Technical Memorandum 2
Recreational Use Inventory

The Santa Ana Basin Water Quality Control Plan ("Basin Plan") (1995) designates nearly all waters and their tributaries with both water contact recreation (REC-1) and non-contact water recreation (REC2) beneficial uses. In addition, all waters not specifically listed in the Basin Plan that are tributary to waters with a REC-1 beneficial use are by default presumed to have a REC-1 use. Although the Basin Plan uses this blanket approach for protecting recreational uses in the region, little documentation exists regarding actual or existing recreational use in many of basin's waters. This lack of documentation is especially true for the undesignated tributaries, many of which are channels that were constructed for the purpose of capturing and moving stormwater flows.

With the exception of the coastal beaches, few inland waters in the Santa Ana River basin are obvious or typical water contact waterbodies, i.e., locations such as Big Bear Lake and Lake Perris which have permanent water and public facilities that support or encourage water contact recreation activity. Instead, the majority of waters that do have sufficient water to support some kind of recreational activity are posted to limit or prohibit water contact recreation, e.g., Santa Ana River.

The Stormwater Quality Standards Study Task Force is evaluating the applicability of the classification and designation of recreational beneficial uses in the Santa Ana River Watershed and documenting, to the extent practical, existing and potential recreational uses in the Santa Ana basin. To support this effort, this technical memorandum was prepared to document what is known regarding existing and potential recreational uses within the receiving waters in the watershed. The types of information gathered for this effort included:

- The Santa Ana Integrated Watershed Plan, Environmental and Wetlands Component (SAWPA 2002) regional planning document;
- Identification of known waters where water contact recreation is planned and encouraged;
- Review of recreational use surveys;
- Site-specific information from specific study sites;
- Informal observations and anecdotal reports; and
- Other regional land use plans or reports that document existing and planned recreational opportunities associated with the Santa Ana River and tributaries.

Santa Ana Watershed Recreational Use Designations

Waters in the Santa Ana Basin are protected with REC-1 and REC-2 beneficial uses. The Basin Plan defines these uses in the following manner:

- Water Contact Recreational (REC-1): Waters are used for recreational activities involving body contact where ingestion of water is reasonably possible. These uses may include, but are not limited to swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs

- Non-contact Water Recreation (REC-2): Waters are used for recreational activities involving proximity to water, but not normally involving body contact where ingestion of water would be reasonably possible. These uses may include, but are not limited to picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.

These definitions include the following supporting footnote:

> "The REC-1 and REC-2 beneficial use designations assigned to surface waterbodies in this Region should not be construed as encouraging recreational activities. In some cases, such as Lake Mathews and certain reaches of the Santa Ana River, access to the waterbodies is prohibited because of potentially hazardous conditions and/or because of the need to protect other uses, such as municipal supply or sensitive wildlife habitat. Where REC-1 or REC-2 is indicated as a beneficial use in Table 3-1 [of the Basin Plan], the designations are intended to indicate that the uses exist or that the water quality of the waterbody could support recreational uses."

Attachment A provides a list of the waterbodies with designated recreational uses in the Basin Plan. An "X" indicates that the waterbody has an existing or potential use. Some of the existing uses are well-established, many are not. Lakes and streams may have potential beneficial uses established because local activities or land use plans already exist to establish these uses, or because conditions (e.g., location, demand) make such future use likely. The establishment of a potential beneficial use serves to protect the quality of that water for such eventual use. An "I" in Attachment A indicates that the waterbody has an intermittent beneficial use. This may occur because water conditions do not allow the beneficial use to exist year-round, i.e., flow ephemeral or seasonally intermittent.

The listing of waters within the Basin Plan attempts to include all significant surface streams and bodies of water. Specific waters which are not listed have the same beneficial uses as the streams, lakes, or reservoirs to which they are tributary. Therefore, by this "tributary rule", the recreational uses are extended to local natural tributaries and urban storm drain channels.

Existing Recreational Uses

Established Recreational Areas

The Santa Ana Integrated Watershed Plan Environmental and Wetlands Component (SAWPA 2002) provides baseline information on existing recreational use areas in the Santa Ana River Watershed (Figure 1). This information was supplemented with anecdotal information from conversations with county officials and park rangers, information from the Parks and Open Space District, Flood Control District, Health & Sanitation Department websites, and readily accessible planning documents.

Within each of the counties there are water bodies which have recreational beaches such as the coastal beaches of Orange County, Big Bear Lake and Lake Yucaipa Regional Park in San Bernardino County, and Lake Perris in Riverside County. Recreational uses are also encouraged and supported at localized areas within the Santa Ana River Watershed. Park land within the three aforementioned counties totals 75 square miles (Santa Ana Integrated Watershed Plan Environmental and Wetlands Component).

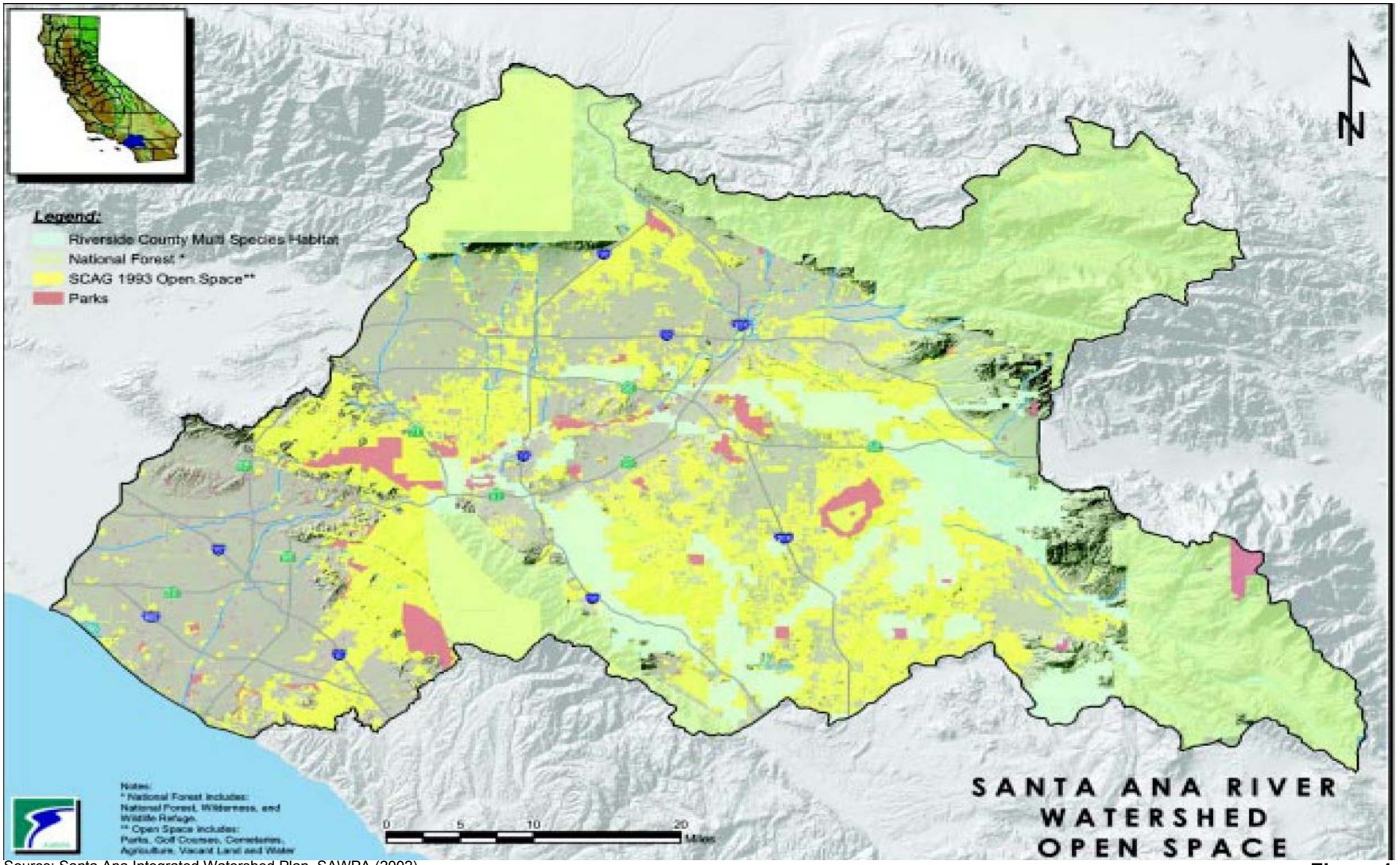
The following sections will provide a summary of existing recreational areas and ordinances applicable to recreational use.

San Bernardino County

SAWPA (2002) identifies 12 regional parks in San Bernardino County within the Santa Ana Basin (Table 1). Swimming is an allowable activity in several of these parks: Big Bear Lake, Canyon Wash, Cucamonga-Guasti Park, and Yucaipa Park. Most of these parks have lake habitats, and encourage swimming as a recreational activity.

Glen Helen encourages swimming, but this activity occurs in a swimming pool that is supplied by water from an onsite well.

Fishing is allowed in all San Bernardino Regional Parks and boating is allowed in about two-thirds of the parks. Activities that do not typically involve body immersion, e.g., fishing or boating, vary in their availability. Yucaipa Regional Park and Big Bear Lake have opportunities for a full variety of water recreational activities, including swimming, boating, and fishing.



Source: Santa Ana Integrated Watershed Plan, SAWPA (2002)

Figure 1
Parks. Open Space, Habitat, and National Forest in the Santa Ana Watershed

Table 1
San Bernardino County Recreational Use at Water Bodies and Open Space Areas within Santa Ana Basin

Name	Picnic	Habitat	Swimming	Boating	Fishing	Trails
Baldwin Lake	•	•		•	•	•
Big Bear Lake	•	•	•	•	•	•
Bear Creek	•	•			•	•
Mill Creek	•	•			•	•
Canyon Wash	•	•	•		•	•
Lytle Creek	•	•			•	•
San Timoteo Wash	•	•			•	•
Glen Helen	•	•	•	•	•	•
Yucaipa Park	•	•	•	•	•	•
Prado Park	•	•		•	•	•
Cucamonga-Guasti Park	•	•	•	•	•	•
San Bernardino National Forest	•	•		•	•	•

San Bernardino County recently opened a new 25-acre regional park named Colton Park. This park is located along the Santa Ana River and does not allow for swimming, but does provide opportunity for fishing in a 7-10 acre lake located near the Santa Ana River channel.

San Bernardino County Code Title 2 (Public Morals, Safety, and Welfare), Division 8 (Property Protection), Chapter 3 (San Bernardino County Regional Parks) establishes the allowable uses for the San Bernardino Regional Parks. Section 28.037 prohibits swimming and other recreational activities, including fishing, in any Regional Park unless specifically designated for that purpose. Interviewed park rangers indicated that they rely on posted signs to prevent park users from swimming or having any type of immersion contact with water within the posted parks.

Riverside County

SAWPA (2002) identifies 23 regional parks and waterbodies in Riverside County within the Santa Ana Basin (Table 2). Only a few parks encourage water contact recreation activities where immersion is likely, i.e. Lake Elsinore and Canyon Lake. Riverside County Regional Parks prohibit certain recreational activities, including wading or bathing, within County-owned or operated parks and recreation camps (Ordinance 328.1). In parks where swimming is prohibited, signs are posted to prohibit body contact.

Table 2
Riverside County Recreational Use at Regional Parks and Water Bodies within the Santa Ana Basin

Name	Picnic	Habitat	Swimming	Boating	Fishing	Trails
Lake Elsinore	●	●	●[1]	●	●	●
Canyon Lake	●	●	●[2]	●	●	●
Mystic Lake		●		●		●
Perris Reservoir	●	●	●	●	●	●
Lake Hemet	●	●		●		●
Railroad Canyon Reservoir						●
San Jacinto River		●				●
Bautista Creek	●	●				●
Bogart Park	●	●			●	●
Box Springs Mountain		●				●
Hidden Valley Wildlife	●	●				●
Kabian Park	●	●				●
Louis Robidoux Nature	●	●				●
Martha Mxlean-Anza	●	●				●
Narrows Park	●	●				●
Rancho Jurupa Park	●	●			●	●
Hurkey Creek Park	●	●				●
Idyllwild Park	●	●				●
idyllwild Nature Center	●	●				●
Lawler Lodge Park	●	●				●
McCall Memorial Park	●	●				●
San Gorgonio Recreation	●	●	●	●	●	●
Cleveland National Forest	●	●			●	●

1 Water skiing is advertised, but swimming is not allowed at Lake Elsinore.

2 Water skiing is advertised, but swimming is not allowed at Canyon Lake.

3 Perris Reservoir is a CA Department of Water Resources reservoir.

Orange County

Both inland park and ocean park/beach recreational opportunities are available in Orange County within the Santa Ana Basin (Table 3). Swimming is authorized at only five of the parks, all of which are associated with coastal waters: Seal Beach, Sunset Beach, Huntington Beach, Newport Beach and Newport Bay. All other county parks with water-related activities limit recreation to boating and fishing. Orange County prohibits swimming, bathing, wading or other water entry in County parks unless the waterbody is designated for such activity (Title 2, Division 5, Article 3, Section 2-5-64). Similarly, Orange County prohibits swimming, bathing or entry into ocean waters where posted (Title 2, Division 5, Article 4, Section 2-5-80).

Table 3
Orange County Recreational Use at Parks, Beaches, Water Bodies, and Open Space Areas within the Santa Ana Basin

Name	Picnic	Habitat	Swimming	Boating	Fishing
Seal Beach	●	●	●	●	●
Sunset Beach	●	●	●	●	●
Huntington Beach	●	●	●	●	●
Newport Beach	●	●	●	●	●
Fairview Park	●	●			
Canyon Lake, Costa Mesa	●	●			
Talbert Nature Preserve		●			
Bolsa Chica Wetlands	●	●		●	●
Newport Bay	●	●	●	●	●
Santiago Creek	●	●			
Villa Park Reservoir		●			
Carbon Canyon Dam		●			
Santa Ana Lakes	●	●		●	●
Arroyo Trabuco		●			
Carbon Canyon Park	●	●			●
Clark Park	●	●		●	●
Craig Park	●	●		●	●
Featherly Park	●	●			
Harriett M. Wieder Park	●	●			
Irvine Park	●	●		●	●
Laguna Niguel	●	●		●	●
Mason Park	●	●		●	●
Mile Square Park	●	●		●	●
O'Neill Park	●	●			
Peters Canyon Park	●	●			
Santiago Oaks Park	●	●			
Yorba Park	●	●		●	●

California State Parks

State-operated inland parks and beach recreational opportunities are available within the Santa Ana Basin. These recreational areas include: Lake Perris, Huntington State Beach, and Corona del Mar State Beach. Lake Perris has a wide variety of recreational use activities, including swimming, fishing, and boating. Huntington and Corona del Mar State Beaches are located on coastal waters and allow swimming.

Recreational Activity

Documented Use Surveys

Significant documented recreational use surveys were not identified for receiving waters within the Santa Ana River Watershed. SAWPA plans to initiate a limited recreational use survey in the watershed (Fall 2004). However, this data will not be available in time to include in this memorandum.

Other evidence of water contact recreation in the Santa Ana basin includes: (1) SAWPA-recorded a video during a helicopter flyover of the Santa Ana River which shows individuals swimming near the Van Buren Bridge, immediately downstream of the Metropolitan Water District crossing; and (2) SAWPA photos of children and adults wading, swimming, and picnicking near the Van Buren Bridge in the summer of 2002.

Staff from the Riverside Regional Water Quality Treatment Plant conducted informal use surveys on the Santa Ana River, Van Buren Boulevard crossing from July to October 2004 (personal communication, Rodney Cruze, City of Riverside). Two locations were surveyed: (1) The mainstem Santa Ana River below the Van Buren Boulevard bridge; and (2) the effluent channel that delivers treated effluent meeting Title 22 standards to the Santa Ana River (confluence of the effluent channel and mainstem Santa Ana River is downstream of the Van Buren Boulevard bridge). Information gathered during the informal survey included number and type of people observed (e.g., adult vs. children), number of people that were wet or in the water, and number that had no contact with the water (however; it cannot be assumed that this group did not at some time come into contact with the water). The number of people observed recreating in the effluent channel greatly exceeded the number of people observed in the Santa Ana River (Table 4). Often at least a third of the people observed were children.

Table 4
Informal Recreational Use Survey - Santa Ana Riverbed at Van Buren Boulevard Crossing

Date	Time	Effluent Channel					Santa Ana River					Temperature			Comments
		People Wet		People Dry	Total Observed	% < 10 yrs old	People Wet		People Dry	Total Observed	% < 10 yrs old				
		Hair Wet	Wet blw Waist	No Contact			Hair Wet	Wet blw Waist	No Contact			< 75^0 F	75 - 90^0 F	> 90^0 F	
7/1/2004	1406				0					0			X		Sunny - no one observed
7/2/2004	1406		2	2	4	0	3	3	1	7	30		X		Sunny
7/3/2004	1430				0					0			X		Sunny - no one observed
7/4/2004	841				0					0		X			Cloudy
7/5/2004	1240		3	6	9	10				0			X		Sunny
7/6/2004	1345				0					0				X	Sunny - no one observed
7/8/2004	830			7	7	0				0			X		Sunny
7/9/2004	1245				0					0			X		Sunny
7/9/2004	1408				0					0			X		Sunny
7/10/2004	1320				0					0			X		Sunny
7/11/2004	1210		1		1	0				0			X		Sunny
7/14/2004	1453				0					0				X	Sunny
7/15/2004	1340				0					0				X	Sunny
7/15/2004	1435				0					0				X	Sunny
7/16/2004	1440	7			7	30				0				X	Sunny - swimmers at outfall
7/17/2004	1310	9	1		10	30				0				X	Sunny
7/18/2004	1430	3	9	4	16	13				0				X	Sunny
7/20/2004	1450		2	2	4	0				0			X		Sunny
7/23/2004	1448		3		3	33				0				X	Sunny

Table 4 (continued)
Informal Recreational Use Survey – Santa Ana Riverbed at Van Buren Boulevard Crossing

Date	Time	Effluent Channel					Santa Ana River					Temperature			Comments
		People Wet		People Dry	Total Observed	% < 10 yrs old	People We		People Dry	Total Observed	% < 10 yrs old				
		Hair Wet	Wet blw Waist	No Contact			Hair Wet	Wet blw Waist	No Contact			< 75^0 F	75 - 90^0 F	> 90^0 F	
7/24/2004	1337	9	2		11	35				0				X	Sunny
7/25/2004	1215	1	1	1	3	33				0				X	Sunny
7/30/2004	1435				0					0			X		Sunny
8/1/2004	1000				0					0			X		Sunny - no one observed
8/5/2004	1500				0					0			X		Sunny
8/7/2004	1435	15		2	17	12	1			1	0			X	Sunny
8/8/2004	1430	5	6	2	13	46				0				X	Sunny
8/9/2004	1430				0					0				X	Sunny
8/14/2004	1443	6	2	2	10	0	5	9	0	14	1		X		Sunny
8/15/2004	1450	0	1	2	3	0	3	3	0	6	0			X	Sunny
8/20/2004	1455	0	0	1	1	0				0			X		Sunny w/Clouds
8/21/2004	1435				0		2	0	6	8	0		X		Sunny
8/22/2004	1450	9	4	3	16	1				0			X		Sunny
8/26/2004	1450				0		6	0	6	12	0		X		Sunny
8/27/2004	1445				0					0			X		Sunny
8/28/2004	1450	0	5	0	5	0	5	0	2	7	0		X		Sunny
8/29/2004	1506	1	1	2	4	0					0		X		Sunny
9/2/2004	1440				0					0				X	Sunny
9/3/2004	1430	1	0	3	4	0				0			X		Sunny
9/4/2004	1455	4	0	0	4	0				0				X	Sunny
9/5/2004	1440	0	0	7	7	0	0	2	0	2	0			X	Sunny

Table 4 (continued)
Informal Recreational Use Survey – Santa Ana Riverbed at Van Buren Boulevard Crossing

Date	Time	Effluent Channel					Santa Ana River					Temperature			Comments
		People Wet		People Dry	Total Observed	%<10 yrs old	People Wet		People Dry	Total Observed	%<10 yrs old				
		Wet Hair	Wet blw Waist	Not Contact			Hair Wet	Wet blw Waist	No Contact			< 75^0 F	75 - 90^0 F	> 90^0 F	
9/6/2004	1430	10	5	0	15	1	10	30	3	43	1			X	Sunny
9/8/2004	1438				0					0				X	Sunny, Very Hot
9/9/2004	1444				0		1	1	0	2	0			X	Sunny, Cloudy, Hot, & Humid
9/10/2004	1440	0	0	1	1	0				0				X	Sunny, Cloudy, Hot, & Humid
9/11/2004	1450	8	2	1	11	1	14	3	0	17	1			X	Sunny, Cloudy, Hot, & Humid
9/12/2004	1440	0	0	3	3	0				0				X	Sunny
9/16/2004	1450				0					0			X		Sunny
9/19/2004	1200				0					0			X		Sunny
9/20/2004	1300				0					0			X		Sunny
9/30/2004	1455				0		0	0	1	1	0		X		Cloudy, relatively cool
10/2/2004	1444				0					0			X		Partly cloudy, warm
10/3/2004	1430				0					0			X		Sunny
10/6/2004	1442				0					0			X		Sunny, breezy
10/7/2004	1500				0					0				X	Sunny
10/9/2004	1442				0		0	0	2	2	0		X		Sunny - 2 People on horseback
10/10/2004	1450				0					0			X		Sunny
10/13/2004	1441				0					0			X		Sunny
10/14/2004	1446				0					0				X	Hot!
10/15/2004	1441				0					0			X		Breezy
10/16/2004	1436				0					0		X			Cloudy

Recreational Evaluation of Study Sites

As discussed further in Technical Memorandum 3 for this study, six study sites were selected for detailed characterization. These sites represent archetypes, or examples of differing types of waterbodies in the region, e.g., natural, partially natural but modified channel or banks, and fully concrete lined channels.

Risk Sciences, Inc. developed scoring criteria which were designed to provide a discussion tool for evaluating the recreational use potential and appeal of various waterbodies within the Santa Ana River Watershed. The following criteria were ranked from 0 (poor recreational habitat and/or appeal) to 3 (good recreational habitat and/or appeal):

- Direct Evidence of Water Contact Recreation – Direct observations of people recreating in the water (0 = no observation; 3 = people actually in the water).
- Indirect Evidence of Recreational Activity – Measures evidence that people are occasionally present at the site, e.g., graffiti, recreational trash (bottles, soda cans, etc), fishing line, and human paths to the channel; however, no evidence exists that visitors actually enter the water (0 = no evidence of recreational activity; 3 = evidence observed, e.g., fishing line, footprints, graffiti).
- Ease of Access – Measure of degree of difficulty to access the waterbody because of fencing, gates, locks, etc. (0 = inaccessible; 3 = easily accessible).
- Channel Slope – Measure of the type of slope, e.g., trapezoidal vs. rectangular (0 = box channel, 90° slopes; 3 = gentle slope)
- Channel Type – Measure of degree of naturalness, ranging from completely natural bottom and banks to completely constructed concrete channel (0 = bottom and banks are concrete; 3 = natural bank and channel bottom).
- Flow Depth & Volume – Measure of the degree that instream flow is sufficient for water contact recreation, including consideration of children (0 = minimal flow, not possible for adults or children to immerse themselves in the water; 3 = sufficient flow for immersion at least by children).
- Flow Velocity – Measure of the degree that flow velocity is dangerous for recreational activity (0 = high velocity, flow is dangerous; 3 = velocity is safe for recreational activity).
- Water Quality (Aesthetics) – Measure of how appealing the water is for recreation (0 = poor quality, e.g., lots of algae, trash; 3 = very appealing, water is an attractant).

- Vegetation Quality – Measure of quality of bank habitat for recreational activity (0 = no cover or shade for visitors; 3 = sufficient cover or shade).

- Adjacent Land Use – Measure of type of nearby land use (0 = site is adjacent to industrial parks; 3 = site is in a residential area).

Each study site was scored based upon the above criteria, and the results are shown in Table 5. The scoring was performed by consultants to the Task Force for each study site. The same criteria were used by members of the Task Force to score similar sites during field trips conducted as part of study workshops. Table 5 does not represent scoring performed during the Task Force workshop field trips.

Table 5
Evaluation of Recreational Appeal at Sites

Evaluation Criteria (Scale: Low - 0 to High - 3)	Temescal Creek at Lincoln (upstream)	Temescal Creek at Lincoln (downstream)	Santa Ana Delhi Channel	Chino Creek at Schaeffer Ave	Santa Ana River at Imperial Highway	Santa Ana River at MWD Crossing	Icehouse Canyon
Direct Evidence of Water Contact Recreation	0	1	0	0	0	0	3
Indirect Evidence of Water Contact Recreation	2	2	0	1	1	3	3
Ease of Access	2	3	0	1	1	2	3
Channel Slope	2	3	0	2	2	3	2
Natural or Concrete	1	3	0	0	0	3	3
Flow Depth & Volume	1	2	1	0	3	3	1
Flow Velocity	2	2	0	1	1	3	2
Water Quality-Aesthetics not Chemistry	1	2	0	0	2	2	3
Vegetation Quality	0	3	0	1	0	2	3
Adjacent Land Use	1	1	1	0	1	1	3

While the results of this scoring cannot be used as a substitute for an appropriately designed recreational use survey, the results do provide information on the range of actual or presumed use and recreational appeal present in different types of waters in the Santa Ana River watershed. A brief summary of the findings for each study site follows.

Temescal Creek at Lincoln Avenue
Recreational opportunity at Temescal Creek at Lincoln Avenue varied depending upon whether one visited the upstream or downstream side of Lincoln Avenue. Because of this variability, two evaluations were prepared (Table 5).

Direct evidence of water contact recreation was not observed upstream or downstream of Lincoln Avenue; limited indirect evidence of recreational activity was observed (e.g., foot trails traced to the stream). Fencing limited access from Lincoln Road, and signs prohibiting trespassing were posted near locked gates. However, both sites were easily accessible simply by walking around the fence. Channel slopes were easy to walk on and provided easy access to the stream. Natural habitat was present downstream, but a modified channel (concrete banks) was present upstream. Low flow depth and volume limit water contact recreation opportunities.

Santa Ana Delhi Channel
Direct or indirect evidence of recreational activity was not observed at the Santa Ana Delhi Channel. The site is fenced, has a locked gate and posted signs warning people to stay away from the water. The channel is boxed shape; approximately 55 feet wide. During dry weather, low flow coupled with a slow flow velocity and shallow depth conditions limited water contact recreational opportunities at this site.

Chino Creek at Schaeffer Avenue
Water contact recreation activity was not observed at the Chino Creek at Schaeffer Avenue site; however, indirect evidence of recreational activity, e.g., graffiti and human made walk paths that led to Chino Creek was observed. The channel is concrete. Normally, this site is fenced and access is severely restricted; however, at the time of the site visit, an access gate was unlocked and open. The presence of a gentle channel slope provided easy access to the stream bottom. According to County environmental health staff that collect water quality data in the Riverside area, occasional incidental water contact at Chino Creek at Schaeffer has been observed at this site from time to time. Overall, the recreational appeal was very low, primarily because of presence of trash, low flow, low depth, and odors.

Santa Ana River at Imperial Highway
The Santa Ana River at this site is entirely fenced with signs posted prohibiting access to the river. Direct evidence of water contact recreation was not observed. Indirect evidence of recreational activity in the area included footprints and trails leading to the river. Flow depth and volume were sufficient for water contact recreation to occur. In terms of aesthetics, water quality was attractive for contact recreation. The channel was modified, with a mix of natural bottom and rip-rap banks.

Santa Ana River at MWD Crossing
Direct evidence of recreational water use was not observed during this evaluation, but data from the Riverside Regional Water Quality Treatment Plant during summer 2004 indicate that this reach of the river is occasionally used for water contact recreation (this activity occurs in spite of posted bilingual signs warning the public to stay away from the water). The Santa Ana River has a natural channel in this area and under dry weather conditions flow volume and velocity are appropriate to support water contact recreational activity. In addition, water quality aesthetics and vegetation quality serve to improve the overall recreational appeal of the site.

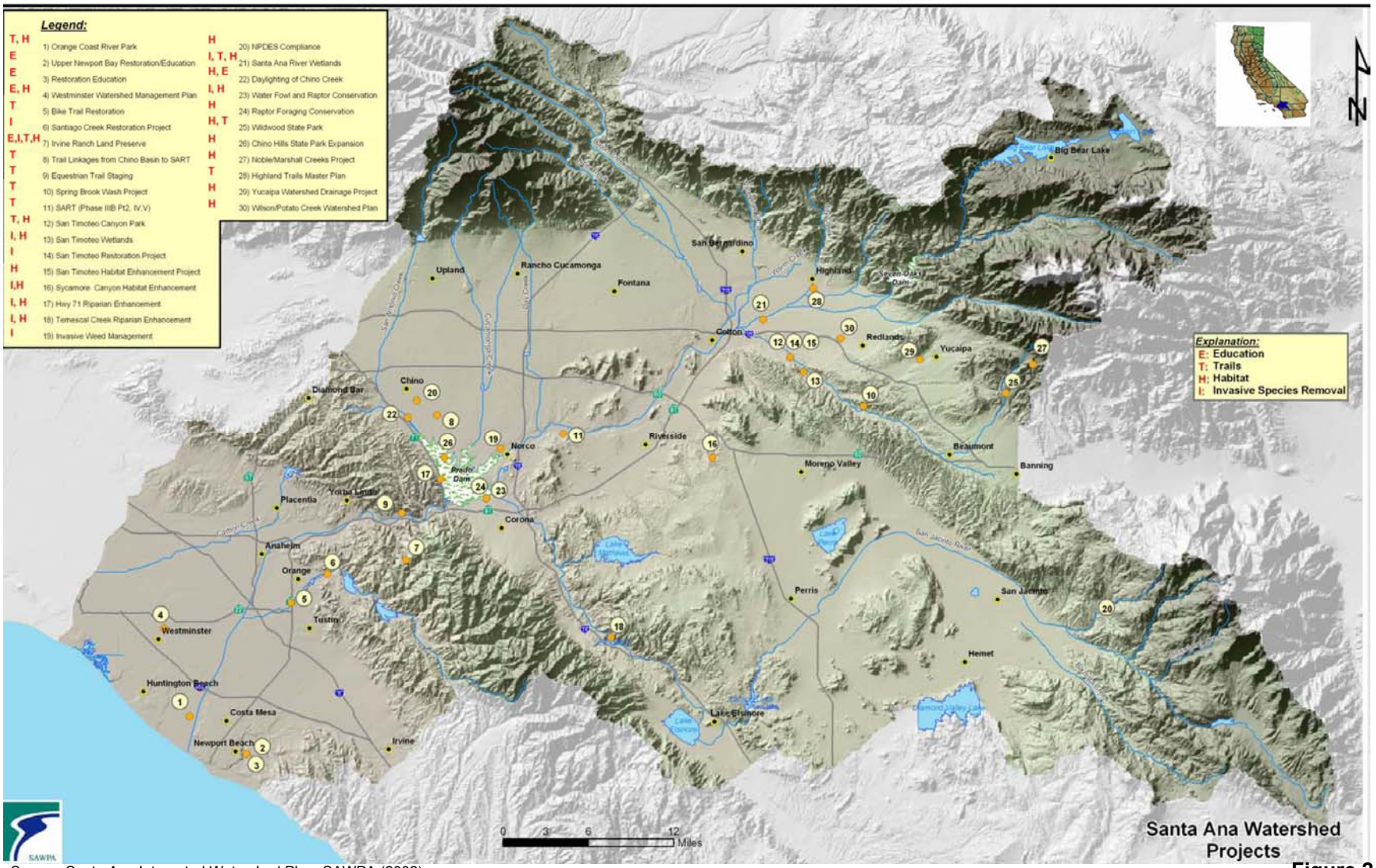
Icehouse Canyon
Icehouse Canyon Creek is located alongside a regularly utilized hiking trail in the Angeles National Forest in the upper part of the Chino Creek watershed. Direct evidence of water contact recreation was not observed, but the creek, which has a sustained baseflow throughout most years, includes several pools and other areas where visitors could likely recreate. Access to the site is easy and water quality aesthetics, vegetation, and land use have good recreational appeal.

Potential Recreational Uses

Orange, Riverside, and San Bernardino Counties have designated parks, open space, habitat, and recreational amenities (i.e., designated bikeways, walking, hiking, equestrian trails) within their General Plans and other adopted land use planning documents. There are a number of recreational use areas planned for development within the Santa Ana Watershed. The Santa Ana Integrated Watershed Plan Environmental and Wetlands Component (SAWPA 2002) provides baseline information on other recreational use areas in the Santa Ana River Watershed (Figure 2). The following inventory does not attempt to describe all of the planned recreational use areas, but rather, provide highlights of potential key projects in the watershed.

Natural Wetlands Restoration – Regional planners have been working towards restoring natural wetlands to provide high value habitat, recreation, and educational opportunities (SAWPA 2002). Examples of potential projects include:

- Bolsa Chica Wetlands Restoration
- Chino Creek Treatment Wetlands
- River Road Treatment Wetlands; and
- Lake Elsinore Aeration and Fisheries Restoration



Source: Santa Ana Integrated Watershed Plan, SAWPA (2002)

Figure 2
Other Recreational Opportunities within the Santa Ana River Watershed

Santa Ana River Trail – Regional recreation development efforts are focused on the Santa Ana River Trail. First conceived over a century ago and formally proposed in 1955, the Santa Ana River Trail is a much-anticipated project with watershed-wide support. Watershed planning participants agree that the trail should provide access for a wide variety of users, including walkers, hikers, joggers, bicyclists and horseback riders. While the 110-mile trail is far from complete, several segments, totaling approximately 40 miles, have been constructed. Plans are almost complete for the remaining 70 miles (as well as a number of feeder trails and connections), and full funding has been secured for some segments.

San Timoteo State Park - Riverside Lands Conservancy with the support of other organizations is developing a plan to create a new State park centered in the San Timoteo Creek Watershed. The park will provide a number of linkages with other recreational areas in Riverside County, and create, restore, and protect wetlands in the floodplains of the canyon and its major tributaries from Loma Linda to I-10.

Orange Coast River Park - The Friends of Harbors, Beaches, and Parks, with cooperation from many partners, including local cities, Orange County nonprofit organizations, and private entities, have proposed a large park at the mouth of the Santa Ana River. The Orange Coast River Park, which may include Banning Ranch, would link several existing parks, incorporating ponds, boardwalks, and habitat restoration.

"String of Pearls" (a series of parks along Santiago Creek) - Local cities and organizations are acquiring land to add a series of new parks along Santiago Creek ("string of pearls"), a major tributary in the lower Santa Ana watershed. These parks would provide recreational and educational benefits, in addition to habitat and water quality benefits. The City of Orange has recently acquired eight acres of land to be included in the 42-acre Grijalva Park on Santiago Creek. The City also owns Yorba Park that borders the Santiago Creek just south of Chapman Avenue and Hart Park, which includes several acres of unimproved land in the creek. The County of Orange and City of Santa Ana incorporate additional parks upstream and downstream from the City of Orange. These public entities, along with the City of Villa Park, are working to connect these parks with a contiguous recreational trail system.

Chino Creek Park - The Inland Empire Utilities Agency, Orange County Water District, and the Wildlands Conservancy are developing an integrated recreational plan that will link Prado Basin with the Santa Ana River Trail System providing habitat, recreational and educational opportunities. Plans include an educational center at Chino Creek Park and a nursery designed specifically to grow native plants for restoration projects. A Prado Basin interpretative center and youth camp for inner-city children will be developed where a gun club is currently located.

Attachment A Recreational Beneficial Uses in Santa Ana River Basin		
Ocean Waters	**Designation**	
	REC-1	**REC-2**
Nearshore Zone		
San Gabriel River to Poppy Street in Corona del Mar	X	X
Poppy Street to Southeast Regional Boundary	X	X
Offshore Zone		
Waters between Nearshore Zone and Limit of State Waters	X	X
Bays, Estuaries, and Tidal Prisms	**Designation**	
	REC-1	**REC-2**
Anaheim Bay – Outer Bay	X	X
Anaheim Bay – Seal Beach National Wildlife Refuge	X[1]	X
Sunset Bay – Huntington Harbour	X	X
Bolsa Bay	X	X
Bolsa Chica Ecological Reserve	X	X
Lower Newport Beach	X	X
Upper Newport Beach	X	X
Santa Ana River Salt Marsh	X	X
Tidal Prism of Santa Ana River (to within 1000' of Victoria Street) and Newport Slough	X	X
Tidal Prism of San Gabriel River – River Mouth to Marina Drive	X	X
Tidal Prisms of Flood Control Channels Discharging to Coastal or Bay Waters	X	X

Attachment A (continued) Recreational Beneficial Uses in Santa Ana River Basin		
Surface Stream	**Designation**	
	REC-1	**REC-2**
Lower Santa Ana River		
Santa Ana River		
Reach 1-Tidal Prism to 17th Street	X[2]	X
Reach 2-17th Street to Prado	X	X
Aliso Creek	X	X
Carbon Canyon Creek	X	X
Santiago Creek		
Reach 1-Below Irvine Lake	X[2]	X
Reach 2-Irvine Lake	X	X
Reach 3-Irvine Lake to Modjeska Canyon	I	I
Reach 4-Modjeska Canyon	X	X
Silverado Creek	X	X
Black Star Creek	I	I
Ladd Creek	I	I
San Diego Creek		
Reach 1-Below Jeffrey Road	X[2]	X
Reach 2-Above Jeffrey Road	I	I
Other Tributaries: Bonita Creek, Serrano Creek, Peters Canyon Wash, Hicks Canyon Wash, Bee Canyon Wash, Borrego Canyon Wash, Agua Chinon Wash, Laguna Canyon Wash, Rattlesnake Canyon Wash, Sand Canyon Wash, and other tributaries to these Creeks	I	I
San Gabriel River		
Coyote Creek within SA Regional Boundary	X	X

Attachment A (continued) Recreational Beneficial Uses in Santa Ana River Basin		
Lakes and Reservoirs		
Anaheim Lake	X	X
Irvine Lake (Santiago Reservoir)	X	X
Laguna, Lambert, Peters Canyon, Rattlesnake, Sand Canyon, and Siphon Reservoirs	X[7]	X
Upper Santa Ana River		
Santa Ana River		
Reach 3-Prado Dam to Mission Blvd. in Riverside	X	X
Reach 4-Mission Blvd to San Jacinto Fault in San Bernardino	X[3]	X
Reach 5-San Jacinto Fault to Seven Oaks Dam	X[3]	X
Reach 6-Seven Oaks Dam to Headwaters	X	X
Mills Creek		
Reach 1-Confluence w/ SAR to Bridge Crossing Route 38	I	I
Reach 2-Bridge Crossing Route 38 to Headwaters	X	X
Mountain Home Creek	X	X
Mountain Home Creek, East Fork	X	X
Monkey Face Creek	X	X
Alger Creek	X	X
Vivian Creek	X	X
High Creek	X	X
Other Tributaries: Lost, Oak Cove, Green, Skinner, Momyer, Glen Martin, Camp, Hatchery, Rattlesnake, Slide Snow, Bridal Veil, and Oak Creeks and other Tributaries to these Creeks	I	I
Bear Creek		
Bear Creek	X	X
Siberia Creek	X	X

Attachment A (continued) Recreational Beneficial Uses in Santa Ana River Basin		
Slide Creek	I	I
All other tributaries to these Creeks	I	I
Big Bear Lake Tributaries		
North Creek	X	X
Metcalf Creek	X	X
Grout Creek	X	X
Rathbone Creek	X	X
Meadow Creek	X	X
Summit Creek	I	I
Other Tributaries ot Big Bear Lake: Knickerbocker, Johnson, Minnelusa, Polique, and Red Ant Creeks and other Tributaries to these Creeks	I	I
Baldwin Lake Drainage		
Shay Creek	X	X
Other Tributaries to Baldwin Lake: Wawmill, Green, and Caribou Canyons, and other Tributaries to these Creeks	I	I
Other Streams Draining to SAR		
Canjon Creek	X	X
City Creek	X	X
Devil Canyon Creek	X	X
Eash Twin and Strawberry Creeks	X	X
Waterman Canyon Creek	X	X
Fish Creek	X	X
Forsee Creek	X	X
Plunge Creek	X	X
Barton Creek	X	X

Attachment A (continued) **Recreational Beneficial Uses in Santa Ana River Basin**		
Bailey Canyon Creek	I	I
Kimbark Canyon, East Fork Kimbark Canyon, Ames Canyon, and West Fork Cable Canyon Creeks	X	X
Valley Reaches of Above Streams	I	I
Other Tributaries: Alder, Badger Canyon, Bledsoe Gulch, Borea Canyon, Breakneck, Cable Canyon, Cienega Seca, Cold, Converse, Coon, Crystal, Deer, Elder, Fredalba, Frog, Government, Hamilton, Heart Bar, Hemlock, Keller, Kilpecker, Little, Mill, Little Sand Canyon, Lost, Meyer Canyon, Mile, Monroe, Canyon, Oak, Rattlesnake, Round Cienega, Sand, Schneider, Staircase, Warm Springs Canyon, and Wild Horse Creeks and other Tributaries to these Creeks	I	I
San Gabriel Mountain Streams		
San Antonio Creek	X	X
Lytle Creek and Coldwater Canyon Creek	X	X
Day Creek	X	X
East Etiwanda Creek	X	X
Valley Reaches of Above Streams	I	I
Cucamonga Creek		
Reach 1-Confluence w/Mill Creek	X[3]	X
Reach 2-Upland to headwaters	X	X
Mills Creek (Prado Area)	X	X
Other Tributaries: Cajon Canyon, San Sevaine, Deer, Duncan Canyon, Henderson Canyon, Bull, Fan, Demens, Thorpe, Angalls, Telegraph Canyon, Stoddard Canyon, Icehouse Canyon, Cascade Canyon, Cedar, Falling Rock, Kerkhoff, and Cherry Creeks and other Tributaries to these Creeks	I	I
San Timoteo Creek		
Reach 1-SAR confluence to gage at San Timoteo Canyon Rd	I[3]	I
Reach 2-Gage at Canyon Rd to Confluence w/ Yucaipa Creek	X	X
Reach 3-Confluence w/ Yucaipa Creek to Bunker Hill II	X	X
Reach 4-Bunker Hill II to Confluence w/Little San Gorgonio and Noble Creeks	X	X

Attachment A (continued) Recreational Beneficial Uses in Santa Ana River Basin		
Oak Glen, Potato Canyon, and Birch Creeks	X	X
Little San Gorgonio Creek	X	X
Yucaipa Creek	I	I
Other Tributaries to these Creeks Valley Reaches	I	I
Other Tributaries to these Creeks Mountain Reaches	I	I
Anza Park Drain	X	X
Sunnyslope Channel	X	X
Tequesquite Arroyo (Sycamore Creek)	X	X
Chino Creek		
Reach 1-SAR confluence to beginning of concrete-lined channel south of Los Serranos Rd.	X	X
Reach 2-Beginning of concrete lined channel south of Los Serranos Rd. to Confluence with San Antonio Creek	X[3]	X
Temescal Creek		
Reach 1A-SAR confluence w/ Lincoln Ave	X[4]	X
Reach 1B-Lincoln Ave. to Riverside Canal	X[4]	X
Reach 2- Riverside Canal to Lee Lake	I	I
Reach 3- Lee Lake	X	X
Reach 4-Lee Lake to Mid Section Line of Section 17	I	I
Reach 5- Mid Section Line of Section 17 To Elsinore Groundwater	X	X
Reach 6- Elsinore Groundwater to Lake Elsinore Outlet	I	I
Coldwater Canyon Creek	X	X
Bedford Canyon Creek	I	I
Dawson Canyon Creek	I	I
Other Tributaries to these Creeks	I	I

Attachment A (continued) Recreational Beneficial Uses in Santa Ana River Basin		
Lakes and Reservoirs		
Baldwin Lake	I	I
Big Bear Lake	X	X
Erwin Lake	X	X
Evans Lake	X	X
Jenks Lake	X	X
Mathews Lake	X[5]	X
Mockingbird Reservoir	X[6]	X
Norconian Lake	X	X
San Jacinto River Basin		
Reach 1-Lake Elsinore to Canyon Lake	I	I
Reach 2- Canyon Lake	I	I
Reach 3- Canyon Lake to Nuevo Road	I	I
Reach 4- Nuevo Road to North-South Mid Section Line	I	I
Reach 5-North-South Mid Section Line to Confluence w/ Popppet Creek	I	I
Reach 6- Popppet Creek to Cranston Bridge	I	I
Reach 7- Cranston Bridge to Lake Hemet	X	X
Bautista Creek-Headwater to Debris Dam	X	X
Strawberry Creek and San Jacinto River, North Fork	X	X
Fuller Mill Creek	X	X
Stone Creek	X	X
Salt Creek	I	I
Other Tributaries: Logan, Black Mountain, Juaro Canyon, Indian, Hurkey, Poppet, and Protrero Creeks and other Tributaries to these Creeks	I	I

Attachment A (continued) Recreational Beneficial Uses in Santa Ana River Basin		
Lakes and Reservoirs		
Canyon Lake	X	X
Elsinore Lake	X	X
Fulmor Lake	X	X
Hemet Lake	X	X
Perris Lake	X	X
Wetlands		
San Joaquin Freshwater Marsh	X	X
Shay Meadows	I	I
Stanfield Marsh	X	X
Prado Flood Control Basin	X	X
San Jacinto Wildlife Preserve	X	X
Glen Helen	X	X

I Intermittent Beneficial Use
X Present or Potential Beneficial Use
1 No access per agency with jurisdiction (U.S. Navy)
2 Access prohibited in all or part by Orange County Resources Development Management Department (RDMD)
3 Access prohibited in some portions by San Bernardino County Flood Control
4 Access prohibited in some portions by Riverside County Flood Control
5 Access prohibited by the Metropolitan Water District
6 Access prohibited by the Gage Canal Company (owner-Operator)
7 Access prohibited by Irvine Ranch Company