

Attachment
SMMC Item 9(b)
February 24, 2014

RECREATIONAL USE REASSESSMENT (RECUR) OF THE ENGINEERED CHANNELS OF THE LOS ANGELES RIVER WATERSHED



LA River Expedition 2008



Recreational Use Monitoring 2011



Recreational Use Monitoring 2011



Recreational Use Monitoring 2012



Recreational Use Monitoring 2011



Recreational Use Monitoring 2012



Recreational Use Monitoring 2011



LA River REC Zone 2013



Recreational Use Monitoring 2012

DRAFT - December, 2013

Los Angeles Regional Water Quality Control Board

1. INTRODUCTION

In September 2010, the Los Angeles Regional Water Quality Control Board (Regional Board) initiated a re-evaluation of the designated recreational uses (water contact (REC-1) and non-water contact (REC-2)) in the engineered channels of the Los Angeles River system as identified in the Region's *Water Quality Control Plan* (Basin Plan). The reconsideration of the application of REC-1 and REC-2 beneficial uses in specific instances was selected by the Regional Board as one of the projects to be addressed during the 2008-10 triennial review period (Resolution No. R10-001). Additionally, during the Board hearing to adopt the Los Angeles River Bacteria TMDL (Resolution No. R10-007), several stakeholders indicated a strong desire for this issue to be prioritized for the Los Angeles River watershed.

This issue was identified as a priority because beneficial uses are the primary basis for the application of water quality objectives to the region's water bodies. Therefore, their designation has broad consequences regarding how the Regional Board regulates water quality in the region in terms of the specific requirements that are imposed on dischargers.

The assessment addresses all the engineered portions of the Los Angeles River system, which includes five of the six reaches of the Los Angeles River main stem - Reaches 1 through 4 and Reach 6, along with thirty-one major and secondary tributaries.

In 2010, USEPA determined that REC-1 uses including kayaking, occur along the main stem (Reaches 1 through 6) of the river and that flows exist in the river throughout the "vast majority" of the year to support such uses. Therefore, for the main stem of the Los Angeles River, the assessment was limited to evaluating the magnitude and frequency of these existing uses in order to determine whether or not sub-categorization of the REC-1 use should be considered.

For the tributaries, the assessment was conducted with the goal of determining (i) whether the physical conditions in these channels were or were not conducive to supporting recreational uses, and (ii) the potential of these channels to support recreational uses in the future based on an inventory and review of all existing or proposed restoration / revitalization plans.

This assessment was conducted in conformance with federal regulations at 40 C.F.R. sections 131.10(g) and 131.20 as well as USEPA's guidelines for conducting use attainability analyses (UAA) (USEPA 1994, 1996, 2006). The effort was enhanced by significant stakeholder participation in key aspects of the assessment. This level of participation allowed for a robust, multi-pronged study design.

The report includes the regulatory basis for the study, the methodology applied, and the results obtained. It provides a comprehensive assessment of the current

ability of the water bodies to support recreational use, along with their potential for future recreational opportunities. Recommendations regarding potential modifications to recreational beneficial uses, based on this report, will be provided in a separate document at a later time

1.1 BACKGROUND ON RECREATIONAL USE CONSIDERATIONS FOR ENGINEERED CHANNELS

Engineered channels are waterways that have been lined (at the bottom and/or on the sides) with rip-rap or concrete and, in most cases, straightened, with the intent of reducing flood risk by transporting storm water as quickly as possible to the ocean. However, these modifications sometimes create life-threatening “swift-water” conditions during and immediately following storm events, making it unsafe for recreational activities in, or in proximity to, such water bodies. In addition, the vertical walls and/or steep-sided slopes of these channels, often in conjunction with restrictive fencing, usually limit, to varying degrees, direct access to channelized creeks and streams for the purpose of recreational use. Furthermore, many of these channels have minimal flows and low water levels in the dry periods that occur throughout the year in southern California.

Given these conditions, the appropriateness of assigning the water contact recreation (REC-1) use to engineered channels has been questioned by a number of stakeholders throughout the region. Concerns have also been expressed regarding the potential for such beneficial use designations to encourage water contact recreational activities in areas that are unsafe.

At the same time, municipalities and federal agencies including the USEPA and the Army Corps of Engineers, along with non-profit organizations have been working to restore urban rivers in the region to provide greater recreational opportunities to urban residents and visitors. Thus, in addressing the issues of recreational use in engineered channels, it is important to balance concerns regarding the appropriateness of such uses with growing desire and efforts to restore streams and increase the recreational use of urban water bodies.

The Regional Board has previously addressed the issue of water contact recreation in engineered channels during unsafe conditions. In 2003, the Regional Board issued a categorical suspension of the recreational beneficial uses and associated bacteria objectives in some engineered channels during unsafe wet weather conditions, known as the “high flow suspension” (Resolution No. R03-010). Engineered channels subject to the high flow suspension have been identified in Ballona Creek, the Los Angeles River, the Dominguez Channel and the San Gabriel River. Also, in 2005, in response to stakeholder concerns that limited accessibility and low-flow conditions in engineered channels cannot support a REC-1 designated use, the Regional Board re-evaluated recreational uses in Ballona Creek and Estuary. The Ballona recreational use assessment resulted in the removal of the potential REC-1 use for Reach 1 (the uppermost reach) of Ballona Creek, which is a concrete-lined box channel with fencing that

limits access throughout its length. The Ballona recreational use assessment also resulted in the development and designation of a sub-category of REC-1 (Limited REC-1) for Reach 2 of the creek.¹

¹ State Board Resolution No. 2005-0015

2. EXISTING POLICY AND GUIDANCE ON BENEFICIAL USE ASSESSMENT

Section 101(a)(2) of the Clean Water Act (CWA) sets the general tone for the designation of beneficial uses of water bodies throughout the United States. It states that, "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983."

2.1 DESIGNATION OF BENEFICIAL USES

Per the Code of Federal Regulations (40 CFR § 131.3(f)) designated uses are defined as "those uses specified in water quality standards for each water body or segment whether or not they are being attained."

Title 40 of the Code of Federal Regulations section 131.10 directs States on the designation of uses as follows:

- (a) Each State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial and other purposes including navigation. In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States.
- (b) In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall provide for the attainment and maintenance of the water quality standards of downstream waters.
- (c) States may adopt sub-categories of a use and set the appropriate criteria to reflect varying needs of such sub-categories of uses, for instance, to differentiate between cold water and warm water fisheries.
- (d) At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under sections 301(b) and 306 of the Act and cost-effective and reasonable best management practices for nonpoint source pollution.

The Water Quality Control Plan for the Los Angeles Region (Basin Plan) contains designated uses for surface and ground waters in the Los Angeles Region. These uses are generally classified as existing, potential, or intermittent. The water contact recreation uses of engineered channels of the Los Angeles River include all three classifications.

Existing Beneficial Uses. Those beneficial uses that have been attained for a water body on, or after, November 28, 1975 must be designated as "existing" in the Basin Plan. Certain other uses must be designated, whether or not they have been attained on a water body, in order to implement the federal CWA goal expressed in section 101(a)(2), often referred to as "fishable and swimmable" unless a UAA is conducted. Other uses can be designated, whether or not they

have been attained, in order to implement state mandates or goals.

Intermittent Beneficial Uses. Beneficial uses of streams that have intermittent flows, as is typical of many streams in southern California, are often designated as intermittent. During dry periods, however, shallow ground water or small pools of water can support some beneficial uses associated with intermittent streams; accordingly, such beneficial uses (e.g., wildlife habitat) are protected throughout the year.

Potential Beneficial Uses. Beneficial uses may be designated as "potential" for several reasons, as set forth in the Basin Plan, including:

- Implementation of the State Board's policy entitled "Sources of Drinking Water Policy" (State Board Resolution No. 88-63, described in Chapter 5),
- Plans to put the water to such future use,
- Potential to put the water to such future use,
- Designation of a use by the Regional Board as a regional water quality goal, or
- Public desire to put the water to such future use.

2.2 REMOVAL OF DESIGNATED USES: 40 CFR § 131.10 (g)

States may remove a designated use which is not an existing use, as defined in section 131.3, or establish sub-categories of an existing use if the State can demonstrate that attaining the designated use is not feasible because:

1. Naturally occurring pollutant concentrations prevent the attainment of the use; or
2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
6. Controls more stringent than those required by sections 301(b) [Effluent Limitations] and 306 [National Standards of Performance] of the Act would result in substantial and widespread economic and social impact.

2.3 RESTRICTIONS ON REMOVAL OF USE: 40 CFR § 131.10

Federal regulations restrict States from removing designated beneficial uses. Specifically, 40 CFR § 131.10 (h) prohibits States from removing designated uses if:

They are existing uses, as defined in 40 CFR § 131.3, unless a use requiring more stringent criteria is added; or

Such uses will be attained by implementing effluent limits required under sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices.

Furthermore, 40 CFR § 131.10 (i) states that where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.

2.4 USE ATTAINABILITY ANALYSES

Title 40 of the Code of Federal Regulations section 131.3(g) defines a UAA as a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g).

Under 40 CFR § 131.10(j) of the Water Quality Standards Regulation, States are required to conduct a UAA whenever the State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or adopt subcategories of uses specified in section 101(a)(2) that require less stringent water quality objectives.

USEPA (2003) provides guidance on conducting UAAs for recreational uses and provides the following factors that may be addressed:

- (i) Information concerning any existing recreational activities that occur in the water body, by type of activity, including frequency information (e.g., gathered from surveys or interviews with knowledgeable individuals, entities, or organizations);
- (ii) Information that is useful in assessing the potential for various types of recreational uses to occur in the water body, which may include:
 - (a) Physical analyses addressing: features that facilitate public access to the water body (e.g., road crossings, trails), facilities promoting recreation (e.g., rope swings, docks, picnic tables), features limiting access to the water body or that discourage recreation uses (e.g., fences, signs), location of the water body including proximity to residential areas, schools, or parks, projections of population growth/development in the area, safety

considerations, water temperatures, flows, velocity, depth, and width, and other physical attributes of the water body such as substrate characteristics;

(b) Chemical analyses of existing water quality for key parameters (bacteria, nutrients), including a comparison of available representative data for indicator bacteria to the criteria adopted by the state or authorized tribe (which may include both geometric mean and single sample maximum values);

(c) Identification of sources of fecal pollution, and an assessment of the potential for reduced loadings of bacterial indicators; and

(d) Economic/affordability analyses.

On the subject of physical analyses, USEPA has previously stated that physical factors, which are important in determining attainability of aquatic life uses, may not be used as the basis for removing or not designating a recreational use consistent with the CWA section 101(a)(2) goal (USEPA, 1994). This precludes states from using factor 2 (pertaining to low flows) or factor 5 (physical factors in general) as the sole basis for determining attainability of recreational uses. The reason for this preclusion is that, in certain instances, people will use whatever water bodies are available for recreation, regardless of the physical conditions (USEPA, 1994).

In addition, in its 1998 “Water Quality Standards Regulation: Proposed Rules,” USEPA considered whether the regulation or Agency guidance should be amended to allow consideration of one of the physical factors, alone, as the basis for removing, or not designating primary contact recreational uses, and reaffirmed its position that one of the physical factors, alone, was not sufficient justification.

USEPA’s suggested approach to the recreational use issue is for states to look at a suite of factors such as whether the water body is actually being used for primary contact recreation, existing water quality, water quality potential, access, recreational facilities, location, proximity to residential areas, safety considerations, and physical conditions of the water body in making any use attainability decision (USEPA, 1994).

More recently, in a 2006 memorandum titled “Improving the Effectiveness of the Use Attainability Analysis Process,” USEPA made the following key points:

- **Getting the uses right requires both a useful set of designated uses and an effective process for conducting credible and defensible UAAs.** EPA realizes that deciding what uses are attainable is critical, and views the UAA process, properly applied and implemented, as a vital tool

in making those decisions. Early coordination among states and EPA is critical to making the process more efficient. UAAs are meant to assess what is attainable, it is not simply about documenting the current water quality condition and use (although documenting current conditions is often part of the analysis).

- **A credible UAA can result in a change in designated use in either direction.** A credible UAA can lead to refinements or changes in use that lead to either more or less protective criteria (i.e., water quality objectives in State terminology). The goal is that the new use is more accurate.
- **There is nothing wrong with changing designated uses after completion of a credible UAA.** It is an expected part of the process. If a credible and defensible UAA indicates a need for a water quality standards (WQS) change, then a change to WQS is appropriate to effectively implement the WQS program.
- **The UAA process should be better integrated with TMDL development.** EPA, states and tribes need to work together to ensure that as TMDLs are developed, there is also coordination on issues related to use attainability as needed. In practice, the information gathered to develop a TMDL, and the allocations in a TMDL, may point to the need to pursue a UAA. While in some cases it may be more effective to ensure that the right uses are in place prior to completing the TMDL, it is also important not to let uncertainty about a specific water quality endpoint delay implementation of needed water quality improvements. Scarce resources should be directed where they will be most effective and avoid duplicative efforts.
- **Improved public communication leads to improved public acceptance.** It is critical for EPA, states and tribes to engage the public in meaningful discussions regarding the importance and value of getting uses right in maintaining and restoring water quality. WQS that reflect the best available data and information should be used to direct the process of managing water quality. They are essential to informed decision making. Just as important, public understanding and acceptance of WQS is central to broader community support for addressing potentially difficult pollution control management decisions.

Along with this memorandum, EPA has made available a document titled “UAAs and Other Tools for Managing Designated Uses,” which is a compilation of different approaches to USEPA approved UAAs across the country. This report included the suspension of recreational beneficial uses in engineered channels in Los Angeles County during unsafe wet-weather conditions, conducted by the Los Angeles Regional Board, which relied on 40 CFR section 131.10(g) factors 2 and 4.

2.5 STATE BOARD CONSIDERATION OF BENEFICIAL USE ASSESSMENT

REC-1 USE IN OLD ALAMO CREEK, CENTRAL VALLEY REGION - STATE BOARD RESOLUTION NO. 2002-0003

In October 2002, the State Board reviewed its decision concerning the City of Vacaville's (Vacaville) dispute of the Central Valley Regional Board's (CVRB) application of REC-1 and other water quality objectives in crafting the 2001 permit for the Easterly Wastewater Treatment Plant discharge to Old Alamo Creek. The CVRB had applied REC-1 and other uses to the creek via the "Tributary Rule." Vacaville contended the CVRB's approach to designating beneficial uses as well as the existence of specific uses (including REC-1) in Old Alamo Creek. Vacaville had conducted a receiving water survey in the fall of 1997 and concluded that REC-1 was not an existing use of the creek. In contrast, CVRB determined that the public has access to the creek, which runs by homes and provides riparian habitat that could attract users. CVRB staff also found evidence of fishing in the creek, and received accounts of wading from nearby residents who were interviewed. Based on these findings, the State Board determined that REC-1 was an existing use of the water body (SWRCB, 2002).

RECREATIONAL USE IN BALLONA CREEK, LOS ANGELES REGION - STATE BOARD RESOLUTION NO. 2005-015

In June 2003, the Los Angeles Regional Board considered proposed amendments to the Basin Plan to modify the recreational beneficial uses of Reaches 1 and 2 of Ballona Creek within the Santa Monica Bay Watershed Management Area. Both reaches had been hydromodified in the 1930s, had limited flow and restricted access. The Regional Board did not adopt the proposed amendments; the Board's action was later reviewed by the State Board in response to a petition by the Los Angeles County and Los Angeles County Flood Control District, and determined to have been in error. The State Board subsequently adopted the proposed amendments through State Board Resolution No. 2005-0015, thereby adding a subcategory of water contact recreation (Limited REC-1 [LREC-1]) to the Los Angeles Region's Basin Plan. This new beneficial use was applied to Reach 2 of Ballona Creek, while the water contact recreation component of the potential REC-1 use was removed from both Reaches 1 and 2 of Ballona Creek.

3. BACKGROUND ON THE LOS ANGELES RIVER SYSTEM

3.1 THE LOS ANGELES RIVER

The Los Angeles River flows 51 miles from the western end of the San Fernando Valley to the Queensway Bay and Pacific Ocean at Long Beach (see Figure 3-1). The headwaters are at the confluence of Arroyo Calabasas and Bell Creek. Arroyo Calabasas drains Woodland Hills, Calabasas, and Hidden Hills in the northeastern portion of the Santa Monica Mountains. Bell Creek drains the Simi Hills and receives flows from Chatsworth Creek. From the confluence of Arroyo Calabasas and Bell Creek, the Los Angeles River flows east through the southern portion of the San Fernando Valley, bends around the Hollywood Hills before it turns south onto the broad coastal plain of the Los Angeles Basin, eventually discharging into Queensway Bay and thence into San Pedro Bay, west of Long Beach Harbor.

The Los Angeles River and its tributaries have a total stream length of 837 miles of which approximately 205 miles are engineered. The watershed covers an area of about 834 square miles (see Figure 3-1). The incorporated cities and the urban but unincorporated portion of Los Angeles County comprise 599 square miles of the total area. The remaining acreage consists of managed forest and recreational areas within the Angeles National Forest and other largely undeveloped land uses.

Reach 6 is the uppermost reach of the Los Angeles River main stem. It begins at the confluence of Arroyo Calabasas and Bell Creek. In this reach, the river flows east from its origin, along the southern edge of the San Fernando Valley, to Balboa Boulevard in the Lake Balboa area of the City of Los Angeles. This reach of the Los Angeles River also receives flow from Browns Canyon, Aliso Canyon Wash, and Caballero Creek. The lower portions of Arroyo Calabasas and Bell Creek are channelized. Browns Canyon, Aliso Creek and Caballero Creek are completely channelized, as is Reach 6 itself.

Reach 5 of the Los Angeles River runs from Balboa Boulevard through the Sepulveda Flood Control Basin to the Sepulveda Dam. The Basin is one of the few “soft-bottom” portions of the main river channel. It is a 2,150-acre open space designed to collect floodwaters during major storms. Because the area is periodically inundated, it remains in natural or semi-natural conditions and supports a variety of low-intensity uses. The U.S. Army Corps of Engineers owns the entire basin and leases most of the area to the City of Los Angeles Department of Recreation and Parks, which has developed a multiuse recreational area that includes a golf course, playing fields, hiking trails and bicycle paths. The D.C. Tillman Water Reclamation Plant indirectly discharges tertiary-treated effluent to this Reach via two lakes in the Sepulveda Basin that are used for recreation and wildlife habitat. However, the bulk of this plant’s tertiary effluent is discharged directly to Reach 4 of the Los Angeles River just below the Sepulveda Dam.

FIGURE 3-1: LOS ANGELES RIVER WATERSHED



T:\S\p\gis\arcmap\fm\ll\river\recut\LA Rws\REC_Engineered1.mxd

Reach 4 of the Los Angeles River runs from the Sepulveda Dam to Riverside Drive. Pacoima Wash and Tujunga Wash are the two main tributaries to this reach. Both tributaries drain portions of the Angeles National Forest in the San Gabriel Mountains. Pacoima Wash is channelized below Lopez Dam to the Los Angeles River. Tujunga Wash is channelized for the reach below Hansen Dam. Some of the discharge from Hansen Dam is diverted to spreading grounds for groundwater recharge, but most of the flow enters the channelized portion of Tujunga Wash.

Reach 3 of the Los Angeles River - from Riverside Drive to Figueroa Street - flows from the eastern end of the San Fernando Valley through Griffith Park and Elysian Park. This area is known as the Glendale Narrows. The area is fed by natural springs during periods of high groundwater. The river is channelized and the sides are lined with concrete. However, the river bottom in this area is unlined because rising groundwater routinely discharges into the channel, in varying volumes depending on the height of the water table, maintaining year-long flow in the river, downstream. The Los Angeles-Glendale Water Reclamation Plant discharges to the Los Angeles River in the Glendale Narrows. The two major tributaries to this reach are the Burbank Western Channel, which receives flows from the Burbank Water Reclamation Plant, and Verdugo Wash, which drains the Verdugo Mountains. Both tributaries are channelized.

Reach 2 of the Los Angeles River runs from Figueroa Street to Carson Street. It has two major tributaries – the Arroyo Seco and the Rio Hondo. The Arroyo Seco drains areas of Pasadena and portions of the Angeles National Forest in the San Gabriel Mountains, and lies just below the Glendale Narrows. The Rio Hondo and its tributaries drain a large area in the eastern portion of the Los Angeles River Watershed. At Whittier Narrows, flow from the Rio Hondo can be diverted to the Rio Hondo Spreading Grounds. During dry weather, virtually all the water in the Rio Hondo goes to groundwater recharge, so little or no flow exits the spreading grounds to Reach 1 of the Rio Hondo. During storm events, Rio Hondo flow that is not used for spreading, reaches the Los Angeles River. This flow is comprised of both storm water and treated wastewater effluent from the Whittier Narrows Water Reclamation Plant.

Reach 1 of the Los Angeles River, runs from Carson Street to the estuary at Willow St. Compton Creek is the major tributary for this reach.

3.2 DESIGNATED RECREATIONAL BENEFICIAL USES OF THE LOS ANGELES RIVER

Designated beneficial uses for the Los Angeles Region's water bodies are contained in the Basin Plan. While the engineered channels of the Los Angeles River Watershed have several beneficial uses, the focus of this assessment was on the recreational uses. Per the Basin Plan, recreational beneficial uses include:

Water contact recreation REC-1 defined as *“uses of water for recreational activities involving body contact with water, where ingestion of water is*

reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs”;

Limited Water Contact Recreation (LREC-1) defined as *“uses of water for recreational activities involving body contact with water, where full REC-1 use is limited by physical conditions such as very shallow water depth and restricted access and, as a result, ingestion of water is incidental and infrequent”;* and

Non-contact Water Recreation (REC-2) defined as *“uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities”.*

Table 3-1 lists the designated recreational beneficial uses for each of the engineered channels under consideration. These recreational uses are classified as either “Existing”, “Intermittent”, or “Potential” per the Basin Plan:

Table 3-1: List of Waterbodies for Recreational Use Re-evaluation

Name	Reach	REC-1	REC-2
Los Angeles River to Estuary	Reach 1	E	E
Los Angeles River	Reach 2	E	E
Los Angeles River	Reach 3	E	E
Los Angeles River	Reach 4	E	E
Los Angeles River	Reach 5	E	E
Los Angeles River	Reach 6	E	E
Compton Creek		E	E
Santa Anita Wash		E	E
Pacoima Canyon Creek		E	E
Wilson Canyon Creek		E	E
Rio Hondo below Spreading Grounds	Reach 1	P	E
Alhambra Wash		P	I
Rubio Wash		I	I
Eaton Wash		I	I
Eaton Wash (below dam)		I	I
Arcadia Wash (lower)		P	I
Arcadia Wash (upper)		P	I
Santa Anita Wash (lower)		P	E
Little Santa Anita Canyon Creek		I	I
Sawpit Wash		I	I
Arroyo Seco S. of Devil's Gates. (L)	Reach 1	I	I
Arroyo Seco S. of Devil's Gates (U)	Reach 2	I	I
Verdugo Wash	Reach 1 & 2	P	I
Halls Canyon Channel		I	I
Snover Canyon		I	I
Pickens Canyon		I	I
Shields Canyon		I	I
Dunsmore Canyon Creek		I	I
Burbank Western Channel		P	I
La Tuna Canyon Creek		I	I
Tujunga Wash		P	I
Lopez Canyon Creek		I	I
Haines Canyon Creek		I	I
Pacoima Wash		P	E
May Canyon Creek		I	E
Bull Creek		I	I
Caballero Creek		I	I
Aliso Canyon Wash and Creek		I	I
Limekiln Canyon Wash		I	I
Browns Canyon Wash and Creek		I	I
Arroyo Calabasas		P	I
Dry Canyon Creek		I	I
Bell Creek		I	I
Dayton Canyon Creek		I	I

3.3 PROTECTING RECREATIONAL USES IN THE LOS ANGELES RIVER WATERSHED

Water contact recreational use is generally impaired by the presence of high levels of fecal indicator bacteria. The Los Angeles River and many of its major tributaries (approximately 127 miles in total) were determined to be impaired by fecal indicator bacteria as a result of water quality assessments conducted in 1998, 2002, 2006, and 2008. Many reaches and tributaries exceed the bacterial water quality standards from 80% to up to 100% of the time. This severely limits the potential for recreational uses of the river and downstream beaches in the City of Long Beach.

In July 2010, a Total Maximum Daily Load (TMDL) was adopted for the water bodies of the Los Angeles River Watershed. This TMDL addressed water quality impairments due to elevated concentrations of indicator bacteria, which are widely used to indicate the presence of fecal matter and are correlated with increased health risks to individuals engaged in water contact recreation.

This TMDL considered the entire main stem of the Los Angeles River from above Sepulveda Basin to the estuary as well as the tributaries including Bell Creek, Tujunga Wash below Hansen Dam, Verdugo Wash, Arroyo Seco, Rio Hondo, Compton Creek, Bull Creek and Burbank Western Channel.

Similar to other bacteria TMDLs in this Region, this TMDL 1) used a reference system approach in that the River must not exceed standards more often than a “clean” reference water body; 2) set final allocations in number of days of allowed exceedance of targets; and 3) developed allocations and schedules for wet weather and dry weather separately.

The TMDL set targets for indicator bacteria based on numeric water quality objectives provided in the Basin Plan. Allocations were assigned to storm water and other dischargers in the watershed. The TMDL set a schedule for attainment in phases, segment by segment of the River. The final dry weather allocations are to be achieved 18 years after implementation has begun in a segment. Compliance with the final wet weather allocations is to be achieved by March, 2037.

Trash in waterways impacts the aesthetic enjoyment (non-contact recreation [REC-2]) of the water body and impedes water contact recreation to a lesser degree. In 2007, the Los Angeles Regional Water Board adopted a TMDL for trash in the Los Angeles River and its tributaries. This TMDL required a phased reduction of trash loading to these water bodies until the target of “zero trash” was reached. Full compliance with this TMDL is expected in 2016.

Other TMDLs developed for the Los Angeles River watershed include TMDLs for nutrients and metals. These nutrient and metal TMDLs primarily address impacts to aquatic life beneficial uses.

Recreational Activities

In the absence of recreational facilities with public access along Dayton Canyon Creek, Dry Canyon Creek, and Limekiln Canyon Wash all site visits were to the in-stream monitoring sites from July 2010 to December 2012. No recreation was observed at these monitoring sites. Also no surveys were obtained.

Planned Future Recreational Opportunities

No sub-watershed plan currently exists for any of the secondary tributaries of Upper Los Angeles River. Also, Staff could not find/locate any plans for potential development of recreational opportunities along any of these channels.

5.8 SUMMARY OF RESULTS OF THE RECREATIONAL USE RE-ASSESSMENT

In its 2006 compilation of UAA case studies, USEPA stated that use assessments should not be limited to the current condition of a water body but should also include a prospective analysis of future attainability of designated uses. In this recreational use assessment, consideration was given to direct access to the channel bottom, configuration of channel walls, adjacent recreational facilities, documented current and historical recreational activity, downstream use designations and plans for increased recreational opportunities. Tables 5-8.1 through 5-8.7 contain a summary of these considerations.

TABLE 5-8.1: ASSESSMENT OF RECREATION OPPORTUNITIES IN THE MAIN STEM OF THE LOS ANGELES RIVER

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in Ave.	REC-1 Activity*	REC-2 Activity*	Water Quality	Downstream REC designation	Planned REC Opportunities
Reach 1	Direct	Sloped	Bike Path, Greenway	12.48	Fishing Wading Kayaking	Biking Walk/Run Skateboard	Bacteria, Trash	Estuary (REC-1)	LARMP, LARRMP
Reach 2	Direct	Sloped	Bike Path, Park	12.96	Wading Swimming Fishing Kayaking	Biking Walk/Run Skateboard	Bacteria Trash	Reach 1 (REC-1)	LARMP, LARRMP
Reach 3	Direct	Sloped	Bike Path, Park, Golf Course, Multi-use Trail	11.04	Wading Swimming Fishing Kayaking	Biking Walk/Run Skateboard	Trash	Reach 2 (REC-1)	LARMP, LARRMP
Reach 4	Visual	Vertical	Multi-use Trail, Park	16.6	None observed or reported	Biking Walk/Run Skateboard	Bacteria, Trash	Reach 3 (REC-1)	LARMP, LARRMP
Reach 6	Direct	Sloped	Park, Bike Path	(1.71-0.15)*	None observed or reported	Biking Walk/Run	Bacteria, Trash	Reach 5 (REC-1)	LARMP, LARRMP

LARMP Los Angeles River Master Plan, LARRMP Los Angeles River Revitalization Master Plan

“-“ no activity observed or reported

*Min-max values provided

TABLE 5-8.2: ASSESSMENT OF RECREATIONAL OPPORTUNITIES IN THE MAJOR TRIBUTARIES OF LOWER LOS ANGELES RIVER (REACHES 1 AND 2)

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in) Ave.	REC-1 Activity	REC-2 Activity	Water Quality	Downstream REC designation	Planned REC Opportunities
Compton Creek	Direct	Vertical/sloped	Bike Path, Multi-use Trail	5.0	-	Biking Walk/Run	Bacteria Trash	LAR Reach 1 (REC-1)	CCWMP, CCRGMP
Rio Hondo	Direct	sloped	Park, Bike Path, Multi-use Trail	2.1	Wading Swim Fishing	Biking Walk/Run Skateboard	Bacteria Trash	LAR Reach 2 (REC-1)	RHWMP
Arroyo Seco	Direct	Vertical/sloped	Bike Path, Park, Multi-use Trail, Overpass	3.5	Wading Swim Fishing Kayaking	Biking Walk/Run Skateboard	Bacteria, Trash	LAR Reach 2 (REC-1)	LARRMP, ASWMP

CCWMP Compton Creek Watershed Management Plan, CCRGMP Compton Creek Regional Garden Master Plan, RHWMP Rio Hondo Watershed Management Plan, LARRMP: Los Angeles River Revitalization Master Plan, ASWMP Arroyo Seco Watershed Management Plan

“-“ no activity observed or reported

TABLE 5-8.3: ASSESSMENT OF RECREATIONAL OPPORTUNITIES IN THE SECONDARY TRIBUTARIES OF LOWER LOS ANGELES RIVER (REACHES 1 AND 2)

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in) Ave.	REC-1 Activity	REC-2 Activity	Water Quality	Downstream REC designation	Planned REC Opportunities
Santa Anita Wash	Direct	Vertical/sloped	Park, Bike Path, Multi-use Trail	1.1	Fishing	Biking Walk/Run	Trash	Rio Hondo (Potential REC-1)	RHWMP
Eaton Wash	Visual	Vertical	Park overpass	1.0	-	Biking Walk/Run Skateboarding	Trash	Rio Hondo (Potential REC-1)	RHWMP
Rubio Wash	Visual	Vertical	Country Club, Park	0.5	-	Golfing	Trash	Rio Hondo (Potential REC-1)	RHWMP
Alhambra Wash	Visual	Vertical	Golf Course; Bike Path (opened 2012)	2.7	-	Golfing	Trash	Rio Hondo (Potential REC-1)	RHWMP
Arcadia Wash	Visual	Vertical	Arboretum, Golf Course	1.2	-	Golfing	Trash	Rio Hondo (Potential REC-1)	RHWMP
Sawpit Wash	none	Vertical	none	2.0	-	-	Trash	Rio Hondo (Potential REC-1)	RHWMP

RHWMP Rio Hondo Watershed Management Plan

“-“ no activity observed or reported

TABLE 5-8.4: ASSESSMENT OF RECREATIONAL OPPORTUNITIES IN THE MAJOR TRIBUTARIES OF MIDDLE LOS ANGELES RIVER (REACHES 3 AND 4)

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in) Ave.	REC-1 Activity	REC-2 Activity	Water Quality	Downstream REC designation	Planned REC Opportunities
Verdugo Wash	Visual	Vertical	Park, Overpass	1.7	-	Biking Walk/Run Skateboard	Bacteria, Trash	LAR Reach 3 (REC-1)	LARRMP
Burbank Western Channel	Visual	Vertical	Bike Path, Park, Multi use Trail,	2.2	Wading	Biking Walk/Run Skateboard	Bacteria, Trash	LAR Reach 3 (REC-1)	None known
Tujunga Wash	Visual	Vertical	Multi use Trail, Park, Bike Path	2.1	Fishing	Biking Walk/Run Skateboard	Bacteria, Trash	LAR Reach 4 (REC-1)	LARMP, TPWP
Pacoima Wash	Visual	Vertical/sloped	Multi Use Trail, Park, Overpass	1.7	-	Biking Walk/Run	Trash	LAR Reach 4 (REC-1)	TPWP, PVP

LARRMP Los Angeles River Revitalization Master Plan, LARMP Los Angeles River Master Plan, TPWP Tujunga Pacoima Watershed Plan, PVP Pacoima Vision Plan

“-“ no activity observed or reported

TABLE 5-8.5: ASSESSMENT OF RECREATIONAL OPPORTUNITIES IN THE SECONDARY TRIBUTARIES OF MIDDLE LOS ANGELES RIVER (REACHES 3 &4)

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in) (Min-Max)	REC-1 Activity	REC-2 Activity	Water Quality	Downstream REC designation	Planned REC Opportunities
Halls Canyon	none	Vertical	Overpass	(0-1.32)	-	-	n.a.	Verdugo Wash (Intermittent REC-1)	None known
Snover Canyon	none	Vertical	Park	(0-0.12)	-	Walk/Run	n.a.	Verdugo Wash (Intermittent REC-1)	None known
Eagle (Shields) Canyon	none	Vertical	none	(0-0.60)	-	-	n.a.	Verdugo Wash (Intermittent REC-1)	None known
Pickens Canyon	none	Vertical	none	(0-0.24)	-	-	n.a.	Verdugo Wash (Intermittent REC-1)	None known
Dunsmore Canyon	Visual	Vertical	Park	(0-1.0)	Wading	Biking Walk/Run	n.a.	Verdugo Wash (Intermittent REC-1)	None known
Las Tunas Channel	none	Vertical	none	0	-	-	n.a.	Burbank Western Channel (Potential REC-1)	None known
Lopez Canyon Creek	Visual	Vertical	Park	(0.1-0.6)	-	Walk/Run	n.a.	Tujunga Wash (Potential REC-1)	None known
Haines Canyon Creek	none	Vertical	none	(0.1-1.1)	-	-	n.a.	Tujunga Wash (Potential REC-1)	None known
May Canyon Creek	none	Vertical	none	(0.1-0.5)	-	-	n.a.	Tujunga Wash (Potential REC-1)	None known
Wilson Canyon Creek	none	Vertical	none	(0.5-1.9)	-	-	n.a.	Pacoima Wash (Potential REC-1)	None known

n.a. not available

“-“ no activity observed or reported

TABLE 5-8.6: ASSESSMENT OF RECREATIONAL OPPORTUNITIES IN THE TRIBUTARIES OF UPPER LOS ANGELES RIVER (REACH 6)

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in) (Min-Max)	REC-1 Activity	REC-2 Activity	Water Quality	Downstream REC designation	Planned REC Opportunities
Browns Canyon Wash	Visual	Vertical	Bike Path, Multi use Trail, Gate	(0.1-2.3)	Wading Swimming Fishing Kayaking	Biking Walk/Run Skateboarding	n.a.	LAR Reach 6 (REC-1)	None known
Aliso Canyon Wash	Visual	Vertical	Park	(0.3-4.0)	-	Walk/Run	Bacteria	LAR Reach 6 (REC-1)	None known
Bell Creek	Visual	Sloped/Vertical	Park,	(0.1-1.5)	-	-	Bacteria	LAR Reach 6 (REC-1)	LARRMP
Arroyo Calabasas	Visual	Vertical	Gate	(0.2-3.0)	-	-	n.a.	LAR Reach 6 (REC-1)	LARRMP
Caballero Creek	Visual	Vertical	Gate, Ramp	(0.4-3.0)	-	-	n.a.	LAR Reach 6 (REC-1)	LARRMP

n.a. not available “-“ no activity observed or reported

TABLE 5-8.7: ASSESSMENT OF RECREATIONAL OPPORTUNITIES IN THE SECONDARY TRIBUTARIES OF UPPER LOS ANGELES RIVER (REACH 6)

Water body	Access to channel	Channel Walls	REC Facilities	Water Depth (in) (Min-Max)	REC-1 Activity	REC-2 Activity	Water Quality	Downstream REC designation	Planned REC Opportunities
Dayton Canyon Creek	Visual	Vertical	Gate	(0.1-1.0)	-	-	n.a.	Bell Creek (Intermittent REC-1)	None known
Dry Canyon Creek	Visual	Vertical	Gate	(0.1-2.0)	-	-	Bacteria	Arroyo Calabasas (Potential REC-1)	None known
Limekiln Canyon Creek	Visual	Vertical	Gate	(0.3-1.6)	-	-	n.a.	Aliso Canyon Wash (Intermittent REC-1)	None known

n.a. not available “-“ no activity observed or reported