



# Verde Wild & Scenic River Comprehensive River Mgt. Plan

## Scoping Report

### Location and Overview of the Project Area

Congress designated a portion of the Verde River as a National Wild & Scenic River through the Arizona Wilderness Act of 1984. The Verde Wild & Scenic River (VWSR) is located within the administrative boundaries of the Coconino, Prescott, and Tonto National Forests in Gila and Yavapai Counties of central Arizona. The Wild & Scenic River Area is generally  $\frac{1}{2}$  mile wide,  $\frac{1}{4}$  mile each side of, and parallel to the river. The Scenic River Area begins near Beasley Flat, continues downstream about 18.3 miles to the boundary of the Mazatzal Wilderness, and contains approximately 5,692 acres. The Wild River Area lies within the Mazatzal Wilderness, beginning at the Wilderness boundary and continuing downstream about 22.2 miles to the confluence of Red Creek, and contains approximately 6,824 acres. Elevations throughout the Wild & Scenic River Area range from 2,180 feet to 3,383 feet. The river drops an average of 19.5 feet per mile along its 40.5 mile, Wild & Scenic River reach. Please refer to the attached site location map.

### Outstandingly Remarkable Values

The Wild & Scenic Rivers Act of 1968 requires a determination that a river and its immediate environments possess one or more specific "outstandingly remarkable values" (ORVs) before that river corridor can be considered for designation as a National Wild & Scenic River. The Environmental Impact Statement for the Verde River, approved in 1981, found that this portion of the River corridor contained **outstandingly remarkable scenic, fish & wildlife, and historic & cultural values**. The Act also requires that, once established, the Wild & Scenic River must be administered in such a manner as to protect and enhance the ORVs while minimizing impacts to private landowners and existing land uses. Protection and enhancement of the specific outstandingly remarkable values recognized for the VWSR provides the foundation upon which all management actions and authorizations of uses will be based.

## Scenery

The Verde has outstandingly remarkable scenic values. The scenic qualities of the landforms, vegetation and water within the Wild & Scenic River Area are distinctive, seen from a variety of viewpoints and settings. The terrain varies from steep, rock canyons framing the river, to plateaus dropping to wide flood plains, with the river as a central feature. Vegetation varies according to the terrain, from broad oak/sycamore savannas to narrow bands of riparian box elder/willows, with all variations surrounded by the arid Sonoran Desert. This perennial stream changes in character from shallow, still pools or slowly moving water to high flow seasonal rapids and waterfalls. Recreationists view the river from the high edges of plateaus or canyons, within the floodplains, along the banks and by floating the river itself.

## Fish & Wildlife

Outstandingly remarkable fish and wildlife values along the Verde Wild & Scenic River result from the high quality habitat that the river and its associated riparian areas provide for threatened and endangered fish and wildlife species. There are 57 threatened, endangered, sensitive or special status species present, or potentially present, within the VWSR. The River Area contains important nesting habitat for the bald eagle, and provides habitat for several listed fish species. In addition, the River and its riparian area provides habitat for over 60% of the vertebrate species that inhabit the Coconino, Prescott, and Tonto National Forests. The high variety of both resident and visitor wildlife species found in the VWSR illustrates the corridor's value for these species within Arizona and the Southwest.

## Historic & Cultural

Information gained from limited historic and cultural resource surveys along the Verde River shows the area contains outstandingly remarkable historic and cultural values. The Verde River Valley has long been known for its wealth of prehistoric and historic sites—dating back to 12,000 B.C. Hundreds of archaeological sites have been found or are suspected to be present in the River corridor. Most of these sites, depending on their condition, are significant and eligible for the National Register of Historic Places, either individually or as part of a group.

## Existing & Desired Conditions for Key Resources

### Water - Existing

The Verde River is a unique and important resource in Arizona. Its headwaters originate at 7,000 to 8,000 feet elevation in North Central Arizona from the Juniper and Santa Maria Mountains on the west and the Coconino Plateau and Mogollon Rim on the north and east. Tributaries draining these mountains are the source of the majority of the runoff in the Verde River system. Major tributaries draining from the east include Sycamore Creek, Oak Creek, Dry and Wet Beaver Creeks, West Clear Creek and the East Verde River. The mainstem of the Verde River begins at Sullivan Lake in Big Chino Valley just below the confluence of Big Chino Wash and Williamson Valley Wash. Perennial flow begins approximately 1 mile downstream from Sullivan Lake from springs, and from inflows from Granite Creek, a tributary that joins the Verde from the south.

The Verde River is free flowing from Sullivan Lake for approximately 150 miles until it enters Horseshoe Reservoir, a water supply reservoir for the Salt River Valley and Phoenix Metropolitan Area. The river flows generally southeast for approximately 91 miles from Sullivan Lake through the Prescott and Coconino National Forests and private and state lands in the Verde Valley until it reaches the beginning of the Wild and Scenic River corridor at Beasley Flat. From Beasley Flat the river flows south for 40.5 miles through the Wild and Scenic River Area. From the lower end of the Wild and Scenic corridor (below the confluence with Red Creek) the river flows an additional 18 miles to Horseshoe Reservoir.

Major perennial tributaries to the Verde River within the Wild and Scenic corridor include Fossil Creek and the East Verde River which drain from the Mogollon Rim. Red Creek joins the Verde River at the lower end of the Wild and Scenic corridor and is a perennial tributary that flows from the west side of the watershed. The watershed area of the Verde River is approximately 5,000 square miles at the beginning of the wild and scenic reach and increases to approximately 5,700 square miles at the lower end of the reach. The majority of the runoff in the Verde (greater than 70%) occurs from December through April from snowmelt and widespread frontal storm systems. Minimum flows occur during May and June, the hottest and driest part of the year. Flows typically increase during the summer monsoon season, which is normally the wettest part of the year.

Fossil Creek enters the Verde River approximately three miles below the beginning of the Wild portion of the corridor. Perennial flow in Fossil Creek is maintained by discharge from a series of springs (Fossil Springs) approximately 14 miles upstream of the confluence of Fossil Creek and the Verde River. Discharge from these springs is reportedly a constant 43 cfs (APS, 1992). This flow is diverted 0.2 miles below the springs into a flume and penstock that carry the flow into the Irving hydroelectric plant that was constructed in 1916. Two cfs are discharged to Fossil Creek at Irving with the remainder diverted to the Childs power plant via Stehr Lake. The Childs hydroelectric plant was constructed in 1909 and is located on the banks of the Verde River approximately 3.5 miles upstream from Fossil Creek. The majority of the baseflow of Fossil Creek is discharged to the Verde River at the Childs plant. In April of 2002 Arizona Public Service Company (APS) submitted a surrender application to the Federal Energy Regulatory Commission (FERC) for its hydroelectric power generation facilities associated with the Childs-Irving project on Fossil Creek. If APS's FERC license is surrendered, the discharge of baseflows in Fossil Creek will shift downstream from the Childs power plant to the confluence of Fossil Creek and the Verde River. This shift will reduce median monthly flows in the reach of the river from Childs to Fossil Creek by almost 50% during the low flow season from May through July.

The East Verde River enters the Verde River approximately 3 miles below the confluence of Fossil Creek. Median monthly flows in the East Verde River range from 15 cfs in June and July to 54 cfs in March. Stream flow in the East Verde River has been augmented by imports from Blue Ridge Reservoir since September 1965. Imported flows typically range from 20 to 30 cfs and usually occur during the summer and fall. In 2002 these imports ceased, affecting median monthly flows in the East Verde River and in the Verde River below the confluence with the East Verde in the Wild section of the WSR corridor. The greatest impact on flows in

the Verde River will be in June when these imports represented about 10% of previous median monthly flows.

From the wide valley bottom of the Verde Valley the river enters a narrow confined canyon below Beasley Flat that continues to the confluence with the East Verde River. Floodplain width is limited by the confining basalt canyon walls to a narrow band of gravel and cobble bars bordered by discontinuous narrow terraces on one or both sides of the river. Gradient averages about 22 feet per mile through this reach and riffles and rapids separated by flatter glides and pools are common. The largest rapid, referred to as "The Falls", drops approximately 6-10 feet about two miles below Beasley Flat. Side and point bars are common through out this reach. These bars are sparsely vegetated and consist primarily of sand, gravel and cobbles. Below the confluences with Fossil Creek and the East Verde River the valley bottom of the mainstem is less confined and gradient flattens to about 17 feet per mile. Bar formations become more prominent and some diagonal as well as midchannel bars appear suggesting reduced sediment transport capacity and consequently greater sediment deposition within the lower reach.

Riparian vegetation in both reaches is limited to a narrow band, or green line, along the margins of the low flow channel and along overflow channels. Absence of riparian vegetation on gravel and cobble bar surfaces, except for a few mature individuals on terrace features, is attributed to the elevation of the bar surfaces above the alluvial water table. Bar surfaces greater than about 3 feet above the alluvial water table typically do not support recruitment of riparian vegetation. Restriction of riparian vegetation to the margins of the low flow channel makes this vegetation vulnerable to the scouring effects of high flows. The absence of the stabilizing effects of riparian vegetation on bar surfaces also results in these features being more vulnerable to scour and erosion during high flows.

Water is diverted upstream of the Wild and Scenic River Area for agricultural, domestic and industrial uses. Water supplies for these uses come from diversion of surface waters from the mainstem and tributaries of the Verde River and from ground water pumping. There is also substantial water consumption by riparian vegetation growing along the mainstem and tributaries of the River. The greatest threats to maintaining instream flows in the Wild and Scenic River Area come from accelerated ground water pumping to support the rapid population growth upstream from the Wild and Scenic River corridor and from water exchanges that would allow upstream diversions.

In an effort to protect the water dependent resources of the Verde River, the Tonto, Coconino and Prescott National Forests filed an instream flow water right application in 1985. The Forest Service subsequently received a certificate for the beneficial use of wildlife, including fish, that requires minimum annual volumes at gauges near Camp Verde and at Tangle Creek. Protected monthly flows at these gauges range from 10 to 65 cfs at the upper gauge to 70 to 135 cfs at the lower gauge. The Forest Service has also applied for instream flow water rights on the East Verde River and on Fossil Creek, and an application is in process for Red Creek.

## Water - Desired

The River exists in a free-flowing condition with a range of flows that are protected to provide optimum habitat conditions for native fish and wildlife. Water quality meets or exceeds State water quality standards. Best Management Practices are implemented to prevent water quality degradation from recreational uses and livestock grazing within the Wild and Scenic River area. Healthy and diverse stands of riparian vegetation thrive along the banks and floodplain, reflecting the potential of the river's habitats and maintaining the channel at a higher level of stability.

## Fish - Existing

The fish community present within the VWSR is represented by six native fish species and numerous introduced nonnative fish species. Native fish species include razorback sucker (*Xyrauchen texanus*), Colorado pikeminnow (*Ptychocheilus lucius*), roundtail chub (*Gila robusta*), Sonora sucker (*Catostomus insignis*), desert sucker (*Catostomus clarki*), and longfin dace (*Agosia chrysogaster*). Nonnative fish species commonly found in the VWSR include common carp, channel catfish, flathead catfish, smallmouth bass, largemouth bass, green sunfish, red shiner, and mosquitofish.

Of the native fish species present in the VWSR, two are federally listed as endangered species and one is listed as a Forest Service sensitive species. The razorback sucker is listed as endangered with designated critical habitat (USFWS 1991, USFWS 1994). Critical habitat (CH) in the Verde River extends from Perkinsville to Horseshoe Reservoir. Within the VWSR, razorback sucker CH includes the entire reach of river and its 100-year floodplain. There is no Recovery Plan for the razorback sucker. The Colorado pikeminnow is listed as endangered (USFWS 1967), though within the Verde River, it is considered an "experimental non-essential" population under Section 10J of the Endangered Species Act (USFWS 1985). Under this designation, the pikeminnow is treated as a threatened species, except for the purposes of Section 7 of the Endangered Species Act, where they are treated as a proposed species. The roundtail chub is listed as a Forest Service Sensitive species and as a Species of Concern for the state of Arizona (Towns 1999, AGFD 1996).

The Verde River is also designated CH for the spikedace (*Meda fulgida*) and loach minnow (*Rhinichthys cobitis*) from Sullivan Dam to Fossil Creek (USFWS 2000). Spikedace and loach minnow CH covers 21 miles of the VWSR, almost entirely within the Scenic reach, from Beasley Flat to Fossil Creek. The spikedace and loach minnow are not currently present within the VWSR. The spikedace is known from the upper Verde River above Clarksdale. The loach minnow is considered extirpated from the Verde River Basin (USFWS 2000).

The majority of the management actions taken since the 1984 designation of the VWSR have revolved around endangered species management. The Forest Service has been involved in Section 7 consultation with the Fish and Wildlife Service since the listings and designations of critical habitat for the razorback sucker, spikedace, and loach minnow. Consultation has resulted in management changes, mainly in livestock grazing activities. Drift and gap fences have been built on the Brown Springs Allotment to restrict/hinder livestock use along the Verde River. All water access points on the Ike's Backbone Allotment have been closed. On both

allotments, water sources were improved or developed in the uplands to draw livestock away from the river. On the Red Creek Allotment, the Red Hills Pasture, which includes the Verde River, has been excluded from livestock grazing.

Actions taken by the Arizona Game and Fish Department include reintroductions of razorback suckers and Colorado pikeminnow into this reach of the Verde River beginning in 1981 and 1985, respectively. These species were extirpated from the Verde River Basin and are part of a reintroduction program to recover the species in the state. The VWSR is the focal area of this program with annual goals to stock 2,000 large individuals of each species in the river (Jahrke and Clark 1999).

Since VSR designation the Arizona Game and Fish Department has changed fishing regulations in the Verde River and its tributaries to allow for unlimited harvest of introduced fish species (channel catfish, flathead catfish, smallmouth bass, and largemouth bass) because these species are negatively impacting native fish populations in the Verde River and its tributaries. In addition, there are restrictions on transport of baitfish and crayfish in the Verde River. These actions are both aimed at managing the non-native fish populations in the Verde River and allowing for recovery of threatened and endangered species.

## **Fish - Desired**

The River Area contains abundant, high quality habitat for native fish and self-sustaining populations of razorback sucker, Colorado pikeminnow, roundtail chub, and other native species that may be present. The public is aware of the importance of native fish and releases listed species when caught. In the Wild Section only natural processes occur in relation to fish habitat. In the Scenic Section fish habitat restoration occurs based on need.

## **Wildlife - Existing**

The VWSR provides habitat for a large number of wildlife species. The river and its associated riparian vegetation offers water and dense, lush riparian vegetation that by itself meets the needs of a wide variety of wildlife species. The combination of extensive water and riparian resource immediately adjacent to dry Sonoran Desert upland communities offers a unique combination of habitat factors and attracts additional desert wildlife species. Associated cliffs, talus slopes, springs, caves and other geophysical features found along the river enhance habitat factors for many other species. An estimated 60% of the vertebrate species found on the three National Forests occur within the VWSR.

Factors affecting wildlife habitat along the VWSR include: upstream uses and diversion of water; increased settlement, human structures and other watershed conditions which may increase peak flows; off-highway vehicle use; camping and related recreation impacts; and livestock grazing.

Thirteen species listed as Federally threatened, endangered, or proposed occur, potentially occur, or have historic habitat within the VWSR. In addition, 44 other species on the Regional Forester's Sensitive Species list, on the Forests' Management Indicator Species Lists, or that are considered as species of special concern on the three National Forests occur within the VWSR. Following are descriptions of those listed or sensitive mammal, bird, reptile, and amphibian species with suitable habitat present in the VWSR.

Bald eagles (Federally listed as threatened) occur within the VWSR as both residents and winter visitors, occupying all habitat types and elevations. They feed on fish, waterfowl, terrestrial vertebrates, and carrion. Eagles are often seen perched in trees or snags near water or next to roadways where they feed on road-killed animals. Four bald eagle nest territories occur within the VWSR (Ladders, Cold Water, East Verde, and Table Mountain). Nests are located on rock pinnacles and/or cliffs and the river provides the primary foraging area with both native and non-native fish species taken. Threats to the species within this area include disturbance (recreation, aircraft, other), shooting, and others, such as monofilament/hook entanglement. The overall longterm loss of mature cottonwoods along the Verde River may also affect bald eagle habitat quality. Within the WSR, disturbance has the highest potential to affect reproduction and fledging success. Recreational-related activities such as walking, hiking or camping within sight distance of the nest, as well as loud noises or stopping while floating near the nest, may negatively affect hatching or fledging. Currently, the Ladders Territory is the only one with a designated "No Stopping, Quiet Zone".

The Mexican spotted owl (Federally listed as threatened) is usually associated with conifer stands above and below the Mogollon Rim; however, it also nests in rocky canyons like those found in the VWSR. It winters in lowland riparian areas and may use these areas for dispersal between suitable nesting sites. The rocky canyons and conifer habitat on either side of the WSR imply that the project area may provide either nesting and/or dispersal habitat for this species. However, no surveys have been conducted in or near the WSR to determine occupancy of the area by this species. Guidelines for the species restricts grazing because of potential removal of herbaceous vegetation which provides habitat for prey species. Increases in the number of developed campgrounds or recreation improvements could also affect the species.

Current population estimates of the southwestern willow flycatcher (Federally listed as endangered) indicate that only 300 - 500 nesting pairs remain within the southwestern United States. Habitat occupied (breeding populations) by this species occurs above and below the VWSR in the Verde Valley and at Ister Flat. Within the VWSR, habitat for the species (dense, multi-storied stands) occurs in relatively small, isolated stands. The fragmented state of this habitat may limit potential occupancy; however, the area has a high potential to develop suitable habitat in a relatively short time period. Scouring flows, the latest in 1993 and 1995, have been a major factor causing habitat fragmentation.

The Yuma clapper rail (Federally listed as endangered) is an elusive bird that occupies marsh-like situations around rivers, ponds and bogs where emergent vegetation such as cattails (*Typha latifolia*), bulrush (*Scirpus californicus*), and reed grass (*Phragmites communis*) occur. The Yuma clapper rail climbs around on flattened, floating materials and feeds mainly on crayfish although other invertebrates, arthropods, and fish are eaten as well. This species has historically occurred along the Salt, Verde and Gila River systems. The species winters above the WSR in the Verde Valley, and during flycatcher surveys in May 2001, was heard calling within the WSR just north of Red Creek. This area has better riparian habitat development than many other areas of the WSR.

One known peregrine falcon (Forest Service sensitive species) eyrie occurs just outside the VWSR near the East Verde River confluence. The Wild & Scenic River corridor is probably used by falcons for foraging.

The yellow-billed cuckoo (Forest Service sensitive species) has been identified by the Fish and Wildlife Service as a species whose listing is warranted, but precluded due to other listing priorities. This species prefers mature riparian forest vegetation. Although this habitat is limited, the species has been found in stands on the lower VWSR. A single yellow-billed cuckoo was detected at Horseshoe Dam in 1998 by USGS/AGFD. AGFD and USGS biologists also detected one pair at Sheep Bridge/Sycamore Creek in 1998. Factors that reduce or slow the progressions of riparian habitat toward maturity affect this species. Cuckoos are also affected by human disturbance during nesting.

The southwestern river otter (Federal species of concern) is an historic inhabitant of the Verde River watershed. Otters feed on fish, amphibians, turtles, crayfish, and other aquatic animals. In 1981 and 1982, Arizona Game and Fish Department introduced river otters from Louisiana into Fossil Creek and the Verde River near the Fossil Creek and East Verde confluences. This species may have interbred with any southwestern otters that remained in the river. Currently, there are good populations of river otters present, but it is not known which genetic strain inhabits the VWSR.

Bell's vireos (Forest Service sensitive species) occupy dense riparian thickets as well as mesquite and oak thickets near water. The decline in the Bell's vireo population is largely due to brood parasitism by the brown-headed cowbird. In the project area, the Bell's vireo are fairly common inhabitants of the denser riparian thickets found along the river.

The narrow-headed garter snake (Federal species of concern) is the most aquatic of the garter snakes, seldom found far from quiet, rocky pools. Preferred habitat is along large streams and rivers in pinyon/juniper and oak woodlands and ponderosa pine forests. Numerous sightings in Oak Creek have been reported. Food items include fish, frogs, tadpoles, and salamanders.

The Mexican garter snake (Forest Service sensitive species) is usually found in or near streams, ponds, and cienegas in the highland canyons (up to 6,200 feet in elevation) with pine/oak or piñon/juniper woodland, but may follow streams into lower desert grasslands. It is most closely linked to shallow slow-moving or impounded waters, though it also occurs in other aquatic environments. The Mexican garter snake's diet consists of leopard frogs, toads, tadpoles, and various native fishes. Mexican garter snakes have been sighted along the Verde River. Threats to this species include habitat degradation and destruction and predation by bullfrogs.

The lowland leopard frog (Federal species of concern) prefers permanent stream pools, springs, stock tanks, and side channels of major rivers within desertscrub, grassland and oak and pine/oak woodland habitats. It is seldom found in association with bullfrogs. The lowland leopard frog has been recorded at various locations along the Verde River. In 1986, Rosen and Schwalbe (1988) detected lowland leopard frogs near the Falls. A historical record for this species exists for the Verde River northwest of Childs. Recent surveys by Bill Burger failed to detect lowland

leopard frogs along the Verde but they were detected in Squaw Creek and Tangle Creek, both of which are tributaries to the the Verde (2000).

The Arizona toad (Federal species of concern) occurs in rocky streams, canyons, and floodplains with dense riparian vegetation. It is also found in the upland desert and pine/oak communities south of the Mogollon Rim. This toad feeds on insects and snails. Generally, they occupy habitat similar to that of leopard frogs.

The Arizona night lizard (Forest Service sensitive species) is a secretive lizard found in arid and semiarid lands. This lizard occupies the spaces beneath fallen branches, logs, dead clumps of agave, dead brush, and cow dung. It is also found in rock crevices. It ranges into the chaparral-oak belt in central Arizona.

The VWSR is a major corridor for migratory birds. Mule deer, white-tailed deer, javelina, and small game mammals are also common throughout the VWSR. Hunting of these species occurs, but data is not available on the number of hunter days or the level of take. The number of hunters using the VWSR is probably more limited in the Wild section of the river than the Scenic section due to limited access.

The most dramatic changes in wildlife populations along the river since the 1984 VWSR designation have been due to major scouring floods which removed large amounts of gallery forest-type habitat, on which several species depend. Populations of willow flycatcher and yellow-billed cuckoo have probably declined due to the reduction in this habitat. However, the number of known bald eagle nests have increased by two in the VWSR. Historic nesting sites (pinnacles) have been reoccupied as overall populations in the State have increased. Species requiring seedling/sapling thickets of riparian vegetation also decreased after the flooding, but are increasing as the riparian communities become reestablished.

## **Wildlife - Desired**

Habitat for both riparian- and upland- dependent wildlife species develops to its highest capability within the corridor. Management focuses on a variety of riparian dependent wildlife species including migratory birds, management indicator species, game species and sensitive species such as southwest willow flycatcher, yellow-billed cuckoo, and bald eagle. Existing and potential habitat is monitored frequently enough to identify population trends, and make adjustments in recreation and other uses. The river corridor provides important wildlife viewing opportunities for visitors. The public is aware of species habitat requirements and the need for protective actions. In the Wild Section, natural habitat processes occur, while habitat improvements are implemented as needed to meet wildlife habitat management objectives in the Scenic Section.

## **Cultural/Historic - Existing**

The Verde Wild and Scenic River corridor is known to contain archaeological evidence of the occupation and agricultural use and modification of the Verde River floodplains, terraces, and bajadas by people related to the prehistoric Hohokam and Southern Sinagua cultural traditions over a period of at least 600 years. It may also contain sites of human use and occupation from as long ago as 8,000 to 10,000 years.

It is also known to contain a number of pre-European contact and historic sites reflecting its use and occupation by Yavapai and Apache hunters, gatherers, and farmers and by Anglo, Hispanic, and Basque stockmen who raised or drove cattle and sheep throughout the area. It even contains a significant part of the industrial history of Arizona, as it contains the site of the earliest hydroelectric generating facility in the State at the small settlement of Childs. The significance of this place has already been recognized by listing this site in the National Register of Historic Places.

However, no part of the Verde Wild and Scenic River corridor has been intensively surveyed to produce a fully representative inventory of heritage resources, despite the fact that it has drawn the attention of archaeologists since the 1890s. Small scale archaeological surveys dating anywhere from a decade to a century ago have identified a wide range of features embedded into the Verde landscape, from nearly invisible scatters of discarded artifacts and trash or collapsed and buried pithouses, to ruins of buildings with as many as 100 rooms with stone masonry walls collapsed into rubble piles several meters high. There is even the aforementioned fully functioning historic hydroelectric generator at Childs.

Despite the fact that relatively little information is available on the individual archaeological sites recorded along the river, it is clear that the heritage resource of the Verde Wild and Scenic River is both outstanding and remarkable. The reason for this conclusion has much to do with the remoteness of the area and the lack of modern encroachment. These sites represent a prehistoric social landscape in a geographic setting little changed from the day they were abandoned. And yet, today's environment is not the same, for it, like all landscapes, continues to evolve.

Prehistoric peoples stripped the river area of trees for fuel and construction projects and ditched the river's waters onto terraces planted with corn. These same areas are now inhabited by riparian vegetation and impenetrable canebrakes, while the terraces have been reclaimed by mesquite and desert scrub. In the uplands fronting the river, the agave terraces that once fed hundreds of prehistoric people are now only recognized as stairstep lines of rock lost among the brush. Although many of the sites that make up this cultural landscape have witnessed a long history of vandalism and pot hunting, today it is predominantly a "natural appearing" landscape. It is a landscape shaped for hundreds of years by the people who used it to make a living and called it home, and which is still a reflection of that use. These sites, in this setting, tell an eloquent story of the history of the land along the Verde River.

More than just the landscape, though, the heritage resources of the VWSR provide evidence of what we are only now beginning to recognize as a remarkable history of cultural development. Initially one of several corridors of travel, trade, and migration between northern and southern Arizona, the river eventually became the scene of historical and cultural events that transcended mere topography. Before it was abandoned prehistorically (undoubtedly quite a story in itself), the river ceased to function as a long distance trade and travel route. Instead, it was incorporated into the geographic territories of cultural groups that spanned it from east to west and whose boundaries crossed it north to south. The information contained in and represented by the archaeological sites present here can make an outstanding contribution to the reconstruction of prehistoric lifeways in Arizona.

The Verde River may also have played a key role in the resettlement of central Arizona by the Yavapai and Apache who came into the area from opposite directions and first met in or around the Verde Valley. It may also have been the scene of several confrontations between these Tribes and the U.S. Army in their struggle to remain on the lands their ancestors had settled.

The relatively intact landscape and setting, and the range of known and potential site types and periods of occupation along the Verde River combine to represent the better part of an entire prehistoric settlement system that may reflect the development of one or more distinct cultural groups. In addition, many of the individual sites appear to have played significant roles in the development of this settlement system, either in terms of their size or placement or potential for control of travel or contact with other cultural groups. This level of significance, combined with the considerable degree of integrity of many of the sites and their settings, makes the heritage resources of the VWSR eligible for inclusion in the National Register of Historic Places, either as a whole or as a series of individual properties.

Our knowledge about the cultural/ historic resources of the Verde River corridor prior to Wild & Scenic designation was based almost exclusively on just the most obvious sites. While this was sufficient to recognize the outstandingly remarkable values they represented, it did little to further our understanding of how prehistoric and historic occupations of the corridor had transformed it into the cultural landscape of today. Clearly, the pre-designation picture was focused only on large prehistoric residential centers on the terraces and bluffs directly overlooking the river, but the post-designation inventory indicates that there was considerable use of temporary residences associated with agricultural features at some distance from those villages and from the river. Thus, the major change in the heritage resources of the VWSR corridor has been a marked growth in its inventory and a shift in the content of that inventory to reflect broader patterns of cultural occupation over more time periods.

The physical condition of the cultural/ historic resources of the VWSR corridor has not changed much since the 1984 designation of the river. Although baseline data for monitoring is not available, impressions from occasional site visits from heritage personnel and reports from others indicate that most of the smaller, less visible sites remain essentially untouched and undamaged by any activities related to the designation or use of the corridor.

Secondary effects to heritage resources resulting from other activities and uses in the corridor are minimal. Impacts from grazing since the reduction in numbers and management of livestock distribution by the Forest Service beginning in the early 1900s have become increasingly minor. Recreation-related impacts to sites within the corridor are also considered to be minor and limited. Where heritage sites are adjacent to trails or campsites or are easily accessible from the river, visitation may be resulting in the loss of some surface artifacts and the removal of some structural stone to build campfire rings, but the lack of baseline data and monitoring limits our ability to make such assessments.

## **Cultural/Historic - Desired**

Users of the Verde Wild & Scenic River are aware of the cultural and heritage values present. Heritage properties are protected from unnatural deterioration. All classes of properties and cultural values existing in the River Area are adequately represented in the inventory.

## **Scenery - Existing**

The Wild and Scenic River area is a distinctive landscape due to its presence as a unique ribbon of riparian life amidst a desert landscape, the strong contrast between the features of the river environment and the uplands, the variety of landforms and vegetative patterns visible from the river area, and the distinct water and geologic features.

The character of the landscape changes dramatically with elevation along the river corridor. At Beasley Flat, near Camp Verde, views from the river area encompass grassland and chaparral. South facing slopes are covered with open grasslands and scattered junipers. North-facing slopes are thick with chaparral. Drainages have diverse riparian tree species.

As the river flows southeast the grassland gives way to cactus and mesquite that characterizes the Sonoran desert. Riparian vegetation along the river is lush and diverse and contrasts dramatically with the plant communities away from the river.

The VWSR area is visually sensitive due the combination of high viewer expectations, generally long duration of view, and high amount of detail visible by the viewer. The river corridor is characterized in many locations by open, expansive vistas viewed from numerous viewpoints.

Scenic integrity along the VWSR area currently varies from moderate to very high. Integrity is lowered where there are human and cattle impacts in the riparian zone such as: power lines and utility towers, Salt River Project water gauging stations, and a micro-wave relay station. A small percent of the view is impacted by utilities while a larger percentage of the view is affected by human and cattle impacts. The historic elements at Childs are considered positive landscape features, valued by the general public. All three forest plans' visual quality objectives also reflect the public's desire to maintain high levels of scenic integrity.

Since the 1984 designation of the river as Wild & Scenic, the most substantial changes have been in the numbers and extent of visitation to the river corridor. The most prevalent impact this has caused to the scenic resource is evidenced by degradation of vegetation, trash, fire rings, and waste due to human visitation.

## **Scenery - Desired**

Within the Wild and Scenic River Area the public experiences a landscape that is predominantly natural appearing. Deviations from the natural landscape are limited and may include important cultural landscape features and essential and minimal management elements that are designed to blend with the natural landscape character. Scenic integrity is maintained at its highest level. Important and desired cultural features are identified and the public has an opportunity to view them.

## Current Management Direction

Programmatic land management direction for the Verde Wild & Scenic River is found in several plans, decisions, and orders on the Coconino, Prescott, and Tonto National Forests. This direction is not consistent across the three forests resulting in inconsistent management practices on the river, depending upon which forest has jurisdiction. Some of the areas where management direction are inconsistent include: acknowledgement of the VWSR as a separate management unit, direction on maintaining instream flow, acknowledgement of ORVs and their protection and enhancement, outfitter guide allocations, access and travel management, and rangeland management.

## Purpose of and Need for Action

The purpose of this planning effort is to implement the direction of the Arizona Wilderness Act of 1984 that amended the Wild & Scenic Rivers Act of 1968 to add a segment of the Verde River to the National Wild & Scenic River System. This Act requires the U.S. Forest Service, in consultation with State and local governments, tribal governments, and the public, to develop a comprehensive river management plan that protects and enhances the specific outstandingly remarkable values within the designated Wild and Scenic segments of the Verde River without limiting other uses that do not substantially interfere with public use and enjoyment of the river values.

The Coconino, Prescott, and Tonto National Forest Land and Resource Management Plans provide general goals, objectives, standards, and guidelines for various activities and land allocations along the Wild and Scenic segments of the Verde River within each respective National Forest. There is a need for a Comprehensive River Management Plan (CRMP) for the Verde that specifically addresses protection and enhancement of the river's outstandingly remarkable values consistently across all three forests. The CRMP will likely result in the need to amend all three Forest Plans to make management direction consistent and to include any new direction.

## Objectives

In addition to the requirements of the Wild & Scenic Rivers Act (as stated above), and other applicable legislation and regulation, management direction set forth in this plan will be designed to:

- Protect the quality of river water by meeting or exceeding Arizona State water quality standards;
- Protect and enhance the river's identified outstandingly remarkable values of scenery, fish and wildlife, and cultural and historic resources within the Wild and Scenic River Areas;
- Emphasize user education and information, establishing as few regulations as possible and ensuring that any regulations established are enforceable and enforced;

- Consult with State and local governments, and interested public, recognizing them as partners and participants in managing the VWSR;
- Protect the integrity of Wilderness Areas and their associated wilderness values; and
- Maintain the desert river backcountry experience for visitors in the Wild and Scenic River Areas.

## Proposed Action

The Coconino, Prescott, and Tonto National Forests propose the development of a CRMP for the Verde Wild & Scenic River. The CRMP would establish programmatic management direction for both the Wild and Scenic Areas of the Verde River consistently across all three forests. The Verde CRMP would guide all development, management, and restoration activities within the Scenic River and the Wild River segments. It would establish specific management goals and objectives for both segments of the VWSR. It would define desired conditions of specific river segments and set standards and guidelines for activities within these segments. The CRMP would protect and enhance the ORVs by facilitating the recovery and protection of healthy riparian vegetation and proper functioning stream channel characteristics, while improving river-related recreational experiences.

## Decision to be Made

The Coconino, Prescott, and Tonto National Forest Supervisors are the officials responsible for making the following programmatic decisions in the CRMP of the Verde Wild & Scenic River.

- Measures for protection and enhancement of fish and wildlife habitat;
- Measures for protection and enhancement of scenic values;
- Measures for protection and enhancement of historic and cultural values;
- Measures for protecting water quality;
- Determination of instream-flow needs to protect and enhance the ORVs;
- Delineation of a River access system including roads, trails, and parking facilities;
- Recommendations for acquisition of land, or scenic easement on private land, with willing sellers;
- Measures for management of special uses to protect and enhance ORVs;
- Determination of recreation use capacity and controls including sanitation needs;
- Design of a recreation and resource monitoring system; and

- Identification of recurring operation and maintenance needs including law enforcement requirements.

## Significant Issues

The Agency received approximately 125 letters with over 280 substantive comments on the information provided in the October 30, 2001 NOI published in the Federal Register and the January 23, 2002 scoping letter. The issues and concerns expressed in these letters, along with those published in newsletters of organized interest groups, have been taken into consideration in the identification of significant issues and in the development of the preliminary alternatives described below. Measures have been selected to evaluate issue resolution, attainment of objectives, and describe environmental impacts. Where possible, the measures are quantified. When the measures cannot be quantified, a narrative discussing specific effects will be presented in the environmental document. The measures anticipated for use in this analysis are also listed below.

### River Access Issue

Reducing the number of vehicular access points to the Verde River may deny some people the opportunity to enjoy the river's recreational activities and view its natural scenic beauty.

Developing or improving river access points and/or recreation sites may reduce the "desert solitude" experience for recreational river users.

### Recreation Use/ Capacities Issue

Allowing too much recreation use (private, institutional, or commercial) in the river corridor may be inconsistent with effective protection and enhancement of the scenery, cultural/historic resources, and native fish and wildlife habitats found there. Too much recreational use may also detract from the "desert solitude" experience.

Restricting recreational use in the river corridor may interfere with people's ability to enjoy its outstandingly remarkable values.

### Livestock Grazing Issue

Reducing or eliminating the amount of livestock grazing allowed in the VWSR may pose an economic hardship on some grazing permittees.

Livestock grazing in the river corridor and uplands may be inconsistent with effective protection and enhancement of the native fish and wildlife that depend upon the riparian area, and may negatively affect the recreation experience and the scenery.

### Water Quantity/ Quality Issue

Population growth, land development, and land use in the Verde River watershed upstream from the Wild & Scenic River reach may impact instream flows and water quality in the WSR segment. Activities such as recreation use and livestock grazing within the WSR corridor, may also impact water quality. Reduction in instream

flow and water quality could adversely affect the scenery and fish and wildlife outstandingly remarkable values.

## Preliminary Alternatives

The following are preliminary management alternatives that have been developed in response to public and agency concerns. These preliminary alternatives will be further refined as the analysis process progresses and other alternatives may be developed if necessary to respond to new information.

### Alternative 1

*No Action* – This alternative is required by law to be analyzed. It would entail continued implementation of the existing Forest and Wilderness Management Plans for the Coconino, Prescott, and Tonto National Forests independently. Some management direction would not be consistent across forest boundaries. Existing regulations and closures would be enforced within the Wild & Scenic River.

### Alternative 2

This alternative would blend management direction from the three existing Forest Plans and existing Wilderness Plans into one CRMP, making minor changes to gain consistency in resource management direction and regulation within the Wild & Scenic River. All existing Forest Roads would remain open to vehicular access. Bald eagle closures would be standardized. Limits of Acceptable Change (LACs) would be established for cultural/historic properties and for recreation uses. Water rights will be pursued to protect instream flows. An interpretive plan would be developed for the Wild & Scenic River corridor. Standards and guidelines for livestock grazing would be standardized between the three forests. A voluntary river runner registration system would be implemented. Capacities for recreation special uses would be standardized between forests. Foreground and middleground views from the river would be managed to a high scenic integrity objective.

### Alternative 3

This alternative would provide for protection and enhancement of the ORVs while converting much of the vehicular access to the VWSR to pedestrian access, and requiring moderate controls on human uses of the river corridor. Alternative 3 would differ from Alternative 2 in that some existing access roads would be closed to vehicular access at the VWSR boundary and some would be open only for administrative use. Closed roads would be open to pedestrian use. Invasive plant species would be selectively controlled. Seasonal closures would be implemented to prevent users from stopping or entering some areas along the river, as necessary to protect nesting and foraging habitat for critical species. Opportunities for livestock grazing would be more limited than in Alternative 2. A mandatory river runner registration system would be implemented. All overnight river users would be required to carry portable toilets and remove their own waste from the river area. Camping and boat launch/take out opportunities would be slightly increased. Foreground views from the river would be managed to a very high scenic integrity objective, and middleground views would be managed to high scenic integrity objective.

## Alternative 4

This alternative would provide for protection and enhancement of the ORVs with the most limited access to the VWSR and the most controls on human uses of the river corridor. Alternative 4 differs from Alternatives 2 and 3 in that some existing access roads would be closed to vehicular access at the VWSR boundary and some would be open only for administrative use. Those roads that would be closed and not available for administrative use would be obliterated and also not available for pedestrian use. Permanent closures would be implemented to prevent users from stopping or entering some areas along the river, as necessary to protect nesting and foraging habitat for critical species. Visitation to historic/cultural properties would be discouraged. Livestock grazing would not be allowed in the VWSR corridor. A mandatory river permit system would be implemented with no capacity limits at this time. All overnight river users would be required to carry portable toilets and fire pans/blankets, and remove their own waste and ashes from the river area.

## Line Officer Approval

On behalf of the Forest Supervisors of the Coconino, Prescott, and Tonto National Forests, I concur with the findings of this scoping report including the determination of significant issues. I am directing the interdisciplinary team to move forward to further develop the preliminary alternatives listed here and to analyze the environmental effects of implementing those preliminary alternatives in relation to the significant issues. Further, based on the information collected in the scoping process, I have determined that it is appropriate for the interdisciplinary team to proceed with the development of an environmental assessment.

/S/ MICHAEL KING

MICHAEL R. KING  
Prescott Forest Supervisor

Date: 9/17/02