

Supplemental Map Information (User Report) Outline

Project ID: R09Y08P07

Project Title or Area: Deseret Chemical Depot, Utah

Source Imagery (type, scale and date):

1997 B&W 1:40,000

Collateral Data (include any digital data used as collateral):

USGS topographic quads for Saint John and Ophir

Inventory Method (original mapping, map update, techniques used):

Wetlands 1 acre and larger were consistently mapped. Every effort was made to identify wetlands on the facility within the inherent limitations of photointerpretation technology. Photointerpretation followed standard NWI conventions

Classification (Cowardin wetlands, riparian, uplands, hydrogeomorphic, etc.):

Wetlands and deepwater habitats were classified according to the Service's official wetland classification system (Cowardin). Wetlands were typed to ecological system, subsystem, class, subclass, water regime, and special modifiers

Riparian vegetation was mapped using the System for Mapping Riparian Areas in the Western U.S.

General description of the Project Area:

Intermountain Semidesert and Desert Province

Land-surface form.--The Intermountain Desert Province covers the physiographic section called the Great Basin and the northern Colorado Plateau in Utah. Much of this area is made up of separate interior basins; only a small part of it drains to the sea. The lower parts of many basins have heavy accumulations of alkaline and saline salts. Streams are rare and few are permanent. Many mountains rise steeply from the semiarid, sagebrush-covered plains. These mountains are generally well covered by vegetation, and their upper elevations usually bear sparse conifer forests.

Climate.--Summers are hot, but winters are only moderately cold. The average annual temperature ranges from 40 to 55F (4 to 13C). Spring comes early, except at higher elevations. Annual precipitation averages only 5 to 20 in (130 to 490 mm), often falling as winter snow. Almost no rain falls during the summer months except in the mountains.

Vegetation.--Sagebrush dominates at lower elevations. Other important plants in the sagebrush belt are antelope bitterbrush, shadscale, fourwing saltbush, rubber rabbitbrush, spiny hopsage, horsebrush, and short-statured Gambel oak. All these shrubs tolerate alkali to varying degrees, essential to their survival on the poorly drained soils widespread in the region. On soils with the highest concentrations of salt, even these shrubs are unable to grow; they are replaced by plant communities dominated by greasewood or saltgrass.

Although sagebrush now dominates this zone, it may not represent climax growth, but rather a disclimax produced by overgrazing. In plots protected from fire, grasses typical of the Palouse grassland or mixed-grass steppe gradually become dominant.

Above the sagebrush belt lies a woodland zone dominated by pinyon pine and juniper, similar to the pinyon-juniper woodland of the Colorado Plateau.

In the montane belt above the woodland zone, ponderosa pine generally occupies the lower and more exposed slopes and Douglas-fir the higher and more sheltered ones. In the subalpine belt, the characteristic trees are subalpine fir and Engelmann spruce. Only a few mountains rise high enough to support an alpine belt.

Soils.--Aridisols dominate all basin and lowland areas; forest soils are found at higher elevations. Narrow bands of Entisols lie in stream floodplains and rocky landscapes. Salt flats and playas without soils are extensive in the lower parts of basins with interior drainage.

Description of wetland habitats:

Examples of wetland communities at Deseret Chemical Depot.

Wetland Type (Map Code)	Dominant Species	Common Associates
Palustrine Forested / Scrub-Shrub Wetland, Temporarily Flooded (PFO1/SS1A)	English Elm	Willow, Salt Cedar, Sagebrush
Palustrine Emergent, Wetland, Temporarily Flooded (PEM1A)	Saltgrass	Bluegrass, Rush
Palustrine Emergent, Wetland, Seasonally Flooded (PEM1C)	Rush	Foxtail Barley, Wheatgrass

Description of Riparian habitats:

Riparian Type (Map Code)	Dominant Species	Common Associates
Riparian Lotic, Forested, Mixed Deciduous (Rp1FO6MD)	Lombardy Poplar	Willow, Salt Cedar
Riparian Lotic, Scrub-Shrub, Deciduous Salt Cedar (Rp1SS6SC)	Salt Cedar	Rabbitbrush, Sagebrush
Riparian Lotic, Scrub-Shrub, Mixed Deciduous (Rp1SS6MD)	Willow	Sagebrush, Greasewood

References:

Cowardin, L.M., V. Carter, F.C. Goulet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. Office of Biological Services, Fish and Wildlife Service, US Department of the Interior, Washington D.C.

U.S. Fish and Wildlife Service. 1997. A System for Mapping Riparian Areas in the Western United States