

WETLAND USER NOTES -- Ajo SW Quadrangle

1. Map Preparation

Wetland classification for the National Wetlands Inventory (NWI) wetland map overlay to the Ajo SW 1:100,000 scale map are in accordance with L. M. Cowardin et al (1979). Wetland delineations and classifications were produced through the interpretation of black and white aerial photographs at a scale of 1:120,000 taken during October 1972. The photographs were viewed stereoscopically at a 6X magnification. Delineations were enlarged using a zoom-transferscope to overlays of 1:24,000 and 1:62,500. Overlays were then transferred to 1:100,000 scale base maps. Limited field checks were performed during December 1973.

The Project Officer for production of the wetland map was Warren Hagenbuck, Regional Wetlands Coordinator, (U.S. Fish and Wildlife Service, Region 2, P.O. Box 1306, Albuquerque, New Mexico 87103, (505) 766-2914). Aerial photo interpretations were completed by the School of Renewable Natural Resources, University of Arizona, Tucson 85721, Project Director: Dr. Jon Rodiek (602) 625-2313.

The user of the map is cautioned that due to mapping, primarily through photo interpretation, a small percentage of wetlands may have gone unidentified. Landscape changes could have taken place since the time of photo acquisition; therefore, discrepancies or land use changes should be provided to the Regional Wetlands Coordinator, Region 2, U.S. Fish and Wildlife Service.

2. Collateral Data

A. General Location

The area is within Pima, Yuma County, Arizona.

Northern boundary	32° 30' N Latitude
Southern boundary	U S - Mexico Border
Eastern boundary	113° W Longitude
Western boundary	114° W Longitude

B. Land Ownership

There are three (3) major land holdings within the Ajo SW quadrangle. These are:

Luke - Williams Air Force Range
Cabeza - Prieta Game Range
Organ Pipe Cactus National Monument

C. Soils

There are five (5) major soil associations found on the Ajo SW according to J E Jay et al (1975). These are:

Hyperthermic arid soils (HA) -- mean annual soil temperatures of more than 72°F and less than 10 inches mean annual precipitation.

HA 1	Torrifluent Association
HA 6	Lithic Cambrid-Rock Outcrop-Lithic Haplargids Association
HA 10	Superstition-Rositas Association
HA 8	Tremant-Coolidge-Mohall Association
HA 4	Gunsight-Rillito-Pinal Association

Detailed soil references: M. L. Richardson and M. L. Miller (1974); USDA Soil Conservation Service (1972); and E. G. Chamberlin and M. L. Richardson (1974).

D. Biotic Communities

The descriptions of the biotic communities are summarized from C. H. Lowe (1977) and Brown, Lowe and Pase (1977). The community types are listed here in descending order of their relative dominance in the Ajo SW quadrangle.

The Sonoran Desertscrub -- The Lower Colorado Subdivision represents 17% of Arizona's land area and is dominated by the creosote bush - bur sage community, composed mainly of shrubs and dwarf shrubs. Over extensive areas, creosote bush and white bur-sage are the plant dominants. Other occasional dominants are mostly shrubs. Any trees present usually exist in drainageways and are classified as desert riparian trees. This shrub community characterizes habitats less rocky and of lower relief (valleys, mesas and shelving plains) in the lower Colorado desert section. Precipitation occurs primarily during the winter and rarely exceeds 10 inches annually.

The Sonoran Desertscrub - Arizona Upland subdivision represents 14.0% of Arizona's land area and is comprised of the paloverde - sahuaro community, consisting of small desert trees, shrubs and numerous cacti. The best development of these is best attained on rocky hills, bajadas, and other coarse soiled slopes. It is a rich community of desert plants and animals, exhibiting highly varied and often spinose life-forms. The foothill understory is often comprised of a mixture of 5 to 15 or more shrub and dwarf shrub species in the form of a three, four or five layered understory. The primary desert trees are foothill paloverde, sahuaro, ironwood, elephant tree and a few others including some riparian species. Mean annual precipitation is approximately 10 inches.

User Notes Ajo SW Quadrangle Arizona Wetland Map

The Semidesert Grassland, accounting for 8.0% of Arizona's total land area, is a transitional type of grass dominated landscape positioned between desert below and evergreen woodland or chaparral above. Its lower limit is about 3,500 feet in elevation and its best development is between 4,000 and 5,000 feet. In Arizona it occurs largely in the south-eastern quarter of the state. A small area also occurs in the northwestern quarter near Kingman. The grasses are often bunch-growth perennials in which the bases of clumps are separated by bare ground. Where the soil is deep black gramma, blue gramma, slender gramma and others may be the dominant cover over large areas. A wider variety of shrubs, trees and cacti life forms occur on shallow-soiled rocky and gravelly hills and slopes. Mesquite trees have invaded large areas of former grasland. Mean annual precipitation ranges between 10 and 15 inches.

3. SUPPLEMENTAL DATA (N.W.I.)

A. Hydrologic Units

Major hydrologic units found within the Ajo SW quadrangle are defined by the U.S. Geologic Survey (1974). For example, the coding designates region (15) Lower Colorado, subregion (01), accounting unit (00), and cataloging unit (05).

15070203
15070201
15080103
15080102
15070202

There are three (3) groundwater areas designated within the quadrangle by the U.S. Geological Survey (1979). These are:

Gila River Drainage from Texas Hill to Dome
Western Mexican Drainage
Gila River Drainage from Painted Rock Dam to Texas Hill

B. Geography

Landforms

Physical subdivisions and land surface forms are classified according to E. H. Hammond (1965). There is one (1) major type:

(V-4) B5a -- Intermontane; Basin and Range Area; Plains with low mountains.

User Notes Ajo SW Quadrangle Arizona Wetland Map

Bailey's Ecoregions

Bailey's Ecoregion Classification, R. G. Bailey (1975), identifies the area as within the following province:

3222L Dry Domain; Arid Desert Division; Creosote Bush-Bur Sage Section.

4. Wetland Communities

The wetland and deepwater habitats displayed on the Ajo SW map are dominated by a single type (R₄SB) which represents, the only identifiable area on the map: During wet, periods when high runoff is experienced there may be, some other types created: Due to high evaporation, - transpiration rates this area remains extremely dry:,

R₄SB Riverine, Intermittent, Streambed

5. Field Checks

No data.

6. Wetland Loss and Vulnerability

The extreme southwestern geographic location makes Ajo one of the most arid regions within the state. Low precipitation accumulations and high evapotranspiration rates account for this condition. The wetland type found here is limited almost exclusively to R₄SB. Vegetation that exists here in appreciable volume is located along these washes. When water does flow across the landscape it can be found in these areas.