**Conservation Practice Effects**

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| **Wetland Enhancement (No) 659****Definition: The augmentation of wetland functions beyond the original natural conditions on a former, degraded, or naturally functioning wetland site; sometimes at the expense of other functions.****Major Resource Concerns Addressed: Wildlife improvement, flood control, water quality.****Benchmark Condition: Poorly functioning wetland, little plant diversity.****Date: October, 2016 Developer/Location: Hal Gordon, OR** |
| **Positive Effects** | **Negative Effects** |
| **Soil*** **Water ponding promotes growth of wetland vegetation and reduces decomposition of soil organic matter.**
* **Hydric soils protected.**

**Water*** **Temporary flood storage reducing flooding and ponding.**
* **Pathogens are trapped in the wetland.**
* **Improved vegetative cover with a reduction of runoff and sedimentation.**
* **Water released from impoundments may be warmer or cooler than receiving waters, depending on site conditions**
* **Nutrients and pesticides in surface water will be captured and degraded protecting both surface and ground water.**
* **Improved hydrological conditions.**

**Air*** **The accumulation of organic matter and sediments sequester carbon. However, anaerobic conditions can promote the generation of methane.**

**Plants*** **Plants are selected and managed to maintain optimal productivity and health for their intended use.**
* **Vegetation is installed and managed to control undesired species.**

**Animals*** **Fish and wildlife habitat, cover, shelter are created, restored, or enhanced.**
* **Improved habitat for some species, and adversely affects others that become entrapped (e.g., fish); the taxa that benefit depend on the degree to which hydrological conditions are conserved.**
* **Maintained or increase in livestock feed and forage.**
* **Increase in wildlife populations and opportunities for recreation.**

**Energy*** **No Change**

**Human*** **Facilitating practices may make other activities (such as recreation) more profitable.**
* **Labor requirements will decrease if land is taken out of production.**
* **Create sustainability of natural resources that support your business.**
* **Increase the property value (real estate) of your property.**
* **Create open space and improve habitat for wildlife.**
* **Conserve soil and water for periods of drought and future use.**
* **Prevent off-site negative impacts.**
* **Comply with environmental regulations.**
* **Save time, money and labor.**
* **Promote family health and safety.**
* **Make land more attractive and promote good stewardship.**
* **May be eligible for cost share.**
 | **Land*** **Land converted to more intensive wetland.**
* **Land use and land in production may change if agricultural land is convert to wetland.**
* **Cultural resources may be mechanically impacted during construction impacts.**

**Capital*** **No additional field equipment required.**
* **Maintain vegetation and water control structures, manage pests, operation and maintenance costs.**

**Labor*** **Labor to manage artificial water levels.**

**Management*** **Develop water, pest and wildlife management plan.**

**Risk*** **Increase in wildlife populations may encourage unlawful trespass and property damages.**
* **Anaerobic conditions can promote the generation of hydrogen sulfide and other odorous compounds.**
* **Improved habitat for some species, and adversely affects others that become entrapped (e.g., fish).**
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| **Net Effect: Improved wetland and water quality at a slight cost.** |

**Commonly Associated Practices:** Access Control, Aquatic Organism Passage, Dike, Fence, Grade Stabilization Structure, Integrated Pest Management, Livestock Pipeline, Nutrient Management, Pond, Structure for Water Control, Wetland Wildlife Habitat Management.

**Note:** This worksheet contains general talking points for the conservation planner to discuss with the land user. It is the first step towards an economic or financial analysis. The second step would include identifying a specific site for analysis at the farm or field level, editing the template for local conditions, adding units and quantities of farm inputs and outputs. The third step in the economic analysis is to place a dollar value on as many variables as possible, put all units in the same time frame, using amortization ($/Acres/Year) or net present value ($/Acre), so benefits and costs can be compared. The fourth and final step would be to combine several conservation practices into a conservation system, which is how most conservation practices are applied at the field level. Data for the worksheet comes from the land user, conservation planner, technical specialist and local agricultural supply vendors and contractors. See Economics Technical Note: TN 200-ECN-1, Basic Economic Analysis Using T-Charts (August 2013) for more information.