

From: "Lamberson, Heather" <HLamberson@lacsds.org>
To: <commentletters@waterboards.ca.gov>, <cjwilson@waterboards.ca.gov>
Date: Tue, Jan 31, 2006 4:57 PM
Subject: RE: Comments on State Board's Proposed 2006 CWA Section 303(d)

Please include the following document, Attachment 1, with our earlier comment submittal.

Thank you,

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<<Attach 1_Watershed Settings_Jan 2006.doc>>

303 (d) Deadline:
1/31/06



> -----Original Message-----

> From: Springer, Denise
> Sent: Tuesday, January 31, 2006 4:32 PM
> To: 'commentletters@waterboards.ca.gov'; 'cjwilson@waterboards.ca.gov'
> Cc: Lamberson, Heather; Bax, Beth; Green, Sharon; Montagne, Dave; Heil, Ann
> Subject: Comments on State Board's Proposed 2006 CWA Section 303(d)

> Please find the above listed document. The complete title of the document is "Comments on State Board's Proposed 2006 Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments."

> << File: Final Comments_Jan 2006.zip >>

> Denise Springer
> Administrative Secretary, Technical Services
> County Sanitation Districts of Los Angeles County
> (562) 908-4288, x2500; (562) 692-5103 fax

CC: "Bax, Beth" <BBax@lacsds.org>, "Green, Sharon" <SGreen@lacsds.org>, "Montagne, Dave" <DMontagne@lacsds.org>, "Heil, Ann" <AHeil@lacsds.org>, "Springer, Denise" <DSpringer@lacsds.org>

Attachment 1

San Gabriel River, Santa Clara River and Santa Monica Bay Watershed Settings

Introduction

The Districts own and operate 8 wastewater treatment facilities that discharge to waterbodies currently included on the 303(d) list for one or more substances. To provide a meaningful context for evaluating the attached comments on specific listings, we would like to briefly describe our facilities and the waters into which they discharge. These include the Lower San Gabriel River Watershed (including the Rio Hondo Channel), the Upper Santa Clara River Watershed, and the Palos Verdes Shelf/Santa Monica Bay Watershed.

Lower San Gabriel River Watershed

The San Gabriel River Watershed drains a 689 square mile area of eastern Los Angeles County and has a main channel length of approximately 58 miles; its headwaters originate in the San Gabriel Mountains with the East, West, and North Forks. The river empties to the Pacific Ocean at the boundary of Los Angeles and Orange County boundary in Long Beach. The main tributaries of the river are Big and Little Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek.

In the middle to lower portions of the watershed, the San Gabriel River and its tributaries (Coyote Creek and San Jose Creek, and the Rio Hondo Channel¹), are for the most part highly modified urban waterbodies. These modifications were effectuated to control flooding in the Los Angeles Basin, which occurred on a regular basis following severe sequential rainfall events, and resulted in numerous fatalities and significant property damage. As the region has become more and more urbanized and the landscape has included more impervious cover, the proportion of the water that runs off, rather than percolate into the ground, has increased as well, thus increasing the hazard from flooding. It is our understanding that in the 1960s, the Army Corps of Engineers and Los Angeles County Flood Control District lined a significant portion of the lower San Gabriel River and Coyote Creek (and portions of the Rio Hondo) with concrete for flood management purposes. The portions of the San Gabriel River, San Jose Creek and Rio Hondo Channel that are not fully concrete-lined have been channelized and lined with rip-rap. These areas are soft-bottomed, flows are intermittent (as a result of groundwater recharge operations) and some areas support some aquatic habitat. Flows during dry weather in these waterbodies consist primarily of managed releases from upstream dams (e.g., Morris, Cogswell, and San Gabriel Dams), discharge of reclaimed water, and urban runoff.

The Districts own and operate 5 water reclamation plants (WRPs) that are located within the lower portion of the San Gabriel River watershed. These WRPs discharge into the San Gabriel River (San Jose Creek WRP and Los Coyotes WRP), Coyote Creek (Long Beach WRP), San Jose Creek (San Jose Creek WRP and Pomona WRP), and the Rio Hondo (Whittier Narrows WRP) (see Figure 1). These facilities are part of an integrated collection and treatment system known

¹ The Districts' Whittier Narrows Water Reclamation Plant is the Districts' only facility discharging to this river. The Rio Hondo is technically considered tributary to the Los Angeles River Watershed however, due to the multiple effluent discharge locations (some of which are tributary to the San Gabriel River) needed to facilitate deliveries of reclaimed water to designated groundwater recharge sites, the Whittier Narrows WRP is also considered tributary to the San Gabriel River. So the Rio Hondo is included for discussion purposes.

as the Joint Outfall System, which also includes the Joint Water Pollution Control Plant (see description below). We also maintain and routinely sample 23 receiving water monitoring stations within the lower San Gabriel River watershed. All 5 WRPs provide tertiary treatment consisting of activated sludge secondary treatment followed by inert media filtration and disinfection, with treatment capacities ranging from 15 million gallons per day (MGD) to 100 MGD. These facilities produce approximately 163 MGD (183,000 acre-feet/year) of recycled water that meet Title 22 primary drinking water standards, of which about 37% is reused through groundwater recharge, landscape irrigation, industrial processing and other applications. The rest is discharged to surface waters. In the unlined channels (as well as in constructed off-stream spreading grounds adjacent to the San Gabriel River and Rio Hondo Channel), groundwater recharge occurs utilizing both recycled water and local and imported waters. This activity occurs through a planned groundwater replenishment project that is regulated under a water recycling requirement (Regional Board Order No. 91-100).

In June 2003, all 5 WRPs were upgraded to include nitrification/denitrification (NDN) treatment in order to comply with ammonia requirements placed in the Districts' NPDES permits for these facilities in 1995. In addition to reducing the ammonia levels in WRP effluent, the NDN process has reduced overall nitrogen loadings from the WRPs, as well as reduced chronic toxicity in effluent and receiving waters caused by ammonia.

Santa Clara River Watershed

The Santa Clara River is one of the last natural rivers in southern California, which has not been dammed or channelized. The river originates in the San Gabriel Mountains and flows westward through Los Angeles and Ventura Counties more than 80 miles to the Pacific Ocean. The river and floodplain provide high quality riparian and aquatic habitat in many locations, although the riparian resources have been fragmented due to urban development and agricultural activities in various areas of the watershed and invasive exotic species have impacted the biological resources as well. Additionally, water flows are intermittent due to natural conditions that alternately result in rising groundwater and percolation of surface water. Surface water flows in the upper portion of the Santa Clara River Watershed are comprised primarily of wastewater discharges from the two Districts' WRPs located in the Santa Clarita Valley (discussed in more detail below). The surface water flows in the lower portion of the watershed consist primarily of discharges from a wastewater treatment plant in Santa Paula and water released from Castaic Lake and Pyramid Lake (via Lake Piru and Piru Creek).

The Districts own and operate 2 interconnected WRPs in the Santa Clarita Valley known as the Santa Clarita Valley Joint Sewerage System. The Saugus WRP (6.5 MGD) discharges to Reach 6 and the Valencia WRP (17 MGD) discharges to Reach 5 of the Santa Clara River (see Figure 2).² The Saugus and Valencia WRPs are tertiary treatment plants, similar to the San Gabriel River watershed WRPs, and were also upgraded to add the NDN process in September 2003.

Santa Monica Bay Watershed

Santa Monica Bay is an open embayment on the central part of the southern California coast, bounded in the north by Point Dume and in the south by the Palos Verdes Peninsula. Santa Monica Bay is heavily used for recreation, and the adjacent shoreline areas are heavily developed (including 25% impervious surface and more than 200 documented storm drains). Its 50 miles of

² There are two sets of reach delineations used for this river (see Exhibit 1). For the purposes of this document, Reach 6 is bounded by the Bouquet Canyon Road bridge in the east and West Pier Highway 99 in the west. Reach 5 is bounded by West Pier Highway 99 in the east and Blue Cut gauging station in the west (just downstream of the Los Angeles/Ventura County line).

coastline, with 22 separate public beaches, provide recreational opportunities for an estimated 45 million visitors each year -- more than 500,000 a day at the height of summer. The Bay and its environs also provide essential habitat for a number of migratory waterfowl and shorebirds, as well as for threatened and endangered species. The Bay's intertidal areas (rocky shores and tidepools) are home to a multitude of small fishes, invertebrates, and other organisms. The Palos Verdes Shelf adjoins Santa Monica Bay to the south.

Point source discharges to the Palos Verdes Shelf and Santa Monica Bay are comprised mainly of two major wastewater treatment facilities: the Hyperion Treatment Plant, which is owned and operated by the City of Los Angeles and the Joint Water Pollution Control Plant (JWPCP), which is owned and operated by the Districts (*see Figure 3*). Several other point sources discharge to Santa Monica Bay, including one oil refinery and three power plants. The JWPCP was built in 1928 in Carson, California, and has served many cities in the region since that time. The plant now has a permitted capacity of 400 MGD. The JWPCP was upgraded to full secondary treatment in December 2002. All of the effluent flow is disinfected prior to discharge. The secondary effluent is discharged to the Pacific Ocean about two miles off of White's Point at a depth of approximately 200 feet.