5.6. Element 6: Wetlands Assessment.

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5.6.1. Wetland Characterization and Mapping. Wetland areas within the Jackson Creek Watershed were identified through using aerial photos, National Wetland Inventory maps, and 7.5 minute quadrangle maps, ranging from its headwaters through Jacksonville and Central Point to its confluence with Bear Creak. A majority of the wetlands identified are on private property, which were viewed from public roadways. A field visit was made to verify observations and evaluate conditions. The following attributes were recorded:

- Location and size (in acres) of the wetlands
- Surface water connections between the wetland and a stream
- Cowardin Classification code
- Characteristics of buffer zone
- Restoration/ Enhancement potential

Each wetland area identified was assigned an identifying number, consisting of Section-Township- range and identifying number for the wetland. Identified wetlands were plotted on NWI maps, 7.5 minute quadrangle maps and aerial photos. Each wetland was classified under the Cowardin Classification Code which consist of three letters. The first letter represents the class (e.g., palustrine, riverine, etc.). All the wetlands in this watershed fell into the palustrine class (P). This classification includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand. The subcategories under this class has two letters and are as follows:

EM = Emergent: Dominated by rooted herbaceous plants, such as cattails and grass
FO = Forested: Dominated by trees taller than 20 feet
OW = Open Water: No vegetation evident at the water surface
SS = Scrub-Shrub: Dominated by shrubs and saplings less than 20 feet tall
UB = Unconsolidated Bottom: Mud or exposed soils

Each wetland area was then given a code to list the dominant land use within 500 feet of the wetland edge. The following codes were used:

FO = forest or open space
AG = agriculture (pasture, crops, orchards, range land)
R = rural (mixed or small scale agriculture, forest, and/ or rural, residential)
D = developed (residential, commercial, industrial)

Complete data tables and supporting information for the wetlands assessment are located in the Technical Supplement.

5.6.2. Wetlands Enhancement.

The assessment revealed only a few existing wetlands that are candidates for rehabilitation or enhancement in the Jackson Creek watershed. Most of the wetlands noted are mostly farm ponds or small wetlands confined by development on all sides. A few sites (6 to 8) warrant further study. One area that is a possible site for wetlands work is the old reservoir above the town of Jacksonville, which is largely silted in. There are several additional sites below the town of Jacksonville that are also candidates for restoration or enhancement.

The best options for creating new wetland areas involve reestablishment of flood plain wetlands and benches, or creation of new wetlands outside of the flood plain using irrigation canals, stormwater, or other sources to supply water, although obtaining water rights for wetlands can be problematic. The flood plain wetlands should be studied and incorporated into overall plans for the creek channel including vegetation management, flood flow studies, and fish passage issues. Flood plain wetlands can be of great benefit to native and anadromous fish particularly from the standpoint of providing rearing areas for juvenile fish and also as productive sources of aquatic insects and other fish food.

Given the extensive irrigation system throughout the lower portion of the basin, wetlands could be created almost anywhere where there is a source of either irrigation or drain water. Seed banks of wetlands plants are found in most agricultural soils and small berms, and excavations can contour the site to meet specific needs without harm to adjacent lands. The specific wetland design can be tailored to meet the goals of the project including creation of waterfowl and shorebird habitat, water quality improvement, increasing groundwater supplies, and any other needs identified by the SAC. Since most of the land within Jackson Creek is privately owned, agreements with landowners will be required for most wetlands development. Any wetlands using irrigation or drainage water will require new water rights, which must also allow for the seasonal irrigation water supply. Constructed wetlands tend to have relatively low maintenance costs associated with them, however, they are not maintenance free. Long term planning for water control and vegetation management is required. Costs for created wetlands are typically reasonable but vary from site to site depending on the size of the project and the complexity of the water delivery system.