Wetlands Project Guidance

Stakeholder Informed

WILDLIFE HABITAT COUNCIL℠

Introduction

Wetlands are lands saturated with water permanently or seasonally. Wetlands are typically defined by three characteristics:

1) The area is saturated or flooded at least part of the year
2) The presence of hydric soil
3) The presence of plant life that thrives in wet conditions

Wetlands vary widely due to regional and site-specific differences in soil, topography, climate, hydrology, water chemistry, vegetation and other factors. WHC Conservation Certification defines wetlands as areas that are inundated and/or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions. Wetlands falling under this definition can be tidal or non-tidal, and can include:

- swamps
- forested wetlands
- bogs
- freshwater and saltwater marshes and flats
- prairie potholes
- vernal pools and other ephemeral wetlands
- wet meadows and prairies

- fens
- riparian wetlands
- floodplain wetlands
- playa lakes
- lacustrine wetlands
- open freshwater habitats such as lakes, ponds, impoundments, streams and rivers

Building Your Program

Projects are divided into four categories: **Habitat**, **Species Management**, **Education and Awareness** and **Other Options.** You can build a program with more than one of each category but you must associate your program with at least one habitat. This Wetlands Project Guidance is in the **Habitat** category. You will be able to associate your wetlands project with **Education and Awareness** projects, as well as with **Species Management** projects such as those focused on birds, reptiles and amphibians.

Habitat – Projects that focus on conservation actions to protect, restore and manage different habitats.

Species Management – Projects addressing the conservation needs of targeted wildlife species or groups of species.

Education and Awareness – Projects to improve awareness, understanding and skills relating to conservation and the environment.

Other Options – Specialized projects that add value to your conservation efforts.

Browse the Project Guidance library at *wildlifehc.org/pg*.

What Do Wetlands Projects Look Like?

Wetlands projects attempt to manage and enhance existing wetland habitat or create new wetland areas.

Common components of wetlands projects include, but are not limited to:

- Wetland creation or expansion
- Improving access to wetlands for wildlife
- Enhancement of vegetative buffers around wetlands
- Implementation of artificial habitat enhancements such as underwater brush piles, fish habitat, basking platforms, turtle nesting areas, and floating islands, etc.
- Monitoring of wetland flora and fauna
- Ecological restoration
- Enhancement and creation of wetlands on remediation sites
- Management of wetland health through invasive species control programs, plantings, water quality monitoring, etc.
- Creating underwater habitat for aquatic species

Wetlands projects vary in size, but are usually limited by existing conditions that are conducive to the soil saturation or inundation needed for wetland habitat, or by the resources and space available to create those conditions.

Several factors will impact which species a wetland will benefit, including its size, whether it includes open water, the water's depth, and whether it is permanent or seasonable in nature.

Considerations for Corporate Lands

Projects implemented on corporate-owned lands have different circumstances and challenges to those on public lands, protected lands or wild lands.

Which types of corporate lands are best suited for wetlands projects?

Wetlands projects are well suited to corporate properties where wetland habitats already occur, or where site conditions and resources allow for wetland creation. This can include properties of all sizes, from small urban facilities with stormwater wetlands, to large rural properties with lakes or long tracts of river frontage.

Wetlands are often created or restored on corporate lands in response to regulations, such as mitigating for a wetland eliminated by development elsewhere. Regulatory requirements must be exceeded for the project to receive Conservation Certification.

Addressing challenges

The corporate context presents certain challenges for implementing wetlands projects. Understanding these concerns and potential ways to overcome them can help your project succeed in the long term.

Concern	Response
The creation or restoration of wetlands can be complex and highly technical.	*Local experts and researchers in wetlands communities can provide teams with technical expertise in creating and restoring wetland communities.*
There may be public resistance to wetlands creation and restoration due to concerns about mosquitos and other wetland-associated species, or about flooding.	*Teams can use education to raise awareness about the benefits of wetlands and wetland-associated species to the local community, and allay concerns about public health risks and flooding. Outside experts could also be called upon to help field questions and concerns.*
Teams may not have the resources or knowledge to do more than simple monitoring of wetlands, which can limit the ability for thorough evaluation.	*Local researchers or experts may be willing to assist with in-depth monitoring of wetlands, particularly if the wetland type being restored or created has not been available for study in the past.*
Wetlands in highly trafficked areas can be vulnerable to destruction and disturbance.	*Teams may wish to install structures such as boardwalks to protect the wetland, or designate that only a specific area of the wetland be used for education, viewing or recreation.*

Getting Started with Wetlands Projects

For a project to qualify toward Conservation Certification, you must be able to answer "yes" to five questions.

1. Is the project locally appropriate?

2. Does it have a stated conservation or education objective?

3. Does it provide value or benefit to the natural community?

4. Have outcomes been measured and is there supporting documentation?

5. Does it exceed any pertinent regulatory requirements?

Conservation and education objectives

It is a requirement of Conservation Certification that wetlands projects be designed to meet one or more conservation objectives. Objectives can guide the direction of the project, help motivate others to participate and provide a basis for evaluation.

The following objectives are suggested for wetlands projects. Your team may choose one or more of these objectives, or develop your own relevant objectives.

- Creating new wetland habitat, or managing, enhancing, or restoring existing wetland habitat:

  - to benefit wetland-dependent wildlife in general

  - to improve water quality in the greater watershed

  - to address hydrology issues or restore wetland hydrology, such as flooding or stormwater runoff

  - to contribute to climate change or drought adaptation

- Recreating wetland habitat of the same type as a wetland eliminated by development, or of a rare wetland type needed in the region

- Converting existing operations-related features such as stormwater management facilities into functional wetland habitat

- Protecting wetland habitat and wetland-dependent wildlife from site operations and human activity

- Creating or restoring wetlands to provide the same ecosystem functions as natural wetland communities

- Managing or creating wetland habitat to benefit a specific wetland-dependent species or group of species

The following strategies are recommended to strengthen the conservation impact of your project:

- Make structural changes to existing wetlands, such as sloping, grading and recontouring to enhance wildlife benefit

- Establish a baseline of plant and animal species in the wetland habitat at the project's start, upon which desired outcomes can be determined and then compared to evaluate progress

- Provide opportunities for college students, professors or other scientific professionals to conduct research in the wetland habitat that is used to inform the project

- Include credible monitoring that contributes to a citizen science program or the database of an established wetland-related organization and that is used to inform the project

- Include artificial or manufactured structures that target general/multiple wetland-dependent species and meet a conservation or education outcome

- Demonstrate an understanding of why each species was chosen for the planting list or why the seed mix as a whole was selected, including wildlife benefit, substrate and light requirements, or its role in the type of wetland habitat being restored

- Promote structural complexity and biodiversity in the wetland by managing for snags (dead or dying trees), large woody debris, buffer zone vegetation, etc.

- Develop and implement a plan for the project's design, maintenance and monitoring using the appropriate technical and interdisciplinary expertise

- Develop and implement a plan for evaluating the project over the long term

- Engage employees or community members in the majority of the aspects of the project

- Reduce the use of nutrients, fertilizers, pesticides and other chemicals that may impact water quality on surrounding uplands

- Improve hydrologic and hydraulic conditions where appropriate, such as by amending soil or removing barriers

- Alter artificially straightened water course to adopt a more natural path that feeds into wetland habitat

- Be implemented as part of a corporate-wide initiative for wetland conservation and restoration

- Align with the conservation priorities for wetland conservation or wetland-dependent species of a local or regional conservation or watershed plan

- Collect and propagate seeds or cuttings of wetland vegetation from a wetland to be eliminated by development, for use in the creation of a new wetland

- Partner with neighboring landowners to connect wetland management and restoration efforts across a contiguous area

- Be in place for at least five years, with a documented commitment of at least ten years

- Be located within or adjacent to a high priority conservation area, such as a Ramsar Wetland of International Importance, and be managed in alignment with the area's conservation priorities

Partnerships

Wetlands projects implemented on corporate lands will benefit from partnerships with groups that have established forest conservation and education objectives. A team may use such a partnership to help design, create, or monitor its wetlands project and provide educational opportunities for employees and community members. Partners may also be able to assist the team with leveraging funds for implementing and maintaining the project, and can help them create links between the on-site wetlands project and other wetlands projects or conservation priorities in the region.

Resources

Your project may benefit from online or printed resources available for your region to support the design, delivery, maintenance and monitoring of wetlands projects.

A search for "wetland" in the Conservation Registry returns over 350 projects implemented through WHC's certification program. This is a great place to find inspiration for your project and see what others are doing in and around your location.

The following terms, in any combination, may be useful when searching online for items related to this theme:

wetlands	prairie potholes	pond
riparian		river
	wet meadow	
marsh	wet prairie	stream
bog		Ramsar Wetlands of International Importance
	fen	
swamp		
	lacustrine wetlands	
vernal pool		
		wetlands assessment
forested wetland	floodplain	
	lake	
mudflats		

Understanding the Application Process

Documentation

When applying for Conservation Certification, you will provide documentation of the planning, implementation, maintenance and monitoring of your grasslands project. The following is required documentation for grasslands projects; however, you may submit additional supporting materials.

Map/image of the project area, showing the relative size and approximate location of the project (other relevant information can be shown in the map as well, but is not required).

Photographs and videos that depict the progress of the project implementation and management.

Maintenance plans that demonstrate appropriate activities that meet the needs of the habitat to fully support the target species and support the conservation and education objectives.

Baseline data that provides a biological baseline upon which post-implementation monitoring can be based and used to evaluate the progress of the project and determine next steps.

Monitoring logs that show the frequency, type, and results of monitoring of the project, whether in an informal manner or a scientifically rigorous manner.

Updated plant list/survey that lists all of the plant species currently know to occur in the wetland, including common and scientific names and whether the plant species is native.

Application questions

As you complete the application online, you will be asked the following questions about your wetlands project. These questions will help us understand and evaluate your project.

	Question	Why this question is important
Overview	What is the total size of the wetland habitat managed for this project?	*This provides us with a description of your project to allow us to assess it.*
	Describe the habitat in general including plants and structures, the range of water depth and change over seasons.	
	Give a brief description of the vegetation types found in the habitat and list several of the common plant species.	
	Briefly summarize activities taking place to manage the targeted habitat.	
	Upload a map showing the location and photos showing the habitat.	
	When did on the ground work for the project begin?	
Objective	What are the project's conservation objectives?	*Having a conservation objective is a requirement for certification.*

	Question	Why this question is important
Habitat Creation or Expansion	Give a brief description of the vegetation types found in the habitat and list several of the common plant species.	*For wetlands habitat, size and location are important factors that determine success and ecological benefit.*
	Upload a dated list of current plant species in the habitat including common and scientific names and whether the species is native to the region.	
	Is this a new project not presented in previous applications?	
	If this wetland was created as a wetland mitigation project, describe the impacted wetland.	
	Does it replace a habitat with less ecological value?	
	Describe the habitat prior to your project.	
	Describe any design or plant selection considerations that were part of this new project.	
	Upload documentation of the specific considerations.	
	Since the last application, have you expanded the size of your wetland area being managed?	
	What is the size of the wetland that has been added since the last application?	
	Does the expansion replace a habitat with less ecological value?	

	Question	Why this question is important
Habitat Creation or Expansion *Continued*	Describe the habitat present prior to your project.	*For wetlands habitat, size and location are important factors that determine success and ecological benefit.*
	Describe any design or plant selection considerations that were part of this project expansion.	
	Upload documentation of the specific considerations.	
	What is the size of the area that is being newly managed since the last application?	
Management	Describe the steps taken to maintain the wetland.	*Appropriate management policies and practices are also important to the target species.*
	Provide a timeline of maintenance and other completed activities.	
	Describe the steps being taken to minimize disturbance of the wetland habitat.	
	Describe the steps taken to allow access while minimizing disturbance.	
	Upload documentation of these activities.	

	Question	Why this question is important
Monitoring	Was baseline data collected for this project?	*Monitoring is essential to understand the impact of the project and to be able to adapt the project develops.*
	Describe the types of baseline data collected.	
	Upload the baseline data.	
	Select each type of monitoring that is being carried out: plant surveys, plant sampling, plant diversity assessment, species (flora and fauna) counts, other.	
	List each type of monitoring, including the frequency and list any plans or protocols used.	
	Upload the monitoring protocols, if applicable.	
	Upload the monitoring data and any analysis, if applicable.	
	Provide a brief summary of results from monitoring.	
	Evaluate the success of the project. If there were any concerns, what are the plans to address them in the future?	
Employee Participation	Do employees actively contribute to the wetlands project?	*Employee participation can strengthen a project and secure its future.*
	How many employees participate in the project on a regular basis?	
	Describe how employees are involved in this project.	
	How many employee hours were spent on the following activities each year?	

	Question	Why this question is important
Other Participants	Select and list the groups or individuals outside of your company actively contribute to the project on a regular basis.	*It is not always possible to recruit outside groups to a project. Conservation and education partners can strengthen a project and provide different audiences to use it for lessons or recreation, thus broadening its reach.*
	Describe their involvement in this project.	
	How many hours were spent by the groups on the following activities each year?	
	If you work with a wetlands specialist and have a current letter of support from them, upload it.	
	List additional sources of technical advice (e.g. website, guidebook, etc.) and describe how they were used.	
Regulatory Requirements	Are any aspects of the project done in relation to regulatory requirements?	*Going beyond compliance is a requirement for certification.*
	Explain how the project exceeds requirements.	
	How long are you required to monitor the project?	

	Question	Why this question is important
Connectivity	Does the project connect with other wetland habitats on neighboring land?	*Connectivity onsite and across fence lines helps to decrease fragmentation, one of the leading causes of habitat loss and improve water quality by restoring hydrology.*
	Describe how the project connects with the other wetlands.	
	Describe any coordinated management efforts with other wetlands.	
	Is the project a stream or lake shoreline that affects habitat quality in the water body?	
	How does the project affect habitat quality in the water body?	
Alignments	Does the project align with any larger scale initiatives? (e.g. corporate strategy, regional conservation plan, migratory pathway, watershed plan, etc.)	*Aligning conservation efforts with large-scale conservation plans and other regional conservation initiatives allows a site-based activity to support a landscape-scale objective.*
	Is the project part of a corporate level commitment to wetlands	
	Upload documentation of your corporate commitment to wetlands	
	Does the project align with an existing conservation plan or other large-scale initiative?	
	List the conservation plans or other large-scale initiatives the project aligns with and provide website links, if available.	
	How does your project align with these large-scale initiatives?	
Existing Certifications	Does this project have third party wetland-related certification?	*Other certifications or recognitions illustrate strong efforts and commitments.*
	List the certifications and provide a website link if available.	

Content development for Conservation Certification

To inform the development of Conservation Certification, WHC analyzed the projects it was recognizing through its certification program to assess whether they were aligned with contemporary conservation and education priorities.

Following this assessment and using information from it, WHC convened Advisory Committees around conservation and education themes to develop the content that would guide practitioners and applicants in the future. This content is the basis for the Project Guidance and the online application process.

The following provided feedback on the initial draft of the Wetlands Project Guidance:

Paul Botts, The Wetlands Initiative

Valerie Brady, University of Minnesota Duluth

Jenna Emerson, CEMEX

Dave Evans, Office of Wetlands, Oceans and Watersheds, U.S. Environmental Protection Agency

Rita Peralta, Fairfax County Park Authority

Jonathan Phinney, U.S. Fish and Wildlife Service, U.S. Department of the Interior

Joseph Shisler, PhD, Shisler Environmental Consultants, Inc.

Dan Taylor, Bat Conservation International

More information can be found about this process in the "Our Impact" section of ***wildlifehc.org*** under "Commitment to Transparency."

WILDLIFE HABITAT COUNCIL℠

The WHC Strategy and Planning team can help you build a successful project by identifying needs, making connections with partners and resources, and providing strategies that meet business and conservation goals. Contact us today.

strategyandplanning@wildlifehc.org | **301.588.8994 x2** | **wildlifehc.org**

Every act of conservation matters.