

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Wildlife Wetland
Practice Code/Name	657 - Wetland Restoration
Scenario ID	6

Scenario Name: [Hydrologic restoration, Heavy Equipment](#)

Scenario Description: An agricultural area with altered soil is restored to the natural hydrologic conditions using heavy equipment. The subsurface drainage, surface ditches, and/or fill is disabled or removed. Soil is removed to create mounds and shallow water pools on 80% of the site. Heavy equipment is used to restore hydrology and disable drainage systems.

Associated practice(s): [Tree and Shrub Planting](#), [Herbaceous Riparian Buffer](#), [Forest Riparian Buffer](#)
 Before Practice Situation: Typically an agricultural area that was once wetland has altered the soil, vegetation, or natural hydrologic conditions. The natural hydrology was disabled by subsurface drainage, surface ditches, and/or fill. The natural topography has been altered for agricultural use- it is flat, graded with a slope of 0-3%. The area is typically being used as cropland, pasture, or abandoned cropland. Amphibian and Reptile Breeding, Waterfowl Habitat, Wading birds, Mammal Habitat, Bat Habitat, Insect Habitat, Floodwater Retention, Groundwater recharge, Surface water storage, Floral Diversity, Water Quality Improvements, Threatened and Endangered Species Habitat

After Practice Situation: Area now has varying topography, seasonally holding water in the fall and spring. The pools may dry up in the summer. The surface ditches have been disabled. The subsurface drainage features have been disabled. Soil is removed to create mounds and shallow water pools on 80% of the site. Some soil removed was moved into mounds for habitat(70%). 30% of the soil is moved offsite.

Scenario Feature Measure	Acre of restored hydrology
Scenario Unit	Acre
Scenario Typical Size	2

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$5,358.24	\$2,679.12
Labor	\$3,649.28	\$1,824.64
Mobilization	\$1,069.52	\$534.76
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$10,077.04	\$5,038.52

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Wildlife Wetland
Practice Code/Name	657 - Wetland Restoration
Scenario ID	7

Scenario Name: Hydrologic restoration with embankment, heavy equipment

Scenario Description: An agricultural area with altered soil is restored to the natural hydrologic conditions using heavy equipment. The subsurface drainage, surface ditches, and/or fill is disabled or removed. Soil is removed to create mounds and shallow water pools on 80% of the site. Heavy equipment is used to restore hydrology and disable drainage systems. A low embankment is created with excavated material to restore natural hydrology.

Before Practice Situation: Associated practice(s): Structure for Water Control, Tree and Shrub Planting, Herbaceous Riparian Buffer, Forest Riparian Buffer, Mulching
Typically an agricultural area that was once wetland has altered the soil, vegetation, or natural hydrologic conditions. The natural hydrology was disabled by subsurface drainage, surface ditches, and/or fill. The natural topography has been altered for agricultural use- it is flat, graded with a slope of 0-3%. The area is typically being used as cropland, pasture, or abandoned cropland.

After Practice Situation: Area now has varying topography, seasonally holding water in the fall and spring. The pools may dry up in the summer. The surface ditches have been disabled. The subsurface drainage features have been disabled. Some soil removed was moved into mounds for habitat. A 250 ft long embankment, 3 ft from top of embankment to toe of downstream side is created from material excavated on site. Low embankments.

Scenario Feature Measure	Acre of restored hydrology
Scenario Unit	Acre
Scenario Typical Size	2

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$7,555.95	\$3,777.98
Labor	\$4,454.40	\$2,227.20
Mobilization	\$1,069.52	\$534.76
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$13,079.87	\$6,539.94

