Project Goals & Objectives

Wetland Restoration Training

Identifying Potential Projects

- Landowner Initiated
- Drained Wetland Inventory
- Statewide Wetland Restoration Strategy
- Specific Statewide or Local Goals

Planning involves locating potential wetland restoration sites, assessing their potential, and seeing if that project meets a set of goals, objectives, and outcomes. Selecting a site to meet a specific goal is different from finding one that meets a broader watershed or regional goal. Some projects will be landowner initiated meaning a landowner will come into the office and be interested in a certain program. Others might be identified through a Wetland Restoration Strategy or through specific statewide or local goals. Landowner-initiated projects may be located on lands not considered high-priority by different government programs. On the other hand, government programs tend to seek projects that will achieve a specific need within a targeted area or watershed which can have its challenges since program goals often are different than landowner goals. Having a defined strategy or scoring system for prioritizing projects can help to address some of those potential issues.

Landowner Initiated

Source: MN Wetland Restoration Guide

Private landowners can have a variety of motivations for a project: financial, conservation, recreation, or simply for aesthetic reasons. Landowners may offer all or a portion of their property through various conservation programs either through their own initiative or after being contacted by program, agency, or other representatives. Matching the needs of the landowner with the opportunities that exist on the property is a vital function of the planning process. If the project is to be completed through a conservation program or because of a regulatory requirement, program policies, goals, and site criteria must be consistent with landowner needs and the opportunities that exist on their property.

Statewide Wetland Restoration Strategy

- Developed in 2009
- Prioritize Restorations
- Improve coordination
- Design and Produce Better Wetland Restorations

Source: MN Wetland Restoration Guide

A statewide Wetland Restoration Strategy was developed in January 2009 and it provides the framework for a coordinated approach to the restoration of drained and degraded wetlands.

Key elements of this statewide wetlands restoration strategy are:

- Prioritize restorations based on desired outcomes, specifically water quality improvements, habitat, food damage reduction, and other hydrologic benefits.
- Improve coordination of wetland restoration efforts.
- Design and produce better wetland restorations that stand the test of time and provide lasting functional benefits.

If you have worked on a Wetland Restoration Project has it been Landowner Initiated??

YES

NO

Project Goals

- Targeted Wildlife
- Improve downstream water quality
- Flood Control
- Groundwater Protection
- Increased Landscape Diversity
- Targeted plant communities
- Specific management objectives

Wetlands present a wide range of functions that provide natural resource benefits whey they are restored. Conservation organizations and government entities target projects to achieve specifc natural resource goals. These goals may include improving habitat for specific wildlife species, increasing biological diversity, plant community reconstruction, water quality improvement, and food damage reduction.

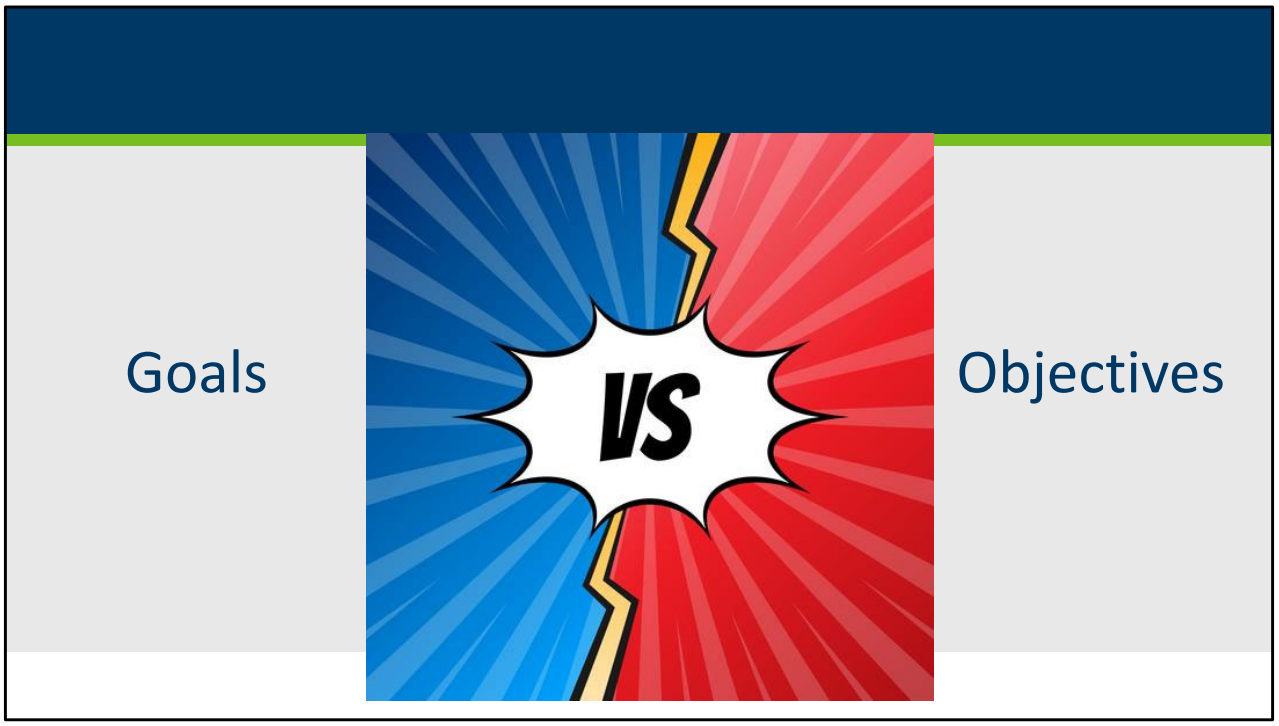
Project goals will also affect the project scope. Program expectations or required project outcomes along with landowner expectations for final appearance and management are critical to project success and will help define the project scope. Examples of such could include:
Targeted wildlife use of the wetland (such as waterfowl)
Improved water quality for downstream resources
Flood control benefits
Groundwater protection
Increased landscape diversity
Targeted plant communities or wetland types
Specific management objectives (such as the ability to manage wetland water levels)
Specific functional goals will usually require a more comprehensive site assessment

and more expertise to interpret the data to ensure that the goals are attainable.

Goals & Objectives

Source: MN Wetland Restoration Guide

Establishing goals and objectives influences strategies used for design, implementation and future management of a project. Goals and objectives must be tailored specifically to each site.



Goals are general statements or conditions that reflect the desired outcomes or future condition of a project. They equate to the project purpose. For wetland restoration projects, goals will tend to focus on those unique functions that wetlands and their associated buffers provide: which is habitat for certain wildlife species, water quality protection, floodwater storage, etc. Goals represent the ideal outcome for a project and might require modification as a more realistic project opportunity or limitation is identified as the project progresses.

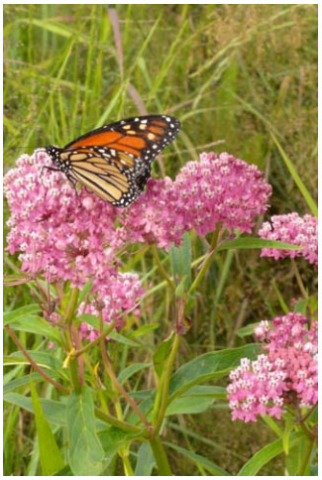
Objectives are more specific than goals and describe specific actions that must be completed to achieve and support the identified goals. Objectives are measurable or readily apparent when they are completed. For example, an objective of establishing native vegetation on a restored wetland is something that can be readily observed and measured. This objective may be part of an overall goal of increasing wildlife habitat diversity. For another example, if the goal of the project is to "restore a tile-drained prairie pothole wetland to provide suitable waterfowl habitat", the project objectives might be:

- Remove sediment from the wetland basin.
- Break or block the tile system.
- Establish a diverse mix of shallow marsh and open water plant communities.

- Establish diverse native plant communities on the surrounding upland buffer.

Considerations for Goals & Objectives

- Identify general goals
- Be realistic
- Be consistent with
  - Programs
  - Agencies
  - Sponsoring Organizations



Source: MN Wetland Restoration Guide

The development of project-specifc success criteria follows the identifcation of general goals and the site assessment and evaluation process. In addition to being realistic and achievable, success criteria should be consistent with the requirements of programs, agencies, or organizations that are sponsoring the work. As stated earlier, the establishment of goals and objectives usually occurs after a comprehensive assessment of a project.

Restoring to Historic Conditions

Source: MN Wetland Restoration Guide

For example restoring a wetland to historic conditions is an idealized goal that is typically assumed to be the best possible outcome for a restoration project. But in some situations, surrounding land use changes and other factors may make this goal unrealistic or not the best choice for the current site condition. If adjacent land uses and drainage patterns have been significantly altered, this may prevent wetlands from being restored to their true historic condition.

In these cases a more achievable goal might be to restore these sites to a condition more suited for the current situation. A simple goal might be to restore a functioning, self-sustaining wetland. Project proposers may identify certain aspects of the project that can be restored to historic conditions while establishing other goals that may not emulate historic conditions but will be achievable in the context of an altered landscape. It will be important then to assess whether or not historic conditions can be fully achieved before establishing it as a goal. There may be other attainable goals that do not emulate historic conditions but would more effectively address program objectives.

Measurable Outcomes

Goal	Objective(s)	Outcome(s)
Provide high quality wildlife habitat and plant diversity	High interspersion of plant community types achieved by implementing a diverse seeding and management plan Selective shallow scraping to remove sediment and create deeper water regimes	At least 3 different plant community types composed of 12 or more native plant species Scraped areas with normal water depths from 0.5 to 2.5 feet during the growing season At least 3 nesting pair of waterfowl utilize the site each year
Improve flood conditions in downstream lake by attenuating floodwater	Establish dense upland and wetland vegetation to slow and intercept flood waters	At least 90% areal coverage of vegetation and at least 30% coverage by shrubs and trees
Restore seasonally flooded wet meadow	Break drainage tile to restore natural hydrology Establish diverse native vegetation in wetland and upland project areas	Surface water present in 50% of the basin for at least 14 consecutive days from May until June. At least 8 or more dominant native plant species in upland and wetland plant communities
Provide breeding habitat for amphibians	Construct earthen embankment across drainage ditch and install water control structure	At least 6 inches of surface water in 50% of the basin until June 1.

One of the more difficult aspects of project planning is identifying and articulating outcomes in ways that are useful, meaningful, and measurable. Outcomes can be simply defined as the measurable results or attributes of project objectives. Conservation projects may not be required to have specific written project outcomes; however, establishing some defined outcomes will serve as a useful measure of project success. Without a set of well-defined outcomes, the determination of whether or not project goals and objectives have been met is subjective. Projects associated with wetland regulatory programs are likely to require documentation of specific outcomes that can be verified through measurement and monitoring. Outcomes can be related to short, intermediate, or long-term conditions depending on project goals and monitoring period length. Short-term outcomes, such as observing a hydrologic event after completion of a restoration, are often simple and easy to document. Long-term outcomes, such as establishment of a certain minimum number of native, noninvasive species as dominants in restored wetland areas, may require intense sampling and extensive documentation.

When developing measurable outcomes, consider when and how often measurement will occur, how results will be documented and used, who will be reviewing the results, and how the outcomes reflect the project goals

If you have worked on a Wetland Restoration project what have been some Goals for the project?

Take Home

- BWSR Wetland Restoration Guide – Section 2
- Identifying Potential Projects
- Project Goals vs Objectives
- Outcomes