Enhancement often doesn't help as much as it was supposed to, can just be an excuse to do some dredging for fill. Replacement can involve wetlands that should be protected anyway. Restoration can work best. The restored area should be a viable project, should be more area than was lost to assure success. Creation can also take place on land that had some other environmental value already.

0146 When public agencies are involved the EIS or EA program works for documentation rarely protection!

0159 Too much give and got at the expense of the resource.

0161 It is a compromise.

0165 Wetland area needs to be increased and enhanced and protected.

0173 I don't know if mitigation is effective in protecting wetlands, but it would help to stabilize the total amount of wetlands being lost or improving the quality of an existing wetlands Perhaps if a wetland were of very marginal quality in a congested area ft could be replaced by one of higher quality, but it would be detrimental to replace a wetland just for the expediency of some industry, municipal, or governing agency, or individual with the resulting loss of wetland acreage.

0175 [Mitigation should be used] Perhaps as a last resort but the knowledge and skills to do this are at best questionable at this point

0176 Mitigation provides some wetland purposes when done correctly. Mitigation is used much too frequently, mitigation only imitates a wetland the whole - intact community is gone! The filling of one wetland only to enhance or restore a wetland that if left fallow would return with time leaves us still in the "red". We are still losing wetlands, and this should not be.

0177 Creation of wetlands, in my mind does not work. Restoration and enhancement are doubtful.

0181 If permits must be issued, then all of these [mitigation] options may be appropriate depending on circumstances.

0183 Restoration - appropriate when a project area previously filled no longer used as developed i.e. now highway - restore wetland filled by old highway not needed.

0184 I only know of one instance and it worked well.

0185 Usually mitigation is a poor compromise, but may be necessary on a few occasions, due to some circumstances; usually a wetland cannot be created or restored.

0186 Something is better than nothing.

0189 Mitigation can be effective and it can also be an excuse for destruction. No one really knows how to recreate a wetlands it is an experimental at this time. [appropriateness of mitigation] depends on individual case. What is being lost versus what is "replacing" it.

0191 If compromise is the only alternative - make the beat of it. Each permit must be thoroughly researched to determine which elements of mitigation serve the best interest of the wetland involved.

0193 Mitigation isn't a very satisfactory substitute for a natural wetland and often is delayed for years while plants and animals perish.

0196 Cost and accountability may prevent wholesale wetland destruction. Created wetland can't equal natural wetlands in quality but cost may deter some parties form carrying through wetland filling or draining.

0197 Best to preserve the original. Creation, restoration, enhancement should be going on with degraded wetlands anyway.

0198 How would this be enforced - A lost, quality wetland is lost. If we are banking on promises of future restoration on location we are taking a great risk.

0199 I am judging by the outcome of road building in our area of wetlands near madison or Milwaukee. Once something is lost - it never can be re-created exactly and something is gone forever.

0201 It creates subpar wetlands that in no way replace that which was lost. For 10 units of now wetland for I unit of natural one is not adequate.

0202 I think certain wetland types are more rare than others and some types are presently virtually impossible to re-create. Some types may be easy to create out of non-wetland areas. A wetland with rare qualities and inhabitants shouldn't be allowed to be destroyed if mitigation would result in a very common type of wetlands containing species which are abundant throughout Wisconsin.

0203 The first two [creation and restoration] are fantasy - permits should be denied. the last is at best a break-even deal.

0204 Beltline - benefits weighed against costs.

0206 This is a vast and quite complicated area - site specific depends on many things, initial condition of wetlands type of mitigation, who is mitigating, etc. Site specific - each category of mitigation listed is questionable fin terms of its viability and also is necessarily site specific.

0207 Often easy - Type 1: reduce or eliminate impact by alternative design (such as bridge) Often difficult - Type 2: Restore damaged wetlands Often Very difficult - Type 3: Create now ones or enhance existing ones w/o loss of existing values. [Mitigation is effective] only if the system is taken as a unit. In many cases restoring watersheds and wetlands can more than compensate in public values for the small loss in one wetland. This could have been done on the Madison Beltline project. But replacement by protecting another wetland must be restricted to A) loss of low-value wetlands and B) protecting wetlands not already protected by zoning and regulation. Assuming the same conditions are applied to mitigation permits/projects as to alteration projects. also privatizing wetlands in advance is desirable in deciding whether to allow mitigation.

0208 [Mitigation is effective] if small areas are involved, minimal disturbance has occurred, area is adjacent to urban area. [options are appropriate to add to a permit] if wetland is lost due to roadbuilding or activity adjacent to urban areas.

0209 As far as I'm concerned, the more regulation to protect the few existing wetlands, the better.

0210 Cosmetic re-creation of wetland may not duplicate natural systems.

0211 [Mitigation] should be used with caution, highest priority to be placed on high - value wetland protection. Mitigation has the danger of making it too easy to destroy valuable wetlands with mitigations as the justification. Creating and restoring wetlands is a very now area with little track record for what works well - once a wetland is lost, it is often nearly impossible to "re-create" it adequately. however, when a wetland is lost unavoidably, to development, some sort of mitigation, tailored to the specific situation, is a good idea.

0212 Some wetlands can be improved. Say by creating some open water, control of levels etc. In exchange for allowing some very small % of loss. Most creation would actually be restoration by establishing historic or prehistoric water levels.

0215 If necessary, if proposed use damages/destroys wetlands mitigation is necessary.

0218 How can mitigation protect wetlands - you mitigate to replace a lost wetlands

0220 Mitigation seem of dubious value compared to protection of existing wetlands.
0221 We should not trade natural - native wetlands for created ones.
0222 Mitigation is a tool to allow development. In most cases it is a compromise which means a loss of wetland quality. It is only a politically sound solution. If you buy into mitigation then any of these can be sound alternatives depending on whets available and what is being destroyed. Combinations of the above are most common I suspect.
0224 Improve what's left!
0227 From what i've seen wetlands tend to return to their natural state once human activity decreases in them. It doesn't take a lot of money or action, nature often takes Us own course in spite of man.
0228 I think land owner has some right The state should improve it wetlands
0230 Only God can create Natural wetlands - man can only try to help nature sometimes ft works - other times he falls.
0233 Depends on individual project
0254 Creation is O.K as long as Damage isn't being done to some other valuable resource. Rather than enhancing, some wetlands may be better off evolving naturally.
0257 Where wetlands are being created, landowner should be given credit for future development projects. Mitigation should not be used to punish landowners for developing private property. If the state or federal government wants to own and control all wetland they should compensate landowners.
0266 Most cranberry farms create and enhance wetlands for game and fish DNR is putting them on the endangered species list.
0268 Process not followed through [mitigation is not effective in protecting wetlands.
0271 [Mitigation is effective] to provide for "no not loss"
0273 Urban areas.
0275 There is a lot of wetland around.
0277 A user should be given the option of creating new wetland to trade rather than have a permit cancelled.
0281 [Wetlands] we don't need them.
0286 Each case may be different.
0288 I think wetlands will take care of themselves if man will leave them be. [replacement] This would work well - we've had farmers offer to designate a portion of their property as - wetland and even do some beneficial work with it for wildlife, if they could just having the little piece in the middle of their field fixed, or repair a crossing that they've used before but now want to use for crossing with a hayer planter.
0297 Again it depends on what the use of the wetland is. It depends on each individual case. Certain farming activity has a positive impact to the point that all the above may happen without regulation.
0305 This gets extremely complicated - so much is yet to be decided in this area. every case must be evaluated separately.
0307 I'm sure there are wetlands that have been used for many things that could be improved.

OTHER COMMENTS ON THE SURVEY OR PRESENT STATE OF WETLANDS AND WETLANDS PRESERVATION

0002 In Racine County alone at the present time there are 4 + proposals to develop for residential purposes, significant upland wetland in all cases. The approval process seems to be proceeding apace unless the army Corps stops them by refusing to grant 404 permits, all 4 projects will lead to accelerated loss of wetlands. In all cases, the DNR has e been very helpful in protecting the wetlands. The total wetland loss, if development is permitted, for these 4 sites will be almost 100 acres.
0007 Whatever agency takes over 404, a main priority should be better data coordination and follow-up. No enforcement, management or protection actions can be taken if the agency

involved does not find out what happened to a particular project

0012 Our wetlands problems are linked to a general malaise that is in state agencies. There's a deep fear of rocking the boat for environmental good. Also the need for adequate staff # and staff professionalism is a detriment. it takes trained professionals to do this job and they aren't being hired and those hired are not being kept in state govt. d.t.[due to?] the current backpaddling on env. policies.

0018 Wisconsin needs a much more effective and aggressive wetlands protecting law. Now filling and drainage for farming or development should be generally prohibited. We need a management program that will restore 100,000 acres over the next 10 years in the south 1/2 of Wis.

0020 Wetlands in WI are being filled in and they should not. I once lived in Mass. In that state, a homeowner or business could not fill in any wetland without a permit WI should have the same kind of law. More land that was once wetland should be returned to wetlands More information should be sent to the public of the value and need of wetlands.

0030 Recreation is not preservation. Political climate for substantive preservation will come from rural moderates, not from urban yuppies with ethnocentric political agendas.

0032 Good luck I publish results, offer results to those responding. DNR would have to do better than COE. Examine MI and see how effective their program is.

0040 Land use planning- good long-range large scale would be great - if it could be left uncompromised. I would like to see much more enforcement of the regs. that are in place - especially regarding fed. projects. - all too often It "appear" wetlands are negotiated away - that funds are lacking for enforcement of regs against violators - Mitigation feels like selling out - but it's better than losing wetlands acres.

0045 This is a good approach to the solutions for the project - good luck!

0048 I didn't understand a lot of things in this survey I tried to use my best judgement. I hope you are not using hunting and fishing license funds for this survey.

0049 The only way we are going to save wetlands(what's left) is with "absolute statutory protection' simply put : what wetlands are left may never legally be degraded they may only be upgraded with assistance from DNR or other people and agencies who are entrusted with that duty.

0050 I don't know that much about wetlands but I feel they are necessary to our Ecology. It would be terrible to lose any more of them.

0064 Some questions were confusing and difficult to understand to answer properly. In the future, please simplify the questions.

0056 I would appreciate more information on wetland regulations and wetland preservation. I would be interested in managing my wetlands. I understand the state of Minnesota has a program where property owners are given property tax breaks - (Such as the woodland tax laws for woodlots in Wisconsin for preservation of wetlands and still maintaining ownership.

0057 Simplifying everything would help effectiveness. make an equal definition of wetland for reg. programs and S.C.S. Regulate cranberries, regulate ag. uses. regulate road construction, regulate industries/commercial/ residential development.

0058 As an avid fisherman, I fish quite often on a northern Wisconsin inland lake. I don't use marshes and wetlands of this type so don't seek out information, but read articles when I come across them if I have time. This is why many answers are marked DK I would like to learn more about wetlands.

0061 I don't know whether the tediousness of this survey is designed to impress me with your commitment towards wetlands protection or to obfuscate some of the issues you will be considering as a result of this survey. Anyone in sync with current affairs has been exposed to the plight of wetlands and is aware of their aesthetic and functional attributes. If one cares about his environment, the inescapable conclusion designed to be elicited from this survey is that we must mandate more regulation.

I'm hesitant to acknowledge agriculture's role in the loss of prairie pot holes - apprehensive that in your zeal to protect wetlands you will view all segments of agriculture as harboring similar risks to wetlands, when in fact, they do not I am a cranberry grower and by the time I got to pages 14 and 15 of this survey I could no longer see the point in contributing to the body of public opinion (i.e. this survey) that could subject my industry to additional encumberences.

Yes I concur that wetlands are a necessary and vital part of the ecosystem. Yes, they need to be protected. But, do I as cranberry grower want to fall under additional environmental regulations - NO!.

It obviously makes no sense to materially after a wetland to produce a non-wetland product. I on the other hand cultivate a wetland plant in its native, albeit modified, wetland environment. It personally irks me to face the possibility of having my industry's cultural practices so publicly scrutinized and controlled because peoples past transgressions have paved over wetlands to establish shopping malls, parking lots, college athletic facilities, etc. If you were to take the time to study cranberry growers as a class of property owners/land users versus other classes of property owners/land users I think you would conclude that after a hundred plus years of cranberry growing, cranberry growers on their lands have a diversity and abundance of wetland plant and wildlife species unparalleled by most other property owners/land users - including many public parks. Let our record of environmental stewardship speak for itself.

0062 Public isn't always educated on issues. Also the people regulating aren't always properly enlightened to issues being regulated.

0065 More information abut Corps should be available.

0066 Wisconsin needs to reclaim a waning heritage of environmental leadership. Wetlands are not replaceable, once lost. Assertive grass roots, thorough, for-the-long term efforts now are needed. What good are short term booming residential districts, commercial industry, fire roads, productive dairy farms - if the diversity of and health of the environment is lost

0069 People should be given tax breaks for preservation of wetlands, even requiring ' no taxes' a program similar (although designed specifically for wetlands) individuals should be made more aware of wetland locations and boundaries. - informed specifically why this land is important, - become an active steward of the land.

0076 Corps has balanced program. DNR has private agenda, sometimes more interested in pushing private agenda than in balancing public interests and too often willing to bend letter and spirit of rules to further private agenda. Corps is consistently professional, DNR is too often petty and-vindictive, arbitrary and authoritarian.

0088 Obviously it [the most effective method of wetland protection] has to bee acquisition in fee simple. (Also prohibitively expensive If widely applied, but I think it should be used more.) Deed restrictions could be very effective on a parcel by parcel basis. Local zoning - if strongly applied this could be very effective (and wetlands must be zoned wetlands) Land use planning - needed in order to use other methods (not a protection method itself)

0091 I really don't know much about wetlands and their regulating. However I am very interested in being informed about what different types of regulations are out there. Since I am an avid hunter, fisherman, and trapper, and believe in maintaining wildlife habitat, also am presently involved with the EPA program. Thank you for sending this survey to me.

0094 The values of the functions [in qu. C7] listed depends entirely on the wetlands State watch and federal rare species should be considered but should not necessarily prevent permitting of a project.

0101 Presently these methods are not well used [those listed in F4] Need is to encourage private wetland protection - only effective way to protect wetlands. DNR and local government tend to prevent wetlands projects, without a sound basis for doing so. Many projects enhance wetlands and Corps has been best at allowing those projects to proceed. Because DNR enforcement is very strict and unreasonable people tend to ignore DNR - it is

impossible to do anything if you wait for DNR approval, and DNR selective enforcement shows most people got away with ignoring the regulations or else pay minor penalties. The court don't like to enforce irrational regulations or irrationally applied regulations and these are all the DNR has.

0103 [Which categories of endangered species should be considered in granting or denying permits ...] None should not even be a choicer

0107 [Effective wetland protection methods] Federal protection by law (designation); state protection by law (designation). When appropriate the state should consider initiating programs similar to federal preservation programs. Example: Coastal Barriers act to protect coastal wetlands by denying federal subsidies for developments on these areas.

0110 What gets me is how the farmers can got money for not planting crops and then you see them tiling and working up wetlands. Why should this. be allowed?? I have heard the government even pays for a part of it. tiling etc. ???

0111 I would like to be better informed about our wetlands and how we can help protect them. I have an immense distrust for the Corps and their ill-conceived projects - more input should be possible by groups such as Wisconsin Waterfowlers Association, nature conservancy etc.- these are the people who know and care the most - politicians/ fed. officials don't seem to be in touch with the pulse of nature and what it needs to survive man's onslaught.

0114 Yes I think it is very good that some different groups of people are doing something about how we are losing wetlands and wildlife habitats. Thanks for the work you are doing!

0116 Why are there so many now housing and industrial sites going up, surrounding wetlands? Look at Mequon, Wisconsin in particular.

0125 I am not too informed in any one program - but from little information radio- newspapers, T.V. etc. - it would seen wetland Regulation is only one of the many problems concerning our environment. Too much "red tape" - no enforcement on any level it seems. Too many "ideals" made for special favors not always for everyone's benefit.

0126 With some of the questions about the Corps, DNR, and Local, I am not well versed on what each does or how they work so I didn't answer those questions. But with a lot of the other questions about which is the most important I don't know if that really matters. All aspects of wetland management must be improved or very little improvement will be noticed.

0129 I personally believe we need more Fed Land Use Laws to control the developers and big money. Anything that puts all of these lands into permanent protection and also provides for restoration/expansion of the total acres.

0134 I found many answers difficult to answer just don't have enough experience with technical aspects. We have a large wetlands

0135 A friend of mine owns a small (40 acres or so) horse farm which has a small wetlands Some public utility or road crew did some work on or around a culvert that the water drained through. Because of this, the water now backs up further on his land, it is slowly becoming more wetlands less productive. They asked the DNR if they could undo the damage, the response was no because they felt it was a natural change and told them if they did change it they would be fined! Why wasn't the UTILITY or ROAD CREW fined in the first place. Seems to me that the natural progression of wetlands is to dry up not grow as it did in this case.

0144 I hope to obtain more information about the status of wetlands and regulatory agencies involved in the permit process. the most important aspect of current wetlands is the preservation of these lands. Development should be closely c=scrutinized so that Wisconsin's wetlands are protected. Once wetland are removed ft may be more difficult to add wetlands in other areas. Water quality must constantly be measured. Pollution is ruining many lakes and rivers. The industries responsible must pay for cleanup. Economic development is necessary for a state to grow. However, if the price for this development is a decrease in environmental quality (air water etc.) we will lose in the long term.

0153 Quite an extensive survey. Unfortunately I honestly admit an ignorance in many of the laws

governing relations of wetlands.

0156 I am against the conservation easements if these easements are put on the land - then lot someone else own the land and pay taxes on it. I became involved in buying a farm with a conservation easement on it. I owned the land and was supposed to pay taxes on ft but I was told I couldn't even drive a tractor across it if the government wants these easements then take the land with it. it just isn't fair the other way. I also feel the farmers are getting a raw deal. There is plenty of areas for wetlands. I don't think R is fair nor reasonable to limit a farmer as to draining his fields by ditching or tiling. We are just trying to make a living and after all feeding and providing food for everyone.

0162 It is very important that steps are taken now to protect our remaining wetlands before they disappear also.

0165 One thing not addressed was purple loosestrife control. Purple loosestrife poses a real threat to wetlands and something needs to be done now.

0166 More input from tribal governments.

0174 Wetlands are an endangered resource - no additional development should take place - we should try to make more where possible.

0176 One tablespoon of wetland fill is too much! regulations must be enforced! Developers need incentives to be environmentally sensitive. The general public needs more education and information on the benefits short and long term of wetland systems and they need to be aware of the regulatory processes and how they can got actively involved and "make a difference". We need to get more land in protected ownership under federal, state, and local ownership. Buy up all you can grab. Our future is at hand and no one wants to care.

0177 We all know wetlands are decreasing at an alarming rate. Through public education, awareness and a desire to preserve, we have the greatest hope of reversing the trend.

0179 Wetland is one of the best places to raise a family. The DNR does not have the whatever to protect wetlands. all areas of government have to protect it. if we keep going the way we have (in the fill of wetlands) we will end up with very little.

0183 I have recently joined WWA and volunteered to help with project review. My familiarity with the regulations is minimal.

0184 What Wis. needs more than anything is Land Use Planning backed with taxing that is slanted to encourage leaving any land and especially wetlands, in its natural state or at least reduce its vulnerability to runoff and erosion. This would reduce pressure on farmers to sell their top producing land to developers and in turn try to bring wetlands into farm production. Those who would insist on development would pay the much higher taxes that could be used to pay for the negative effects.

0185 I'd like to see a very strict state permitting process, covering all aspects of wetlands use and coupled with tax incentives for protection.

0189 Mitigation I have seen has been far costlier than necessary because of the process. Also, projects differ depending an the priorities of the enforcement officer. Virtually no one is trained or thinking holistically. This is the key, Wetlands can't be saved without the uplands. I am involved in mitigation projects. In Wisconsin they are not too bad. In California and southern coastal areas they are a ticket to destruction of wetlands.

0191 Regarding the recently published I A citizen's guide to protecting wetlands' by the National Wildlife Federation, March, 1989 How about giving this wide publicity and distribution throughout the state or perhaps use it as a model to create a similar publication specifically for Wisconsin. Purple loosestrife and Reed-canary grass are factors contributing to wetland destruction. They must be incorporated into wetland protection programs.

0193 The continuous loss of wetlands is dangerous to our natural resources and the eventual welfare of our state and our citizens.

0198 Please do what you can as efficiently as you can, to save Wisconsin's precious wetlands resource. I sincerely hope you can bring together some good people to join the effort. Thank you for the chance to comment.

0199 People must be educated in the value of wetlands - I feel it is in the long run, life and death. A friend and neighbor read this pamphlet and agreed with my answers land] is horrified at the future of our lands as regards what will be left for our grandchildren and great-grandchildren. Our very drinking water is in jeopardy - far too long we've been educated to think that just by tossing in some chemical all would be remedied - now we are beginning to realize we are killing ourselves. I am a widow now and do not drive a car and I live 3 miles at least out of town so I cannot be of much use to you but I am very interested and I am in contact with the local DNR. My neighbors also are interested.

0206 I'm very interested in what Wisconsin is doing in the area of wetland mitigation. lye done some work for the EPA in wetland protection in superfund remediations, and (am] willing to relate my experiences or otherwise participate in your efforts.

0207 Once training and education are in place, process would be simpler. Also, advance evaluation and prioritizing would vastly simplify procedures. [Comments on which are effective methods of wetland protection.] Local zoning - add permit program, Tax incentives - state and local, Land use planning with compensation, Deed restrictions - only if made to an enduring body, mitigation - with safeguards and funding by applicant, issuing boards, tax districts, transfer of development rights, real estate transfer tax. One can't rank these because a) often combinations are best and b) each has value in specific situations and is impracticable in others. You left out the strong role of Fish and Wildlife service n advising Corps and other agencies and especially in categorizing wetlands into high and low priority for protection. Likewise SEWRPAC has strong advisory role now. For both, the time has come for automatic permit denials for high priority wetlands.

0209 This survey makes me realize how little I know, especially about regulations and policies concerning wetlands I haven't spent much time trying to locate the information, but I'm also not absolutely sure about the best place to find information. As with so many other aspects of the environment, education will have to be a must if our wetlands are to be preserved/conserved. I like listening to radio programs myself and learn a lot that way (WHA) and read feature articles in the Sunday newspapers. As yet I'm unsure as to whether the educational focus should be at school children. I think adults probably do more damage now. Much stronger enforcement is also crucial, I think; i.e., more staff to do it and doing more than "slapping the wrist" of offenders.

0210 I feel that every remaining square inch of wetland in Wisconsin should be preserved for future generations. I understand that there is a very small fraction remaining compared to 150 years ago. Regulations should err on the side of strictness. There are enough roads, parking lots, fast food joints, shopping malls and tourist traps to last us at least 100 years already.

0214 Local officials are too wishy-washy and easily influenced by developers etc. Almost no enforcement of zoning restrictions that I can see. Corps is too far removed, too remote of an entity, but quite effective once involved. I would like to see DNR in charge with Federal backing. Have a Person in charge who could be contacted for permits or to report violations.

0215 This survey is a good idea. Useful for me to loam how much I don't know about wetlands and regulation. thanks!

0216 Not enough background, sorry!

0218 Couple all of the above permitting zoning programs with a compensation such as tax incentives, conservation easement.

0222 I think most of us have been brow beaten to the point of thinking that compromising on wetland development is in our best interest But t ' he fact is that we have already lost more wetland than we can afford. Any continuation of this process only makes the situation worse. We need to gain rather than lose. If mitigation is used we should gain wetland by it not just hope for equal. The single biggest problem I see is making people pay taxes on land we must regulate. Some coordination of stewardship, ownership, and tax incentives

must be worked out. Tax credits for wetland preservation must come from state and federal coffers, not local or county.

0224 We need one standard easy to understand set of regulations on wetlands. Simpler even than this opinion survey was.

0227 I think farming in wetland is okay because often all food is one of the most important things for our human existence. Wetlands can be, with proper management, very dependable places to raise crops. Many species of wildlife flourish with something more than cattails to eat. I'm not saying that all land should be drained to raise corn. Many areas are not feasible. Lots keep things in the proper perspective between the needs of wildlife and humans. Farming wetlands doesn't take as much energy, fossil fuels etc. as ground which must be irrigated heavily.

0228 I think the outboard motor does the most damage to our rivers and shorelines. The wake keep eating a way at banks and the discharge of exhaust in to water. Every 6 gal. of gas used 1/2 quart of oil is dump.

0229 I like local control of wetland with help form DNR and Corps. I don't like rules and regulations people don't understand or want. Most farmers who want or need work done for wetland protection are unable to handle the paperwork to get anything done.

0233 I am most familiar with the swampbuster provisions many of which I disagree with.

0235 I think wetlands in Southern district should be used for farming and food production. It's a agriculture area.

0245 Federal in cooperation with state regulation would be ideal because federal is too broad. However, we need an agency that is answerable to someone. The DNR is answerable only through the courts or the legislature and most people cannot afford to take on the DNR id they feel they have been wronged. Also the DNR is much too concerned over the PUBLIC'S rights and the PUBLICS interests when it comes to a private individuals use or non -use of his wetland property. The concerns should be over impact to wildlife, nature and the ability of the land to continue its filtering, flood control, erosion control properties, not whether the aesthetic value will be altered or "John Doe" can access the land for hunting, fishing, or crossing his canoe. We need minimal regulation with maximum rights to the owners, while still protecting wetland from destruction and exploitation in the form of draining and filling especially.

0246 When DNR buys more land for Ducks and Goose the Fowl also spreads out to outlying fields.

0251 Do not have or use any wetlands.

0255 Primary focus should be on people who destroy wetlands like commercial, residential, industrial development and get off the farmers and cranberry growers backs who in most cases are either creating or converting wetlands.

0258 DNR has too much big boss authority with care of private ownership.

0263 I believe it is essential to build more flexibility into the wetland program so that private owners will be given more option in using his or her wetlands. Wetland used for food production or recreational use will indirectly benefit the public. A recent application for a water impoundment was denied because the dam was located on so called wetlands My opinion is the dam would enhanced the wetland and controlled flooding and benefitted wildlife.

0266 This has to be the most one sided survey that I have ever seen, Only the DNR could have made iL

0273 I hope personnel in Corps DNR and local wake up to the fact that cranberry growing helps preserve conserve create and mitigate wetlands. They are the only places where wetlands stay green in droughts. If we had more cranberry growers we would have more and better wetlands. Where wetlands suffer is near urban areas and places of industrial development and road construction etc. also being ditched and drained for dryland farming.

0277 The biggest problem which cranberry growers face in developing into wetlands is a total lack

of understanding of cranberry culture by the Corps, DNR and local authorities, Cranberries are a native wetland plant, commercial beds have all of the wetland benefits of a natural wetland including sediment filtration, groundwater recharge, wildlife and fish habitat, endangered species habitat, and surface water filtration. Rather than constantly fighting the cranberry industry the DNR should look at it with an open mind and see the many, many benefits of cranberry culture. It has been documented time and again that commercial cranberry marshes harbor the densest wildlife populations and do the best job of controlling and cleaning the water of any

features in an area.

0280 Zoning and permitting programs are all political giving certain individuals favors. Make your Questionnaire shorter.

0281 I was in Germany in 1987 there is very little wetland there and they got an=long fine. We don't need a DNR as far as I can see. It is just some more stupid bureaucrat with a big paying job.

0282 As a member of the Wisconsin Farm Bureau and the Wisconsin conservation congress, the two interests sometimes find themselves opposing each other. However I believe there is room for compromise and responsible solutions can be found.

0286 I live in the city of Oak Creek, we have a large amount of wetlands and it would benefit everybody if the city know just what ft can do as it develops to develop in the right direction we have to work together!

0287 The DNR is the most despised and least effective group in the state of Wisconsin. I do not know of anyone in business, agriculture or recreation that has any respect for the DNR. They waste more of the tax revenue from the tax payers of the State of Wisconsin than any other bureaucracy in the state and maybe in the U.S.

0288 First you must sit down and decide just what is wet land. To me wetland is two acres or more of swamp, where cattails and muskrat huts are to be seen - and water in R year around; or in your river bottoms and around lakes. Not some 4 or 5 tenths of an acre in the middle of some farmers corn field that maybe will have an inch or two of water in it for a day or two, just enough to mess up planting it, and then in two weeks you can cultivate through it. yes, and maybe even spray R to control the woods; not too good for plants and wildlife. (I know the song and dance about hydraulic [hydric] soil and perched water tables.) We must back off this type of so called wetlands We cannot turn prime farmland into wetland I am talking 2 acres or lose. I think more information is needed and more simplified! I think in the end DNR should set the regulations and the Local zoning regulate protecting wetland for each county. I am out of time for now. I hope you can come up with now simpler laws. Good luck.

0289 If wetlands are to be controlled, they should not be under private ownership. If taxes are paid on land and it is under private control I do not feel it fair to dictate policy on private land. State or federal govt should purchase these lands and then protect them. I am not a hunter, recreation user or fisherman - not too interested except to protect environment where necessary under above condition only.

0292 I received this on May 31 if you want a considered report, got it here sooner.

0293 I believe cranberry growers should be exempt form the wetland permit process. It is in the growers best interest to improve and protect the wetlands that provide his bogs with the water that they need. Cranberry growers have proven over time that they are more than able to property manage the wetlands that they own or control. Some of the best hunting, trapping and fishing I know of is on cranberry growers reservoirs and wetlands. Every time a grower plants a now bog or constructs a now reservoir he creates more wetlands.

0294 I feel that roads and businesses should not be allowed to be built on wetlands - most of those areas provide flood protection for home owners as well as farmers in the area - in times of flood the water has to go somewhere. These lowlands are our natural protection.

0297 It appears to me that the wetland problems I am involved with have nothing to do with

wetland protection. Instead it seems to be a matter of control and politics. I believe that to be true servants of the "public trust" that the state regulatory agencies involved need to accept their responsibility to better educate themselves and consequently to better understand the possible positive impact some activities have on the wetlands.

0299 I think we should build more lakes and ponds or reservoirs to hold water in the wetlands which would keep the ground water up, also would be more fishing, waterfowl, animals and forbearing animals and also more food for all wildlife.

0302 I feel that the DNR is slow in making necessary adjustments in game management A few years ago turkeys were introduced to our area. Now we have thousands of them. A limited number of turkey permits are issued. DNR worries about duck habitat and then reintroduces the osprey. Osprey feast on duck. The wolf has been brought back to northern Wisconsin. Was it the wish of the majority of the people. Hall no. Some wetlands are extremely unproductive. when someone suggests making improvements others scream no - lot nature be. Before lands are returned to bogs and swamps I think unproductive wetlands should be improved so that wildlife might find them useful for nesting etc.

0305 I feel that the Corps of Engineers should have the overall responsibility of regulating wetlands in all states of the union - this would insure uniformity Certainly, auto and local governments, interest groups and individuals should have input and appropriate involvement in the process.

0308 reported a man three times for putting a dam in crook and nothing was ever done. another thing a soil sample should be take[n] before a building permit is issued.

0309 I believe that the time has come to actively pursue activities that increase and create wetlands in a self sustaining way that doesn't burden public programs that any wetland that is created has value even though it may not be top of the line wetlands, the choice wetlands that have disappeared are gone and can't economically be brought back and that any increase in wetland habitat should be pursued. I also believe that the DNR,is already undertaking too many activities to fairly judge all the aspects of wetlands management I also believe that the Corps of Engineers interests we also too diversified to properly manage wetlands. An independent department that will explore all aspects of wetland management for all people and fairly treat all people is needed.

STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 6

SUMMARY OF WETLAND PERMIT COMPLIANCE SURVEY

PART OF A STUDY FUNDED BY THE EPA AND WDNR

INTRODUCTION

The purpose of the survey summarized in the following pages is to assess the compliance of activities permitted in Wisconsin wetlands with the conditions included in the permits. The survey is one of several data components of a larger study to assess the effectiveness of wetland protection programs in Wisconsin. The study was being conducted by the Wisconsin Department of Natural Resources (WDNR), with financial assistance from EPA, and began in October 1988.

The results of the permit compliance survey was used together with other study data components to identify strengths, weaknesses and needed and/or possible improvements to existing wetland regulatory and/or protection programs in Wisconsin. The other study data pieces include: comparisons of federal, state and local programs, jurisdictions and authorities, numbers of permits, workload estimates and opinions of several groups of people involved with wetland programs, including permittees, wetland users and local, state and federal agency personnel.

Based on analysis and interpretation of the data, each of 3 committees and WDNR's Bureau of Water Regulation and Zoning developed lists of alternatives with rationales, for improving wetland protection in Wisconsin. The 3 committees were active throughout the study period and include: a citizen's advisory, an inter-agency and a WDNR technical/policy committee. The alternatives include changes to administrative policy, complete assumption of federal section 404 responsibilities by WDNR, ideas for new state legislation, strengthening existing state programs and/or additional incentives for wetland protection. The complete list of suggested alternatives, as well as the individual committee recommendations are included in the final report, along with the other data components.

The final study report was designed for use as an informational source and decision making tool for WDNR administrators, legislators and other parties interested in Wisconsin's wetland protection programs. WDNR will determine the course of action it wishes to pursue, which may include assumption of section 404 responsibilities, and work with the Natural Resources Board, the Legislature, staff and other groups as appropriate.

The formal procedure for a state to request assumption of section 404 responsibilities requires the state to have necessary legislation, authorities, jurisdictions, funding and staff in place before applying to EPA for assumption.

The survey design and results are discussed in the pages that follow.

WETLAND PERMIT COMPLIANCE SURVEY DESIGN

The wetland permit compliance survey looked at 1988 federal, state and local shoreland/wetland zoning permits for 7 Wisconsin counties. Corps section 404 permits, WDNR chapter 30 and county zoning permits were included. The 7 counties surveyed are: Dane, Door, Jackson, Manitowoc, Price, Waukesha and Waupaca. They represent a wide range of geographical locations and developmental pressures around the state.

For each county the permits were compiled and visits were made to each project site. An anonymous data sheet was completed for each site which included: the type of permit (corps, WDNR, county), location description of the permitted project and conditions, if the activity was started, if it was completed as permitted or not as permitted, what if any, conditions were not met and other comments or observations.

The survey was conducted during August through December, 1989. Five field staff were hired to cover the 7 counties. Each person was knowledgeable of field and/or wetland ecology and was familiar with at least 1 of the counties they surveyed. The field staff received instructions and training about the types of permits activities and conditions and how to complete the data sheet. The data results and comments were complied for each county by the field staff.

CAUTIONS FOR INTERPRETING THE DATA

As you are reading the narrative and table summaries of the permit compliance survey data keep in mind that the results are not designed to be statistically significant. They represent a "snap shot" in time of permit compliance - one visit each, to 1 year's permits, in 7 of Wisconsin's 72 counties. Limitations to the data include:

1. In some sites, construction was still in progress, though the timing was towards the end of the summer construction season.

2. No riprap sites were visited in Waukesha or Waupaca counties because of the large number of riprap permits, the small likelihood that riprap is used in wetlands in these areas and the short time available to complete the survey.

3. Visits to several riprap sites in Manitowoc, Jackson and Door counties confirmed that riprap is not likely to be placed in wetlands in these counties.

4. City and/or village shoreland/wetland zoning permits were not included in the survey.

5. Not all corps section 404 nationwide sites were visited because of the large number of them and the difficulty in locating specific sites with the general location information available.

Even with these limitations, the survey results are useful. General levels of compliance can be estimated. Evaluation of percent of projects complying with permit conditions was calculated based on the subset of total permits that were visited, found to be in wetlands and where activity had begun. Additionally, the information on numbers of permits, types of activities, amount of wetlands etc. relative to each county and agency is helpful.

RESULTS

Permit compliance survey data results are given in tables 1 & 2 following this narrative interpretation. Table 1 summarizes the results from all 7 counties. Table 2 shows the data from each individual county.

HOW MANY PERMITS WERE ISSUED IN 1988?

The agency computer records of total numbers of water regulatory permits issued in 1998, not just those in wetlands, indicated that the corps issued 473 s. 404 permits and WDNR issued 659 Ch. 30 permits in these 7 counties. County shoreland/wetland zoning permit numbers were not available through a computer filing system. In the survey group WDNR issued 1/3 again as many permits as the Corps. Even though the state's jurisdiction is smaller than federal jurisdiction, more activities are covered by regulations.

For both agencies the greatest number of permits among the 7 counties were issued in Waukesha County, totaling slightly over 1/3 of both the federal and state permits (182 and 236, respectively).

Jackson County had the least activity, with about 5% of the permits (21 corps and 24 WDNR).

Of the section 404 permits, just under 75% were issued as nationwide permits, 17% were general permits and 10% were individual permits.

HOW MANY SITES WERE FIELD CHECKED IN EACH COUNTY DURING THE SURVEY?

From August to December, 1989 a total of 242 permitted sites were visited in the survey group of counties. Of these sites, 65% (157) were federal permits, 25% (60) were state permits and 10% (25) were county permits. The greatest number of visits occurred in Waukesha County (55) and least number was in Waupaca County (22). Not all nationwide permit sites were visited in any county because of the large number and difficulty in locating the projects. Not all riprap sites were visited in any county except price, because of the large number and the unlikelihood of riprap being placed in wetlands.

HOW MANY FIELD CHECKED SITES WERE FOUND TO BE IN WETLANDS?

A total of 162 (67%) of the visited sites were found to be in wetlands. Again, the largest number of wetland sites occurred in Waukesha County (48), with the smallest number of sites in wetlands being in Door County (11). For each agency, the percentage of field checked sites found to be in wetlands ranged from 85%/county to 78%/state to 60%/federal. It is interesting to note that for these 7 counties a relatively small number of the total issued permits occurred in wetlands - 20% of the corps and 7% of the WDNR permits.

WHAT TYPES OF ACTIVITIES WERE PERMITTED IN THE VISITED WETLAND SITES?

Wildlife enhancement activities, mostly ponds were the most common activity permitted in the visited wetland sites. A total of 29 wildlife enhancement permits were issued distributed between all 3 agencies as 15 state (1/2)t 9 federal (1/3) and 5 county (1/6). Additionally, 19 utility crossing permits of various types were issued, mostly (14) under section 404, with a small number under Ch. 30. Eleven cranberry related permits were issued, all under federal regulations; 11 commercial fills - 9/federal and 1 each state/county; 10 residential fills - 70%/federal and 30%/county; and 9 road constructions, mostly federal. Other commonly occurring activities (6 each) were: lake dredging, channel dredging and various bridges. Unusual activities included: a pond for a fire department water source, a golf course and a septic holding tank fill.

HOW MANY OF THE VISITED PROJECTS IN WETLANDS HAD BEEN STARTED?

At the time of the survey, 3/4 (120) of the field checked projects found to be in wetlands had been started and/or completed. Most of these were federal permits (69) and most occurred in Waukesha County (36), with the least number started in Door County (4). The range between agencies of percent of projects started was relatively narrow, ranging from 70% for WDNR permits to 86% of the county projects.

HOW MANY OF THE PROJECTS THAT WERE STARTED WERE IN COMPLIANCE WITH THE PERMIT CONDITIONS AT THE TIME OF THE SURVEY?

Overall, at the time of the survey, 56% (67) of the started and/or completed projects that occurred in wetlands completely met the conditions included in the permits. The extent of the non-complying activities for an individual site varied from minor to significant. The types of problems that were found are discussed in the next paragraph.

Between agencies, compliance ranged from 72% (13) for the county, to 57% (39) for the federal and 45% (15) for the state. The best rate of compliance occurred in Waukesha County, with 81% (29

permits). One of 10 projects started in Manitowoc County met all permit conditions at the time of the survey. Small numbers of started projects in Door and Waupaca Counties add caution to the percents of compliance which are 75% and 10%, respectively. One hundred percent compliance was found in county permits in Waukesha, Price and Dane Counties, in federal and state permits in Door County. Eighty one percent of the Waukesha County federal permits were in compliance. On the other extreme, 0% compliance was found in Jackson County for WDNR and county permits, in Manitowoc County for Corps and county permits and in Waupaca County for Corps permits.

Cautions here include: a) some time remained in the construction season after the survey to complete remaining conditions, b) the conditions on the federal nationwide permits are very general and c) the conditions on the state permits are usually more specific than on the federal or county permits.

WHAT TYPES OF PERMIT CONDITIONS WERE NOT MET AT THE TIME OF THE SURVEY?

Of the 53 sites where conditions were not met at the time of the survey, the major condition not met was the requirement for seeding and/or mulching for erosion control. Lack of seeding/mulching occurred in over 1/3 (19) of the sites with unmet conditions. Other common problems were slopes steeper then permitted (8), extra area filled (7) and mitigation not started/completed (5). Extra activities started that were not included on the permits included: a ditch, a pond, a cranberry bed, a culvert and extra nesting islands. Problems that occurred that could lessen wildlife use of the permitted enhancement projects included 4 ponds with the wrong size or shape and dredge spoils not being spread properly. Potential erosion and/or receiving water impacts could result from these findings: a site with tar in the fill, 1 site missing a retention basin and 1 missing riprap around an outfall structure.

HOW MANY "AFTER THE FACT" PERMITS WERE NOTED DURING THE SURVEY?

Of the all permits that were reviewed and field checked during the survey, 7 were noted to have been after the fact. Four of those were granted, 2 were denied and 1 was withdrawn after its issuance was contested by WDNR.

WHAT ADDITIONAL OBSERVATIONS OR COMMENTS DID THE SURVEY STAFF MAKE?

Lack of information on project site location was the greatest problem the survey staff had conducting the survey. Each surveyor noted that at least once, mostly relating to federal nationwide permits. Other useful comments included:

1. Permits didn't have enough information about when seeding/mulching should occur;

2. All permits should include erosion/sediment control conditions;

3. Surveillance is even more difficult in areas with high numbers of wetlands and projects;

4. Better coordination between wetland regulatory agencies is needed to make the programs effective;

5. Impounding a sedge meadow is not a good mitigation option because species diversity and other unique functions can be lost;

6. Because WDNR permits have the most specific conditions, it can appear that they are the most difficult to meet and have the least percent compliance;

7. A major loss of wetlands occurs when a federal permit is issued for a new road and is followed by many small residential fills that are allowed without a permit;

8. Potential major erosion problems occurred at a WDNR fish enhancement project - WDNR should set a good example.

9. Better communication is needed between agencies and the applicant, because in one case a WDNR permit was applied for and granted on time, but the county permit was after the fact.

WHAT ARE (SOME OF) THE CONCLUSIONS?

1. Slightly over half (56%) of the issued permits met all their conditions, with the county having the highest percent compliance (72%), followed by the corps (57%), then WDNR (45%).

2. A large number of non-compliance problems could be corrected by doing the seeding & mulching and other erosion control practices as soon as possible after construction is finished. The permits in all 3 levels of government should include specific requirements and time for erosion control practices.

3. The lower percent compliance of the WDNR permits may be due to the fact that more specific conditions are included in the permits and that the nationwide permit conditions are very general.

4. Better permit records need to be kept at all 3 levels of government, including accessible information on numbers of permits, specific site locations and if the site is in a wetlands The current level of information makes sites very difficult, and at times impossible, to find. Better computer records are needed at the county level.

5. Better cross reference of permit numbers from other agency permits is needed, because many cases occurred where a corresponding permit should have been issued, but was not found in the 1988 permits.

6. Better surveillance is needed at the federal and state level to assure that additional activities that are not included in the permits are not conducted.

7. Changes are needed in the regulations and/or application of the regulations that currently allow the cumulative loss of wetlands to small residential fills following the issuance of a new road fill.

8. Mitigation, if used at all should maximize, not minimize, wetland species and function diversity.

9. After the fact permits should not be granted any more leniently then those applied for at the correct time and they should not be withdrawn or denied without requiring and enforcing restoration.

10. The author questions the issuance of 1 permit to build 178 acres of cranberry beds in a wetland and an after the fact permit that was withdrawn, without restoration, after the issuance of it was contested.

STUDYING WETLAND PROTECTION PROGRAMS IN WISCONSIN

APPENDIX 7

ADVISORY COMMITTEE MEMBERSHIP

PART OF A STUDY FUNDED BY THE EPA AND WDNR

Citizen Advisory Committee

Ms. Catherine Owen - Co-Chair
Wisconsin Wetland Association

Dr. Jim Zimmerman
Wisconsin Wetland Association

Mr. Bob Tevik - Interim Director
League of Municipalities

Mr. Rich DeVriend
WCCA

Mr. William Peterburs, Jr.
Wisconsin Wildlife Federation

Senator Chvala
c/o Curt Pawlisch

Mr. Gerald Timm
Wisconsin Farm Bureau Federation

Mr. Bob Radtke
Private Contractor

Mr. Erik Jonjak
Cranberry Growers Association

Mr. Chuck Strozewski
Cranberry Growers Association

Representative Tom Seery
c/o Katie McGrath

Ms. Judy Pratt
Great Lakes Indian Fish and Wildlife Commission

Mr. Ken Kailing
Private Wetland Consultant

Mr. Randy Krenn
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Ms. Marcia Traska
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