Section 5: Important Resources

The Salt Watershed has extensive and important natural resources, with national, regional and local significance. The watershed contains critical riparian habitat for the Mexican Spotted Owl, the Loach Minnow and the Southwest Willow Flycatcher (U.S. Fish & Wildlife Service, 2004). The watershed also contains important recreational resources including extensive wilderness areas with hiking, bird watching and fishing.

As a result of our analysis, two Natural Resource Areas (NRAs) have been identified for protection based on the combination of natural resource values. Factors that were considered in delineating these areas include: legal status (unique waters, critical habitat for threatened and endangered species, national monument areas and wilderness), the presence of perennial waters and riparian areas, the presence of state parks and forests, recreational resources and local values.

Several 10-digit contiguous HUCs have been combined to form a unique NRAs. The two identified Natural Resource Areas consist of the following groupings of 10-digit HUCs:

1. Western Salt River NRA: Upper Salt River, Tonto Creek, and Lower SALT River.

2. Eastern SALT River NRA: Black River, White River and Carrizo Creek

Western Salt River NRA

The Western Salt River NRA contains Tonto National Monument, extensive riparian vegetation along the Salt River and its tributaries, important perennial streams, seven wilderness areas, three Arizona Preserve Initiative areas, critical wildlife habitat, a national forest, and parts of two Indian reservations.

Critical habitat exists in the Western Salt River NRA for the Southwest Willow Flycatcher and the Mexican Spotted Owl (Figure 3-7)

Tonto National Monument

The following description of Tonto National Monument is from the National Park Service website (http://www.nps.gov/tont/naturescience/index.htm)

Situated within rugged terrain at the northeastern boundary of the Sonoran Desert, Tonto National Monument preserves cliff dwellings and other prehistoric archeological sites. For three hundred years, a vast culture lived within Tonto Basin, surviving and adapting to the arid environment. Built in shallow caves, perched over a thousand feet above the river valley, the cliff dwellings are representative of the final phase of occupation in this area.

The river valley below, once a thriving settlement with farm fields and stone dwellings, is now covered by Roosevelt Lake. The surrounding mountains, built by sedimentary layers and then uplifted, are continually being shaped through erosion and weathering. From the valley rising 2000 feet to the
mountain tops, spreading through open areas, sheltered among rocks, nestled in canyons, and hidden among washes are different local environments, each with their own community of wildlife. This is the tremendous diversity and interconnection of life that is the Sonoran Desert.

Wilderness Areas

There are seven wilderness areas in the Western Salt River NRA, all administered by the U.S. Forest Service. These wilderness areas are:

Hellsgate Wilderness


The United States Congress designated the Hellsgate Wilderness in 1984 and it has a total of 37,440 acres.

Lying at the base of the Mogollon Rim, upper Tonto Creek has incised a 1,000-foot-deep canyon that runs entirely through the center of this Wilderness. A perennial waterway, Tonto Creek creates deep emerald pools sometimes separated by impassable falls. The area also contains Haigler Creek with its impressive rock formations. Elevations range from 6,440 feet atop Horse Mountain in the northeast corner to 2,960 feet where Tonto Creek leaves the area in the southwest. Trout, catfish, and smallmouth bass inhabit both creeks, popular destinations with anglers. Available water helps to support a variety of wildlife: black bears, mountain lions, mule deer, coyotes, gray foxes, javelinas, beavers, and many small mammals and birds.

Sierra Ancha Wilderness


The United States Congress designated the Sierra Ancha Wilderness in 1964 and it has a total of 20,850 acres.

Centuries ago the Salado Indians built and lived in cliff dwellings in this region, and the ruins of many of them still stand today. An "original" Arizona Wilderness, Sierra Ancha was established as a Primitive Area in 1933 and as a Wilderness in 1964. Uranium exploration carved a few roads into this area in the 1950s, roads now being reclaimed by natural processes.

Exceptionally rough, scenic, and often inaccessible, Sierra Ancha consists of precipitous box canyons, towering vertical cliffs, and pine-covered mesas. Elevations range from 4,000 feet near Cherry Creek to more than 7,400 feet on several high peaks, with the highest point on Aztec Peak at 7,733 feet. Chaparral covers lower elevations with turbinella oak, manzanita, and mountain mahogany. Some pinyon and juniper cloak the east side of the Wilderness, dropping to semidesert brush and grassland below. Several springs usually offer water year-round.

Salome Wilderness
The United States Congress designated the Salome Wilderness in 1984 and it now has a total of 18,531 acres.

Salome Canyon is the major canyon that runs almost the entire length of this Wilderness. You won't encounter many human beings in the area but you will see remnants of the Salado Indians, who lived here until vanishing about 700 years ago.

In the north area, the land becomes increasingly rugged with many bedrock outcappings. It culminates in Hell's Hole, a region of precipitous bluffs. Water is sometimes available from several small springs. Elevations range from 2,600 feet at lower Salome Creek to 6,500 feet on Hopkins Mountain. Semidesert grasslands and chaparral dominate the vegetation. Winters usually freeze, and summer temperatures often exceed 100 degrees Fahrenheit.

**Salt River Canyon Wilderness**

Although there is no guarantee that you will find buried treasure, you are sure to discover miles and miles of desolate and barren mountains, seemingly endless and haunting canyons, raging summer temperatures that can surpass 115 degrees Fahrenheit, and a general dearth of water. Even the area's earliest known inhabitants, the hardy Hohokam and Salados peoples, established only very small villages and cliff dwellings in this harsh and
fabulous country between 800 and 1400 A.D.

The Wilderness value of the Superstitions has long been recognized. Established as a Primitive Area in 1939, it was named a pre-Wilderness Act “wilderness” in 1940, and became an official Wilderness in 1964. Elevations range from approximately 2,000 feet on the western boundary to 6,265 feet on Mound Mountain. In the western portion rolling land is surrounded by steep, even vertical terrain. Weaver’s Needle, a dramatic volcanic plug, rises to 4,553 feet. The central and eastern portions are less topographically severe.

Vegetation is primarily that of the Sonoran Desert, with semidesert grassland and chaparral higher up. Dense brushland covers hundreds of acres. A few isolated pockets of ponderosa pine may be found at the highest elevations.

Four Peaks Wilderness


The United States Congress designated the Four Peaks Wilderness in 1984 and it now has a total of 61,074 acres.

Rising from desert foothills near the center of the Wilderness, a major mountain with four peaks can be seen from great distances in all directions. From the craggy summits the land drops down a complex series of ridges and drainages to bluffs and deep gorges. Elevations vary from around 1,600 feet to 7,657 feet on Brown's Peak, the highest of the four peaks.

Ponderosa pine and some Douglas fir grow in the highlands. A few aspen stand on the north side of Brown's Peak. Intermediate elevations have produced impenetrable thickets of manzanita, Gambel oak, and pinyon pine. Below 4,000 feet, grasslands blend into the Upper Sonoran Desert and impressively huge saguaro cacti thrive. The narrow canyons are pleasingly shaded with cottonwoods and sycamores.

One of the densest black bear populations in Arizona lives in this Wilderness. Other mammals include ring-tailed cats, skunks, coyotes, deer, javelinas, and mountain lions. Keep your eyes open for rattlesnakes, scorpions, black widow spiders, centipedes, and millipedes.

Atop the mountain temperatures are noticeably cooler than down below. Lightning storms occur regularly during "desert monsoon season" (July and August) and flash floods are common. Snow accumulates here in winter.

Springs and streams are seasonal, and water is often impossible to find.

Tonto National Forest


The Tonto National Forest, Arizona, embraces almost 3 million acres of
rugged and spectacularly beautiful country, ranging from Saguaro cactus-studded desert to pine-forested mountains beneath the Mogollon Rim. This variety in vegetation and range in altitude (from 1,300 to 7,900 feet) offers outstanding recreational opportunities throughout the year, whether it's lake beaches or cool pine forest.

As the fifth largest forest in the United States, the Tonto National Forest is one of the most-visited “urban” forests in the U.S. (approximately 5.8 million visitors annually). Its boundaries are Phoenix to the south, the Mogollon Rim to the north and the San Carlos and Fort Apache Indian reservations to the east.

In the winter, national and international visitors flock to Arizona to share the multi-hued stone canyons and Sonoran Desert environments of the Tonto’s lower elevations with Arizona residents. In the summer, visitors seek refuge from the heat at the Salt and Verde rivers and their chain of six man-made lakes. Visitors also head to the high country to camp amidst the cool shade of tall pines and fish the meandering trout streams under the Mogollon Rim.

One of the primary purposes for establishing the Tonto National Forest in 1905 was to protect its watersheds around reservoirs. The forest produces an average of 350,000 acre-feet of water each year. Six major reservoirs on the forest have the combined capacity to store more than 2 million acre-feet of water. Management efforts are directed at protecting both water quality and watershed and riparian area conditions.

Eight Wilderness Areas, encompassing more than 589,300 acres, are managed to protect the unique natural character of the land and to assure the public recreation areas where one is only a visitor. In addition, portions of the Verde River have been designated by Congress as Arizona’s first and only Wild and Scenic River Area.

Fish and wildlife are abundant on the Tonto; more than 400 vertebrate species are represented, including 21 listed among federal and state Threatened and Endangered Species. Maintaining quality habitat to support and improve wildlife diversity is a primary management consideration.

Approximately 26,000 head of cattle are permitted to graze on the forest. Because of its year-round availability, permitted use is extremely high and land allotments must be carefully managed to avoid over-utilization and declining productivity of the range. Currently, long-term drought conditions across the Southwest have limited our ability to sustain more than 20 percent of the permitted numbers on the forest.

The Tonto has a rich history of producing copper, gold, silver, lead, zinc, uranium, molybdenum, manganese, asbestos, mercury and many other metals and minerals. This history spans over 150 years and includes 38 mineral districts with recorded production.

Although the Tonto is not heavily timbered, about 4 million board feet total of saw logs, fuel wood and other forest wood products are selectively harvested each year.
The critical fire season is relatively short, usually lasting from May to mid-July. During that period, natural and human-caused fires often threaten the timber, chaparral, grass and light shrub vegetative zones. The Tonto has averaged 330 wildfires a year over the last ten years.

With some of the state’s more prominent peaks located on the Tonto, the forest supports an important communication link for Arizona. Radio, television and telephone networks use the electronic sites on these mountains to facilitate state and national communications. Many of the high-capacity transmission lines that bring Phoenix its power also crisscross the Tonto.

Arizona Preserve Institute Areas

There are three preserve lands within the Western Salt River NRA, encompassing a total of 611 square miles. The largest preserve is in the Lower Salt River Watershed (15060106) which covers 520 square miles near Payson. The other two preserves are located near Globe and Chandler, respectively. Figure 4-14 shows the boundaries of the preserve lands within the Salt Watershed.

Eastern Salt River NRA

The Eastern Salt River NRA contains extensive riparian vegetation along the Salt River and its tributaries, important perennial streams, three wilderness areas, six areas protected as Outstanding Arizona Waters, critical wildlife habitat, a national forest, and parts of two Indian reservations.

Critical habitat exists in the Eastern Salt River NRA for the Loach Minnow and the Mexican Spotted Owl (Figure 3-7)

Mount Baldy Wilderness


The United States Congress designated the Mount Baldy Wilderness in 1970 and it has 7,079 acres.

Captain George Wheeler, who surveyed much of the American Southwest in the 1870s, wrote that the view from Mount Baldy was "the most magnificent and effective of any among the large number that have come under my observation." In other words, he liked it . . . he really liked it. So do the scores of day hikers who visit Mount Baldy Wilderness today, making it one of the most popular hiking areas in Arizona.

An extinct volcano rising to 11,403 feet, Mount Baldy stands within the White Mountain Apache Reservation; the Wilderness occupies its eastern slope. Most of the forest covering the mountain is mixed conifers with ponderosa pine in the lower elevations and fir and spruce higher up. Large meadows break open the forest, carpeted in summer with wildflowers such as Indian paintbrush, columbine, penstemon, iris, and lupine. Until winter cloaks the area in snow, elk and deer are commonly seen. Beavers, mountain lions, coyotes, bobcats, and black bears live here with a variety of smaller mammals. Bald eagles, falcons,
and hawks circle beneath the sun. Summer thunderstorms are frequent, as are lightning strikes on the mountain.

_Bear Wallow Wilderness_

(text from Wilderness Institute, University of Montana College of Forestry and Conservation, 2008, http://www.wilderness.net/index.cfm?fuse= NWPS&sec=wildView&wname=B ear%20Wallow)

The United States Congress designated the Bear Wallow Wilderness in 1984 and it now has a total of 11,080 acres.

Some of the largest acreage of virgin ponderosa pine in the Southwest stands on Bear Wallow Wilderness, venerable reminders of a once extensive forest of these giants. Down the length of the area, through a blanket of pine, fir, and spruce, beautiful Bear Wallow Creek flows year-round, shaded by green riparian hardwoods. The creek provides a habitat for the endangered Apache trout; anglers can try for other species in the creek and its north and south forks. Early explorers were impressed by the large number of well-used wallows, which revealed how plentiful the area’s population of black bears was. Black bears still abound, and you may see elk, deer, squirrels, and a diverse community of smaller mammals, birds, and reptiles. Wildflowers bloom in profusion, especially during the summer rains. Poison ivy grows tall and dangerously abundant.

_Blue Ridge Primitive Wilderness Area_


In 1933 the Secretary of Agriculture proclaimed the Blue Range should be managed for primitive uses to maintain the wildness of that area. Its 173,762 acres are indeed wild and it is the last designated Primitive Area in the United States. The Blue Range remains one of Arizona's untouched and little known jewels. This is a land of rugged mountains, steep canyons, and stark ridges that is at the same time remote and accessible through an extensive trail system. Trails are open to non-motorized and non-mechanized use only within the primitive area.

_Apache - Sitgreaves National Forest_

The Apache and the Sitgreaves National Forests were administratively combined in 1974 and are now managed as one unit from the Forest Supervisor's Office in Springerville. The two million acre Forest encompasses magnificent mountain country in east-central Arizona along the Mogollon Rim and the White Mountains.

What makes this Forest so special? It's the water...lots of it...draining the high mountains and forming numerous lakes and streams...a fisherman's paradise in the arid Southwest.

The Apache-Sitgreaves has 34 lakes and reservoirs and more than 680 miles of rivers and streams - more than can be found in any other Southwestern National Forest. The White Mountains contain the
headwaters of several Arizona rivers including the Black, the Little Colorado, and the San Francisco.

The Sitgreaves was named for Captain Lorenzo Sitgreaves, a government topographical engineer who conducted the first scientific expedition across Arizona in the early 1850’s. On the Sitgreaves, the major attractions for visitors from the hot valleys of Phoenix or Tucson are the Mogollon Rim and the string of man-made lakes. From the Rim’s 7600-foot elevation, vista points provide inspiring views of the low country to the south and west.

In the last century, the US Army established a series of forts in New Mexico and Arizona. To supply these forts and settlements, a military road was built linking Santa Fe, New Mexico and Camp Verde near Prescott. Part of this road, called the General Crook Trail, runs almost the length of the Sitgreaves and in many places follows the brink of the Rim.

The Apache National Forest is named after the tribes that settled in this area. It ranges in elevation from 3500 feet near Clifton to nearly 11,500 feet on Mount Baldy. The congressionally proclaimed Mount Baldy, Escudilla, and Bear Wallow wildernesses and the Blue Range Primitive Area make the Apache one of America’s premier backcountry Forests. The Apache is also noted for its trout streams and high-elevation lakes and meadows.

The management concerns on the Apache-Sitgreaves include the health and restoration of the watersheds, sustaining the Forest’s ecosystems, reducing the dangers associated with wildfire in the urban interface, and maintaining the National Forest road system.

**Outstanding Arizona Waters**

Within the Eastern Salt NRA, portions of six areas are currently protected as Outstanding Arizona Waters. OAW include 4.25 miles of Bear Wallow Creek (from its headwaters to the San Carlos Indian Reservation), 3.8 miles of both the North and South Forks of Bear Wallow Creek (from their headwaters to where they join Bear Wallow Creek), 5.5 miles of Hay Creek (from its headwaters to Black River), and 3 miles of Stinky Creek (from White Mountain Apache Indian Reservation to the West Fork of Black River) (Figure 2-5) (ADEQ 2007).
References:


