Section 5: Important Resources

The Middle and Lower San Pedro Watershed has extensive and important natural resources with national, regional and local significance. This Watershed contains critical riparian habitat for several rare and endangered species, including the Mexican Spotted Owl and the Gila Chub (U.S. Fish & Wildlife Service, 2004). It also contains important recreational resources such as extensive wilderness areas with cultural, hiking and fishing opportunities and is one of the premier birding areas in the continental United States.

Based on our analysis of the combination of natural resource values, two Natural Resources Areas (NRAs) have been identified for protection. Factors that were considered in delineating these Natural Resource Areas include: legal status (Unique Waters, critical habitat for threatened and endangered species, and wilderness), the presence of perennial waters and riparian areas, recreational resources, and local values.

The two identified Natural Resource Areas (Figure 5-1) consist of the following groupings of 10-digit HUC subwatersheds:

1. Aravaipa - Alder Creek Natural Resource Area: Lower Aravaipa Creek, Upper Aravaipa Creek, and Alder Wash - Lower San Pedro River.


A description and the significance of each NRA are discussed below.

Aravaipa - Alder NRA

The Aravaipa - Alder NRA (AVAL-NRA) includes three 10-digit HUC subwatersheds: Lower Aravaipa Creek, Upper Aravaipa Creek, and Alder Wash - Lower San Pedro River. This NRA contains several units of the Coronado National Forest, three wilderness areas, extensive tracts of riparian woodland and perennial streams, two important wildlife preserves, and critical Mexican spotted owl habitat. The AVAL-NRA contains the Turkey Creek Riparian Area of Critical Environmental Concern (ACEC), the Butterfly Wash Research Natural Area (RNA), and the Table Mountain ACEC/RNA.

The 19,410-acre Aravaipa Canyon Wilderness includes the 11-mile long Aravaipa Canyon, as well as the surrounding tablelands and nine side canyons. Seven species of native desert fish, desert bighorn sheep, and over 200 species of birds are found there (BLM, 2006).

Twenty-two miles of Aravaipa creek are perennial and classified as an Arizona Unique Water which provides special protection from water quality degradation. The creek and several of its tributaries support riparian woodlands of mesquite, cottonwood-willow, and mixed broadleaf trees.

Significant portions of the 5,800-acre Santa Teresa Wilderness and Galiuro
Wilderness are within the AVAL-NRA. These very remote areas are characterized by deep canyons, rocky outcrops and bald summits. Vegetation is predominantly thick chaparral with forests of ponderosa pine. They serve as ideal habitat for wildlife species that prefer a high degree of isolation. Among those are black bear and mountain lion. Other desert species, such as mule deer, coatimundi and javelina, can be found here as well (Coronado National Forest, 2006).

Bingham Cienega Natural Preserve is located in the Alder Wash – Lower San Pedro River HUC. Its distinctive swampland appears to result from subsurface flow deriving from the San Pedro River, augmented by those from Buehman and Redfield Canyons, draining from the Santa Catalina Mountains.

Part of Turkey Creek is a Bureau of Land Management (BLM) designated Area of Critical Environmental Concern (ACEC). Turkey Creek flows into Aravaipa Canyon at its southeast end. ACEC’s are lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values. They afford protection to fish and wildlife resources or other natural systems or processes.

The USDA Forest Service's Research Natural Areas (RNA) program is a specific system of selecting and managing research sites. The RNA program was established in 1927 to identify, protect, and manage a representative sample of pristine areas of forest, shrubland, grassland, alpine, aquatic, and geologic types (U.S. Forest Service 1990).

Table Mountain ACEC/RNA encompasses 1,220 acres of the AVAL-NRA southwest of the Aravaipa Wilderness. It contains an Alligator Juniper savanna vegetation system that is of extremely restricted range. Its canyons of Mexican Blue Oak contribute to the Aravaipa Canyon system and help stabilize streamflow.

Paige Creek NRA

The Paige Creek NRA (PC-NRA) is comprised of the Redfield Canyon-Lower San Pedro River, Hot Springs Canyon, Paige Creek-Lower San Pedro River, Ash Creek-Upper San Pedro River, and Clifford Wash-Upper San Pedro River subwatersheds. The PC-NRA includes Critical Habitat for the Gila Chub (Redfield Canyon), the Huachuca Water Umbel (Clifford Wash) and the Mexican spotted owl (all HUCs).

There are about 16 miles of perennial reaches in the San Pedro River and in Redfield Canyon in the Redfield Canyon HUC. The San Pedro River also has perennial reaches in the Clifford Wash subwatershed. Riparian corridors are classified by Arizona Game & Fish as mesquite, cottonwood-willow, and mixed broadleaf woodlands. They occur along these perennial reaches and also in reaches not classified as perennial, including between Pomerene and Curtiss along the San Pedro, a distance of about 20 miles.
Buehman Canyon in the Redfield Canyon HUC is listed as an Arizona Unique Waters, which provides special protection from water quality degradation.

The PC-NRA includes parts of the Rincon Mountains, East Saguaro, Redfield Canyon, and Galiuro Wilderness Areas. It includes parts of the eastern unit of Saguaro National Park and large areas of the upland portions. All its component HUCs are included in the Coronado National Forest.

The PC-NRA has a variety of public natural, cultural and recreational resources that add to its value as a conservation area.

Oracle State Park is a 4,000 acre site that encompasses 15 miles of public hiking trails with access to the Arizona Trail, a 790 mile non-motorized, primitive, long distance trail that traverses the State from Mexico to Utah. This park offers environmental education programs for children and adults. Its Kannally Ranch site provides a venue for outdoor cultural events.

Kartchner Caverns State Park lies between Benson and Sierra Vista. It is valued as one of the top 10 cavern systems of the world for it’s over two miles of underground trails, magnificent mineral formations and paleontological significance.

Cascabel Hermitage Open Land Trust is a member of the Land Trust Association and is dedicated to provision of conservation easement in a remote area of the Hot Springs watershed. It occupies 440 acres committed to solitary retreats, land conservation, and education in desert adaptive living.

The Muleshoe Ranch Cooperative Management Area, located in the Redfield Canyon and Paige Creek HUCs, is the third largest U.S. holding of the Nature Conservancy. It is 49,120 acres of public and private land cooperatively managed by The Nature Conservancy, Bureau of Land Management (BLM) and Coronado National Forest. It is situated in a key area of three watersheds that contribute to some of the most important aquatic habitat in Arizona. Some eighty percent of the region’s wildlife species depend on this confluence of waters and habitats.

The area provides lodging, primitive camping, and guided hiking. It is the site of the Muleshoe Ecosystem Project, whose goal was to use managed grazing and prescribed burns to increase perennial grass cover and decrease perennial shrubs thereby providing protection to the area’s perennial waters. This important project demonstrates how sound science and strong partnerships with public agencies can restore large landscapes for species such as pronghorn antelope, mountain lion, grassland birds, native fish, and Lowland leopard frog (Nature Conservancy, 2006)

The PC-NRA is home to several ACEC/RNA designated areas: Swamp Springs ACEC in Redfield Canyon of the Hot Springs subwatershed; the 350 acre St David Cienega ACEC/RNA; the San Pedro River ACEC/RNA; and the San Pedro River National Conservation
Area (SPRINCA) in the Clifford Wash subwatershed. These areas are the focus of several BLM, Forest Service, and Arizona Game and Fish initiatives for habitat restoration and recovery efforts for populations of federally listed species. Actions to create open water habitat for Gila topminnow, desert pupfish, Chiricahua leopard frog and Huachuca water umbel have been planned.
Figure 5-1: Natural Resource Areas in the Middle and Lower San Pedro Watershed.
References:

http://www.blm.gov/az/rec/aravaipa.htm


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