Permits for Voluntary Wetland Restoration:

A Handbook

November 2013

Association of State Wetland Managers

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I. Introduction

The restoration of wetlands is a priority for many agencies, organizations, and individuals. In the context of a commonly cited national policy – ***no net loss of wetlands in the short term and the net gain of wetlands in the long term***[1] - voluntary wetland restoration is integral to the net gain of wetland functions and values.

Under the Clean Water Act (CWA) this component of the national wetland goal is considered "*voluntary*", in contrast to compensatory mitigation and other regulatory requirements associated with CWA §404 and parallel state permits (which are directed primarily at the "no net loss" component of the overall goal). The importance of voluntary restoration activities is reflected in the multiple wetland restoration programs established and funded through conservation organizations and local, state, and federal agencies, and by the participation of tens of thousands of private landowners. Habitat restoration carried out by private landowners and their partners contributes to national goals, even where no specific legal mandate exists. Voluntary wetland restoration efforts far exceed mandatory restoration projects and are key to achievement of long term gains in wetlands. Millions of public and private dollars are spent annually on projects to regain the societal benefits derived by restoring altered wetlands.

Voluntary restoration has broad potential to improve fish and wildlife habitat, buffer and protect adjacent waters, improve water quality, provide protection from natural hazards such as flooding and storm surge, establish green infrastructure for water management, and offer recreational opportunities, among other benefits. There is increasing attention being given to wetland restoration associated with adaptation to impending climate change. Whether restoration projects are large or small, funded by public or private funds, and carried out by large agencies or individual property owners, there are overall positive benefits to society from restoring wetlands and their ecological services.

Although voluntary restoration actions vary widely, they have in common that many, if not most, require some level of authorization under local, state or tribal and federal wetland protection regulations. Wetland regulation is not intended to be a roadblock, but rather is important in order to avoid unintended consequences, to ensure coordination with other land and water management efforts, and to promote thorough planning. Most information needed for regulatory review will already have been considered during the restoration planning process. For example,

[1] A goal of "no net loss" of wetlands was articulated by the National Wetlands Policy Forum in 1987, and adopted by President George H.W. Bush in 1989. Since then this policy has been reiterated in the 1998 Clean Water Action Plan developed by President Bill Clinton, in the National Wetland Mitigation Action Plan developed under President George Bush, and in numerous other state and federal policy documents.

- Restoration activities may result in alteration of existing wetland areas through excavation, construction of berms or other structures, or changes in hydrology or plant communities. Regulatory agencies and restoration practitioners have the responsibility to ensure that such modifications have a net positive benefit.

- Alteration of hydrologic conditions can impact upstream, downstream, and adjacent biological communities and property owners, through both surface and groundwater connections. These impacts are assessed during the planning and permitting processes, with input from appropriate landowners and agencies.

- The enhancement of one aspect of a wetland community may have negative consequences for other functions. For example, the introduction of fish into an isolated pool by expanding connections to an existing lake or stream may limit the potential for reproduction of amphibians in the pool. A thorough planning process followed by a permit review provides for the evaluation of such ecosystem functions tradeoffs.

- The construction activities associated with restoration and enhancement projects are a potential source of invasive species, which may be transferred on heavy equipment, or simply become established on disturbed sites, especially those that are not immediately revegetated.

Wetland managers -- whether conducting regulatory oversight, implementing restoration projects, or managing blocks of wetland on public or private lands -- are united in a common goal of maintaining and improving a key natural resource that provides tremendous benefits to the American people. While recognizing that these subsets of managers each have distinct roles and responsibilities, it is the common goal that brings us together to work cooperatively and efficiently.

Effective regulatory agencies acknowledge that many wetland restoration and management actions are planned and carried out by professional wetland managers in experienced agencies and organizations, who have taken such factors into account. For this reason, many voluntary restoration permits are now processed through simplified and expedited permit programs in state and federal agencies. This handbook is intended to explain permit requirements and options for organizations that are faced with meeting these requirements[2]. Simultaneously, it is

[2] While this document focuses on permits, there are several environmental regulations that require federal or state agencies to analyze environmental impacts, impacts on endangered species, etc. onservation organizations that receive grant funding from a federal or state agency should ask for, and

our goal to encourage regulatory staff to understand and consider the unique aspects of wetland restoration projects when reviewing individual permit applications. Potential means of expediting processing based on the experience of other state and federal programs are presented.

This handbook has been prepared by the Association of State Wetland Managers with significant input from both wetland regulators and wetland restoration practitioners. Our goal is to assist those seeking regulatory approval in understanding the dredge and fill permit process, and to share the experience of regulatory agencies that have developed measures to streamline the process in an effective and positive way. We also seek to encourage understanding among regulatory agencies of the manner in which restoration practitioners undertake wetland restoration – based on the best available science, and tied to international, national, state, and regional wetland plans assembled by diverse partners. Of course, our ultimate goal is to encourage and support the voluntary restoration of wetland resources.

Finally, given the national scope of this document we recognize that regulations other than those discussed in this handbook may apply to specific restoration projects in specific locations. While we have attempted to touch on the need for coordination with a range of agencies, it is beyond the scope of this handbook to fully address local zoning requirements, state and local provisions regarding water use, special areas or habitats, coastal zone provisions, endangered species protection and so on. We encourage project sponsors to work with state and local agencies that can help them to identify and address potential concerns.

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expect to receive, terms and conditions on their funding based on environmental reviews and consultations. It is outside the scope of this document to include all such regulations.

II. Basic Definitions: What is voluntary wetland restoration?

This handbook broadly addresses those activities that are undertaken by individuals, organizations and agencies on a voluntary basis to restore, enhance, or improve wetlands to support a wide range of ecological functions. Project goals associated with voluntary restoration may include habitat management, flood and storm water management, recreation, water quality improvement and similar objectives. Most often these goals are associated with local, state, regional, national and/or international wetland or fish and wildlife plans.

By contrast, wetlands are commonly restored to provide compensatory mitigation (replacement) of wetlands and wetland functions as a condition of a permit for actions that result in the loss of wetlands (e.g. construction of buildings, roads etc.). This handbook does not address wetland compensatory mitigation that is mandatory under a permit process. Compensatory mitigation must be consistent with legally defined standards and specific permit conditions, and thus is subject to a different course of action than voluntary restoration.

While voluntary wetland restoration is not always subject to state and federal wetland permit requirements, it is quite common for the construction activities associated with restoration projects to trigger the need for a permit. As discussed in this handbook, the physical alteration of existing wetlands, streams, or other waters typically requires state, tribal, and/or federal review, even if the restoration goal is a positive one for resource management.

Conservation agencies and organizations may use the terms wetland ***restoration, creation or establishment, enhancement, and maintenance***, and wetland conservation programs may include elements of all of these actions. There are many valid definitions for these terms. For reasons of clarity in tracking wetland losses and gains, a federal interagency committee[3] adopted consistent definitions, which are adopted as follows for use in this document.

> ***Wetland Restoration***: the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to former or degraded wetland.
>
> Restoration practices are sometimes more specifically defined to include:
>
> - ***Re-establishment***, the rebuilding of a former wetland; and
> - ***Rehabilitation***, repairing the functions of a degraded wetland.

[3] Federal interagency definitions of wetland restoration: http://water.epa.gov/type/wetlands/restore/defs.cfm#Fed

Wetland Establishment (Creation): the manipulation of physical, chemical, or biological characteristics of a site to develop a wetland that did not previously exist.

Wetland Enhancement: the manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site that heighten, intensify, or improve specific function(s) or for a purpose such as water quality improvement, flood water retention or wildlife habitat. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland function, but does not result in a gain in wetland acres.

Wetland Maintenance: the removal of a threat to or preventing decline of, wetland conditions by an action in or near a wetland. Based on the comment received during preparation of this handbook, we would clarify that wetland maintenance can refer to the repair or replacement of structures that are already in place, such as dikes or berms, water control structures, or habitat structures. It can also refer to regular modification of hydrology (that is, raising or lowering water levels to achieve management goals), replanting of vegetation, or removal of unwanted vegetation.

While trying to avoid excessive "legalese", this handbook will also use the following regulatory terms, which are defined in a general way here:

An ***individual permit*** is the written authorization that is required under federal or state law for a particular restoration project. The project may be sponsored by a property owner, or by a state, federal, local, or private agency or organization.

A ***general permit*** refers to a type of written authorization that streamlines the regulatory process for all projects that meet pre-defined criteria. Projects that have no more than minor impacts, and that follow standard best management practices, may qualify for a quicker and easier general permit process that entails less agency review. Some state programs may use terms such as *general authorizations,* or *minor permits* to refer to similar expedited processes.

A state or tribal ***certification*** is a process through which a state or tribe can review permit actions taken by a federal agency, and may object to or add additional state requirements to a permit. Examples include a state "water quality" certification[4] to determine whether the federally authorized project meets state standards, and a Coastal Zone Consistency

[4] Pursuant Section 401 of the federal Clean Water Act, and often termed a "401 Certification"

certification[5] if the action is in a marine or Great Lakes coastal area, to determine whether the project is consistent with the state Coastal Management Plan.

A ***memorandum of agreement (MOA)*** or ***memorandum of understanding (MOU)*** is a formal written and signed agreement between two or more agencies or organizations, agreeing to coordinate in defined ways. It may agree on basic programmatic goals, and typically outlines the roles and responsibilities of each agency, and how they will assist one another. An MOA may also include mechanisms for dispute resolution, and for modification of the agreement.

[5] Pursuant to the federal Coastal Zone Management Act.

III. Voluntary Wetland Restoration and Permitting: The Issue

Wetland and wildlife/conservation managers typically share common goals, and should ideally work as partners. However, this may require a concerted effort when those responsible for wetland restoration programs work in different agencies than regulatory staff, at different levels of government, or in non-governmental organizations. Some state and tribal agencies have responsibility for regulatory programs and also related water programs that support restoration – such as nonpoint source management, TMDL[6], or floodplain management programs. It is less common for fish and wildlife programs to directly share permitting responsibility, and almost all agencies face the need to routinely coordinate across state and federal lines. While all of these groups share goals, they may have very *divergent responsibilities* – and these responsibilities may lead to divisiveness rather than teamwork.

State, tribal, federal, and non-governmental managers have all stressed the importance of cooperation, communication, trust, and understanding in meeting both restoration goals and regulatory obligations. Lack of understanding and interagency tension is evident where, for example, a conservation group feels that a regulatory agency discriminates against waterfowl habitat, or where a regulatory agency is frustrated by resistance to or impatience with the permit process. Virtually all agencies and organizations have limited staff and budgets, and resist taking time away from primary responsibilities.

This handbook is designed to share suggestions from a range of stakeholders gathered during workgroup conference calls, information gleaned from case studies of states that have developed cooperative approaches, and other information sources. There are no "right or wrong" sides to these issues; our goal is improved coordination and teamwork.

[6] Total Maximum Daily Load – a process to evaluate and control total pollutant loading on a watershed scale

IV. Working Together: Think like a regulator

Dredge and fill regulatory programs have been developed to protect aquatic resources while acknowledging that many activities that impact waters and wetlands are unavoidable, are necessary, and are in the public interest. Requiring submittal of a permit application is not an expression of opposition to restoration activities. Managers in regulatory programs have a mandate to evaluate impacts on public resources from a very broad perspective. The following suggestions from experienced wetland managers are an attempt to help conservation groups and other restoration practitioners understand regulatory requirements, "think like a regulator", and ultimately facilitate restoration goals. Most involve being aware of the responsibilities of regulatory staff, and how they are trained to meet them.

Regulatory agencies care about improving and expanding wetland habitat, but also have specific legal responsibilities. Restoration project sponsors should understand that the Clean Water Act and many other state and local laws *prohibit* staff from issuing a permit unless it is demonstrated that negative impacts are avoided, and that there are no significant adverse impacts on wetlands and other waters and their uses. While this can often be achieved relatively simply based on the purpose and description of the project, regulatory staff have a legal obligation to document that these requirements are met. To do so, they need information from the permit applicant to support their decision. Section V provides a more detailed discussion of state and federal permit requirements.

While it is not the role of regulatory agencies to define the mission or goals of restoration partners, they are responsible for determining whether the purpose of a specific project can be met in a way that avoids and minimizes adverse impacts. Their responsibility includes evaluating the proposed alteration of existing wetlands and other waters to determine whether the project is in the public interest – whether it will serve the common good. This requires a consideration of benefits as well as negative impacts, direct and indirect impacts, cumulative impacts and future impacts.

Many regulatory agencies have the responsibility of coordinating with sister agencies having related responsibilities – e.g. those responsible for protection of state or federally listed species, state or local floodplain managers, and state and tribal historic preservation programs. Regulatory agencies often do a lot of work "behind the scenes" to ensure that related requirements are addressed. In essence, this provides important legal protection for project sponsors or landowners, who might otherwise be liable for unintended consequences. Regulatory agencies are also increasingly faced with limited staff and other resources; they are obligated to meet legal responsibilities, often limiting the opportunity for site visits or other

activities that would build understanding of individual projects. Early communications and providing applications well before planned activities can benefit everyone.

Steps to Facilitate the Approval of a Wetland Restoration Project

Experienced restoration practitioners know how to work and communicate with regulatory staff to complete permit reviews as efficiently as possible. By providing information that addresses regulatory criteria, and communicating freely with permit reviewers to answer questions that arise, any delay is minimized. ***Participants in discussions sponsored by ASWM – including staff from state and federal regulatory and conservation agencies and non-governmental organizations – made the following suggestions***.

- **Clearly define project goals.**
  The staff who review permit applications are required to make a decision in the context of the stated project purpose – the more clearly this is defined, the better for both parties.

  For example, "habitat improvement" is somewhat vague. "Improved habitat for waterfowl including mallards, black ducks, and other species" is somewhat better. However, a clear, strong goal statement might read something like, "To replace previously existing waterfowl habitat that has been drained for agriculture by removing drainage and restoring hydrology. The resulting emergent marsh will provide an additional X acres of nesting and feeding habitat for mallards, black ducks, and others." This statement defines what is being done and for what purpose, while leaving room to address any agency concerns that might arise.[7]

  Permit reviewers are trained to question whether there is a less damaging alternative to the project. Project sponsors should therefore not be surprised if reviewers ask about other options that were considered, and applications should describe design standards or other best management practices used to minimize impacts. ***Remember, the wording of your definition of project purpose is important.***

- **Provide all information that is required by the permit application or pre-application notice.**
  An incomplete application will delay permit review, and require more of the applicant's

[7] Note that some agencies may consider the definition of a project purpose to be *too* specific if it is limited to a detailed design with rigid specifications, and with no room for consideration of alternative approaches. Partners that have actively discussed a proposed project prior to submittal of a permit application are less likely to face this issue.

time and more of the permit agency's time. Delays may be caused by simple errors – such as failing to sign the application or to include required fees, but most often result from incomplete project information.

The specific information requested will depend on agency regulations, and the type of permit requested. It is generally helpful to think in terms of clearly describing the specific actions being proposed (excavation, fill, dike construction, changes in the land contours, seeding or planting, etc.) and when the work is scheduled. Be clear. For example, in a restoration project, structures such as dikes or drain tiles may be removed – therefore make sure that plans specify whether a labeled structure is being *placed* or *removed.* Simple, thoughtful steps such as this can go a long way to avoid misunderstandings. Consider having someone not familiar with your project review your materials before submittal to the regulatory agency, and see if they understand what you are proposing.

If there is uncertainty regarding information requested in the application, contact the permit review staff for clarification. Many agencies provide a checklist for completed applications. If one is available, be sure to use it. Regulatory agencies that need more information should generally request that information all at once, rather than on multiple occasions.

- **Clearly define the impacts of the project, including any potential adverse impacts.** Identify the specific location of the proposed project on a map and/or site plan. Identify existing wetlands and other waters, as well as useful landmarks.

  Clearly define the size of the impact – length and width, square feet, depth of excavation, change in water elevation, etc. as requested by the application materials. What is the size of an area to be flooded or excavated? Does it include existing wetland – and if so how much? What will be the net impact? Be sure to include temporary as well as permanent impacts, and clearly describe construction techniques, access areas, and equipment.

  The permit application should be direct and honest about identification of adverse impacts, and ways that such impacts have been avoided or minimized. Some examples:

- If the project will raise water levels on the site, how have adjacent property owners been protected from flooding? If drain tiles are blocked or levees are moved, will drainage of adjacent farmland be maintained?

- If a stream is being blocked or diverted, what will be the impact on fish? Are there coldwater species present? What will be the impact of the impoundment on stream temperatures?

- If the habitat is highly degraded as compared to natural conditions (e.g. farmed), describe past degradation. How will current habitat be altered? Is the site currently dominated by native vegetation, or invasive plants?

- If excavation is proposed, where will the excavated material be placed?

- Are there other locations where the project could be done with fewer impacts? For water quality projects, this may involve evaluating other sites or practices elsewhere in the watershed.

- Are there other designs or construction methods that would have fewer impacts?

- Have provisions been made for long-term maintenance and remediation, if necessary?

Organizations that are experienced in restoration planning have likely considered these sorts of factors during project design. Simply documenting issues that *were* considered and addressed will assist regulatory staff in fully understanding the project, and will help to build trust in the professional ability of the sponsoring organization.

Remember that regulatory organizations must document the basis for their decisions. Knowing and trusting conservation agencies and organizations is helpful, but information may still be requested that is sufficient to document the basis for a permitting decision in order to answer any future legal challenges from third parties.

- **Anticipate potential problems, and if possible solve them prior to applying for a permit.** For example, the state wildlife agency may be able to identify habitat for rare species in the project area. Landowners may be able to get a sign off in advance regarding potential adverse impacts, or to incorporate mitigating actions into their plans. Other needed approvals – e.g. from local government agencies – should be identified and obtained in advance to the extent possible. If the applicant is aware that an unresolved issue remains, notification of the regulatory agency and explanation of steps taken to date may help to jump start the process of resolving it. Cultural resource considerations should not be overlooked, and might need early consideration.

- **Communicate early with regulatory agencies if possible.**
  At a minimum, take advantage of fact sheets or other information that is posted on-line. If possible, meet with regulatory staff in advance of submitting a permit or grant application. For larger projects, it may be worthwhile to schedule a presentation at one of the quarterly meetings with reviewing agencies that are held by many Corps offices. Invite regulatory staff to project planning meetings on site to obtain input and answer questions. All of these actions will minimize the time needed to review the project later.

- **Be prepared for an analysis of alternatives.**
  Dredge and fill permit regulations typically require staff to determine whether there is an alternative to each proposed project that minimized adverse impacts, or that can avoid negative impacts entirely. In order to respond to this requirement, project sponsors should be prepared to discuss how adverse impacts have been avoided, and what other options were considered. For example, the project may have been designed to avoid alteration of high quality existing wetlands, or scheduled to avoid construction during the nesting or breeding season for animals of concern.

- **Be open to suggestions or comments.**
  Approach approval of required permit applications in a positive manner. Keep an open mind about means to minimize impacts. If changes are not practical, explain why.

- **Build support and understanding with those who may be impacted – neighbors, local government, and other conservation groups.**
  Most landowners are nervous about changes made on neighboring land, and upset by surprises. Letting them know about project plans and answering questions in advance may help to avoid misunderstandings or objections. Seriously consider the suggestions of other interest groups if they are workable. Remember that waters and associated fish and wildlife are public resources.

- **Do not try to avoid permitting requirements.**
  Agencies that are familiar with permit requirements should help direct project sponsors to appropriate state and federal agencies. Any assumption that this is "not their responsibility" may result in a regulatory violation by the landowner, with associated legal liability. If permits are needed, it is for a reason. Seek to understand requirements, and to work in partnership with regulatory staff.

- **Get the help of experts as needed.**
  Work with those who are experienced in wetland restoration, including hydrologists, biologists, engineers, and others. Experts may be employed by consulting firms, non-profit

conservation organizations, or government agencies – they all can help to design and obtain approval for a good project. Identify consulting experts in permit applications.

- **Consider a broader agreement with regulatory agencies.**
  Organizations that routinely need permits for voluntary restoration may seek measures to simplify the process through general permits, MOA's, workgroups, and similar procedures outlined in this document. Be willing to take time to review draft permit procedures, and make reasonable suggestions about how to improve them.

V. Special Considerations for Wetland Restoration: Goals, Missions and Mandates

Numerous successful wetland restoration programs are supported by wetland regulatory and conservation organizations that routinely work as partners.
Regulatory agencies often benefit from an improved understand of the goals and particular needs of conservation agencies in order to facilitate the restoration and enhancement of wetland resources that we all find desirable.

Wetland restoration, enhancement, and management projects are designed to result in a net increase in wetland acreage and benefits, as compared to development projects that destroy or degrade wetlands. Supportive regulatory agencies should acknowledge this distinction when reviewing restoration projects, while still maintaining regulatory requirements. Streamlining of voluntary restoration permitting will allow regulatory agencies to spend more time on development projects that result in the greatest losses.

Wetlands are created, restored, and enhanced to provide a wide range of ecosystem services. Much of the pioneering work in wetland restoration was carried out by conservation groups to improve or replace habitat for waterfowl and related marsh dwelling plants and animals, often where wetlands had been drained for farming and other use. A significant percentage of the wetland restoration achieved nationally to date has been the result of this cooperative work by landowners, non-profit conservation organizations, and partners in state and federal government agencies.

As our knowledge of aquatic systems has expanded, so have wetland management approaches. Today, while the work of waterfowl managers continues, restoration activities are also carried out to improve other habitat types, to maintain and increase biodiversity where possible, to provide habitat for declining or listed species, to protect water quality for all users, to serve public safety by providing flood storage and storm surge protection and, and increasingly to address the need for climate change adaptation.

We are, for purposes of this handbook, identifying these restoration activities as *voluntary* -- in contrast to legally required permit conditions and mitigation. However, this term is in no way intended to minimize the importance of wetland restoration work – landowners and other groups are to be applauded for voluntary wetland restoration that provides benefits not only to themselves but to their communities. Wetland restoration is a priority for multiple agencies and organizations, and restoration projects frequently arise from legal mandates directed at federal, state, and local government - to protect species and habitat, to improve water quality through nonpoint source management, to control flooding, and so on.

To a great extent, many restoration activities are directly related to the overall goals of the Clean Water Act – protecting the physical, chemical, and biological integrity of waters of the United States - in addition to other important laws and regulations. They can also be part of a larger targeted watershed goal set forth by state and tribal agencies, or local watershed groups.

Restoration partnerships: A Montana Example

The Montana Department of Environmental Quality, Montana Wetlands Legacy Partnership, Greater Gallatin Watershed Council, and Big Hole Watershed Committee recently completed a project on integrating wetlands into Watershed Restoration Plans (WRP). The goal of the project was to help the watershed groups develop specific wetland goals and objectives, and identify and prioritize specific project locations that will address known water quality impairments of 303d listed waterbodies. Aside from accomplishing these goals several additional outcomes were realized:

- It should not be necessary to have to do a specific project to integrate wetlands into WRPs. The watershed groups demonstrated that integrating wetlands, when treated as one of a list of aquatic resources to consider, does not increase time or costs of developing a watershed restoration plan.
- Through the process we took to develop this project, other important gaps in aquatic resource protection were identified, for example lack of local regulations and public education, and incorporated to develop a more comprehensive watershed restoration plan.
- A 61 acre site within Bozeman City limits was identified as important for maintaining and improving local water quality. This site was purchased by the Trust for Public Land and the wetlands and riparian areas will be restored with the goal of improving water quality.

A Restoration Perspective: Considerations in Permitting of Restoration Projects

Balancing regulatory mandates with the potential public benefits of wetland restoration and management activities requires the commitment of both conservation and regulatory agencies. Ideally, conservation and regulatory agencies will work *together* to assure broad resource protection through compliance with appropriate regulations, and, simultaneously, will work together to facilitate the important and widely beneficial work of restoring wetlands with minimal added cost or delay.

The missions and mandates of numerous agencies and organizations align directly with the wetland goals of the Federal Clean Water Act, as well as other federal, state, tribal, and local wetland, fish, and wildlife laws and programs. A few examples include:

- State/tribal/federal Nonpoint Source Management (§319 of the CWA), including low impact development and use of green infrastructure
- EPA's Urban Watershed Initiative
- Wetland conservation through the USFWS North American Wetlands Conservation Act
- Farm Bill Conservation Programs, including the Wetland Reserve Program and Conservation Reserve Program, administered by the Natural Resources Conservation Service and their many state/tribal and private partners
- Landowner wetland restoration through the U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program
- Coastal wetland restoration carried out in cooperation with NOAA's Coastal Zone Program, and multiple state, federal, local, and non-governmental partners
- NOAA's habitat conservation mandate under the Magnuson-Stevens Act
- EPA Climate Ready estuary program
- The National Flood Insurance Program, and many state floodplain management programs
- Large watershed programs, such as the Chesapeake Bay Program, and the Great Lakes Restoration Initiative.
- Restoration of many thousands of acres of wetlands in Louisiana under the federal Coastal Wetlands Planning, Protection and Restoration Act.
- Wetland preservation, restoration and management by multiple national and local land conservancies

Participants in discussions sponsored by ASWM contributed the following recommendations regarding regulatory consideration and review of voluntary restoration projects.

- **Open communication, and building of trust among restoration partners, is essential.**
  This message was stressed over all other recommendations. Ongoing communication and mutual understanding of the roles and responsibilities of both the regulatory agencies and restoration project sponsors will go far in avoiding or addressing all other issues.

- **Regulatory agencies should be accepting of reasonable, practical, and beneficial project goals**.
  Voluntary wetland restoration actions will often further the broader goals of multiple wetland management partners, particularly in areas such as habitat and resource management, watershed planning, and climate change adaptation. At the same time, voluntary projects will reflect the mission of project sponsors, current site conditions, and the desires of private landowners, as well as available funding. Wetland restoration projects should be reviewed in the context of the project origin, and the associated restoration plan, rather than the personal opinion of the reviewer.

  Given that wetland restoration projects cannot meet all purposes, they need to be evaluated in the project context. Projects that are providing a net benefit, with minimal adverse impacts, should be supported as a positive action by regulatory agencies. The development of a plan for the site or watershed with the contribution of partnering agencies will assist in the support of the individual action.

- **Acknowledge the limitations of project sites.**
  Restoration and enhancement projects are often carried out in highly degraded environments, and often on a landscape with fragmented ownership. The wetland may be completely gone, and hydrology may be been altered. This should be taken into consideration in evaluating alternatives; if the project will result in a net increase in wetland restoration area and/or ecological services, review of alternatives may be limited, provided there are no other considerations. Submittal of adequate background information, including available monitoring data, to regulatory and review agencies will allow reviewers to acknowledge the degraded condition of wetlands that may be impacted by restoration and enhancement activities.

  It may not be realistic to achieve historic or pre-settlement wetland conditions in a highly degraded environment, or in areas where past hydrology has been greatly modified. Proposed restoration or enhancement efforts may still offer a net gain in function and condition.

Project goals may also reflect uncertainty regarding future site conditions and hydrology in light of climate change considerations. For example, anticipated sea level rise may alter water chemistry and hydrology in coastal areas. Regulatory agencies should rely on the expertise of their sister conservation agencies in these difficult areas.

- **Distinguish between voluntary restoration and compensatory mitigation.**
  While voluntary restoration and enhancement projects are evaluated under all pertinent regulatory criteria, provisions for compensatory mitigation are not applicable. That is, the specific acreage and functional goals of the project are defined by the project sponsor – not by the need to replace a permitted loss.

  It is not generally the role of regulatory review to redefine habitat or water quality goals for a project, although the review may consider consistency with established state, tribal, or local plans for watersheds and aquatic resources. This is especially true for restoration of degraded or historically altered habitat, such as former wetland that has been used for farming and now has limited functionality. Any restoration that is acceptable to the landowner may provide some benefit at such sites, provided that it does not interfere with broader management programs.

  Where a state, tribal, or local entity has defined specific wetland protection, restoration, or watershed management goals, conservation partners may benefit from publication of materials that explain regulatory concerns regarding wetland habitat values. Again, communication among wetland partners is paramount.
  While monitoring and evaluation of restoration efforts are important, the "success" of a project and monitoring criteria to evaluate that success should be defined by the project sponsor, based on programmatic needs. Typically these are not obligatory permitting criteria.

- **Encourage creativity and innovation, and provide for adaptive management, with an appropriate degree of flexibility in interpretation of regulations.**
  Generally speaking, wetland regulations are based on the concept of "stopping bad things from happening," and positive restoration actions were not in the forefront in the formulation of regulatory requirements. Some conservation agencies sense that review of restoration projects is more intense or detailed than for other projects, or that restoration projects are held to a higher standard. In order to facilitate restoration, regulatory agencies are encouraged to focus on the big picture and ecological benefits.
  Lines of communication should be kept open, and the regulator should feel that they can call upon restoration practitioners to work through details. Effective ecological restoration

may require adaptive management to meet the needs of a particular site and project, or to address uncertainty regarding the effectiveness of restoration measures. Flexibility is also needed to adapt to anticipated changes in climatic condition.

- **Take advantage of special knowledge and experience of both restoration practitioners and regulatory staff.**
  The staff of agencies and organizations that sponsor wetland restoration projects are typically professionals who have training and expertise in wetland restoration and who often have significant on-the-ground experience in carrying out restoration projects. This expertise will contribute significantly to restoration design, implementation, and ultimate success.

  The presence of at least one regulatory staff person who is experienced in wetland restoration procedures and who can focus on these projects on a statewide basis can be very helpful in improving interagency cooperation. It is essential that communications are open and that new processes are presented with as much background information as possible.

- **Regulatory agencies should facilitate timely permit review, recognizing funding constraints.**
  Many restoration projects are funded at least in part with grants or cost share from public agencies, non-governmental organizations, or foundations. Often grant funds cannot be released until permits are in hand, which affects the ability of conservation organizations to provide detailed technical design work. Once funds are released projects must be completed by a set deadline. A relatively minor regulatory delay may mean the loss of a construction or planting season for a restoration project, or the inability to complete a project within the grant period.

In order to avoid this quandary, site and conceptual plans for restoration should be discussed in advance by project sponsors and regulatory/review agencies. The efforts of all parties may be needed to develop a workable design/permitting/ construction schedule. Partners should take advantage of newer communication tools – webinars, collaboration sites, Google map tours, and so on to facilitate reviews.

- **Minimize the cost of regulatory review to the extent possible.**
  Restoration projects are often supported by very limited public and private funds, which may be in the form of fixed amount grants. Increased costs associated with regulation may limit the ultimate resource benefits. Conservation groups feel that permit processes take time and money away from the important work of wetland restoration. Similarly, funding for permit review by regulatory agencies is limited, and review of restoration projects is thought to take time away from the regulation of actions having a potentially significant adverse impact to wetlands.

  In a worst case scenario, costs and delays in the permit process may reduce the scope of the project, or preclude the restoration project altogether. Regulators should be aware of these potential negative impacts.

- **Value public support.**
  Wetland restoration projects may be widely publicized, especially where they are funded by grants or other public donations. The general public may not understand permitting requirements for such projects, and reported permitting difficulties can result in negative publicity for state and federal agencies. A fair and transparent partnership among regulatory agencies and sponsors of restoration projects is desirable -- both to assure the public that wetland regulations are applied equitably for all applicants, and that regulators are supportive of wetland conservation.

- **Regulatory agencies should seek to streamline/coordinate review by multiple interested agencies. Wetland restoration projects are often subject to multiple levels of review and coordination.**
  The review of sister regulatory agencies should be acknowledged, and their findings may be utilized to avoid duplication and delay. Concurrent review should also be used to the extent possible.

  Regulatory agencies should be open to new or innovative procedures and partnerships to advance wetland restoration permitting. Development of an improved process to coordinate review of common restoration or management procedures may be time well spent, especially if it expedites an increase in wetland acreage and values. This handbook includes examples of a number of options. Section VIII provides additional suggestions regarding regulatory streamlining.

VI. An Overview of Wetland Regulatory Processes and Agency Responsibilities

Wetlands are protected by a number of interlinked federal, state or tribal, and local regulations. Most individuals and organizations that are involved in wetland restoration fully understand the need to protect wetlands from physical alteration associated with commercial or residential development and other human activities, given the resulting loss of wetland resources and their associated functions and benefits.

Some of the same practitioners may feel that it is inappropriate to apply the same regulatory standards to projects intended to increase the extent of wetland areas or to improve wetland functions. In reality, wetland laws and regulations require an assessment of certain types of activities that *impact* wetlands -- for example placement of fill in a wetland. The potential impact itself is what triggers the regulatory review, and not whether the net impact will be adverse or beneficial. Regulatory staff are then charged with assessing those impacts and determining if it is in the public interest to issues permits for proposed activities.

Many if not most wetland restoration projects have some impact on existing aquatic resources, even though in many instances those resources are degraded. Even where the goal is to provide a net benefit, projects may involve excavation to deepen wetlands, disposal of excavated material (potentially in a wetland), construction of dikes or other water control structures, diversion of the flow from existing waterways, or other construction activities in streams and wetlands. Given the complexity of water resource management and the vulnerability of wetland resources, it is generally accepted that some level of regulatory oversight is appropriate.

Although regulatory agencies acknowledge and support the potential for a net gain in wetland resources, they also recognize that these activities can have adverse impacts on other wetland functions – for example, increased use of an area to filter stormwater could have an adverse impact on existing habitat. It is the responsibility of regulatory staff to take a broad look at a restoration, creation, or enhancement project and to ensure that it avoids unnecessary negative impacts, results in a net gain, and is not likely to result in unintended consequences, such interference with floodplain functions. In many ways, wetland permits are analogous to local building permits; the purpose is not to prevent construction activities, but to make certain that the project is based on a sound design that will produce positive results, without burdening the public or neighboring property owners. Because public resources – water, fish and wildlife resources – are involved, coordination with agencies responsible for oversight of these resources is provided.

Regulatory agencies must also understand that time and money are involved in obtaining construction permits. Ideally, regulatory costs should not be more than is necessary to ensure

coordination with other water and resource management programs, and to ensure consistency with various regulatory requirements. Staff of many regulatory programs and restoration programs have worked together to develop ways to expedite permit processing for restoration projects as discussed in this handbook.

What is a regulated wetland?

The term *regulated wetland* (or *jurisdictional wetland)* is normally used to describe a wetland area that is protected under federal, state, tribal, and/or local laws or regulations[8]. Wetlands that are in some way connected to lakes, streams, or oceans are generally regulated under the federal Clean Water Act, which applies nationwide. State, tribal and local regulations vary considerably. Not all states regulate wetlands, while others have jurisdiction over areas that are not protected by federal law. In some states, virtually all wetlands are regulated. It is wise to check with appropriate regulatory agencies prior to planning in order to avoid misunderstandings and unintended violation of permit requirements.

What is a regulated activity?

Not all wetland restoration *activities* are regulated. This is particularly true where wetlands are being created in uplands, or are being restored at the location of a former wetland that has been totally drained and used for some other purpose. However, if the project involves diversion of water from a stream or other surface water, permit requirements will likely be triggered. Generally speaking, if a proposed restoration, creation, or enhancement involves the physical alteration of an existing wetland or associated lake, stream, or coastal areas, then a federal and/or state permit is required. Even if the wetland is degraded but still present, it is still regulated. Examples of activities that are typically regulated include excavation of a deeper pond within an existing wetland, sidecasting of excavated spoil material into a wetland, construction of dikes, berms or water control structures in a stream or wetland, restoring hydrology, or alteration of a stream channel.

Some activities may be specifically exempted from permit requirements under state and federal laws. For example, certain maintenance activities are exempt from federal and some state permit requirements. However, maintenance exemptions are typically limited to repair or replacement (not expansion) of current structures, or routine management activities. Restoration and/or land management staff should discuss management needs with state and local regulatory agencies to identify permit requirements for specific actions such as weed control (herbicide use is now subject to NPDES permit requirements, as well as to some state and local laws); water level manipulations; and use of fire for vegetation management. Different geographic areas may have specific concerns regarding these types of land use activities.

[8] Federal Clean Water Act regulations define "waters of the United States" at 40 CFR 230.3(s). Additional information regarding federal jurisdiction over wetlands may be found on EPA web pages here.

Conservation planners should also be aware that regulations primarily designed to protect other types of resources may also apply to a wetland restoration project. These can include state and federal fisheries regulations (e.g. for alteration of a cold water stream); laws protecting threatened and endangered species habitat; and regulations that control alteration of a floodplain, among others. Staff of a state environmental regulatory agency should be able to help identify and coordinate with these other programs as needed.

Given the complexity of laws that protect natural resources, and regional differences in laws and regulations, it is always advisable to investigate permit requirements through both federal agencies and state, tribal or local sources when planning a wetland restoration project.

Clean Water Act Section 404: The primary federal regulatory authority

Wetlands and other waters are protected under Section 404 of the federal Clean Water Act[9] on a national basis. This legal provision – normally referred to simply as "Section 404" - is administered jointly by two federal agencies. The U.S. Army Corps of Engineers (Corps) is responsible for the 404 permitting program in most states, and permit applications are submitted to the Corps District that is responsible for a particular geographic area. Links to District Corps of Engineers offices are available at http://w3.saj.usace.army.mil/permits/HQAvatar/index.htm.

The U.S. Environmental Protection Agency (USEPA) is responsible for development of program regulations and policies in cooperation with the Corps, and reviews public notices issued by the Corps. States may also assume authority to operate a Section 404 program with EPA approval and oversight; to date only two states (Michigan and New Jersey) have assumed administration of the 404 Program. Note that the provisions of Section 404 apply not only to wetlands, but to other waters. Section 404 requirements are also linked to other components of the Clean Water Act (such as water quality standards), and to related laws including the federal Rivers and Harbors Act, Endangered Species Act, the Coastal Zone Management Act, the National Historic Preservation Act, and the National Environmental Policy Act among others. In some states in particular, evaluation of historic and archaeological concerns may add significantly to the time and cost associated with permitting.

State water quality certification. All states and tribes have a role in decision making under Section 404, regardless of other state regulations. The Clean Water Act gives states and tribes the

[9] For information regarding Section 404, including legal references, see USEPA web pages at http://water.epa.gov/lawsregs/guidance/wetlands/sec404.cfm.

right to review federal permit actions, and to determine whether the action is consistent with state water quality standards and other relevant authorities. This state review of federal permitting decisions is made under Section 401 of the Clean Water Act, and is typically referred to as *401 Water Quality Certification*. A state may object to issuance of a federal permit, or may specify conditions under which it may be issued. If a state or tribe objects, the Corps may issue a form of conditional approval, and leave it to the permit applicant to obtain 401 certification from the state. Note that for General Permits (as discussed below), the state or tribe[10] provides 401 review and certification at the time that the umbrella General Permit categories and criteria are approved - every 5th year for Corps General Permits.

State coastal zone certification. Any project that falls within the designated Coastal Zone Management Area of a coastal state (including the Great Lakes) is subject to state review for consistency with the state approved coastal zone program. The Corps will typically coordinate review with the appropriate state agency. In these states, coordination with the National Marine Fisheries Service may also be required.

State, tribal, and local regulations

Many states and tribes have enacted additional independent laws, codes, or regulations that protect wetlands, and which are often somewhat parallel to the Clean Water Act. However, various state laws differ in terms of the geographic extent of waters that are regulated, activities that are regulated and permitting processes. Moreover, states and local units of government have fundamental land use authorities that may result in a different or somewhat broader perspective than the Clean Water Act. Local units of government in particular may control land uses though zoning or similar measures that can impact wetlands as well as shoreline areas. Therefore, individuals or organizations that are not already familiar with state and local aspects of wetland regulation should contact state and local agencies regarding permitting requirements prior to initiating restoration activities.

While state and local laws may be similar in many ways to national laws, they can provide additional protection for issues of more local concern – for species or habitats that are locally rare, or for local water management issues. Even for issues that are national in scope – e.g. climate change – there may be a special local focus. For example, restoration of coastal wetlands may be intended in part to minimize the effects of increased severe weather, or in a manner to adapt to anticipated sea level rise.

[10] Some tribes have been authorized for treatment as a state for purposes of §401 certification. For other tribes, the EPA provides 401 certification on tribal water for federal permits.

Tribal regulations may also be used to protect wetlands, and are often integrated with other tribal concerns. Wetland regulations may specifically address cultural issues, such as protection of wild rice beds. [11]

Criteria for permit decisions

Federal and state permitting decisions are based on specific legal criteria that recognize the interrelationship of waters, the biological communities found in those waters, watersheds, and human uses of those waters. The federal Clean Water Act is essential to protect waters that cross state or tribal boundaries, and to ensure interstate protection for migratory animals. In this way, the interests of neighboring or downstream states are protected.

In determining whether to authorize the alteration of wetlands or other waters, regulatory specialists must consider both direct impacts to the stream or wetland, indirect impacts (such as increased erosion or pollution of other waters), the impact on biological communities, and the public interest in the project – including impacts on human use. The cumulative impacts of the project and other activities in the area are also considered. Adverse impacts must be avoided and minimized to the extent possible.

Legal criteria for Section 404 permitting decisions are detailed in federal regulations known as the Section 404(b)(1) Guidelines. All decisions made by the Corps, EPA input, and decisions by states authorized to administer the 404 program, must be consistent with the criteria that are defined by these guidelines[12].

Projects that need additional attention during regulatory review

It is difficult to make a general statement about restoration activities that may or may not be permitted. Presumably, well-designed and planned wetland restoration projects will be readily approved. However, some projects with potentially significant benefits may still require additional time for review simply due to their scale and complexity. Agencies may have developed special procedures to facilitate review of high priority – but complex – restoration projects.

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[11] Examples: Wetland regulation of Fond Du Lac Tribe (WI):
http://www.fdlrez.com/newnr/environ/wetlandordinance.htm
Wetland regulation of Blackfeet Tribe (MT):
http://www.blackfeetenvironmental.com/ordinance90/blackfeet_aquatic_lands_protection_ordinance90a.pdf

[12] The 404(b)(1)Guidelines are posted on EPA and Corps regulatory websites. See
http://www.wetlands.com/epa/epa230pb.ht

Additional public review and expert comment may be needed to fully evaluate activities that also involve other government agencies, or off-site impacts. Based on the experience of conservation groups and regulatory agencies, the following types of projects may raise "red flags" – they may result in predictable questions or require additional review time. For these projects, sponsors should plan sufficient time for review, and anticipate appropriate questions.

- *Actions that involve alteration of a significant acreage of wetland, or impacts to rare wetland types*. What is "significant" depends to a great extent on the scope of wetland resources in a particular region. For example, there is no fixed area limit for consideration of a restoration project under the Corps of Engineers Nationwide General Permit 27. Agencies and organizations that routinely partner in wetland restoration activities likely have a good sense of the scale of a "major" project at the local level.

- *Projects that alter other waters, including a lake or stream*. For example, impoundment of a stream may degrade quality for coldwater fish, or block upstream and downstream migration of fish. Alteration of headwater areas may have an impact (positive or negative) on downstream base flow. *Dam construction or removal*. Dam removal is often desirable to restore natural stream flow, but the method of removal is important to avoid increases in sediment loads downstream above the load typically carried by the river/stream. Recent research on dam removal has shown significantly different responses to dam removal in gravel bedded streams in the Pacific Northwest as opposed to sand bedded streams in the Midwest. Both regulators and project proponents should be aware of the effects analysis appropriate for the region. During dam removal, some wetlands on the border of an impoundment may be lost, while others are restored. For these reasons and others, additional review is often necessary.

Site of recent dam removal in Michigan showing channel and riparian habitat restoration

- *Projects with a potential to impact state or federally listed threatened or endangered species.* If listed species occur in the vicinity of the project, coordination with state and or federal fisheries and wildlife agencies is needed to identify and avoid possible impacts.

- *Projects falling within the state Coastal Zone boundary.* Coastal wetland restoration is often of high priority, but may be hampered by high land costs and competition from land developers. Agencies may develop special procedures to facilitate review by the multiple agencies with coastal responsibilities.

- *Activities that would reduce flood storage capacity or interfere with flood flows.* Wetlands can provide very significant flood storage, but if the design relies on dikes or berms that reduce the size or location of the floodplain there could be unintended adverse effects, such as increased flood risk on adjacent property – and additional review may be needed.

- *Enhancement projects impacting existing habitat.* Projects that propose alteration of current wetland habitat type or wetland function are often the most difficult to review under state and federal wetland regulations. Alteration of existing wetlands may result in establishment of wetland ecological types that are atypical for a given region or location, and can modify existing food webs and ecosystem functions. Requests for additional information regarding the "ecological lift" and resource benefits of the project may be anticipated.

- *Activities that may impact a historic or archaeological site.* Such sites may not always be well known or obvious to ecologists, but archaeological resources are extensive in many locations. Basic screening for impacts should be available through the State Historic Preservation Office.

- *Projects that may impact navigation*.

- *Projects that involve the resources of more than one state or tribe.* In these instances, interstate and/or tribal coordination will be essential.

- *Projects that impact international treaties or compacts.* One example is projects that impact river basin agreements or compacts

<u>Types of permits - individual permits and public notice review</u>

An *individual* permit is the term that is typically used for a specific project that requires comprehensive review by the responsible agency, typically including a public notice and

opportunity for public comment. The review is specific to the individual project, and permit conditions that may be developed are also aimed at this individual project.

If a restoration project will require an individual permit, the project sponsor should plan for a more extended permit application review. Working with agencies in advance (see pre-application planning below) may expedite this process.

Restoration and enhancement projects may require an individual permit and a full public review if,

- They involve significant alteration of water resources and surrounding landscape (e.g. the large dam removal, or alternatively creation of a large impoundment);
- They impact particularly sensitive species or ecosystems (e.g. alteration of a fen or bog);
- They are proposed by individuals who lack experience and expertise, without the assistance of agencies and organizations that routinely do this work; or,
- They are controversial.

This level of review does not imply that a project is undesirable or unacceptable. On the contrary, some large, complex projects are strongly supported by multiple agencies. However, for a variety of reasons, coordinated evaluation may be appropriate.

A *public notice* is issued for two general reasons: (a) to gather expert advice and input from appropriate federal, state, and local agencies and experts (for example, fish and game departments, local land use officials, water quality specialists), and (b) to provide those who may be impacted by the project an opportunity to comment (e.g. neighboring property owners, local government agencies, other users of the wetland or waters). Responses to a public notice must be received within a defined time frame, typically in the range of 20 to 60 days for many state agencies. Some state and federal agencies issue a "joint public notice" – which simply means that they gather needed comments simultaneously for state and federal review.

A public notice will typically include a short description of the project, its location, purpose and proposed impacts, and identification of the project sponsor. The notice will also give a deadline for comments, and identify the legal criteria that will be used to make a decision. Public notices may be mailed or e-mailed to interested individuals and agencies, posted in an on-line system, or in some instances published in a local newspaper. In addition to the public notice, a public hearing may be held for a project that has potentially significant impacts or significant interest

(e.g. a dam removal). Hearings are costly and time-consuming for the agency, and are typically limited to major or controversial projects.

It is the responsibility of the Corps or other permitting agency to evaluate comments that are received, and to weigh inconsistent comments. The process is not like a vote. Agencies will not give much weight to comments that object to a proposed project without a valid reason (e.g. simply because the commenter "doesn't like it"). Agencies may suggest that a permit applicant respond to opposing comments, but the overall decision making responsibility rests with the permitting agency. The permit applicant is well-advised to respond to comments received in a constructive manner. Public input may help to improve the project, may suggest relatively minor changes that will make neighbors or others more supportive, or may simply provide an opportunity to clear up misunderstandings.

While the review and comment generated by a public notice process can improve permit decisions, it can also be time consuming. Simply preparing and issuing the notice takes time, and permits cannot be issued until the public notice period is closed, and all comments are evaluated. The agency responsible for a specific project review should be able to provide a general estimate of the maximum time required.

Note that a state may provide comments regarding Section 401 water quality certification, or coastal zone certification (as described above) in response to a public notice. However, states are allowed more time for review under these interagency coordination processes, which may extend beyond the public comment period. Early coordination with state water quality and coastal agencies is thus urged, even where the Army Corps of Engineers has primary permitting responsibility.

Finally, some Corps district offices have developed "Letters of Permission" (LOPs) that may be used to authorize small projects without a public notice. Provisions for LOPs are defined at the district level.

Types of permits - General permits

Regulatory agencies have developed alternative processes to authorize projects that do not demand the same level of public scrutiny given to an individual permit. The Clean Water Act allows federal agencies to provide more limited review for general categories of activities that are not expected to have significant adverse impacts, based on criteria defined by the agencies. Unlike an individual permit, authorization under a *general permit* (GP) is issued based on consistency with these pre-set criteria.

State, tribal, and local regulatory agencies often follow a similar process, although terminology may vary; terms such as "general authorization" "expedited permit," or "minor permit" may be used. General permits are normally developed in cooperation with multiple stakeholders, including fish and wildlife agencies and conservation organizations.

Activities that are authorized under general permits may be,

- Small projects, with a very minimal adverse impact on existing resources;

- Projects that are carried out routinely following well-defined standards, such as replacement of road culverts following an agreed upon design; or

- Projects that have already received significant expert input from identified programs, or already received authorization from a parallel agency. For example, the Corps of Engineers may authorize projects that have been reviewed and approved by a state wetland program through a general permit process.

It is important to understand that these projects are not *exempt* from permitting requirements. There is still a potential for adverse impacts if approved criteria - including best management practices for design and construction - are not followed. The project sponsor has responsibility for ensuring compliance with the conditions of the general permit. However, solicitation of outside comments through a public notice is considered unnecessary, and the overall permitting process is generally much quicker.

A variety of methods may be used to gain authorization under a general permit. The applicant may be required to submit a permit application form (in some instances, a simplified form), or to notify the appropriate agency of the proposed activity in advance. Some processes are a hybrid – the Army Corps of Engineers requires what is termed a "pre-construction notification" (PCN) for many types of general permits; this notice requires inclusion of much of the same type of information as an individual permit application.

Some authorizing agencies allow "*self-certification*" of a project – that is, the applicant is responsible for determining whether criteria in the GP are met. A notice to the agency may or may not be required. While this approach has the advantage of speed and simplicity, the project sponsor should take it seriously, with awareness of his or her liability of these criteria are violated, potentially resulting in an enforcement action.

Corps of Engineers – Nationwide General Permits

The Army Corps Nationwide Permits (NWPs) are the most widely recognized general permits for wetland impacts, and are used to authorize thousands of actions nationally each year under about 50 categories of activities[13]. The actual NWP document is long and detailed, but in spite of the apparent complexity, the process can be reasonably fast. A Nationwide permit includes three primary components:

1. ***Criteria for each specific type of project.*** Many wetland restoration projects are authorized under NWP 27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities (see Appendix B for full language). The listed criteria define eligible permit applicants, types of projects authorized, limits on the work involved, and other conditions.

2. ***General conditions.*** The general conditions apply to all authorizations under applicable NWPs. For example, most restoration activities under NWP 27 require a pre-construction notification (PCN) – a form of authorization described in General Condition 31. Other General Conditions may also apply.

   In addition, the Corps often develops district and state regional conditions to address specific conditions within a state. These are usually more restrictive than national conditions.

3. ***State and tribal certifications.*** NWPs are reissued every 5 years, and at that time the states and tribes are given an opportunity to review and comment. They may object to a nationwide category that may violate state or tribal water quality standards, or that is inconsistent with state Coastal Zone Management plans. The states/tribes may also add conditions or criteria that are needed to achieve certification; EPA may provide §401 certification for waters within tribal boundaries. Generally, each Corps district will issue a public notice listing specific Section 401 and Coastal Zone certifications and conditions for each state or tribe under its jurisdiction.

Sponsors of wetland restoration projects are advised to review NWP 27, along with any other applicable nationwide permits, including general permit conditions and any state specific certification conditions. This will help the project sponsors to document how a proposed project is consistent with the NWP, thereby expediting permitting.

[13] Information regarding the Army Corps of Engineers Nationwide Permits is available on their national website at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/NationwidePermits.aspx

Army Corps of Engineers Regional and Programmatic General Permits. In addition to Nationwide Permits, Corps Districts may issue:

- *Regional General Permits* (RGP's) – which, as the name implies, are similar to NWP's but applicable only to a specific geographic region. They are developed specifically by a Corps District office to meet needs and conditions that exist in a group of states, or often for a particular state.

- *(State) Programmatic General Permits (PGP's or SPGP's).* For more advanced state programs, the Corps may issues a general permit that relies primarily on the review and approval of specified project categories by the **state** wetland permitting **program**. This type of permit is discussed in more detail in Section VII.

Corps District offices may be open to development of an RGP or and PGP to help coordinate a locally common type of restoration project in cooperation with appropriate state, tribal, or local agencies.

Making the most of a general permit process

Although they are intended to simplify and expedite permitting, general permits can still be confusing for those unfamiliar with the process. Those who are new to restoration permitting may find the following suggestions helpful, in order to take maximum advantage of a state or federal general permit.

- Become familiar with the NWP categories that may apply to your project, in particular NWP 27 (Appendix B). Understand the limits and conditions, including Corps General Conditions, and state certifications.

- Become familiar with RGP's that may apply to your project, and be very familiar with the limits and conditions of these permits.

- Become familiar with local and state requirements for the types of projects you proposed. These requirements may be specific to your project, or may be more general and result in limitations on how and when you might do the work.

- Make sure you understand what agency will take the lead in reviewing and issuing a dredge and fill permit in your state – the Corps, or a state agency. Search on-line for specific fact sheets or instructions from your state or Corps District office.

- Learn about the application or notification process for general permits. Obtain copies of needed forms, and find out how much time is needed for review.

- Consider a pre-application meeting with the regulatory agencies. Explain your project, and ask for their suggestions to expedite the permit process. They may be able to point you to other general permit categories that you can use. They may also be able to point out needed modifications prior to final design. Note that some agencies charge a fee for formal pre-application meetings.

- Make sure that your application documents show how your project is consistent with the general permit criteria and conditions. Even if a simplified form is used, explain the project goal, the impacts on existing waters or wetlands, and the final condition that you anticipate (that is, the net improvement in habitat, wetland condition, etc.).

- Describe the current condition of the project site, and explain site history as needed. For example, if the site has been formerly drained and farmed, but has been fallow for a number of years and now has more natural looking vegetation, document when farming occurred and how the project will restore more "natural" hydrology.

- Carefully review the final authorization before beginning work, including all special conditions.

- Communicate freely with regulatory staff, and build trusting relationships. Staff who know you and respect your work will be more confident in making decisions to authorize projects.

VII. Regulatory Approaches to Facilitate Restoration

Over the years, regulatory agencies have developed a number of permit processes in order to effectively evaluate an enormous array of regulated activities. While the basic legal requirements remain the same (starting with avoidance and minimization of unacceptable environmental impacts), the process may be relatively simple or very time consuming. For example, authorization of a driveway across a small wetland swale is relatively simple, and does not require the regulatory scrutiny associated with permitting of an interstate highway. Likewise, removal of a large dam may raise more concerns than restoration of a small wetland in previously drained farmland. Often the most difficult part of developing an expedited regulatory program is definition of limits on projects that can be authorized under the process.

The following approaches have been tried and found effective by state, tribal and federal agencies in response to local needs and agency resources. Many states incorporate aspects of several of these regulatory approaches.

Interagency Workgroups

A number of states have established interagency wetland workgroups to coordinate and facilitate restoration as well as other types of wetland permitting. Members may include state and tribal and federal regulatory and conservation agencies, non-governmental organizations that are actively involved in restoration, and other entities important to facilitation of restoration in a given geographic region.

Some workgroups are formally established through regulations or written agreements. Others are more informal. Meetings may be face-to-face or use remote communications such as conference calls or webinars. In either case, the relationships that develop among group members are important to group success. Those familiar with regulatory processes stress the need for ongoing communication.

The methods used to facilitate restoration are specific to each group, but include the following examples:

- Frequent and regularly scheduled meetings/conference calls to review upcoming projects or pending applications. This direct approach provides an opportunity for regulatory agencies to raise any questions, and for restoration partners to explain the project directly.

- In person or remote meetings to review policy, discuss concerns, or develop procedures to facilitate restoration. Workgroups may support development of other methods, such as

general permits, and may provide direct feedback on the effectiveness of more formal regulatory procedures.

- Coordination of on-site review of pending restoration projects. Workgroups may help to facilitate the review and issuance of authorizations for high priority wetland restoration projects in potentially sensitive environments – e.g. coastal habitat.

- Development or implementation of an informal process for resolution of any disagreements.

- Support for interagency training, and clarification of both regulatory requirements and restoration needs.

Regardless of the specific tasks undertaken by an interagency workgroup, regular and open communications will help to build trust and understanding among stakeholders. When new regulations, emergency situations, or an especially complex situation arise, these individuals can help to coordinate with their interest groups and provide well informed feedback.

Formal Interagency Agreements (MOU's MOA's)

A Memorandum of Agreement (MOA) or a Memorandum of Understanding (MOU) is a legal agreement between two or more agencies or organizations seeking to achieve a common goal. There is no limit to the topics that may be covered by such an agreement as long as all parties concur, but an MOA cannot be used to replace or overrule a state or federal law or regulation. However, an MOA may be very useful in:

- Defining common goals and priorities;

- Outlining special review procedures or considerations for wetland restoration projects;

- Setting up dispute resolution procedures;

- Agreeing to cooperate in development of staff training, mapping, public education and outreach, or similar efforts; and,

- Coordination of technical needs, such as monitoring and reporting on restoration success, or wetland mapping and assessment.

An MOA or MOU may help to clarify expectations, set up a formal way of sharing agency staff knowledge and resources, and, again, will help to improve communication, trust, and understanding among agencies.

Pre-application meetings

A number of states, and the Army Corps, have established a formal process for pre-application meetings with permit applicants. For example, in Michigan, regulations define a timeframe for these meetings, and also outline what information may be requested or conveyed. In Michigan, a final decision on a project may not be made at a pre-application meeting, but applicants may be advised of potential issues or concerns, current wetland boundaries may be confirmed, and the state may also provide assistance in completing permit applications. Note that a mandated quick turn-around for pre-application meetings is helpful in fulfilling a commitment to expedited permit processing. In general, states have found that pre-applications meetings are very effective in ensuring complete and well-understood permit applications and in avoiding regulatory "surprises."

General Permits and General Authorizations

As outlined in Section VI, general permits may be developed to expedite permit processing for projects that have no more than minor adverse impacts. These types of authorizations are based on definition of categories of qualifying activities. Projects that meet criteria may be approved under the general permit or general authorization.

Experience has provided a number of keys to successful use of a general permit procedure. These include the following.

- Genuine commitment to a simplified process for qualifying projects. In some instances, public notice and review has been reduced, but the application still requires the same amount of detail and detailed review as an individual permit. Limited potential for adverse impacts should be linked to a less complex review.

- Increased predictability. Those who sponsor restoration projects should generally be able to readily determine whether a project will qualify for a general permit based on established criteria. Projects that qualify for expedited processing should, in most cases, be permittable.

- Limited use of site-specific conditions. Some agencies have developed general authorizations with no additional conditions for a specific site or project – that is, the decision is a simple yes/no, with all criteria previously defined. Other agencies have processes that allow limited project specific criteria. However, it is the experience of at

least some agencies that extensive use of site specific conditions can negate the benefits of a general permit process.

- Linking of eligibility to expertise. Some general permits – including the Corps of Engineers Nationwide Permit 27 – Wetland Restoration – limit eligibility to projects sponsored by specific federal agencies that have expertise in wetland restoration. State and tribal general permits may limit eligibility in a similar manner. Acknowledged expertise in the siting and design, construction, and evaluation of restoration projects is acknowledged in this manner. Restoration work proposed by less experienced organizations may be equally beneficial, but may require greater regulatory review and oversight.

- Sufficient well-trained regulatory and conservation staff. Some state agency programs have noted problems that occur with frequent regulatory staff turnovers. This situation may be unavoidable, but a well-planned interagency training program may help to reduce the impact. Establishment of a statewide specialist position to assist with all wetland restoration projects may also be useful.

- Joint training of regulatory and conservation staff to support the general permit/general authorization process. It is important that all of those who use the general permit process fully understand procedures and terminology. For example, state agencies have found that some terms mean different things to different user groups (e.g. "ditch" versus "drain" versus "man-made stream"). Joint training minimizes misunderstandings, and leads to a more efficient process.

- Ongoing communication and "adaptive management". Adaptive management can apply to programs as well as on the ground resources. In the experience of many states, the first iteration of a general permit program can be improved by evaluation and adjustment over time. This requires a commitment of all parties to an honest monitoring and evaluation process -- which will also yield benefits in building long term public support for restoration. Open and ongoing communication is also essential to this process. To be effective, a review needs to include all parties, applicants, regulators, reviewers, citizens, etc.

Use of General Permits and General Authorizations in Oregon

The Oregon Department of State Lands has made a significant effort over a number of years to facilitate authorization of wetland restoration. Expediting permitting is challenging given the state's diverse landscape, the existence of numerous high quality waters that support threatened fish and other resources, extensive coastal area, and similar factors.

Currently, the Oregon Department of State Lands provides for review of a number of wetland restoration activities under the *General Authorization for Wetland Ecosystem Restoration.* This process is limited to activities that:

- Will have minimal effect;
- Are consistent with watershed plans;
- Will not introduce non-native organisms;
- Will not convert wetland to upland, or convert one wetland ecosystem to another aquatic use.

The effectiveness of the General Authorization is still being assessed during the first three years of use. State staff recognize that there is still a tension between facilitating restoration, and ability to track restoration outcomes. The General Authorization requires submittal of a significant amount of information to track the location of restoration and details on defined ecosystem types.

Agencies that sponsor restoration express concern with the amount of information required for approval, and question its necessity. Some restoration groups would prefer more on the ground technical assistance, which the DSL is not funded to provide. Turnaround time under the current process does not appear to be an issue.

Oregon has also provided for issuance of a General Permit for restoration actions to specific organizations. For example, a General Permit has been issued to address restoration activities by the Bureau of Land Management and the U.S. Forest Service on public lands. This approach may be useful in further reducing duplication between agency activities.

State Programmatic General Permits and 404 Program Assumption

In some states, the Corps has developed a state *Programmatic General Permit (PGP or SPGP)* that essentially gives the state wetland agency the lead in review of defined types of permit

applications[14]. A PGP is based on the availability of regulatory expertise and on state wetland program requirements that are considered sufficient to review applications that would otherwise qualify for an Army Corps nationwide or regional general permit. Under a PGP, the Corps typically accepts the findings of the state with limited or no additional technical review. Note that a PGP issued to a state or tribe must be reauthorized after a limited term of not more than 5 years. When the PGP is reissued, criteria for eligible projects or other conditions may be modified, based on state program performance and current needs.

404 Program Assumption. When a state or tribe is authorized to administer the Section 404 program, they are also authorized to issue their own general permits. GP's issued by the state must be consistent with certain requirements established for state administered programs.[15] Generally, projects authorized under a GP may have not more than minor individual and cumulative impacts, and will be consistent with the types of project authorized in this manner by the Army Corps. However, states administering the Section 404 Program have the ability to craft general permits for restoration activities and agencies that meet the particular needs of their state.

[14] The Corps outlined procedures for issuance of an SPGP in a proposed regulatory guidance letter, published in the *Federal Register* on April 26, 1996. See: http://water.epa.gov/polwaste/nps/outreach/upload/2003_7_1_wetlands_spgp.pdf

[15] See EPA's Section 404 State Program Regulations at 40CFR Part 233 for detail. http://water.epa.gov/lawsregs/rulesregs/cwa/upload/2004_10_21_wetlands_40cfrPart233.pdf

The Evolution of a Cooperative Wetland Restoration Effort in Wisconsin

- The Wisconsin DNR and various restoration stakeholders organized an informal interagency workgroup in the 1990s, to coordinate and track wetland restoration efforts.
- In 1999, these groups entered into a formal MOU in response to concerns over alteration of existing wetlands and review of potential impacts to listed species.
- The workgroup assisted in the development of an expedited "short form" permit process under the state Administrative Code. Although restoration projects were facilitated under this process, site specific conditions were still added to permits.
- Beginning in 2006, the workgroup began a process of encouraging greater streamlining with federal agencies. As a result, state legislation passed in 2010 allowed the state to issue new General Permit. This improved process:
    - Reduced turnaround from 30 days to 15 days, with automatic issuance in 15 days if the DNR provides no specific response
    - Eliminated site specific/project specific permit conditions
    - Applies only to federal partners, but recognizes the expertise of those partners
    - Is simpler to modify to address future needs.
- This interagency MOU was updated and released in 2011. Under this modified agreement:
    - Each agency is responsible for the projects that it sponsors, and agrees to correct any problems
    - For federally supported projects, the federal agency MUST be the permit applicant, and takes responsibility for the projects.
- This "short form" authorization remains in place for non-governmental sponsored projects such as small wildlife ponds.
- Interagency training, as well as continued coordination through the workgroup, are keys to the success of Wisconsin's program.

VIII. Looking to the Future: Voluntary Restoration Permitting and Climate Change

Across the nation, changing weather patterns demand new approaches to protection from severe storms and flooding, or from drier than normal conditions and drought. Wetlands play a key role in linking habitat corridors, providing flood storage and groundwater recharge, in protecting surface waters from increased runoff, and in buffering communities from storm surge. In addition, the response to sea level rise and the landward movement of wetland fringes represents a major challenge.

The priority placed on wetland restoration will increase as the nation adapts to changing climatic conditions. Wetland managers, conservation groups, landowners, and regulatory agencies will all need to cooperate to address changing needs and goals effectively. Climate change may also change the basic perspective of those involved with wetland restoration planning, regulation, and implementation. For example:

- Wetland restoration has commonly been based on the concept of returning to historic ecological conditions. However, it may not be possible to plan for past climatic conditions – and resulting ecological wetland types – as the climate changes.

- Re-establishment of wetlands that will increase resilience to climate change – for example to provide increased floodwater storage in response to more intense storm events - may not result in the restoration of historic types.

- Uncertainty regarding future conditions will be a fundamental fact associated with climate change in the foreseeable future. As a result, permitted restoration activities may need to place increased emphasis on adaptive management. Restored wetlands should be designed with flexibility and multiple options for sustaining quality and hydrological, botanical, and biological conditions to offset the uncertainty in future climate conditions. Permit conditions will need to provide necessary flexibility.

The magnitude of climate change issues calls for sharing of resources and addressing multiple objectives to the maximum extent possible – providing for both habitat and water resource management. Experience with regulation has already taught us that divergent responsibilities for resource management can be divisive. Therefore, the agencies and organizations that share responsibility for wetland resource protection and management should be particularly attentive to communicating and defining shared goals, and working together to facilitate beneficial wetland restoration projects.

Section 404 and state dredge and fill regulations are often viewed as inflexible. In reality, there are multiple options available to facilitate wetland restoration in response to local and regional needs and priorities. As always, understanding, cooperation, and a shared commitment to both restoration and regulatory programs are the key to achieving success.

Appendix A:
Participants in Voluntary Restoration Workgroup and Handbook Reviewers

During 2012, the ASWM organized a workgroup to address concerns associated with permitting of voluntary restoration projects through a series of conference calls, followed by development of this handbook. Participation was open to all interested participants and representatives of agencies and organizations that typically sponsor wetland restoration efforts were specifically invited.

ASWM also met with stakeholders in Oregon and Wisconsin, both in person and through telephone calls, and with some other wetland managers who were not able to participate in conference calls. These individuals were also invited to review the handbook.

We appreciate the participation of the following individuals in one or more calls or meetings, and apologize if we failed to list anyone who was present on group calls. While we have tried to capture the broad range of topics and suggestions brought up during these discussions, the views expressed in this handbook represent a synthesis of information by ASWM and do not necessarily represent the views of the individuals or organizations listed below.

Collis Adams	New Hampshire Dept. of Environmental Services
Barbara Avers	Michigan Department of Natural Resources
Debra Baker	Kansas Water Office
Tom Biebighauser	USDA Forest Service
Ken Bierly	Oregon Watershed Enhancement Board
Patrick Britton	Ducks Unlimited
Anna Buckley	Oregon Department of State Lands
Eliodora Chamberlain	U.S. EPA Region 7
Jeanne Christie	Executive Director, ASWM
Denise Clearwater	Maryland Department of the Environment
Sandy Crystal	New Hampshire Department of Environmental Services
Rebecca Dils	U.S. Environmental Protection Agency, OWOW

Melanie Gange	NOAA Restoration Center
Bob Gilmore	Connecticut Dept. of Energy and Environmental Protection
Cherie Hagen	Wisconsin Department of Natural Resources
Robert Hansen	Texas Commission on Environmental Quality
Janine Harris	NOAA Office of Habitat Conservation
Amy Horstman	U.S. Fish and Wildlife Service
Jim Hudgins	U.S. Fish and Wildlife Service
Eric Hutchins	NOAA Restoration Center
Jarod Jebousek	U.S. Fish and Wildlife Service
Mitra Jha	U.S. Environmental Protection Agency, Region 8
Christy Johnson-Hughes	U.S. Fish and Wildlife Service
Steven Kahl	Shiawassee National Wildlife Refuge
Rebecca Kihslinger	Environmental Law Institute
Ted LaGrange	Nebraska Game and Parks Commission
Biobby Massey	Ducks Unlimited
Steven McIntosh	Missouri Department of Natural Resources
Carolyn Murphy	Rhode Island Department of Environmental Management
Curt Mykut	Ducks Unlimited
Toney Ott	U.S. Environmental Protection Agency, Region 8
Jade Phillips	Ducks Unlimited
Theresa Portante-Lyle	New England Interstate Water Pollution Control Commission
Myra Price	U.S. Environmental Protection Agency, OWOW
Mike Reed	City of Portland, OR
Christopher Reidy	USDA Natural Resources Conservation Service

Sue Reilly	Texas CEQ, Water quality Division
Ed Reiner	U.S. Environmental Protection Agency, Boston
Alison Rogerson	Delaware Dept. of Natural Resources & Env. Control
Shanny Sprang Gion	Northern Cheyenne Tribe, Environmental Protection Dept.
Gildo Tori	Ducks Unlimited
Yvonne Vallette	U.S. Environmental Protection Agency
Kathy Verble	Oregon Department of State Lands
Lori Warner-Dickason	Oregon Department of State Lands
Paula Webster	Confederated Salish and Kootenai Tribes
Robert Zbiciak	Michigan Department of Environmental Quality

Appendix B
Text of U.S. Army Corps of Engineers Nationwide Permit 27
As issued in the *Federal Register* on February 21, 2012.

27. Aquatic Habitat Restoration, Establishment, and Enhancement Activities.

Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.

To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to:

The removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms, as well as discharges of dredged or fill material to restore appropriate stream channel configurations after small water control structures, dikes, and berms, are removed; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels; the removal of existing drainage structures, such as drain tiles, and the filling, blocking, or reshaping of drainage ditches to restore wetland hydrology; the installation of structures or fills necessary to establish or re-establish wetland or stream hydrology; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; re-establishment of submerged aquatic vegetation in areas where those plant communities previously existed; re-establishment of tidal wetlands in tidal waters where those wetlands previously existed; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services. Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., stream to wetland or vice versa) or uplands. Changes in wetland plant communities that occur when wetland hydrology is more fully restored during wetland rehabilitation activities are not

considered a conversion to another aquatic habitat type. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Compensatory mitigation is not required for activities authorized by this NWP since these activities must result in net increases in aquatic resource functions and services.

Reversion. For enhancement, restoration, and establishment activities conducted:

(1) In accordance with the terms and conditions of a binding stream or wetland enhancement or restoration agreement, or a wetland establishment agreement, between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), U.S. Forest Service (USFS), or their designated state cooperating agencies;

(2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or

(3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the Office of Surface Mining Reclamation and Enforcement (OSMRE) or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these circumstances even if the discharge occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity the permittee or the appropriate Federal or state agency must notify the district engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The

requirement that the activity results in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion.

Reporting. For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of:

(1) The binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map;

(2) the NRCS or USDA Technical Service Provider documentation for the voluntary stream enhancement or restoration action or wetland restoration, enhancement, or establishment action; or

(3) the SMCRA permit issued by OSMRE or the applicable state agency. The report must also include information on baseline ecological conditions on the project site, such as a delineation of wetlands, streams, and/or other aquatic habitats. These documents must be submitted to the district engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing any activity (see general condition 31), except for the following activities:

(1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement between the landowner and the U.S. FWS, NRCS, FSA, NMFS, NOS, USFS or their designated state cooperating agencies;

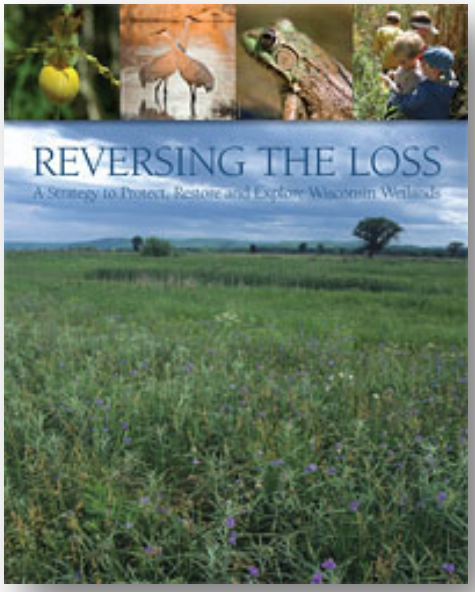
(2) Voluntary stream or wetland restoration or enhancement action, or wetland establishment action, documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or

(3) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSMRE or the applicable state agency. However, the permittee must submit a copy of the appropriate documentation to the district engineer to fulfill the reporting requirement. (Sections 10 and 404)

Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee projects. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

APPENDIX C.
VOLUNTARY WETLAND RESTORATION AND PERMITTING IN WISCONSIN: A CASE STUDY

Restoration of wetlands is one of the focal points of Wisconsin's well-established plan for wetland protection and management – *Reversing the Loss: A Strategy to Protect, Restore and Explore Wisconsin Wetlands.* Initially developed in 2000, this strategy provides a clear, interrelated, and measurable guide to wetland management program components within the state, based on well-defined and positive actions. The Wisconsin Department of Natural Resources (WNDR) led development of this strategy, and also routinely publishes reports of outcomes. For example, during the 2008-2010 period the WDNR and its partners restored about 2300 acres of wetland per year, and enhanced an additional 1200 acres.



A number of factors have contributed to the successful restoration of wetlands in Wisconsin. These include:

- Active involvement of multiple stakeholders in the definition of priorities and goals
- Increased public understanding and support based on publication of goals and proposed actions, as well as success
- Close coordination among government and academic programs, taking advantage of current research, and also outreach capabilities of Wisconsin Extension
- Integration of wetland restoration actions into the state's active regulatory program, including coordination with the federal 404 regulatory program
- Ongoing improvement of the program based on evolving needs, knowledge, and abilities.

"Sixteen conservation organizations and governmental agencies came together in 2008 to create a collective vision for Wisconsin wetlands.

Reversing the Loss – A Strategy to Protect, Restore and Explore Wisconsin Wetlands charts a course these Wisconsin Wetland Team members will follow to achieve that collective vision, and invites other groups and citizens who want to help protect and restore these valuable natural resources."

-WDNR Web Page
http://dnr.wi.gov/topic/wetlands/strategy.html

This case study will focus on the process used by the Wisconsin Department of Natural Resources to coordinate voluntary restoration with stakeholders, and on measures taken to improve the permitting process. The WNDR web pages provide links to many other partnering programs that actively contribute to state wetland restoration activities.

Background: Wisconsin's Wetland Regulatory Program

Wisconsin has a well-established wetland protection program, coordinating permit actions with the U.S. Army Corps of Engineers under a Regional General Permit (RGP) process. The state regulatory program was initially developed through the Clean Water Act 401 Water Quality Certification program. The state promulgated wetland water quality standards[16] that parallel the 404 Section (b)(1) guidelines, giving the state broad authority to review and comment on Corps of Engineers wetland permits. Over time, Wisconsin's regulatory code was expanded as the state program matured. As questions arose nationally regarding the scope of federal regulation, Wisconsin's legislature provided independent state authority to regulate isolated wetlands – areas not clearly protected by federal law.

The Corps of Engineers recognized the scope and maturity of the state regulatory program, and established a Regional General Permit[17] that allows the state to take the lead in most routine permitting actions. Thus, while the Corps continues to play a major role, the state has the ability to adjust regulatory requirements to facilitate voluntary wetland restoration actions. It should be noted that Wisconsin also has a long-established regulatory program for other waters, providing strong protection for lakes and streams under state law in addition to coordination with federal regulatory agencies.

[16] Citation for WI wetland water quality standards
[17] Citation for RGP

The Evolution of a Cooperative Wetland Restoration Effort in Wisconsin

The State of Wisconsin has a traditional conservation and stewardship ethic, backed by a long history of freshwater research through the University of Wisconsin and other state institutions. Voluntary wetland restoration and management activities have existed for some time.

The Wisconsin Wetlands Team. As national interest in wetland restoration increased in the 1980s and 90s, with increased national funding through programs including the National Wetland Conservation Act and USDA Farm Bill conservation title, there was an increased need for coordination among agencies and organizations. The Wisconsin Wetland Team was informally organized by the WDNR and various restoration stakeholders in the 1990's to share information and to provide for coordinated tracking of restoration success. In 1999, members of the Wisconsin Wetland Team entered into a formal interagency Memorandum of Agreement (MOU) in response to concerns over alteration of existing wetlands and review of potential impacts to listed species.

The Wetland Team has expanded over time, and has played an integral role in the evolution of regulatory and tracking procedures for Wisconsin's wetland program. That role continues today.

Regulatory streamlining.
In order to facilitate voluntary restoration permitting, the Wisconsin Wetland Team assisted in the development of an expedited **"short form"** permit process under the state Administrative Code – see NR353 here. As implied by the title, this process made use of a simplified permit application form, facilitating the application and review process. Although defined restoration projects were expedited by the short form process, site specific conditions were still added to many permits. Wetland Team members continued to seek an even more simplified means of addressing regulatory requirements.

Wisconsin Wetland Team

Ducks Unlimited
Natural Resources Foundation of Wisconsin
Southeastern Wisconsin Regional Planning Commission
University of Wisconsin – Extension
U.S. Department of the Army Corps of Engineers
U.S. Environmental Protection Agency — supporting organization of team
U.S. Fish & Wildlife Service
USDA Natural Resources Conservation Service
Wisconsin Coastal Management Program
Wisconsin Department of Agriculture, Trade & Consumer Protection
Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
Wisconsin Waterfowl Association
Wisconsin Wetlands Association
Wisconsin Wildlife Federation
Joy Zedler, Restoration Ecologist

Beginning in 2006, the team began a process to further streamlining restoration permitting, in cooperation with federal agencies. As a result, state legislation passed in 2010 allowed the state to issue new **General Permit** (click here). This was considered an improvement for many types of projects, although the "short form" authorization remains in place for non-governmental sponsored projects such as small wildlife ponds. The 2010 General Permit:

- Reduced turnaround from 30 days to 15 days, with automatic issuance in 15 days if the WDNR provides no specific response.

- Includes criteria to protect habitat, water quality, and other resource values that were developed in cooperation with partnering agencies.

- Eliminated site specific/project specific permit conditions for included activities (as opposed to "short form" application process).

- Applies only to federal agency partners, but recognizes the professional standing and expertise of those partners.

- Is based on an agreement internal to the DNR that both waterways and wildlife will follow the process.

- Is in effect for a 5 year period, and can be re-issued. It is simpler to modify to address future needs than authorizations defined by the state administrative code.

An individual permit is still required for more complex projects that do not meet criteria of the GP, or qualify for the short form. These include actions that would potentially have an impact on coldwater streams; would impact rare or sensitive wetland types such as sedge meadows or fens; removal of large dams; and significant alteration of natural wetlands that support over 50% native/historic vegetation.

An updated MOU among the WDNR, the USFWS, the NRCS, and the Corps of Engineers was also released in 2011. Under this interagency agreement:

- Each agency is responsible for the projects that it sponsors, and agrees to correct any problems

- For federally supported projects, the federal agency MUST be the permit applicant, and takes responsibility for the projects.

- The Corps of Engineers was added to the MOU.

The updated MOU is thought to have improved understanding at all levels of the regulatory process. Interagency training, as well as continued coordination through the workgroup, are keys to the success of Wisconsin's program.

Lessons Learned

The Wisconsin Wetlands Team was formed over two decades ago, and has effectively evolved with the WDNR regulatory program, and with voluntary restoration needs and goals. Among the lessons learned are the following.

- **Joint training of stakeholders and agencies is essential**. Although the original Wetland Team had good intentions, problems arose because of lack of understanding and miscommunication.

  By contrast, about 150 WDNR and staff representing restoration partners were trained, *together*, in how to go through GP/IP process following issuance of the GP in 2010. Frank and open discussions led to improved understanding and cooperation.

- **Partners need to develop a shared vocabulary**. Team members became aware that regulatory and non-regulatory staff often used different terms, or interpreted terms in different ways. For example, a "ditch plug" as used in the administrative code meant something different to regulatory staff than it did to many on the ground wetland managers. Likewise, terminology must be fully defined. If regulations refer to a "large dam" – then a "large" dam needs to be defined for consistent usage and understanding.

  The Wisconsin Wetland Team eventually adopted NRCS technical standards as terms of reference with working with USFWS and NRCS programs.

- **Documentation is important.** Although the early, informal Wetland Team worked well, misunderstanding did arise, in part based on lack of joint understanding of roles and responsibilities. A formalized MOU, and related regulatory documentation, has addressed this problem.

- **It is helpful to teach conservation partners to "think like a regulator."** Over time, partners better understand the permit process, resulting in fewer delays and misunderstandings. Regulatory staff specifically encouraged partners to:

  - Clearly spell out the proposed project in the permit application.
  - Read and understand General Permit requirements and criteria.
  - Determine early in the process whether the proposed project meets GP criteria, from a regulatory perspective.
  - Understand the bottom line: is there a net benefit to wetland? Is it documented?
  - If uncertain as to whether GP criteria are met, apply for an individual permit.
  - Recognize WDNR authority to protect all waters of the state

- **Provision of a statewide regulatory coordinator by WDNR is very helpful.** A single contact for processing of individual permits, with broad knowledge of the programs and needs of restoration partners, can help to resolve misunderstandings, expedite permit processing, and encourage consistent decision-making.

- **Applicants should do their homework in preparation for a restoration project.** Advance coordination with relevant state programs will avoid delays. For example in Wisconsin, as appropriate, restoration projects may need to coordinate with local floodplain managers; consult the Natural Heritage Inventory to determine potential impacts to listed species; or check state maps to identify waters considered to be key for fish passage. The WDNR provides detailed checklists and sources of information on line; they should be used.

Unresolved and Challenging Issues

Wisconsin's current three level system of restoration permitting – "short form" permits for small landowner projects; "general permit" authorization of many types of restoration by state and federal partners; and individual permits for larger projects – generally works well. However, some issues continue to be contentious, and are not fully resolved. The Wetland Team continues to work on these issues

- **What wetland community types are eligible for authorization under the General Permit?** The GP is intended primarily for restoration of previously altered areas For wetlands that are only partially altered – and are at least 50% original (or native) vegetation, hydrologic modification is limited to restoration of hydrology (no dikes). Conversion of one type to another may require an individual permit process. Definition of eligibility under the GP is not always clear.

- **Invasive species concerns.** Wisconsin staff report that wetland restoration projects are on occasion a significant source of invasive species on disturbed sites. Practices to address this concern are still needed.

- **Restoration of broad range of wetland types and functions.** From the perspective of WDNR, statewide restoration efforts tend to be overly focused on waterfowl production – a reflection in part of funding sources. Additional funding needs to be targeted for more holistic, watershed based projects.

Keys to the Successful Coordination of Wetland Restoration and Regulatory Obligations in Wisconsin

According to Cherie Hagan - previous leader of the Wisconsin Wetland Team - the permitting process for voluntary restoration is currently working "great." WDNR permit staff do not have to spend much time on projects authorized under the restoration GP, freeing them for other responsibilities. This outcome has required time and persistence, but has been successful based on these key factors:

- ***Teamwork***. The Wisconsin Wetland Team – now including sixteen members - was organized in the 1990's to coordinate restoration activities. Formalized in an MOU (click here) in 1999, this group has provided an effective forum to define wetland goals and to resolve issues, as well as and a source of broad expertise.

- ***Comprehensive statewide goals***. Wisconsin developed a comprehensive statewide wetland strategy "Reversing the Loss" – in 2000. Updates have been developed cooperatively with the Wisconsin Wetland Team. State goals and progress reports are very transparent and designed to be distributed to and understood by the public. These shared goals provide a focal point for resolution of regulatory concerns or other issues that arise.

- ***Professional respect and agency responsibility.*** The Wisconsin Wetland Team has helped to build respect for agency expertise. In development of the GP process, the WDNR recognized the professional standing of partnering agencies, and relaxed the review process.

  Simultaneously, the team formally agreed in the interagency MOU that each restoration agency is responsible for their own projects, and for addressing any problems that arise. For federally sponsored project, the applicant must be the federal agency, and that agency assumes responsibility.

- ***Continued process improvement***. The Wisconsin Wetland Team continues to address regulatory issues as they arise, and to streamline processes to meet current needs, as described below. The ability to adjust and adapt management to changing resource needs is essential. The following quotation taken from *Reversing the Loss* brings home this need.

> Just as the creatures are always changing, always shifting, the land is constantly transforming. The wetland is continuously rearranging, altering from water to land to water and back again. In several thousand years, what will this place look like?"
>
> *from THIS TENDER PLACE – The Story of a Wetland Year, written by Laurie Lawlor, as quoted in Reversing the Loss*

For more information see Wisconsin Department of Natural Resources – Wetland Program: http://dnr.wi.gov/topic/wetlands/.

APPENDIX D.
VOLUNTARY WETLAND RESTORATION AND PERMITTING IN OREGON: A CASE STUDY

Overview of restoration activities in Oregon

Many aspects of wetland management in Oregon – including dredge and fill permitting – are located in the Oregon Department of State Lands (ODSL). As a result, it appears that wetland management is integrated to a greater degree with other land use management programs than in many states.

Wetland restoration is actively pursued to meet multiple goals, including habitat protection and restoration; watershed and urban wetland management; coastal zone management; and water quality protection. Funding is provided by the Oregon Watershed Enhancement Board – which receives funding from the state lottery - as well as other federal sources (e.g. NOAA's Coastal Zone Program, farm bill programs).

The ODSL has demonstrated a commitment to facilitating authorization of wetland restoration activities. Restoration has been addressed through strategic plans developed by the Department, in a detailed study funding through an EPA Wetland Program Development Grant, and through legislative action. The evolution of the current regulatory process is outlined below.
These efforts have produced somewhat mixed results. While some restoration partners are very satisfied with the current process, other state and federal partners express considerable frustration with wetland restoration requirements. Tensions are due in part to the differing responsibilities and visions of state and federal agencies as applied to a state that supports a remarkable range of exceptional aquatic resources.

Given relatively recent improvements to restoration permitting, some of these concerns may be reduced as procedures are fine-tuned, and as partners better understand the process. Some challenges will likely remain, given the complexities of managing wetlands in a complex environment.

Background: Streamlining Wetland Regulation in Oregon

Oregon's state regulation. Oregon has participated actively in wetland regulation for many years. The primary law regulating alteration of wetlands is the Oregon's Removal-Fill Law (ORS 196.795-990), dating to 1967. Those who plan to remove or fill material in waters of the state are required to obtain a permit from the ODSL. Detailed information regarding the Oregon Removal/Fill permitting is available here. Under this law, the ODSL may develop various procedures for permitting projects. Various provisions have been made over time to expedite approval of wetland restoration activities.

General authorization for wetland restoration projects. As of 2005, wetland restoration projects could be authorized under a General Authorization (GA), a simplified joint application process that required submittal of a short application form. Although useful, the ODSL was concerned that insufficient information was collected to allow accurate tracking of wetland gains and losses on a statewide basis.

The pilot SPGP process. During 2006, the state experimented with a pilot State Programmatic General Permit (SPGP) process. For eight specified activities – including wetland restoration – the Corps of Engineers provided authorization based primarily on state review of permit applications. The goal was to provide "one stop" permit authorization among multiple state and federal agencies. Unfortunately, an unintended consequence of the SPGP was a significant increase in the amount of information that was required from permit applicants. The SPGP process was determined to be counterproductive overall, and was suspended at the end of a year.

State findings regarding past restoration activities. Although the state reverted to the GA process following suspension of the SPGP, they continued to require additional information to support tracking of

wetland gains and losses. The ODSL also continued to work toward a more streamlined process, based both on applicant needs, and on state findings regarding resource gains and losses. This information is detailed in a grant report entitled *Making Wetland Restoration Count* (Kathy Verble, ODSL, 2010), which may be requested from the ODSL.

New General Authorization.

In 2011, the ODSL made a dramatic change in the permitting process for restoration activities, issuing a new General Authorization for restoration activities that is notice based. Changes from the previous to current GA include the following.

- The new Wetland Ecosystem Restoration General Authorization can be used only for "true" restoration project – that is, re-establishment or rehabilitation of natural or historic function on former or disturbed wetlands. It cannot be used for wetland enhancement. In addition, the GA does not authorize conversion to upland, or to other wetland habitat types – these actions require an individual permit.

- The New GA can only be used to authorize impacts that have "minimal effects" either individually or cumulatively. One outstanding question is whether staff who review the notifications are consistently making this determination, a question that is being investigated by ODSL.

- Permit criteria are included in the General Authorization, including specific criteria based on the depth of inundation and excavation, resulting in less creation of open water.

- A shift to notification-based system. A person seeking authorization under the GA must submit a notification form to the ODSL. Within 30 days, staff must determine whether the notice is complete, and whether the project is eligible for authorization under the GA. If the ODSL does not complete its review within 30 days, the project may proceed. Some stakeholders report that processing time has been reduced by about 15 days through the new GA, but they remain concerned by other GA criteria.

- Improved reporting requirements. Information must be submitted to support tracking of wetland gains and losses.

New GA criteria are based on a study by ODSL of restoration permit authorizations issued between 2003 and 2006. Among other findings, the DSL determined that 58% of these projects involved some conversion between wetland types, with the overwhelming number of project designed to produce palustrine emergent wetland. GA provisions are intended to encourage a more balanced approach to watershed and wetland restoration, including drier end wetlands and a greater variety of habitat types.

Prior to adoption of the new GA, the ODSL estimated that approximately 40 – 48% of actions previously authorized under the old process would meet the criteria of the new GA. Others would be required to follow an individual permit process (or, as developed a GP process).

The GA categories are authorized for a three year period. During this time, the DSL is carrying out compliance monitoring of 10% of actions for which notice is received. At the end of the first three year period, they expect to have a better idea of effectiveness of the process, specifically, (1) whether projects are consistent with what was authorized; (2) whether the project was in fact eligible for the GA; and (3) whether state staff consistently and correctly evaluated "minimal adverse impacts."
In addition to other regulatory materials available on line, the ODSL has compiled a Removal Fill Guide (May 2013) which is available here.

General Permits and other potential future improvements. The rules that authorized development of the GA also provided that they state may, by rule, develop a statewide General Permit for the general public, but is not currently pursuing this option. A General Permit differs from a General Authorization in that it requires submittal and review of a full Joint Application Form; may receive public review; and the authorization issued for a particular project includes site specific conditions.

ODSL staff also have the potential to issue a more limited General Permit to a specific applicant or group of applicants – e.g. the Natural Resources Conservation Service. Such agencies may also take the lead in proposing a General Permit to the state. This approach appears to be more attractive and more flexible in that application and reporting requirements could be tailored to a specific program. The state is specifically interested in state/federal parternships to develop a General Permit to authorize wetland restoration projects on federal lands.

Finally, the State of Oregon continues is currently pursuing state assumption of the Section 404 Program. If granted, the state would have additional ability to streamline authorization of restoration activities in assumable waters, and duplication with the Corps in those waters would be eliminated. However, some alternative process would be needed to coordinate with various federal programs regarding threatened and endangered species, historic sites, and so on. One stakeholder suggested that if the state assumes 404 administration, a process that parallels the Corps' Nationwide Permit 27 would be needed for routine wetland restoration projects.

Difficult and Unresolved Issues

Stakeholders appear to agree that current GA regulatory process is an improvement that works well for many projects. The City of Portland, for example, indicated that the restoration permitting process is working very well for their restoration projects: they expressed no real concerns with the current process. Others indicate that they have no major concerns with the removal-fill law or process, but that challenges arise when coordination with other programs is needed (e.g. in response to cultural resource issues). However tension remains between the state regulatory program and some restoration agencies and organizations regarding permitting requirements. Primary concerns, and differing perspectives, include the following.

- **Alteration of habitat types.** State staff remain concerned with conversion of one habitat type to another, or with a change in historic habitat types. However - in particular for the large percentage

of projects that occur on private lands, such as those supported by the Wetland Reserve Program - project sponsors point out the need to respond to landowner wishes. Unless the landowner agrees to the project, there may be no restoration. Moreover, restoration practitioners stress that it is not always practical to restore highly degraded sites to an historic condition on a parcel by parcel basis, especially where basin hydrology has been significantly altered.

- **Balancing the ability to track outcomes, and information needs.** Although state regulatory staff have attempted to limit information needs, some agencies that work with on the ground restoration projects feel that information requests remain extensive, and question whether required maps and plans add any value to the process. State staff remain committed to gathering sufficient information to allow for an accurate assessment of wetland gains and losses over time. They also need sufficient information to determine whether a proposed project meets GA criteria.

- **Regulatory agency staff reduction and turnover.** Stakeholders agree that experienced staff can do a great deal to facilitate complex projects. Unfortunately, both state and federal agencies have faced staff reductions. Restoration organizations indicate that state staff are not always available for meetings or consultation. Changes in regulatory staff that occur during the course of permit review are particularly problematic, as new staff may request new information, further delaying the process.

  The state acknowledges that funding for technical assistance is a gap in customer service. Sufficient staff to provide on-site technical support are not always available. However, state staff are frustrated that federal agencies may not appear interested in coordination if technical support is not provided.

- **Limitations associated with use of grant funds.** Most wetland restoration projects in the state rely on grant dollars. When unanticipated studies are required during the permit review process, funding may not be available for the required work. State staff recognize that restoration sponsors may not be able to do final engineering work in advance. They do recommend early coordination to improve understanding of requirements.

- **Cultural issues.** Archeological and tribal issues are common. Regarding tribal issues, one stakeholder commented that the USFWS and the Corps appear to have different processes for coordinating with tribes, with quick approval through USFWS and simultaneous requests for additional information from the Corps.

  Historic concerns do not seem to be as great. Partners may screen projects in advance through the State Historic Preservation Office, although additional costs may result if archeological surveys are requested.

- **Threatened and endangered species.** The USFWS and NMFS have issued a programmatic biological opinion that can expedite authorization of projects that meet defined standards. Nonetheless, given the extent of listed aquatic species in the state, meeting requirements can be challenging.

- **Duplicative review by various agencies.** Although the Corps and the ODSL coordinate excavation/fill permit review with joint applications and other procedures, restoration partners still feel that state review duplicates that of federal agencies. In particular for projects that come under the authority of the National Marine Fisheries Service, restoration agencies tend to feel that they have already met an exceptionally high standard of review for resource protection, and that additional state review does not add value.

  The state has previously attempted to address this issue through an SPGP, which was not successful. While Section 404 Program assumption offers the opportunity to reduce duplication in another manner, this approach would also require alternative mechanisms to coordinate with USFWS, NMFS, and other federal agencies.

Lessons Learned

- **Complex and high quality aquatic habitat can lead to more complex permit review.** Oregon is fortunate in the abundance of high quality waters within its borders, but given concerns regarding protection of these resources, proposed restoration and enhancement projects receive added scrutiny.

- **Significant tension is generated by differing project goals, e.g. restoration of historic wetland types versus differing landowner or land manager goals.** Common agreement upon restoration goals for a particular watershed or region by a group of agencies may help to reduce this tension.

- **For some wetland restoration programs, it may be possible to tailor the regulatory process to individual agencies and organizations.** The Oregon removal-fill law provides for issuance of General Permits to individual applicants, or groups of applicants. The ODSL appears to be open to these types of authorizations, which may better accommodate the needs of specific restoration programs.

- **Reducing duplicative project review is a key to facilitating permitting.** Restoration practitioners feel that current review by state and federal agencies is duplicative. This situation is not readily resolved, but may be addressed to an extent during development of GP procedures for specific agencies. The state has taken steps to support early screening through a number of programs.

- **Individuals have a significant impact.** The loss of state and federal staff, or changes in state regulatory staff, can have a real impact on the permit process. Support of staff through joint training, development of practical technical methods, and continued process improvement is

important. Joint site visits by regulatory staff and project sponsors can serve to resolve many project concerns.

- **It can be very difficult to balance information needs during a regulatory review.** Production of maps, site plans, and technical studies can be costly and time consuming. Restoration agencies may not recognize the value of these materials to the state in evaluating impacts and tracking outcomes. Continued coordination among regulatory and conservation agencies is needed to find this balance, as has been done for some permit applicants.

- **Agreement on importance of restoration.** In spite of the concerns discussed here, both regulatory agencies and restoration partners agree on the importance of wetland restoration efforts, and the importance of this work to the public who value Oregon's aquatic resources.

For additional information, see Oregon Department of State Lands Wetland Program: http://www.oregon.gov/dsl/WETLAND/Pages/index.aspx

Appendix E: References and Links

Association of State Wetland Managers web pages: http://aswm.org/

An Introduction and Users Guide to Wetland Creation, Restoration, and Enhancement. 2003. Federal Interagency Wetland Workgroup. Available at: http://water.epa.gov/type/wetlands/restore/upload/restoration-guide.pdf

MAKING WETLAND RESTORATION COUNT: Improving, Measuring and Tracking Non-Regulatory Wetland Restoration to Support Oregon's No Net Loss and Net Gain of Wetlands Goals. 2010. Kathy Verble, Oregon Division of State Lands.

Oregon Department of State Lands Wetland Program:
http://www.oregon.gov/dsl/WETLAND/Pages/index.aspx

Oregon Explorer: Restoration, Enhancement, and Creation. 2009. Esther Lev, The Wetlands Conservancy. http://oregonexplorer.info/wetlands/WetlandRehabilitation/Restoration,EnhancementandCreation

Principles and Guidelines for Wetland Resoration. 2003. Ramsar. http://www.ramsar.org/cda/en/ramsar-documents-guidelines-principles-and-20878/main/ramsar/1-31-105%5E20878_4000_0__

U.S. Army Corps of Engineers district offices: http://www.usace.army.mil/Locations.aspx

U.S. Army Corps of Engineers Nationwide General Permits:
http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/NationwidePermits.aspx

U.S. Army Corps of Engineers Proposed Regulatory Guidance Letter regarding SPGPs:
http://water.epa.gov/polwaste/nps/outreach/upload/2003_7_1_wetlands_spgp.pdf

US EPA Web Page: River Corridor and Wetland Restoration:
http://water.epa.gov/type/wetlands/restore/index.cfm

US EPA web page: Voluntary Restoration and Protection [as a state wetland program plan core essential element]: http://water.epa.gov/grants_funding/wetlands/restoration.cfm

US EPA web page - Definition of Waters of the United States - Clean Water Act Jurisdiction:
http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm

US EPA web page – Definitions of Wetland Restoration:
http://water.epa.gov/type/wetlands/restore/defs.cfm#Fed

US EPA web page - Section 404 Regulations, including Section 404 State Program Regulations:
http://water.epa.gov/lawsregs/lawsguidance/cwa/wetlands/regs_index.cfm

Wetland Habitat Management: A Guide for Landowners. 2005. Ducks Unlimited, Great Lakes/Atlantic Regional Office. Available at:
http://www.ducks.org/media/Conservation/GLARO/_documents/_library/_landowner/Landowner_Guide.pdf

Wetland Restoration Handbook for Wisconsin Landowners. 2004. Wisconsin Dept. of Natural Resources.
http://dnr.wi.gov/topic/wetlands/handbook.html

Wisconsin Department of Natural Resources – Wetland Program: http://dnr.wi.gov/topic/wetlands/