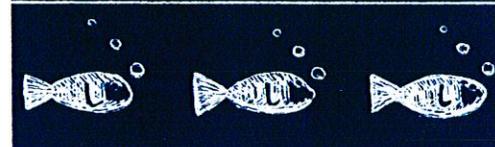


Watson & Willow Lakes
MASTER PLAN





Acknowledgments

Mayor and City Council
Paul S. Daly, Mayor
Lindsay Bell, Vice-Mayor
Dick Cooper
Phil King
Lucy Mason
Tom Reilly
Harold Wise

Lakes Steering Committee
Chuck Lockwood, Chairperson
Kim Pruitt, Vice-Chairperson
Harold Wise, City Council Representative
Nick Awalt
Steve Becker
Walt Bull
Earl Burden
Joel Hiller
Ted Liese
Beverly Williams
Richard Mayol
Tim Miller
Jeannie Morgan
Ralph Rodarte
Elisabeth Ruffner
Jenny Turner

City Staff
Jim McCasland
Ramona Mattix
Diana Fister

Other Contributors
Eric Gardner, Arizona Game & Fish Department
Kermit Johansson, Prescott National Forest

Consultant Team
Logan Simpson Design Inc.
Diane Simpson-Colebank, Project Principal
Steve Lohide, Principal Landscape Architect
Ashley Kowallis
Richard B Lewis, III
Greg Brown
Dave Webb
Brad Remme



Table of Contents

Introduction	1
History	1
Vision and Recreation Use Policies	3
Site Context & Resources	4
Vegetation Type	4
Wildlife Habitat Values	5
Slope Analysis	8
Visual Analysis	8
Water Resources	8
Cultural Resources	13
Jurisdiction/Land Use/Zoning	13
Existing Recreation Activities	14
Planning Process	15
Master Planning Process	15
Facility Programming	15
Site Analysis	16
Public Input	16
The Master Plan	19
Watson Lake	19
Willow Lake	22
Implementation Plan	22
Resource Management Recommendations	22
Vegetation	23
Wildlife	23
Soils	24
Visual	24
Cultural	24



Table of Contents - Continued

List of Figures

Figure 1.	Study Area	2
Figure 2.	Watson Lake General Habitat Value	6
Figure 3.	Willow Lake General Habitat Value	7
Figure 4.	Watson Lake Slope Analysis	9
Figure 5.	Willow Lake Slope Analysis	10
Figure 6.	Watson Lake Water Resources	11
Figure 7.	Willow Lake Water Resources	12
Figure 8.	Watson Lake Site Analysis	17
Figure 9.	Willow Lake Site Analysis	18
Figure 10.	Watson Lake Draft Master Plan	20
Figure 11.	Willow Lake Draft Master Plan	21

List of Tables

Table 1.	Plants Observed in the Study Area	4
Table 2.	Wildlife Observed in the Study Area	5
Table 3.	Existing Recreation Activities	14
Table 4.	High Priority Potential Recreation Facilities	16



Introduction

Approximately 850 acres associated with Watson and Willow Lakes were acquired by the city of Prescott (City) in December 1998. Located eight miles northeast of Downtown Prescott in Yavapai County, Arizona, this unprecedented acquisition created a 1,300-acre public recreation area unparalleled in central Arizona (Figure 1). The procurement of the lakes and associated water rights fulfilled the community's desire to permanently hold the lakes' resources and recreation opportunities for future generations. Since assuming stewardship of the lakes, the City's Parks, Recreation & Library Department has been developing a strategy that will allow for public access and enjoyment while protecting the lakes' natural and cultural resources. This Master Plan is an important step in the development and management strategy of Watson and Willow Lakes.

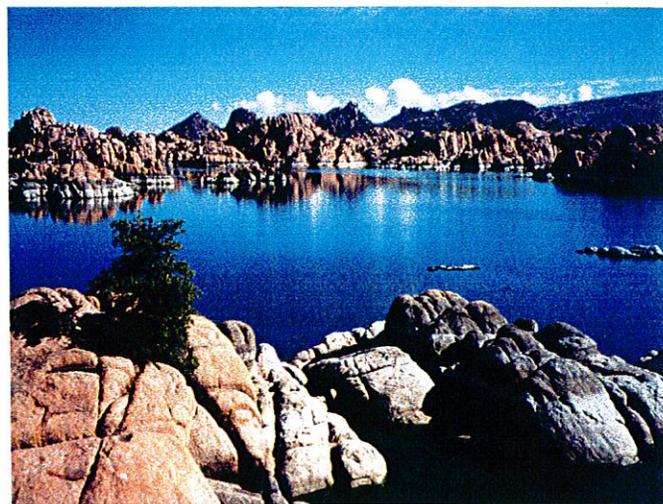
History

Much of the Watson and Willow Lakes area was acquired in the early 1900's by the Arizona Land and Irrigation Company from the railroads. In 1912, construction of the Watson Lake dam and reservoir was started and took two years to complete. Watson Lake filled for the first time in 1915. The Arizona Land and Irrigation Company transferred all of its rights, title, and interest in Watson Lake to the Hassayampa Alfalfa Farms in 1914 that later became the Chino Mutual Water Users Association and eventually in 1925, the Chino Valley Irrigation District (CVID). The Watson Lake reservoir has historically been used by the CVID and its predecessors to impound waters of Granite Creek for irrigation of farmland in the Little Chino Valley. The capacity of the storage right is 4,600 acre-feet, to be released each year between April and October.

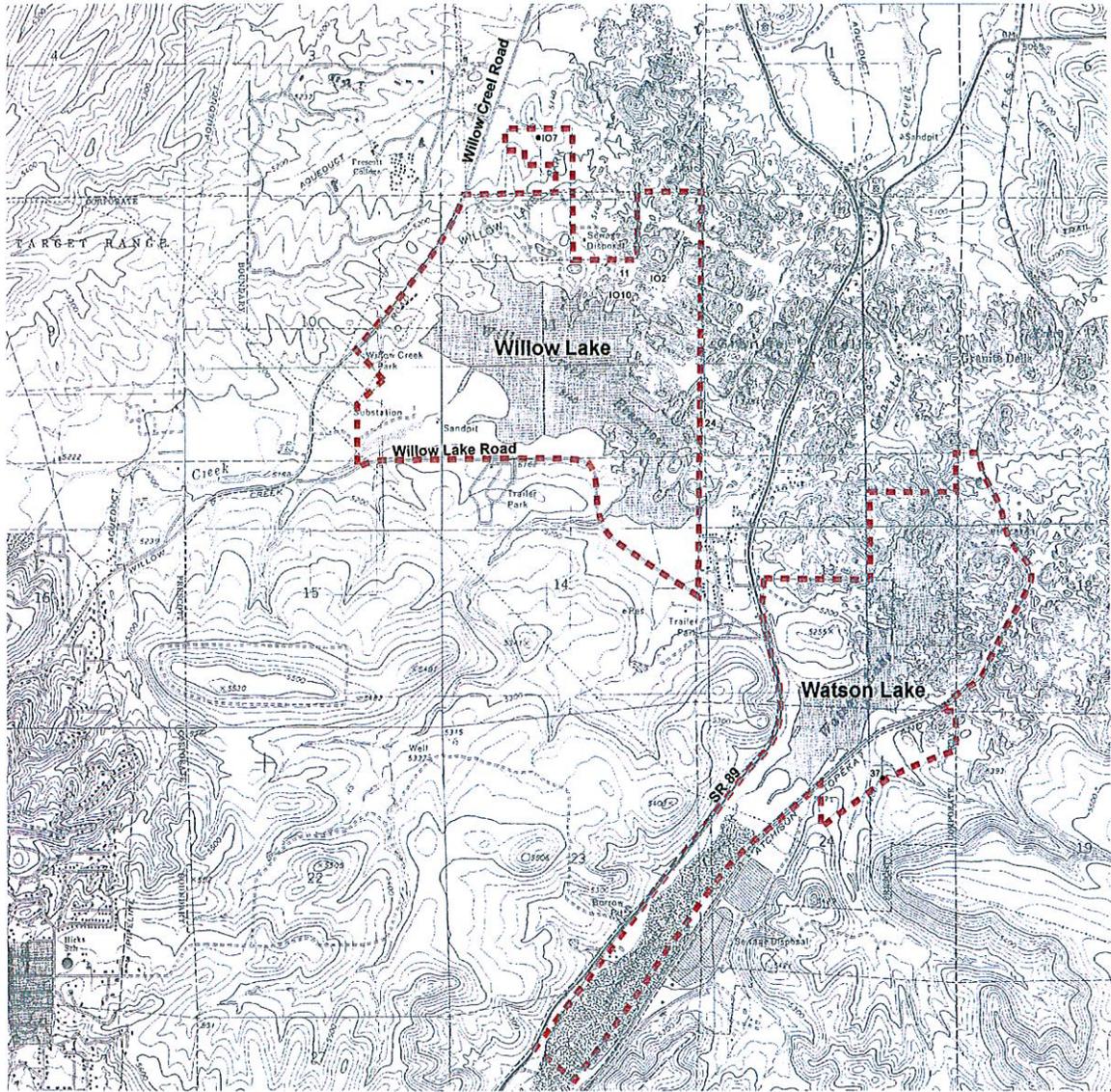
The Willow Lake dam was constructed by the CVID in 1935. Willow Lake's storage right capacity is 5,980 acre-feet. Also in 1935, construction of an earthen canal between Willow and Watson Lakes was started and eventually finished in 1965.

In the early 1990's, the City began its effort to acquire the lakes and their water rights for open space and recreation development, and to enhance the City's long term alternative water portfolio. A working group consisting of City and CVID officials and representatives from the Salt River Project and the Arizona Department of Water Resources was formed in 1996 to develop a conceptual agreement. In March of 1998, the Prescott City Council and CVID Board approved an Intergovernmental Agreement that established the foundation and procedures to enable the transaction processes to go forward. The community of Prescott voted on and passed a bond on May 19, 1998, to acquire the real property and water rights associated with Watson and Willow Lakes.

The City Council authorized a subcommittee to appoint a 15-person citizen's Lakes Steering Committee on August 1998 to work with City staff and their future consultant, Logan Simpson Design Inc., on the development of the Master Plan. In December 1998, the City took ownership of the 850 acres associated with Watson and Willow Lakes to create a 1,300-acre public recreation area for the community. The City Council approved the Master Plan on May 25, 1999.



Granite Dells at Watson Lake



Key

- ■ ■ Study Area Limits

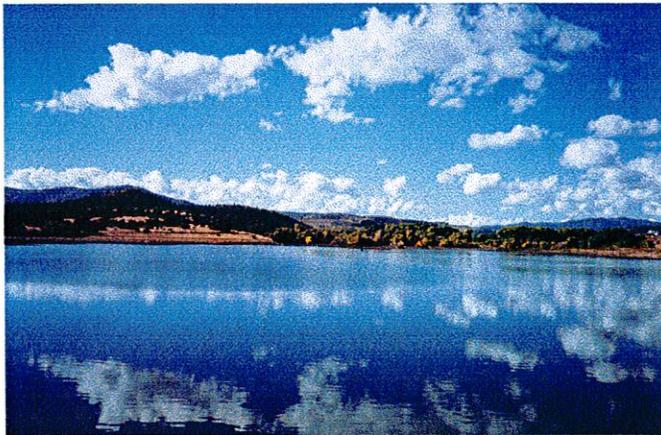
Figure 1. Study Area



Vision and Recreation Use Policies

In May 1998, the Mayor and City Council, in their desire to establish Watson and Willow Lakes as open space and water-based recreation areas in perpetuity, established the following vision statement and recreation use policies for the lakes.

The community's vision is to provide *educational and*¹ recreational opportunities such as fishing, boating, swimming, camping, wildlife viewing, hiking, and outdoor recreation while maintaining and enhancing wildlife habitat and preserving the unique qualities and landscape of the lakes.



Watson Lake

Policy 1.

Substantial wildlife habitat will be preserved, maintained and enhanced around both lakes. Specific areas for such use will include, but not be limited to the wooded area of Watson Lake, east shoreline of Watson Lake adjacent to the Rails to Trails project, wooded area on the west side of Willow Lake, south shoreline of Willow Lake, and leaving undisturbed all large granite boulder formations on both lakes.

¹ The Lakes Steering Committee added the words "educational and" to the vision statement.

² According to the Lakes Steering Committee, concessionaires associated with the City's park and recreation activities are not intended to be prohibited under this policy.

Policy 2.

The use of powered watercraft will be administered and controlled in a manner that prohibits unsafe or excess speed while considering impacts of noise levels on adjacent property owners, recreation users and wildlife. Regulating speed and noise can be accomplished by establishing policy utilizing speed limits, wake restrictions, area and time limitations, motor decibel levels and horsepower restrictions which are consistent with the operational goals of the lakes.

Policy 3.

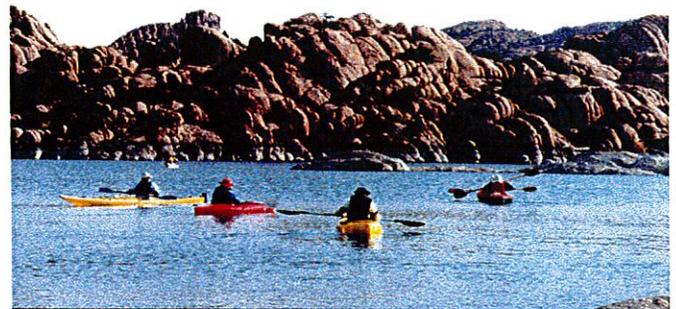
At Willow Lake, all public recreation improvements will be limited to the north shore, adjacent to Heritage Park, and any public access from Willow Lake Road to the wildlife and preserved areas is to be limited.

Policy 4.

At Watson Lake, public recreation improvements will be limited to existing Watson Lake Park and south along State Route (SR) 89 to the existing Watson Lake overlook.

Policy 5.

Private commercial facilities will be prohibited on City-owned property around both lakes.²



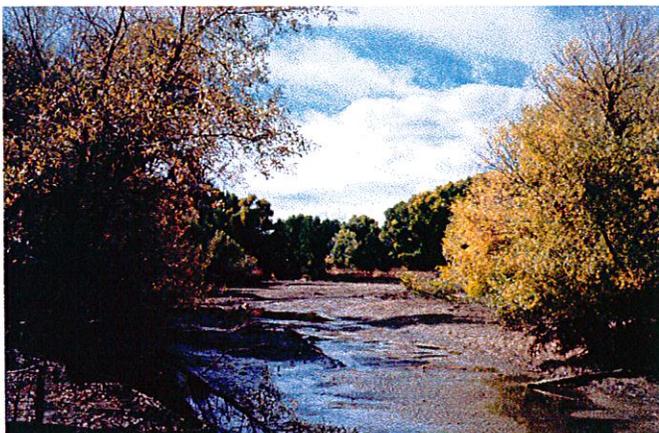
Kayaks on Watson Lake

Site Context & Resources

The Watson and Willow Lakes study area exhibits a wide range of resources and features. These site conditions were studied, mapped, and evaluated during the preparation of the Master Plan. The purpose of the investigation of the study area's resources and features was the development of an understanding of its natural environment and context. The investigation was based on field reconnaissance surveys of the study area conducted from October to December 1998 and available information from the City, other agencies, and community sources.

Vegetation Type

General vegetation types within the study area include pinyon-juniper woodland, chaparral, cottonwood-willow forest, and grasslands. Typical species of the pinyon-juniper woodland consists of pinyon pine, one-seed juniper and Utah juniper. Characteristic chaparral shrub species are tough-leaved evergreens such as scrub oak, manzanita, and mountain mahogany. Various riparian vegetation is associated with the cottonwood-willow forest including Goodding willow, Fremont cottonwood, and tamarisk. Grasses found in the area include western wheatgrass, blue grama, squirreltail, and Indian ricegrass. Plant species identified during the non-intensive survey are provided in Table 1.



Cottonwood-Willow Forest at Watson Lake

Table 1. Plants Observed in the Study Area

Trees	
Boxelder	<i>Acer negundo</i>
Fremont Cottonwood	<i>Populus fremontii</i>
Goodding Willow	<i>Salix gooddingii</i>
Netleaf Hackberry	<i>Celtis reticulata</i>
One-seed Juniper	<i>Juniperus monosperma</i>
Ponderosa Pine	<i>Pinus ponderosa</i>
Salt Cedar	<i>Tamarix sp.</i>
Singleleaf Pinyon Pine	<i>Pinus monophylla</i>
Utah Juniper	<i>Juniperus osteosperma</i>
Velvet Ash	<i>Fraxinus pennsylvanica ssp. velutina</i>
Shrubs	
Arizona Grape	<i>Vitis arizonica</i>
Banana Yucca	<i>Yucca baccata</i>
Beargrass	<i>Nolina microcarpa</i>
Brickellia	<i>Brickellia sp.</i>
Coffee Berry	<i>Rhamnus sp.</i>
False Indigo	<i>Amorpha fruticosa</i>
Hedgehog Cactus	<i>Echinocereus sp.</i>
Hollyleaf Buckthorn	<i>Rhamnus crocea</i>
Manzanita	<i>Arctostaphylos sp.</i>
Mountain Mahogany	<i>Cercocarpus sp.</i>
Prickly Pear	<i>Opuntia sp.</i>
Scrub Oak	<i>Quercus sp.</i>
Squaw Bush	<i>Rhus trilobata</i>
Wild Rose	<i>Rosa sp.</i>
Forbs/grasses	
Cattail	<i>Typha sp.</i>
Cocklebur	<i>Xanthium strumarium</i>
Common Sunflower	<i>Helianthus annuus</i>
Horehound	<i>Marrubium vulgare</i>
Jimson Weed	<i>Datura meteloides</i>
Side-oats Grama	<i>Bouteloua curtipendula</i>

At Watson Lake, the southern portion of the study area contains a significant riparian vegetation community of cottonwood-willow forest designated as the Watson Woods. This area is leased to the Prescott Creek Preservation Association. Granite Creek provides a perennial water source to help sustain the mature cottonwoods found in Watson Woods. The vegetation around the Granite Dells in the northern portion of Watson Lake is predominately chaparral with scrub oak and manzanita. Relatively small pockets of pinyon-juniper woodlands are found in the flat areas surrounding the Dells and along the abandoned railroad bed on the east side of the lake. Grasses dominate the western portion of Watson Lake along SR 89.



Similarly at Willow Lake, the scrubby chaparral vegetation is associated with the rock formations found in the eastern portions of the site. There are however, two small pockets of Ponderosa pines and one riparian area within the canyons of the Dells. Junipers and pinyon pines are predominately found just north of the lake, around Heritage Park. The majority of the Willow Lake area is open grassland with small islands of cottonwoods scattered in the southwestern portion of the site.

Wildlife Habitat Values

Relative habitat values were determined for the study area and were assigned as high, high-moderate, moderate, and low. These values reflect the overall suitability of the landscape for a diversity of wildlife species. Factors considered in the evaluation of habitat value included tree and shrub species diversity, vegetation density and structural variety of cover, the degree of human disturbance (such as roads and trails), and degradation of the landscape. Unusual landforms offering particular habitat value, such as shore bird nesting areas, were also considered.

The lake shore edge adjacent to the rock formations, riparian areas, the south shoreline area along Willow Lake, and the Ponderosa pine areas were considered to have high habitat value relative to the other areas within the Watson and Willow Lakes study area. High-moderate habitat values were judged to be those areas associated with the relatively dense pinyon-juniper woodlands and those areas immediately adjacent to riparian areas. Less dense pinyon-juniper woodland areas were considered to have moderate habitat values. The grasslands were assessed to have relatively low habitat value as compared to other areas of the study area. Figures 2 and 3 illustrate the location of the general habitat value within the Watson and Willow Lakes study area. Table 2 lists wildlife species observed during the non-intensive field surveys in October 1998. It should be noted that there are many other wildlife species found within the study area and that this list is not intended to be inclusive of all species.

The Arizona Game & Fish Department (AGFD) has been monitoring wintering bald eagles at both lakes for several years. Common habitat consist of large trees, snags or cliffs near water for nesting, with fish and waterfowl for prey. Maintaining a consistent water level and increasing the fish population of the lakes will be beneficial for the wintering eagles as well as for other wildlife. AGFD has approved the stocking of channel catfish, large mouth bass, blue gill, and crappie in the lakes.

Table 2. Wildlife Observed in the Study Area

Amphibians	
Bullfrog	<i>Bufo catesbiana</i>
Birds	
American Coot	<i>Fulica americana</i>
American Kestrel	<i>Falco sparverius</i>
American Wigeon	<i>Anas americana</i>
Black Phoebe	<i>Sayornis nigricans</i>
Canvasback	<i>Aythya valisineria</i>
Cinnamon Teal	<i>Anas cyanoptera</i>
Common Raven	<i>Corvus corax</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
European Starling	<i>Sturnus vulgaris</i>
Great Blue Heron	<i>Ardea herodias</i>
Great Egret	<i>Bulbulcus ibis</i>
Greater Yellowlegs	<i>Tringa melanoleuca</i>
Great-horned Owl	<i>Bubo virginianus</i>
Green-winged Teal	<i>Anas crecca</i>
House Finch	<i>Carpodacus mexicanus</i>
Killdeer	<i>Charadrius vociferus</i>
Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>
Mallard	<i>Anas platyrhynchos</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Northern Pintail	<i>Anas acuta</i>
Pied-billed Grebe	<i>Podilymbus podiceps</i>
Redhead	<i>Aythya americana</i>
Red-shafted flicker	<i>Colaptes auratus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Rock Wren	<i>Salpinctes obsoletus</i>
Western Grebe	<i>Aechmophorus occidentalis</i>
Western Meadowlark	<i>Sturnella neglecta</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Mammals	
Mule Deer	<i>Odocoileus hemionus</i>
Pronghorn antelope	<i>Antilocarpa americana</i>

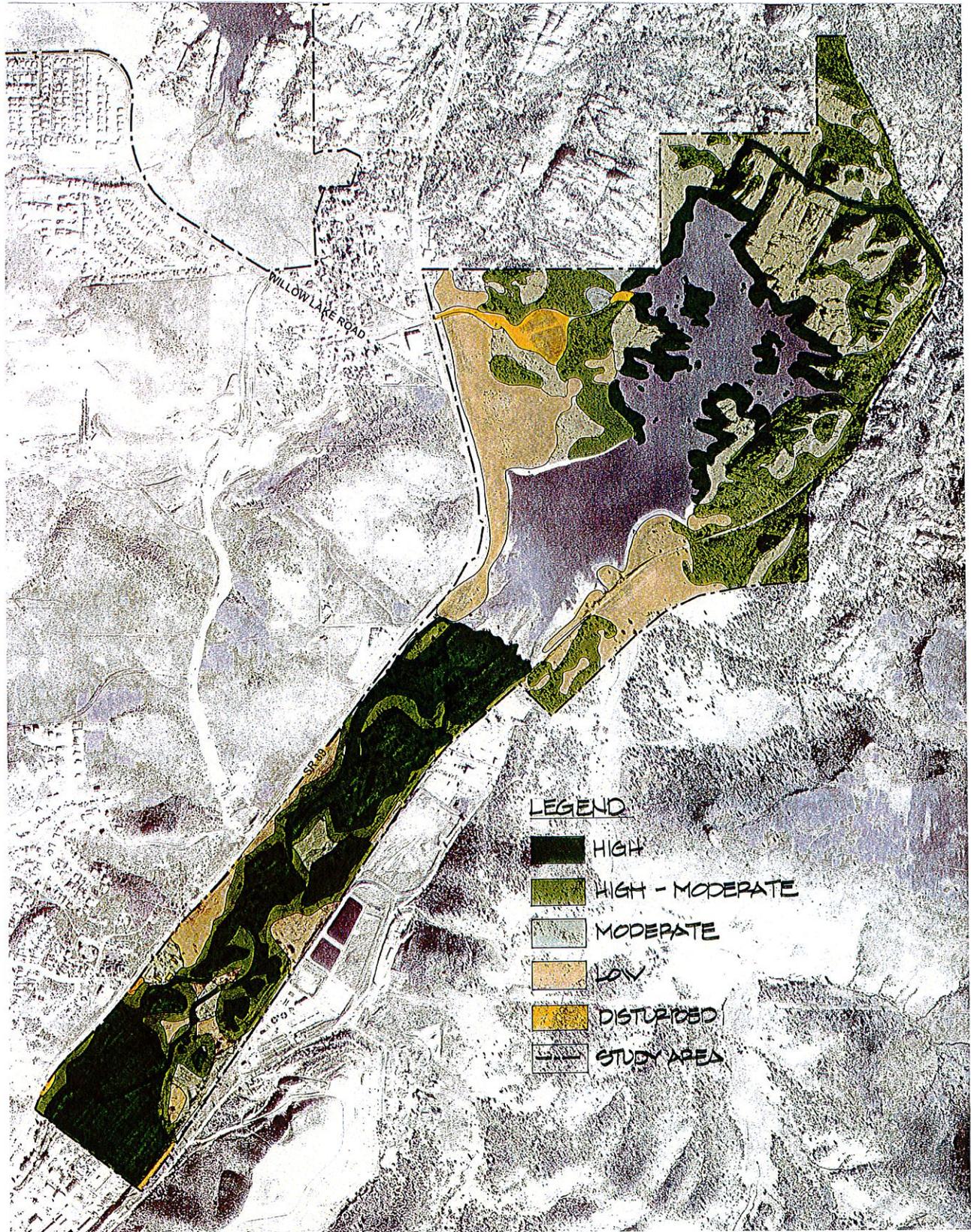


Figure 2. Watson Lake General Habitat Value

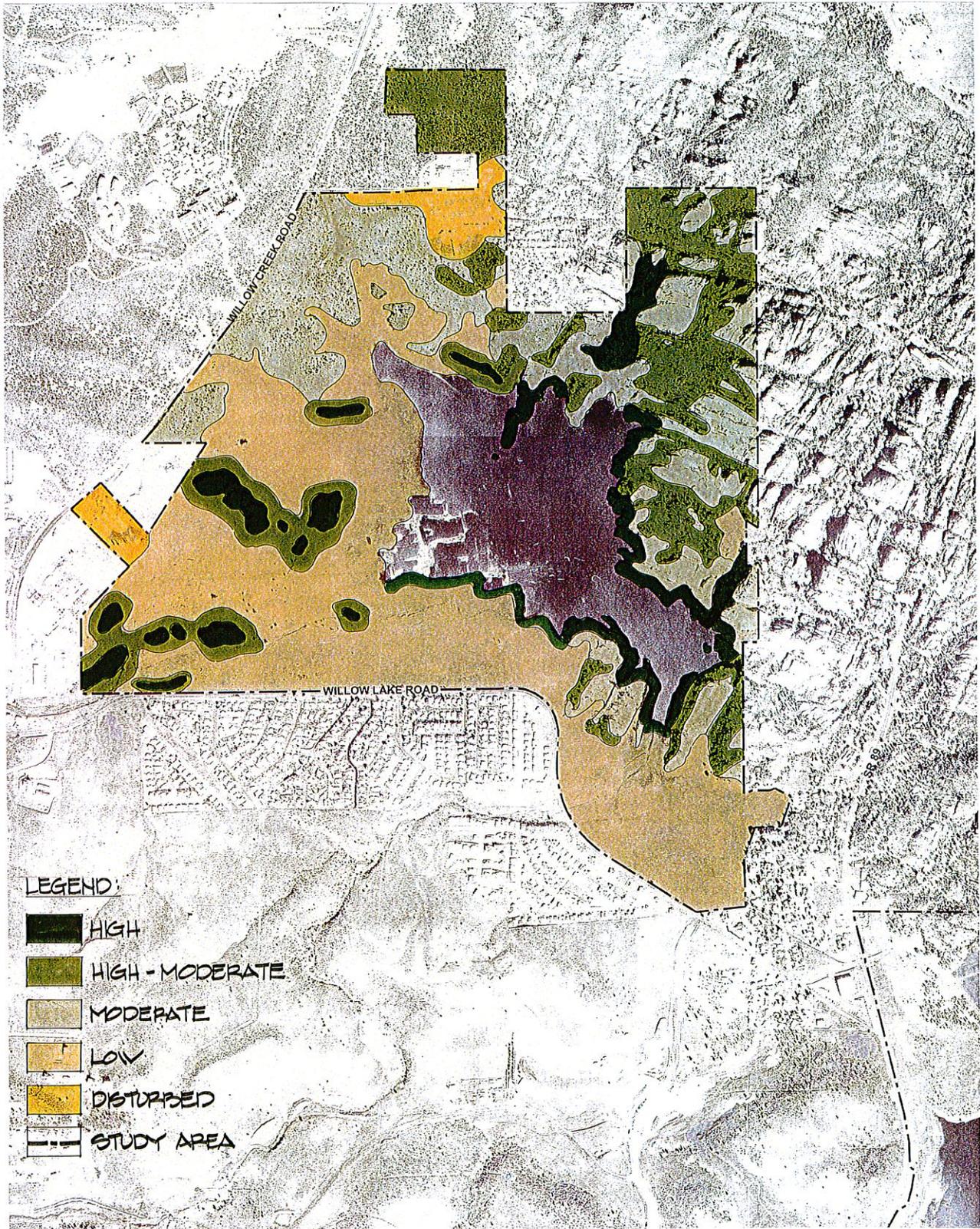
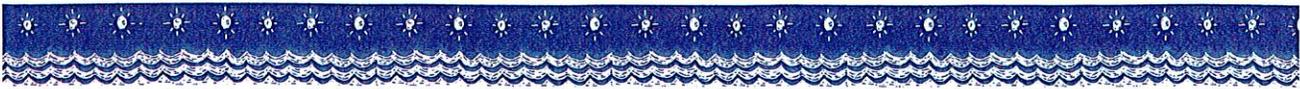
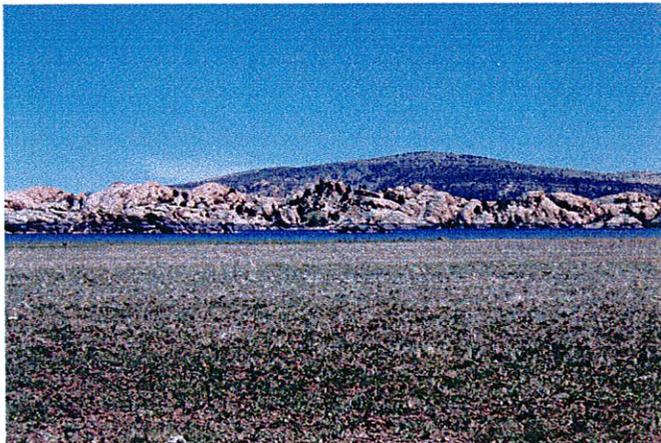


Figure 3. Willow Lake General Habitat Value



Slope Analysis

There are three distinct areas with regard to the slopes that occur within the study area. These slopes can be characterized as surface topography that ranges from 0 to 5% slope, 6 to 8%, and greater than 8%. Slopes in the range of 0 to 5% can be easily developed and provide access according to the Americans with Disability Act. Areas with slopes that range from 6 to 8% can be developed, but at a higher cost for construction relative to the lower slope areas. Slopes greater than 8% would require substantial cost for construction and limit the locations of facilities including trails, parking areas, and buildings. At both lake sites, the majority of the landform either falls within the 0 to 5% or greater than 8% ranges (Figures 4 and 5). The rock formations create slopes over 8% and the grassland and riparian areas are relatively flat.

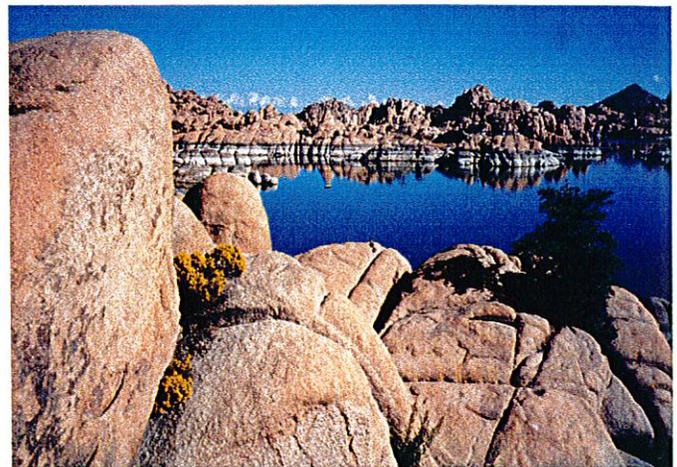


Flat Slope Area at Willow Lake

Visual Resources

The combination of the large expanse of surface water, statuesque cottonwoods, and prominent rock formations create a distinct or memorable landscape pattern within the study area. This landscape is scarce within the State and central Arizona, and is considered to have high inherent visual or scenic value. In addition to the prominent natural features, the two dam structures are also notable visual features. The color, line, scale, and form of the dam structures blend with the natural landscape and are almost unperceived from most locations along the lakeshore.

The pull-out along SR 89 provides a panoramic view of Watson Lake. Other key viewing points are from the large group ramada at Watson Lake, the Peavine Trail - Rails to Trails pathway, and along Willow Lake Road. Notable location of disturbed areas within the study area consists of the gravel mining operations at Willow Lake. The built features associated with the existing recreation facilities are subordinate to the natural features and do not distract from the level of naturalness associated with the study area. Consideration was given for views from the lakes, outward to adjacent land uses. Existing industrial land uses to the east of Watson Woods and at the extreme western end of Willow Lake lower the scenic value at those locations.



Distinct Boulder Formations at Watson Lake

Water Resources

As previously stated, the capacity of the storage right for Watson Lake is 4,600 acre-feet and for Willow Lake, the storage right is 5,980 acre-feet (Figures 6 and 7). The spillway pool elevation for Watson Lake is 5,161.5 feet above mean sea level (msl) and will provide approximately 200 surface acres of water. The spillway pool elevation is the point at which water will spill over the dam structure and not be retained in the lake. At Watson Lake, the conservation pool elevation is 5,152 feet above msl. The City is anticipating keeping the level of water at the lakes at their conservation pool elevation or greater. The available

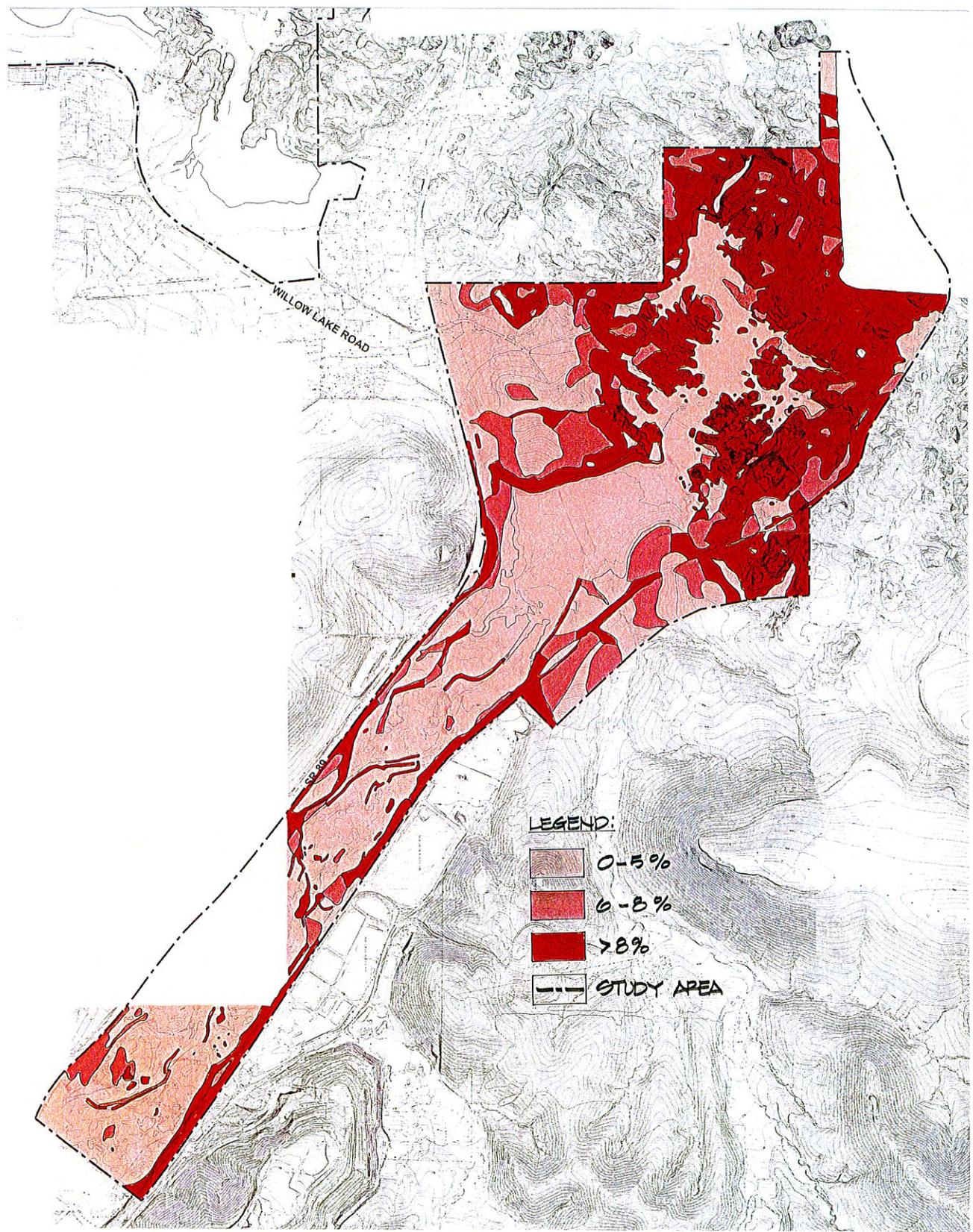


Figure 4. Watson Lake Slope Analysis

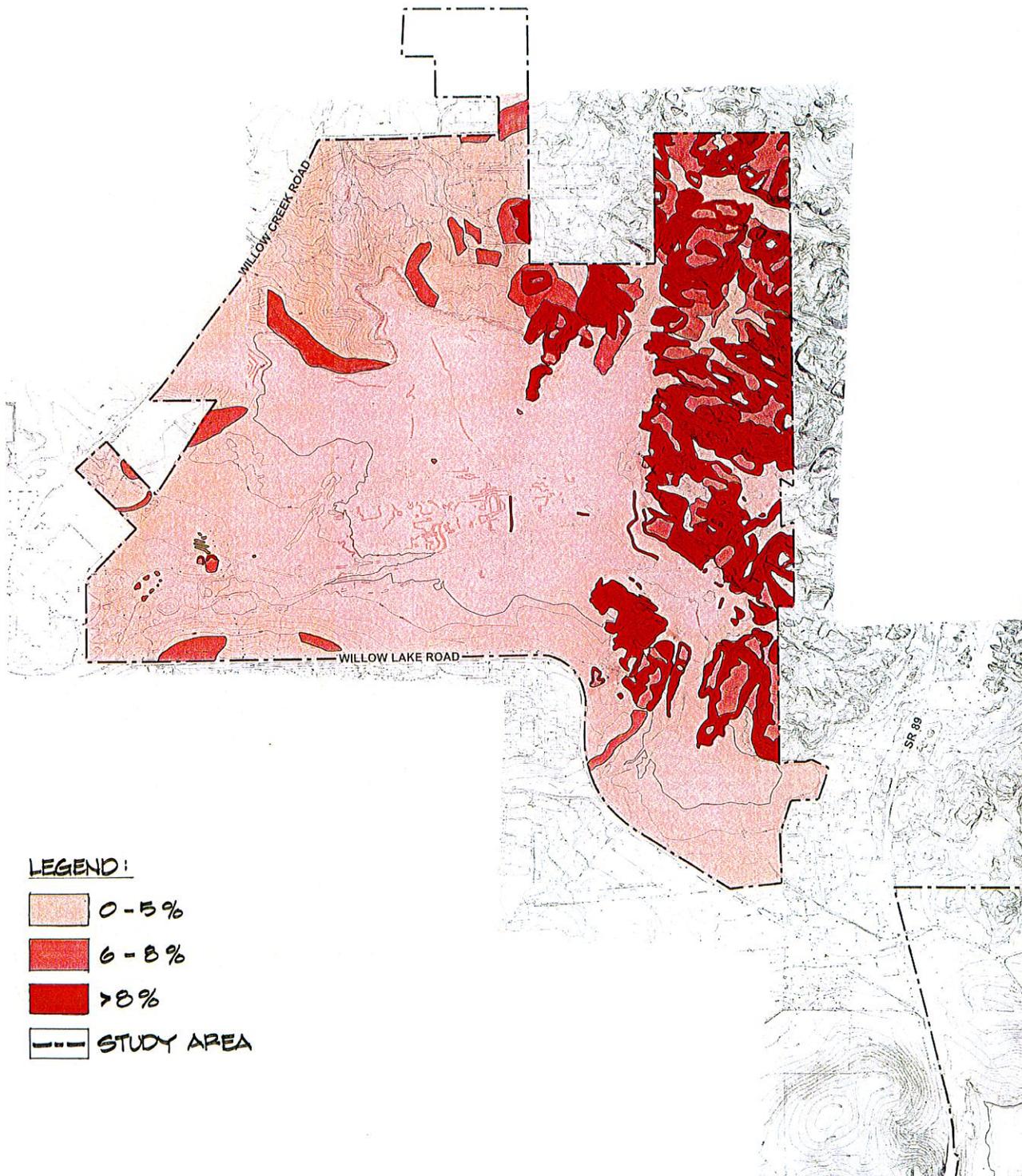
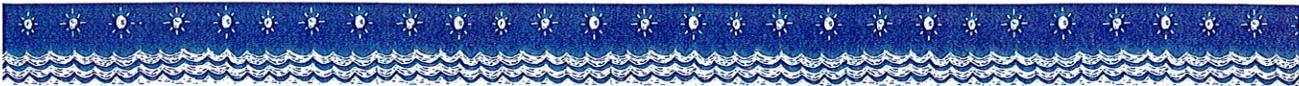


Figure 5. Willow Lake Slope Analysis

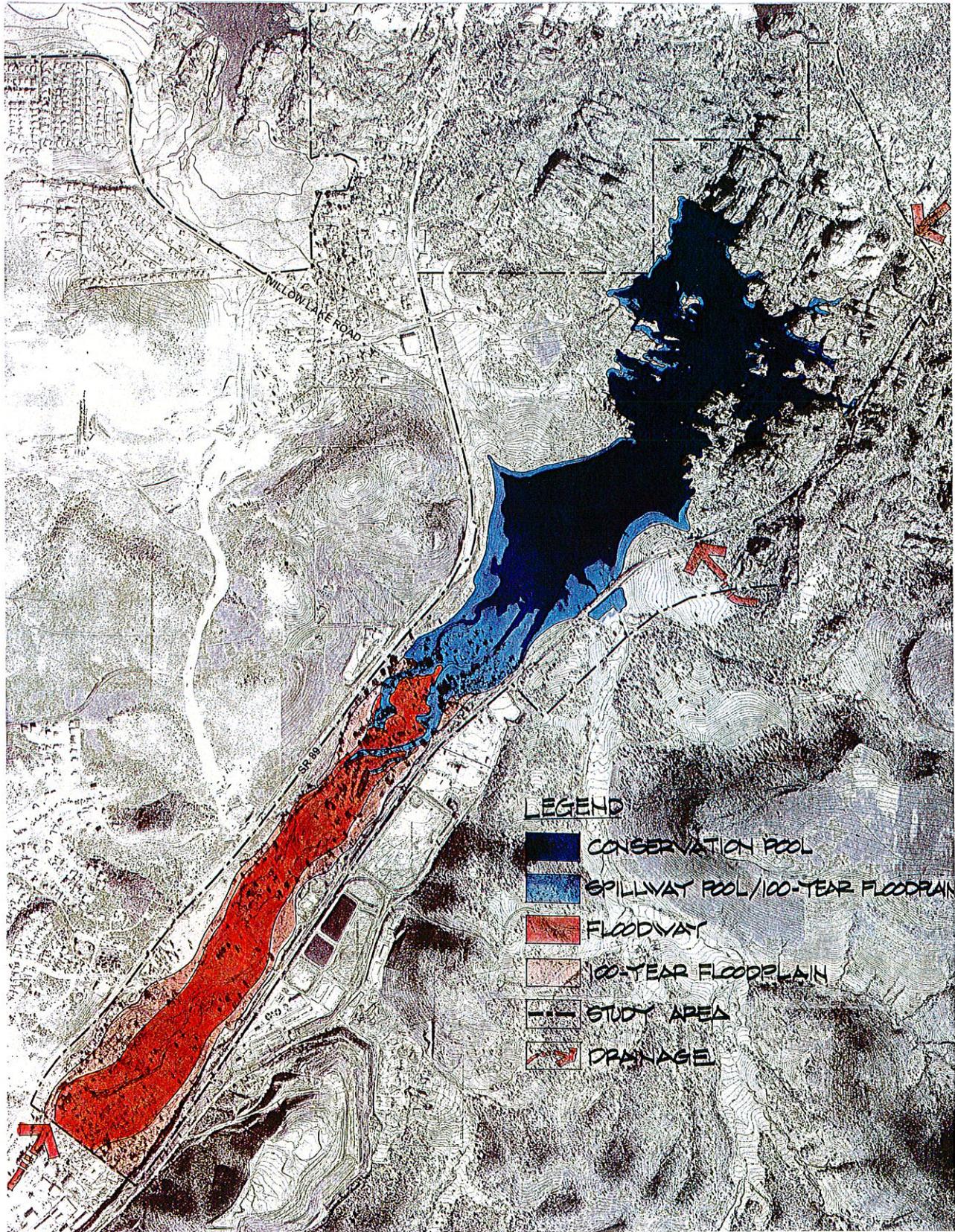


Figure 6. Watson Lake Water Resources

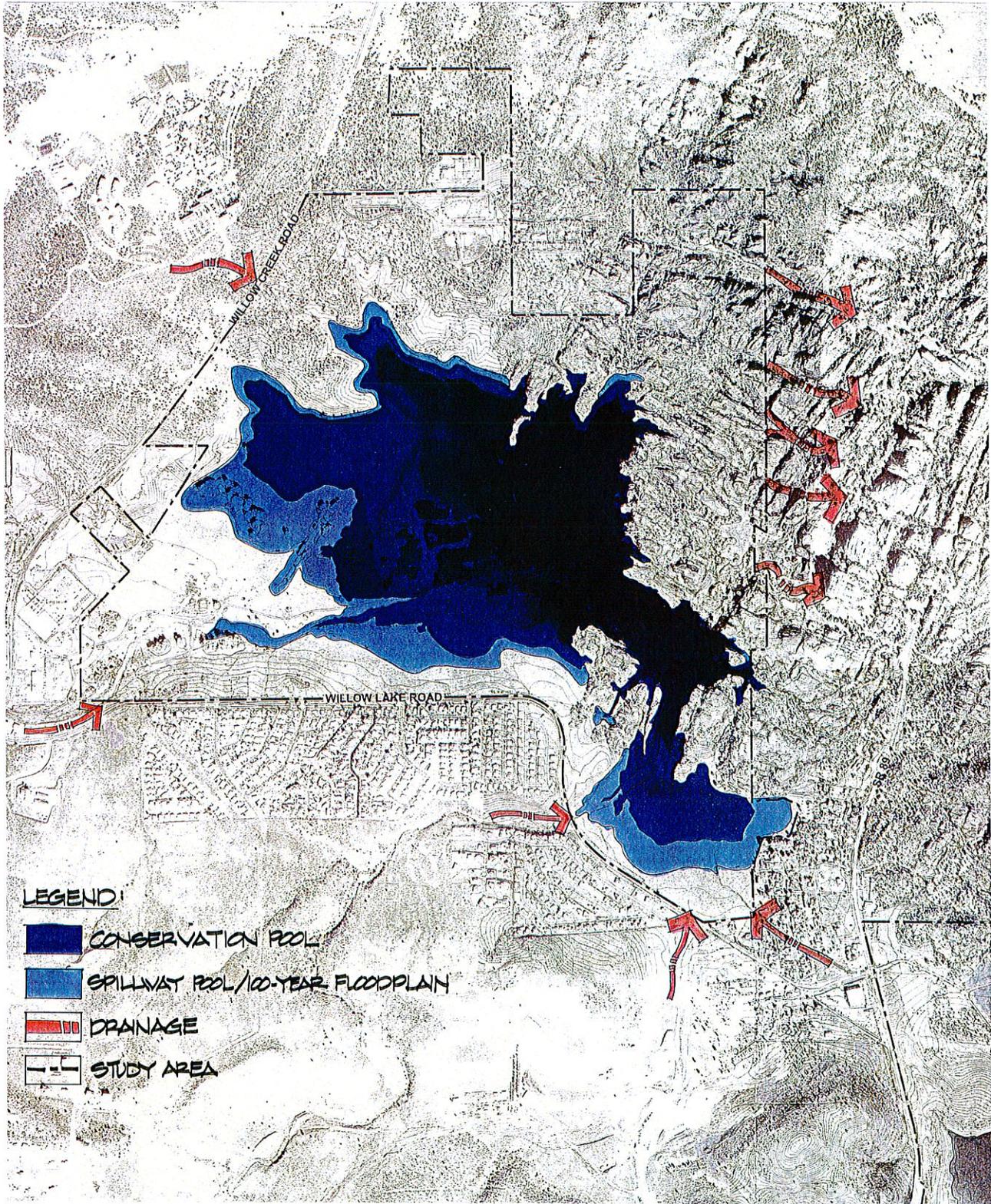


Figure 7. Willow Lake Water Resources



surface acres is approximately at Watson Lake at the conservation pool elevation. At Willow Lake, the spillway pool elevation is 5,140.5 above msl with 342 surface acres and conservation pool elevation is 5,136 above msl with 234 surface acres.

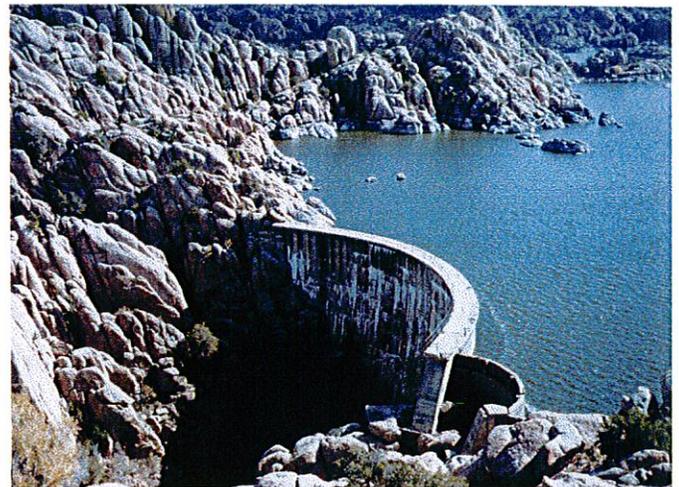
Several drainages flow into the lakes. These include Granite Creek, Willow Creek, and several unnamed washes. The City has delineated floodway and floodplain for the Granite Creek portion of the study area at Watson Lake. The spillway elevation at both lakes is currently considered to be equivalent to the 100-year floodplain limit.

Cultural Resources

A preliminary cultural resource investigation of the study area included a complete review of previous archaeological surveys in and near the study area, identifying the locations of culturally sensitive areas, and making recommendations on the need for further evaluation of cultural resources. The preliminary survey of the study area discovered a total of 41 cultural resource sites. Three of the 41 sites had been previously recorded. Two of the three previously recorded sites, a prehistoric artifact scatter, and an abandoned railroad alignment, could not be relocated. Twenty-five sites were identified as a result of the survey of the Willow area. Survey of the Watson area identified 13 sites. Sites include a variety of prehistoric and historic site types.

Culturally sensitive areas occur in all sections of the Watson Willow Lakes study area. Sites near the Granite Dells area are generally small, limited sites, with little or no possibility of containing buried deposits. These sites are likely to be ineligible for inclusion on the National Register of Historic Places (NRHP). However, sites located on alluvium, terraces, and knolls overlooking Willow and Granite Creeks generally contain more substantial sites and some, if not all, are likely to contain subsurface deposits and features. These sites are particularly sensitive due to a combination of their location and nature, and are expected to be considered NRHP eligible sites.

The exact surface boundaries of the sites, and the NRHP eligibility of historic properties in the Watson Willow Lakes study area are not known at this time. With appropriate planning, it is often possible to minimize impacts to cultural resources by designing improvements to avoid the most culturally sensitive portions of sites. Given the relatively high density of sites near areas likely to be developed, it may not be possible to completely avoid all impacts to historic properties, but every effort should be made to preserve them in place.



Watson Lake Dam

Jurisdiction/Adjacent Land Use/Zoning

The majority of the Watson Lake site is within the Prescott city limits. The most northern area of the Granite Dells by the dam is, however, within the unincorporated area of Yavapai County. Approximately 45 acres of the lake site is owned by the Arizona State Land Department (ASLD) and leased to the City. A substantial portion of this parcel is underwater. It is anticipated that the City will annex the entire Watson Lake site. The 40-acre Watson Lake Park occupies the northwest corner of the site. Existing land uses adjacent to Watson Lake consist primarily of undeveloped land with small areas of commercial, industrial, and single family residential. Current zoning allows for commercial development (RB/CA) along SR 89 in addition to single and multi-family

residential (RA-35/RB). The area adjacent to the eastern shoreline of Watson Lake is zoned industrial (IB) and residential (RA-09). Areas within the county are currently zoned for single-family residential (R1-L35).

In contrast to Watson Lake, the majority of Willow Lake is within the unincorporated area of Yavapai County. The city limits follow Willow Lake Road, and curve around the substation on Willow Creek Road before realigning to encompass Willow Creek Park and Heritage Park. The Lakes Steering Committee recommended the entire study area be annexed into the City. Heritage Park consists of 117 acres of patented land from the Bureau of Land Management to the City under the Recreation & Public Purpose Act. Adjacent land uses consist primarily of undeveloped and residential uses with a few parcels of commercial and industrial land uses. Current zoning within the city limits allow for single and multi-family residential (RA6-MH/RB/RC/RA-35), commercial (CA/BB), and industrial (IA). County zoning allows for planned area development and identifies the lake area as single family (R1L).



Heritage Park

Existing Recreation Activities

As previously mentioned, Watson Lake Park, Willow Creek Park, and Heritage Park are located within the greater Watson and Willow Lakes study area. These existing parks currently provide a wide range of activities and facilities available to the community. It should be noted that all these recreation activities were



Existing Campground at Watson Lake

not continued as part of the approved Master Plan. Willow Creek Park is considered a neighborhood park while Watson Lake and Heritage parks are categorized as regional parks. Table 3 provides a listing of existing recreation activities occurring previously within the study area.

Table 3. Existing Recreation Activities

- Picnicking
- Camping
- Motorized Boating (Watson Lake only)
 - Personal Watercraft (jet ski)
 - Boats with Motors
 - Sail Boats
- Rubber Rafts
- Float Boats
- Plastic Floats
- Canoe/Kayaks
- Radio Controlled Boats and Airplanes
- Wind Surfing
- Field Sports (softball, baseball, soccer)
- Field Archery
- Volleyball
- Rock Climbing
- Wildlife Watching
- Swimming
- Fishing
- Educational Field Trips
- Zoo
- Flying Kites
- Hunting/Limited Water Fowl Hunting
- Horseshoes
- Scuba Diving/Snorkling
- Artist/Photographer/Musicians
- Special Events
- Small Group Events



Planning Process

The Watson and Willow Lakes Master Plan presented in this document is the result of a process that incorporated three underlying principles. The first was that it was necessary to have a good understanding of the study area's natural and cultural resources in order to develop an appropriate master plan. The second was the community's vision and recreation use policy must be adhered to in the planning process. The third principle was that public input and involvement in the project was essential to its long term success. These principles served to shape the overall master plan process.



Lakes Steering Committee

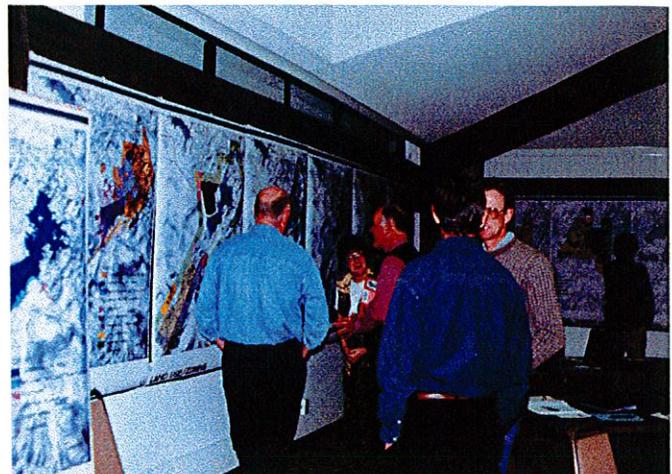
Master Planning Process

The master planning process consisted of four components or phases. These phases were: (1) site inventory and analysis; (2) program development; (3) conceptual master plans; and (4) preliminary/final master plan. The purpose of the first phase was to identify and evaluate the potential environmental and recreational resources within the study area. The opportunities and constraints for recreation developments based on the inventoried elements were also identified. The site analysis was used to document the physical planning influences on the potential uses to be considered for the study area. In the second phase of the planning process, existing and potential

user groups, potential facilities and their needs were identified. The purpose of the third phase was to develop appropriate master plan concepts based on the ideas accumulated in the planning process. This was achieved by synthesizing the user and facility needs within the constraints and opportunities of Watson and Willow Lakes study area. In the final phase of the planning process, a selected alternative or portions of alternatives combined into one alternative was refined to a Preliminary Master Plan. The Master Plan process was completed and adopted by the Parks, Recreation & Library Advisory Committee, Planning & Zoning Commission, and Prescott City Council.

Facility Programming

During the master planning process, one of the major issues centered around the intensity and type of recreation development. In order to assess the appropriate level of development and the recreation needs of the community, a list of potential recreation activities was developed. The list was generated and prioritized as high, moderate, or low based on input from the Lakes Steering Committee, general public, 7th and 8th grade school children, and City staff. Table 4 lists the high priority recreation facilities identified by the Committee, general public who attended the workshops, and the school children.



January 1999 Public Workshop



Table 4. High Priority Potential Recreation Activities

- Steering Committee
 - Canoe/Kayaks
 - Educational/Interpretative Center
 - Fishing
 - Hiking Trails
 - Multi-use Non-Motorized Trails
 - Picnicking
 - Swimming
- General Public
 - Biking Trails
 - Canoe/Kayaks
 - Education/Interpretative Center
 - Fishing
 - Float Boats
 - Hiking Trails
 - Individual Camping
 - Picnicking
 - Plastic Floats
 - Rubber Rafts
 - Sailboats
 - Swimming
 - Wildlife Watching
- Students
 - Biking Trails
 - Canoe/Kayaks
 - Hiking Trail
 - Personal Watercraft (jet ski)
 - Picnicking
 - Rock Climbing
 - Rubber Rafts
 - Scuba Diving/Snorkeling
 - Swimming

Site Analysis

Utilizing the environmental, land use, and site condition information, a composite map was prepared to graphically illustrate the site's opportunities and constraints for recreation developments based on the inventoried elements. The site analyses shown in Figures 8 and 9 were used to document the physical planning influences on the potential uses to be considered for the study area. For both lakes, future trail linkages, areas of minimal development, potential active and passive land-based and water-based recreation areas, staging areas, and interpretive opportunities were identified. Locations where barriers to pedestrian movement and areas needing to be visually screened were also noted.

Public Input

Throughout the planning process, the Lakes Steering Committee met routinely to review and advise on the appropriate issues in the development of the master plans. A series of three public workshops were held during the project. The first workshop presented the site inventory and analysis and was held on January 6, 1999. It also provided the participants the opportunity to express their issues and concerns relative to the project, and to give their preference on a range of potential recreation facilities/activities. In addition, over 800 seventh and eighth grade students and their parents were also given an opportunity to participate in the planning process by making their preference of recreation facilities known. The presentation of the three Preliminary Master Plan Alternatives was made in a second workshop session held February 11, 1999. The third and final public workshop was held on April 7, 1999, to present the Preliminary Master Plan for Watson and Willow Lakes. The presentation of the Draft Master Plan to the City Council was made in May 1999.



February 1999 Public Workshop

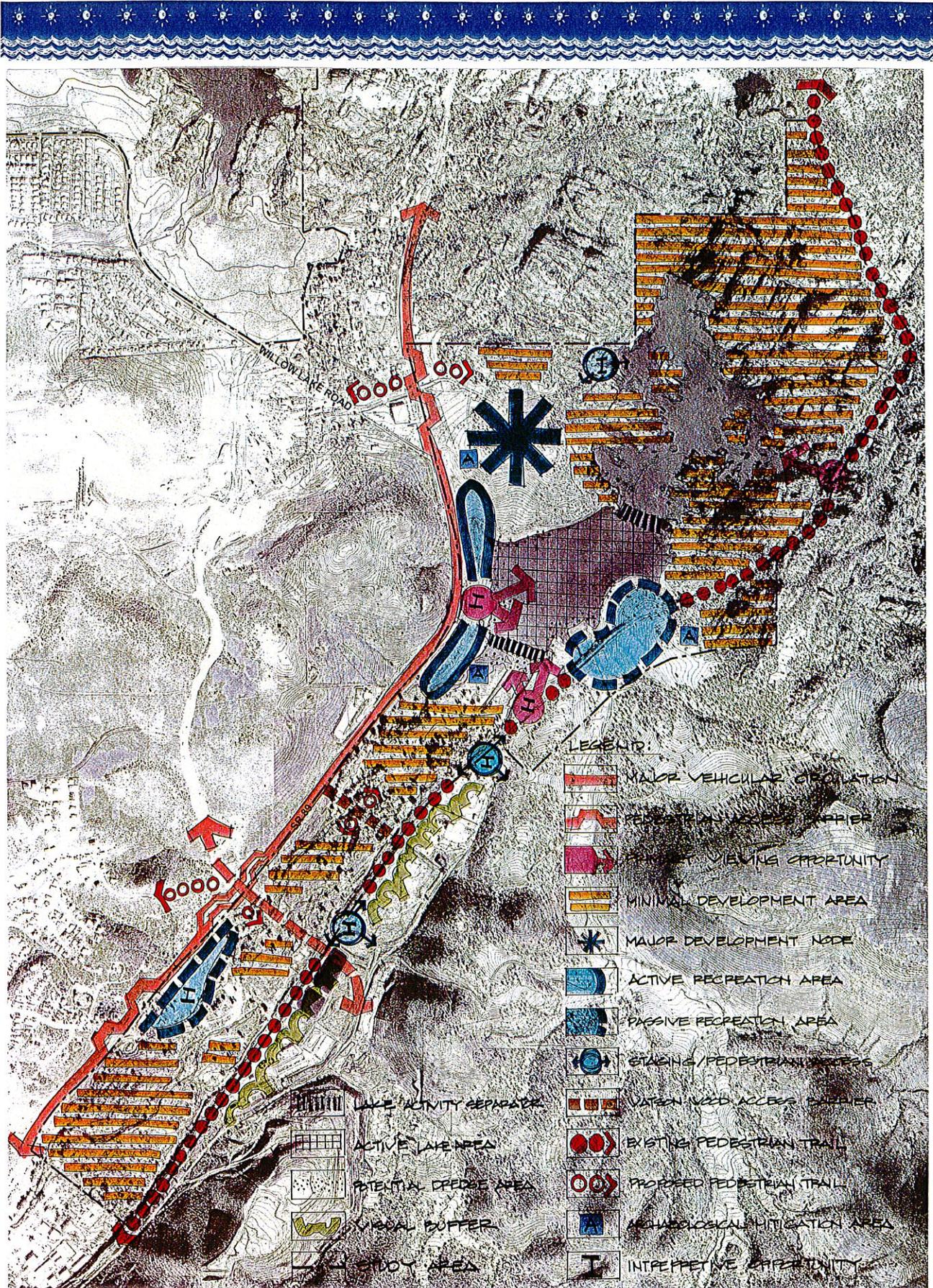


Figure 8. Watson Lake Site Analysis

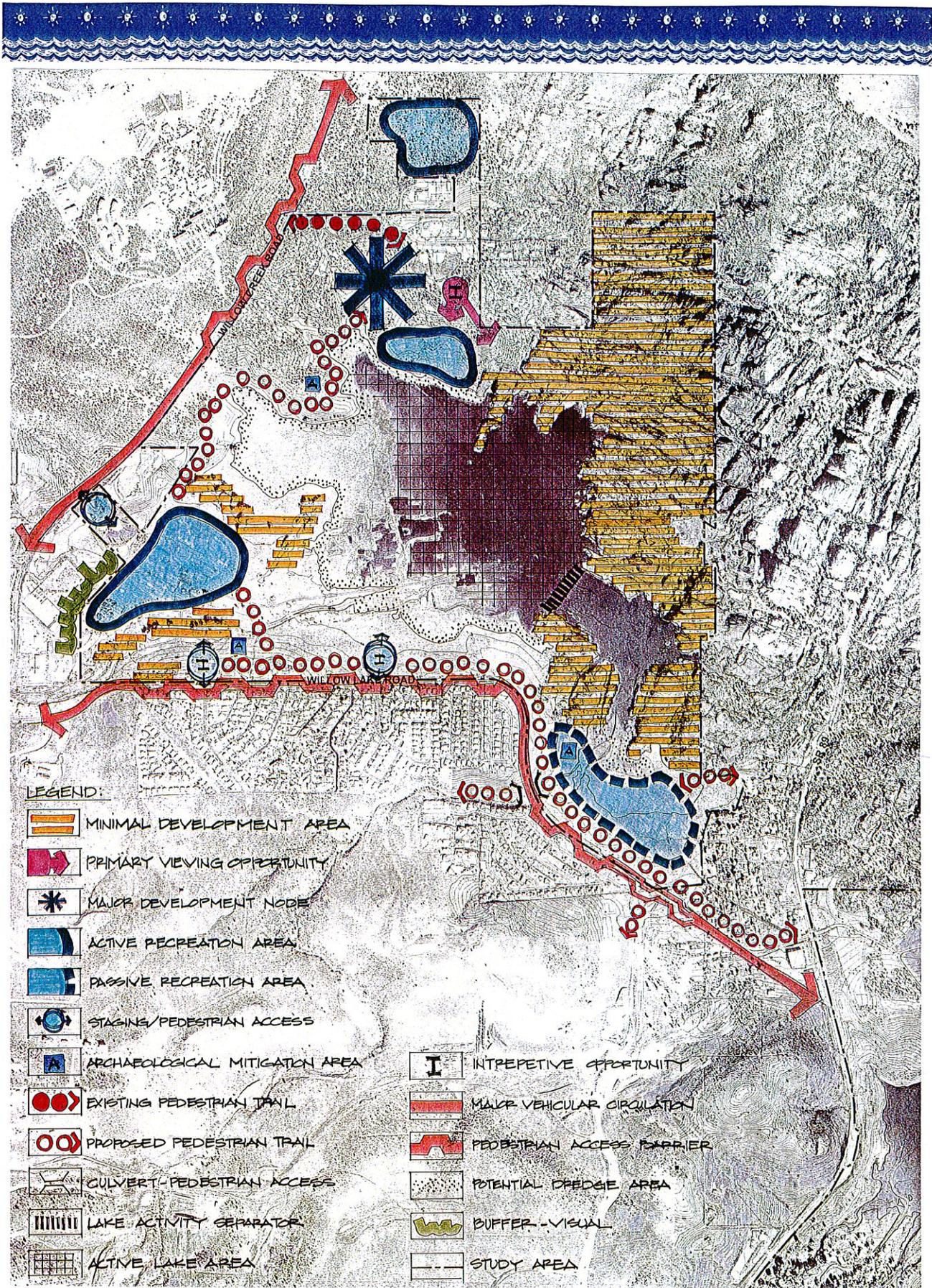


Figure 9. Willow Lake Site Analysis



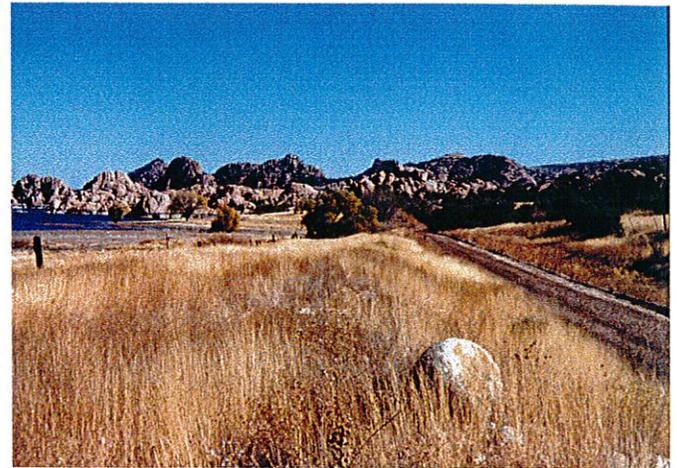
The Master Plan

Based on input from the Lakes Steering Committee, general public, City Council and City staff and following the recreation use policies, Master Plans for Watson and Willow Lakes were developed. The plans are described below and illustrated in Figures 10 and 11. Any changes to the approved Master Plans will involve a public process and formal amendment.

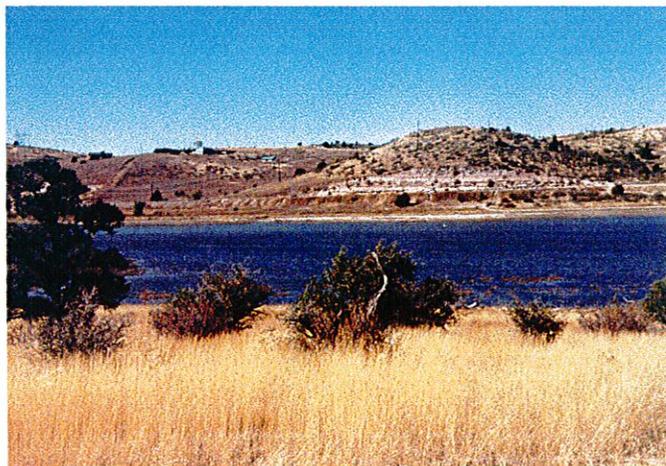
Watson Lake

The entire lake area would be managed as a “no wake” area except at designated times and in designated areas. This would allow any type of boat to be on the lake, but at a “no wake” speed (generally considered to be fewer than five miles per hour). It is envisioned that boating on Watson Lake would be limited to “no wake” for the majority of the year. Any designated time for open boating would occur during the summer months. The existing boat launch road would be realigned to the north thereby creating a large continual grass area for events and open play. The existing boat launch would remain open and the parking area upgraded. A new boat launch area would be located below the bluff next to SR 89 along with a day use area, swimming beach, and associated boating facilities such as boat trailer parking and fish cleaning station. Access to the new boat ramp and day-use area would be from the existing park entrance road. The existing campground, ramadas, parking,

and rest rooms would be upgraded. In the future, a potential tent campground area of fewer than 20 sites could be located on the ridge south of the existing large group ramada. This camping area would occur if and when the community expressed their desire and/or need to have this type of facility incorporated into the park. No developed recreation facilities would be located on the eastern shore area. Two Rails to Trails trail stops would be developed along the abandoned rail bed. Where possible, a series of multi-use trails would be located along the north and western area of the lake site. An informal vegetative screen would be placed along the park's edge near the entrance to



Rails to Trails at Watson Lake



New Day-Use Area below Bluff

visually buffer SR 89. In the future, a potential large event area could be located behind this vegetated buffer and the new boating access road. A pedestrian connection to Willow Lake could potentially occur within the existing public street right-of-way along the north side of Willow Lake Road.



Sketch of New Day-Use Area below Bluff



Figure 10. Watson Lake Draft Master Plan

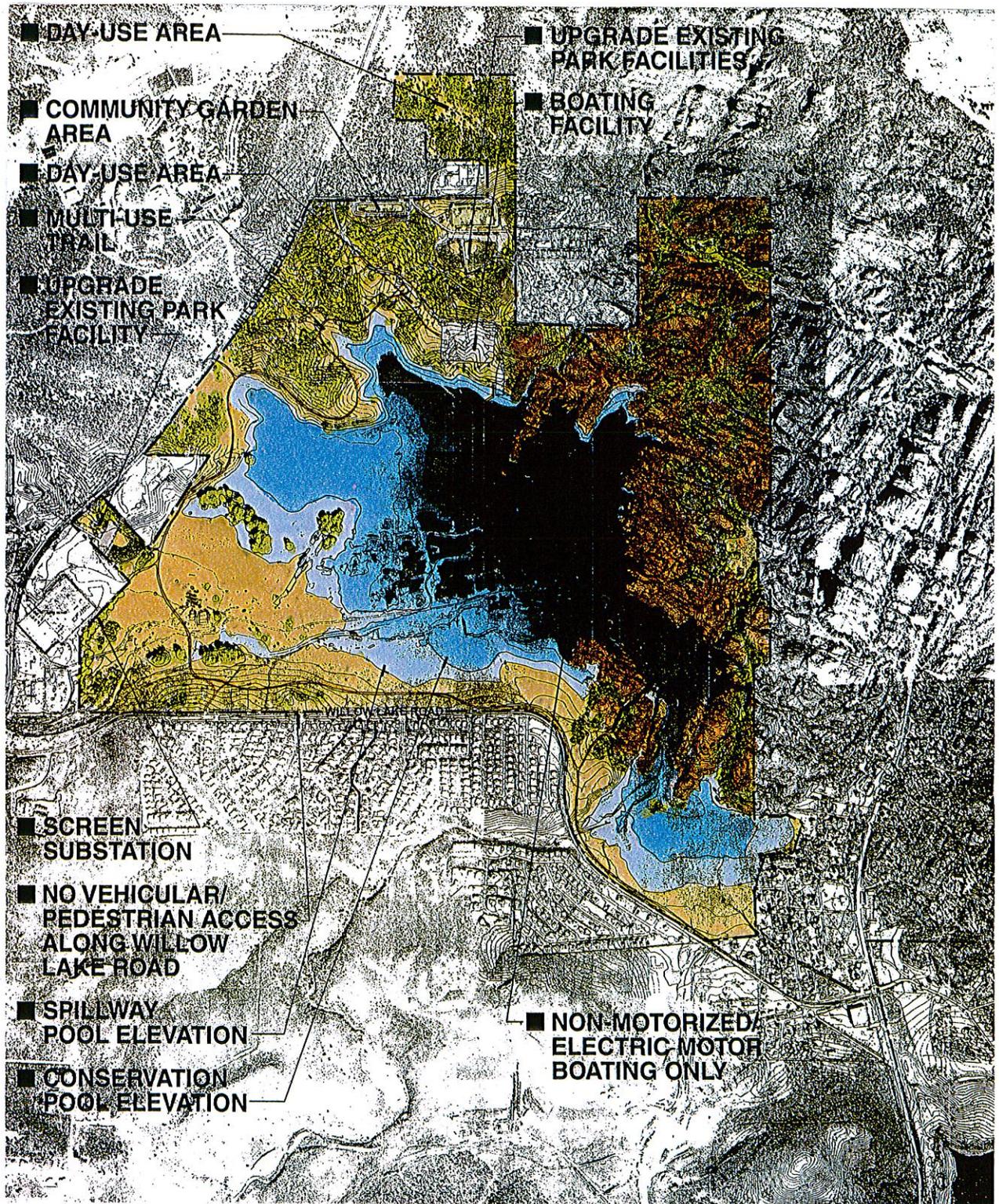
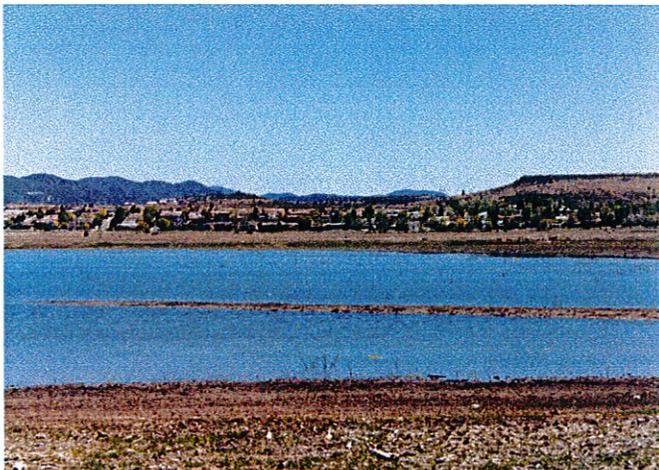


Figure 11. Willow Lake Draft Master Plan

Willow Lake

Boating on Willow Lake would be limited to non-motorized or electric motor boating only. All developed facilities would be located in the northern area of the site except for a multi-use trail system. A boat launch area, day-use area, swimming beach, and associated boating facilities such as boat trailer parking and fish cleaning station would be located near the northern shoreline. The existing ramadas, parking, and rest rooms would be upgraded. An informal vegetative screen would be placed along the substation at the western end of the park. A community garden area would be located off the park entrance road. There would be no pedestrian or vehicular access along Willow Lake Road.



View of South Shore of Willow Lake

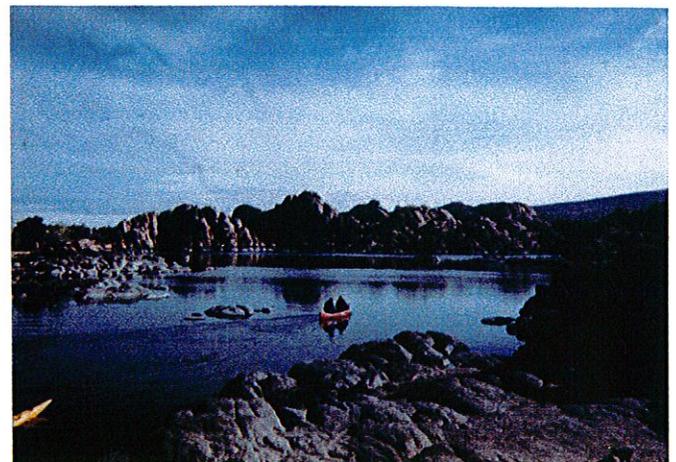
Pedestrian access would be provided at Willow Creek and Heritage parks. While not shown on the Plan, limited parking pull-off area (fewer than 10 cars) could be located off Willow Lake Road to provide access along the south shoreline and to the multi-use trail system. Also not shown is an area that could accommodate future large event or ballfield/soccer fields on the relatively flat terrain adjacent to Willow Creek Park, to the west of the existing cottonwood trees. The parking pull-offs, trail connection, and event/field area could be developed if and when the community expressed their desire and/or need to have these types of facilities incorporated into the park.

Implementation Plan

Implementation of the Master Plan for both lakes will be based on the acquisition of grant funds such as the State Lake Improvement Fund. The first phase of development is expected to take place over the next two years and would include boating facilities, swimming, and improved roadways, parking, ramadas, and rest rooms at both lakes.

Resource Management Recommendations

The success of Watson and Willow Lakes will depend not only on the nature and extent of the facilities to be developed, but ultimately on how the lakes are managed. The protection of natural and cultural resources will be an important component of the overall management of the lakes. The Mayor and City Council has charged City staff with the management of the lakes. The resource management focuses on the lakes' natural and cultural resources. The following are resource management recommendations with objectives and policies associated with each resource. The objectives are a statement of how the resource should be maintained. The policies are intended to serve as a guide for future management decisions.



Non-motorized/Electric Motor Boating Only for Willow Lake



Vegetation

The objective for the management of the lakes' vegetation resources is to maintain a healthy indigenous plant community throughout the study area. Policies include:

- The introduction of non-indigenous plant species will be prohibited.
- The unauthorized collection, cutting and/or removal of indigenous plants will be prohibited.
- All areas disturbed by construction or by other causes such as overuse will be revegetated using indigenous plant species at least equal to the amount of species removed.
- An interpretive program focusing on the lakes' vegetation and biotic communities should be developed to enhance the public's appreciation of this resource.
- A vegetative management plan will be prepared in the future if or when it is necessary.

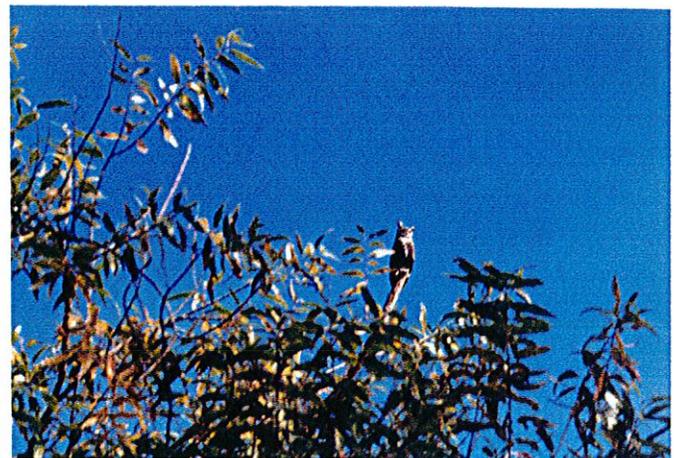


Cottonwoods at Willow Lake

Wildlife

The objective for the management of the lakes' wildlife resources is to maintain a healthy and diverse wildlife population and to protect and enhance existing habitat. Policies include:

- Hunting and trapping will be prohibited within the study area.
- Public access to Watson Woods and other riparian areas will be limited.
- An interpretive program focusing on the lakes' wildlife and variety of habitat should be developed to enhance the public's appreciation of this resource.
- Refuse will be collected and removed from the project area on a regular basis as required to prevent unnaturally high populations of scavenger species.
- Designated areas of the lakes will be closed to public access as required to minimize the impacts of people on nesting sites, seasonal movement corridors, etc.
- Develop a bald eagle management plan with the Arizona Game & Fish Department for the wintering eagles.
- Develop a quality fishery with assistance of the Arizona Game & Fish Department.



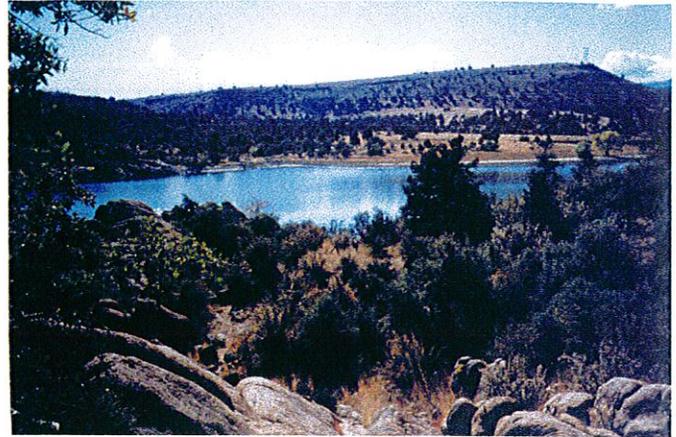
Owl



Soils

The objective for the management of soils and related resources is to prevent unnatural soil erosion. Policies include:

- The use of all motorized vehicles will be limited to designated park roads.
- The use of off-road motorcycles and other all-terrain vehicles will be restricted to designated roads in the study area.
- The use of mountain bikes will be restricted to designated trails or roads.
- Pedestrians will be encouraged to stay on established trails.



Watson Lake



Pinyon-Juniper Woodland Vegetation

Cultural

The objective for the management of the lakes' cultural resources is to minimize the direct and indirect impacts resulting from the use of the lakes. Policies include:

- All applicable State and Federal statutes and guidelines related to the protection of cultural resources will be enforced in the project area.
- Appropriate mitigation measures will be undertaken, if and when required, to protect known archaeological sites from damage by the public.
- An interpretive program focusing on the lakes' cultural resources should be developed to enhance the public's appreciation of this resource.

Visual

The objective for the management of the lakes' visual resources is to prevent key views and vistas from becoming degraded by facility construction or by other built disturbances. Policies include:

- After the construction of facilities proposed by the Master Plan, any additional lake facilities will be constructed with an analysis of its impact on the visual resources of the lakes.
- Pursue grant funds from the Arizona Department of Transportation to upgrade and enhance the existing pull-out off of SR 89 located above Watson Lake.



Group Ramada at Watson Lake

