



U.S. Fish & Wildlife Service

Bill Williams River

National Wildlife Refuge

Welcome: Desert Oasis

With its majestic rock cliffs; its ribbon of cool water running through classic Sonoran Desert; and its cattail-filled marsh harboring rails and waterfowl, Bill Williams River National Wildlife Refuge offers a little bit of everything for both wildlife and people.

Rare Habitat

A century ago, cottonwood forest was widespread along the Colorado River. In their journals, western explorers such as General John C. Fremont noted miles-thick stands of cottonwood and willow along the banks. They also mentioned the presence of abundant mesquite on the higher reaches.

In 1935, the 726-foot Hoover Dam was built on the Arizona-Nevada border, followed by twenty smaller dams over the following decades. As the water backed up into a series of lakes, many of the riparian forests along the Colorado River were drowned. The construction of Alamo Dam on the Bill Williams River in 1968 changed the old flood cycle, which reduced stands of native cottonwood and willow trees.

Fortunately, Bill Williams River NWR holds one of the last stands of natural cottonwood-willow forest along the lower Colorado River, creating a unique ecosystem that provides good habitat for resident and migratory wildlife.

Wildlife: Lush Living in the Desert

The rare riparian habitat of Bill Williams River NWR draws a variety of neotropical migratory birds—winging their way from Central and South America to their breeding grounds in the north. Over 340 species of birds have been documented on the Refuge. Bright colors from birds like the yellow warbler, vermilion flycatcher, and summer tanager flash like sparks in the desert sky as they flit across the riverbed.

About a dozen endangered Yuma clapper rails spend the summer months in the cattails of the marsh and may overwinter. More likely heard than seen, their dry *kek-kek-kek* echoes at dusk and dawn. Another endangered bird, the south-western willow flycatcher, nests on the refuge in the willow trees lining the river.

Crisscrossing tracks in the sand chronicle the nighttime excursions of cottontails,

javelina, and deer, as well as predatory coyotes, bobcats, and the less common cougars.

Rattlesnakes are highly mobile at dawn and dusk and may be active during any month. In daytime heat they recede to cooler spots, such as rodent burrows or crevices.

Native Fish Get a Finhold

Just below refuge headquarters lies a cove where razorback suckers and bonytail chubs are raised. The two species are among 31 native Arizona fish, 28 of which are either endangered, threatened, or candidates for listing.

At Bill Williams River NWR, biologists from the Fish and Wildlife Service's Arizona Fishery Resources Office receive young razorback suckers and bonytail chubs from Dexter National Fish Hatchery, a New Mexico facility that produces endangered fish. The fish are introduced into the cove, where they'll grow to around 10 inches—a size that offers them a chance against predators. At that point they're released into Lake Havasu and other areas, where they'll be monitored to determine their survival. In the future, these fish will also be released into stretches of free-flowing river.

Working for Wildlife

Refuge staff use various management techniques to protect and restore the native plants and animals at Bill Williams River NWR. Cottonwood and willow trees are planted and maintained, salt cedar is controlled, and native fish are being reintroduced. The refuge is also working with the Army Corps of Engineers, the agency in charge of water releases from Alamo Dam, to return water flows in the Bill Williams River to a more natural state.

History: Mystic to Mythic Past

The lower Colorado River region is within the ancestral boundaries of the Mojave and Chemehuevi, tribes whose legacies date back many thousands of years. Descendants of these tribes still use willow stems from the refuge for traditional Native American basket weaving.

The river that flows through the refuge gets its name from Bill Williams, a mountain man who traveled through much of Arizona in the early 1800's. Williams came west from St. Louis, serving as

a missionary to Native Americans. He eventually gave up the life of a missionary and spent the rest of his life traveling the west as a trapper. The year and cause of his death remains a mystery, but legend has it he is buried in an unmarked grave somewhere on Bill Williams Mountain near Williams, Arizona.

Things to do at the Refuge

Wildlife watching, boating, fishing, and hunting are popular activities on the refuge. Stop by headquarters (open Monday through Friday, 8:00 am - 4:00 p.m.) for the latest wildlife sightings and hunting and fishing regulations.

Wildlife Watching

There are no developed trails at Bill Williams River NWR, but the riparian area can be seen from the gravel road that begins less than a mile northeast of refuge headquarters and ends approximately 3 miles east of highway 95. There are several pull-outs off highway 95 that offer good views of the delta area, including a cattail marsh. Visitors are welcome to explore the rest of the refuge on foot.

The Bill Williams River flows gently, at the average rate of 5 to 10 cubic feet per second, except during sporadic dam releases or monsoon flash floods. Its depth is perfect for wading ankle-deep in the sandy bottom along a canopied passage that cuts a path through dense riparian growth. In some pools you might spot native fish species, such as longfin dace.

The refuge encompasses a small portion of Lake Havasu flanked by a shallow, cattail-lined marsh. (Be careful navigating here; boats can get stuck on sandbars.) Many species of birds, such as pied-billed and eared grebes, nest in a few sheltered inlets along this stretch. Canada geese and common and Barrow's goldeneye are present in winter.

Bald eagles winter in the area and may be spotted hunting for fish in the river. The red-breasted merganser is another species that uses the marsh area, along with yellow-breasted chat, common yellowthroat, and red-winged blackbird.

The "no wake" zone on the Bill Williams River delta can be a peaceful place, particularly if you go by canoe or pull your motor and paddle once you've reached the

marsh. Jagged desert mountains tower above, wrapped by a searing blue sky; golden cattails wave in the breeze and harbor great blue herons, egrets, and rails.

The Bill Williams Road takes you along the river, through desert uplands, and past a valley lined with cottonwoods, willows, and salt cedar. Along the way you can stop and explore the desert and cliff-base habitat, where phainopepla and cactus wren are common. Walk out on cactus-flecked rises and look north to scan the cottonwood crowns at eye level. Here you might spot a summer tanager, Bullock's oriole, or any of several warbler migrants. Look, also, for the elusive yellow-billed cuckoo that often perches amid the tree's thick central branches.

You can hike the full 6-mile length of the refuge's river canyon, which lies beyond the parking area located 3 miles from highway 95. Before heading out, however, check with the refuge headquarters about the possibility of releases from Alamo Dam. Heavy rains can overflow Alamo Lake, and water is then released into the Bill Williams, causing the river to rise quickly.

Boating

If you visit Bill Williams River NWR by boat, you'll do the birds a big favor if you observe the *no wake speed* rule and cruise slowly in the middle of the river. This is to protect the fragile riparian habitat and because many backwater areas provide nesting and hiding places for birds, especially in spring and summer. Personal watercraft (PWC) such as Jet Ski™, Waverunner™, Sea Doo™, etc. are not permitted on refuge waters.

Boating

Boats can be launched from a mile below the refuge office on Parker Dam Road, at Take Off Point. Canoes, kayaks, and hand-carried boats may be launched at the Refuge headquarters during daylight hours.

Hunting

Hunting is permitted on Bill Williams River NWR for mourning and white-winged dove, Gambel's quail, and cottontail rabbit on designated areas. Desert bighorn sheep hunting is also allowed on designated areas of the refuge, but you will need a special state permit.

Persons possessing, transporting, or carrying firearms on National Wildlife Refuges must comply with all provisions of state and local law. Persons may only use (discharge) firearms in accordance with refuge regulations (509 CFR 27.42 and specific refuge regulations in 50 CFR Part 32). You may possess only non-toxic shot while hunting. Target practice and "plinking" are not permitted.

Fishing

The Bill Williams River NWR offers three accessible fishing structures on the peninsula adjacent to our visitor center. Fishing for striped and largemouth bass, catfish, bluegill, and others, is allowed on the refuge (all Arizona fishing regulations apply). Please use catch-and-release techniques with any native fish caught, and report catches to refuge staff.

Help Us Protect the Refuge

Camping

Camping is not allowed on the refuge, but

visit nearby Bureau of Land Management wilderness areas or State Parks for excellent camping opportunities.

Fires

To protect scarce desert wood, fires are not permitted on Bill Williams River NWR.

Pets

Pets must be leashed and under control at all times.

Litter

Please leave only your footprints; take all litter with you.

Collecting

Keep wild things wild—all plants, animals, minerals, and historic objects are protected. Disturbance or collection is prohibited except by special permit.

Vehicles

All vehicles must remain on designated roads. Maximum speed limit is 25 mph, unless otherwise posted. All vehicles and operators must be licensed and insured for highway travel, for example: OHV's and ATC's must be 'street legal' licensed.

Volunteer Opportunities

Interested in volunteering for Bill Williams River NWR? There are many volunteer opportunities at the refuge, including maintenance work (carpentry, plumbing, welding, etc.); photographers (landscape or nature and wildlife); clerical (filing, typing, answer phone); artists (crafters, painters, carvers); and someone with a flair for creative writing or design to help design displays for the visitor center, as well as, those with interests in biological research.

Two gravel trailer pads (with water, electricity, and sewer) are available for volunteers; arrangements must be made at least 2 months in advance. Please contact refuge headquarters for more information.

How To Get There

To get to Bill Williams River NWR from Lake Havasu City, Arizona, follow Arizona Highway 95 south approximately 23 miles. Headquarters are located between mileposts 160 and 161.

Text Credit

Text for this brochure was adapted from *Western Wildlife Refuges: Thirty-Six Ecological Havens from California to Texas* by Dennis Wall (Museum of New Mexico Press).

After hours and weekends, please report accidents or violations to the USFWS/BLM/NPS Interagency Dispatch Center at 623/580-5515.

March 2012

