

California Regional Water Quality Control Board
San Diego Region
David Gibson, Executive Officer



Executive Officer's Report
April 10, 2013

Table of Contents

Part A – San Diego Region Staff Activities.....2

- 1. Association for Environmental Health and Sciences 23rd Annual International Conference.....2
- 2. Public Outreach for Toxic Pollutants in Sediment TMDLs at Paleta, Chollas, and Switzer Creek Mouth Areas Project2

Part B – Significant Regional Water Quality Issues.....4

- 1. Water Quality Research Documents4
- 2. 2011 Basin Plan Triennial Review Update: Tiers of REC-1 Based on Intensity of Use.....5
- 3. Enforcement Actions for February 20137
- 4. Expedited Payment Letters for Public Review.....10
- 5. Sanitary Sewer Overflows (SSOs) January – February 2013 (*Attachment B-5*).....11
- 6. Recycled Water Annual Summary Report 2012 (*Attachment B-6*).....12

Part C – Statewide Issues of Importance to the San Diego Region.....13

- 1. Drought and Water Supply Update13
- 2. Report to the Legislature on Communities that Rely on a Contaminated Groundwater Source for Drinking Water13

The April report for the Tentative Schedule of Significant NPDES Permits, WDRs, and Actions, and the attachments noted on page 1 are included at the end of the report.

Part A – San Diego Region Staff Activities

1. Association for Environmental Health and Sciences 23rd Annual International Conference

Staff Contact: Craig L. Carlisle

The Association for Environmental Health and Sciences (AEHS) annual conference on Soil, Water, Energy, and Air was held in San Diego the week of March 18. Several San Diego Water Board staff members attended technical sessions and workshops on a variety of topics including environmental forensics, bioremediation, emerging contaminants, hydraulic fracturing, and vapor intrusion.

Senior Engineering Geologist Craig Carlisle gave a technical talk on the San Diego Water Board's General Waste Discharge Requirements for In-Situ Groundwater Remediation (Order No. R9-2008-0081). This Order provides requirements regulating the subsurface application of a range of in-situ products. Because it is a general order, project enrollment is straight-forward, and can be accomplished with relative speed to keep cleanups from getting bogged down in lengthy permitting processes. Craig also participated in a panel discussion with representatives from the Los Angeles and Santa Ana Water Boards, along with environmental consultants, and an in-situ product manufacturer. The panel fielded questions from the audience on a variety of topics related to permitting in-situ remediation projects. Many of the questions involved the fact that requirements are different for each Water Board, as well as the difficulties with obtaining the other necessary permits with the local agencies (City and County) and the Air Resources Board. Although regional differences in hydrogeology exist among the southern California Regional Water Boards, we will continue to coordinate on permitting requirements for in-situ cleanups to keep our requirements as consistent as possible.

2. Public Outreach for Toxic Pollutants in Sediment TMDLs at Paleta, Chollas, and Switzer Creek Mouth Areas Project

Staff Contact: Lisa Honma

During the March 2013 San Diego Water Board meeting, Board Member Kalemkiarian asked staff to prepare a summary of outreach efforts regarding the proposed Total Maximum Daily Loads (TMDLs) for Toxic Pollutants in Sediment at Paleta, Chollas, and Switzer Creek Mouth Areas. A summary of the public notice for the Board's hearing of the TMDLs and consideration of a Basin Plan amendment was provided in the March 2013 Executive Officer's report.

To date, staff has pursued the participation of affected stakeholders, environmental representatives, and the public during the development of this project through conducting five public workshops, two CEQA Scoping Meetings, six meetings with individual stakeholders, nine meetings with the San Diego Bay Sediment TMDLs Work Group (environmental organizations and affected stakeholders), and three opportunities for stakeholders to review project reports. The organizations that have participated in workshops and meetings over the course of the development of this project include the following:

- CA Department of Fish and Game/Wildlife
- Cal
- CalTrans
- Chollas Restoration, Enhancement and Conservancy
- City of San Diego
- City of La Mesa
- City of Lemon Grove
- County of San Diego
- Environmental Health Coalition
- Groundwork San Diego – Chollas Creek
- NASSCO
- National City
- National School District
- Port of San Diego
- San Diego Bay Council
- San Diego BayKeeper/San Diego Coastkeeper
- San Diego Community College
- Sempra Energy
- Sierra Club
- U.C. San Diego
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Navy, Command Navy Region Southwest
- U.S. Navy, SPAWAR

In addition to those that actively participated, staff reached out to ARCO, Audubon Society, Chevron, Coast Law Group, La Mesa-Spring Valley School District, Lemon Grove School District, National Oceanic and Atmospheric Administration, and San Diego Unified School District.

Outreach to notify interested parties of the current comment period for the proposed Basin Plan amendment includes:	<u>Date</u>
<ul style="list-style-type: none"> • Emailed the Notices of Filing and Hearing to the subscribers of the San Diego Bay Marine Sediments TMDLs electronic email list. This list contains 456 members and includes stakeholder representatives, federal, state, and local agency representatives, consultants, environmental representatives, and members of the public; 	February 19, 2013
<ul style="list-style-type: none"> • Mailed consultation letters to California Coastal Commission, California State Lands Commission, California Department of Fish and Wildlife, California Air Resources Board, San Diego Air Pollution Control District, and 14 local tribal contacts; 	February 19, 2013
<ul style="list-style-type: none"> • Emailed the Notices of Filing and Hearing to the representative of the City of Lemon Grove, who was not a member of the San Diego Bay Marine Sediments TMDLs electronic email list; 	February 20, 2013
<ul style="list-style-type: none"> • Published the Notices of Filing and Hearing in the San Diego Union-Tribune newspaper; 	February 21, 2013
<ul style="list-style-type: none"> • Emailed the Notices of Filing and Hearing to the subscribers of the Basin Planning Issues electronic email list (~ 620 members); and 	February 21, 2013
<ul style="list-style-type: none"> • Emailed an announcement of San Diego Water Board staff availability to meet and/or provide clarification during the public review period. The announcement was emailed to 69 interested persons (stakeholder contacts, federal and state agency contacts, and environmental group representatives). 	March 6, 2013

The formal public comment period began on Tuesday, February 19, 2013, and ends on Monday, April 8, 2013 (a total of 48 days). Written comments must be submitted to the San Diego Water Board no later than Monday, April 8, 2013, at noon. The San Diego Water Board will hold a public hearing on June 19, 2013, to hear testimony and consider the adoption of tentative Resolution No. R9-2013-0003. Relevant documents are available online at http://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/sediment_toxicity.shtml.

Part B – Significant Regional Water Quality Issues

1. Water Quality Research Documents

Staff Contact: Bruce Posthumus

The Southern California Coastal Water Research Project (SCCWRP) produces a number of documents intended to inform efforts to protect and restore the water quality and beneficial uses

of waters in the San Diego Region and elsewhere. These documents include fact sheets, annual reports, technical reports, and journal articles.

SCCWRP fact sheets provide brief non-technical overviews of water quality topics on which SCCWRP conducts research. Topics of fact sheets produced to date are

1. Rapid Microbiological Monitoring Methods
2. Contaminants of Emerging Concern (CECs)
3. Integrated Sediment Quality Assessment
4. Microbial Source Tracking & Assessment
5. Harmful Algal Blooms (HABs)
6. Hydromodification

SCCWRP annual reports, technical reports, and journal articles provide detailed technical information about a variety of water quality topics, including but not limited to those addressed in the fact sheets. All of these documents are available at <http://www.sccwrp.org/Documents.aspx>. Hard copies of the 2012 annual report can be obtained by sending one's name and mailing address to angelicab@sccwrp.org.

SCCWRP is a public agency formed to conduct coastal environmental research and suggest management strategies. The San Diego Water Board is one of the SCCWRP member agencies. David Gibson represents the San Diego Water Board on the SCCWRP Commission, which is SCCWRP's governing board. David Barker is the alternate. More information about SCCWRP is available at <http://www.sccwrp.org/AboutSCCWRP.aspx>.

2. 2011 Basin Plan Triennial Review Update: Tiers of REC-1 Based on Intensity of Use

Staff Contact: Deborah Woodward

The San Diego Water Board (Water Board) received numerous suggestions for revisions to the Water Quality Control Plan for the San Diego Basin (Basin Plan) during its 2011 Basin Plan Triennial Review. One suggestion was to clarify existing water quality objectives for bacteria by defining tiers based on intensity of use for waters designated with the beneficial use of Contact Water Recreation (REC-1). The suggestion ranked highly in a stakeholder prioritization process and, ultimately, was among those adopted by the Water Board for further investigation into the appropriateness of a Basin Plan amendment. Staff began investigating the suggestion in Spring 2012.

In November 2012, however, the USEPA released updated REC-1 criteria recommendations that no longer advocate for a tiered use approach. Consequently, the State Water Board intends to consider statewide REC-1 criteria to be consistent with the USEPA recommendations. As a result, staff has determined that a Basin Plan amendment to clarify tiered REC-1 criteria based

on intensity of use is not appropriate at this time and may be rendered moot by the revised USEPA recommended criteria.

Existing REC-1 standards. The suggestion stemmed from the fact that existing Basin Plan water quality objectives for *E.coli* and enterococci include three tiers based on the intensity (or frequency) of use, but the tiers are not defined. The existing objectives are based on 1986 USEPA criteria; they consist of a geometric mean and – for each of three tiers of use (designated beaches, moderately or lightly used areas, and infrequently used areas) – a different single sample maximum (Table 1). Without definitions of the level of use intended for each tier, the most stringent (designated beaches) applies to all areas regardless of intensity of use. Clarifying the Basin Plan objectives by defining the level of use for each tier may have seemed reasonable at the time the suggestion was made, but it would be inappropriate to do so now because the tiered objectives are no longer recommended by USEPA.

Table 1. Existing Basin Plan water quality objectives for *E.coli* and enterococci.*

	Freshwater		Saltwater
	<i>E.coli</i>	Enterococci	Enterococci
Geometric Mean	126	33	35
Single Sample Maximum			
<i>Designated beach</i>	235	61	104
<i>Moderately or lightly used area</i>	406	108	276
<i>Infrequently used area</i>	567	151	500

* Numbers are colony forming units per 100ml

Future, revised REC-1 standards. The State Water Board staff will be proposing for Board consideration the adoption of statewide standards for enterococci and *E.coli* reflective of the new USEPA recreational water quality criteria released in November 2012. The 2012 USEPA criteria are based on the most recent science and are intended as guidance to states in developing REC-1 water quality standards. The new criteria do not include tiers based on intensity of use; instead, they recommend a geometric mean and one single sample maximum (called a Statistical Threshold Value). The concept of “use intensity” is therefore no longer used as a basis for multiple levels of objectives. Use intensity is a reasonable basis for different levels of monitoring, however, and the new criteria provide a precautionary value for optional use in monitoring and notification programs; the precautionary value (called a Beach Action Value) is the bacteria level at which a public advisory might be issued. The new USEPA criteria actually provide two sets of numeric thresholds (Tables 2a and 2b). Recommendation 1 provides a level of protection similar to that of existing Basin Plan objectives, and Recommendation 2 provides a slightly greater level of protection.

Table 2a. Recommendation 1 of the 2012 USEPA recreational water quality criteria.*

	Freshwater		Saltwater
	<i>E.coli</i>	Enterococci	Enterococci
Geometric Mean	126	35	35
Statistical Threshold Value	410	130	130
<i>(Optional Beach Action Value)</i>	<i>(235)</i>	<i>(70)</i>	<i>(70)</i>

Table 2b. Recommendation 2 of the 2012 USEPA recreational water quality criteria.*

	Freshwater		Saltwater
	<i>E.coli</i>	Enterococci	Enterococci
Geometric Mean	100	30	30
Statistical Threshold Value	320	110	110
<i>(Optional Beach Action Value)</i>	<i>(190)</i>	<i>(60)</i>	<i>(60)</i>

*Numbers are colony forming units per 100ml

The State Water Board staff is currently reviewing the new USEPA criteria and expects to propose revised REC-1 water quality objectives for public comment in 2013 that correspond to one of the two USEPA recommendations. If adopted as part of a State Water Board Plan, such as the "Water Quality Control Plan for Enclosed Bays and Estuaries of California" or "California Ocean Plan," then the criteria would supersede the San Diego Basin Plan. The State Water Board's revised REC-1 objectives will be the subject of a future Executive Officer Report. Staff will continue work on other suggestions identified during the 2011 Basin Plan Triennial Review.

Existing objectives can be found in Chapter 3 (page 3-7) of the Basin Plan at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml.

A fact sheet on the 2012 USEPA recreational water quality criteria can be found at:

<http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/upload/factsheet2012.pdf>.

Information on the 2011 Basin Plan Triennial Review can be found at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/tri_review.shtml.

3. Enforcement Actions for February 2013

Staff Contact: Chiara Clemente

During the month of February 2013, the San Diego Water Board issued the following enforcement actions:

February 2013 Enforcement Actions	Number
Notices of Noncompliance with Storm Water Enforcement Act of 1998	2
Staff Enforcement Letters	10
<i>Total</i>	<i>12</i>

A summary of recent regional enforcement actions is provided below. Additional information on violations, enforcement actions, and mandatory minimum penalties is available to the public from the following on-line sources:

State Water Board Office of Enforcement webpage at:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/

California Integrated Water Quality System (CIWQS)

http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.shtml

State Water Board GeoTracker database:

<https://geotracker.waterboards.ca.gov/>

Notice of Noncompliance

[Jimenez & Sons Towing LLC-Auto Transport and Storage, San Diego](#)

A Notice of Noncompliance was sent to [Mr. Raudel Jimenez, owner of](#) Jimenez & Sons Towing LLC-Auto Transport and Storage in San Diego, on February 12, 2013 for failure to enroll in the statewide General Industrial Storm Water Permit Order No. 97-03-DWQ, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*. This Notice was the first to inform the discharger that, pursuant to Water Code section 13399.30(a), failure to enroll is subject to mandatory penalties. If a Notice of Intent to enroll is not submitted within 60 days of the first Notice, the violation will be subject to a mandatory penalty of not less than \$5,000 per year of noncompliance plus staff costs pursuant to Water Code section 13399.33.

[All Ways Recycling, El Cajon](#)

A Notice of Noncompliance was also sent to [Mr. Kyle Neal, owner of](#) All Ways Recycling in Cajon, on February 12, 2013 for failure to enroll in the statewide General Industrial Storm Water Permit Order No. 97-03-DWQ, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*. This Notice was the first to inform the discharger that, pursuant to Water Code section 13399.30(a), failure to enroll is subject to mandatory penalties. If a Notice of Intent to enroll is not submitted within 60 days of the first Notice, the violation will be subject to a mandatory penalty of not less than \$5,000 per year of noncompliance plus staff costs pursuant to Water Code section 13399.33.

Staff Enforcement Letters[Olivenhain Municipal Water District, 4S Ranch Water Recycling Facility](#)

A Staff Enforcement Letter (SEL) was issued to the Olivenhain Municipal Water District on February 6, 2013 for violating effluent limits in Waste Discharge Requirements (WDR) of Order No. R9-2003-007. Specifically, the 12-month average discharge limit for Percent Sodium was exceeded on April 4, 2012. Also, the effluent coliform bacteria sample collected on November 7, 2012 exceeded the instantaneous maximum limit of 240 MPN/100 mL.

[City of San Clemente Water Reclamation Plant, San Clemente](#)

An SEL was issued to the City of San Clemente on February 6, 2013 for exceeding the effluent coliform bacteria instantaneous maximum effluent limit of 240 MPN/100 mL contained in WDR Order No. R9-2003-0123, with a value of >16,000 MPN/100 mL on May 14, 2012.

[Southern Region Tertiary Treatment Plant, USMC Camp Pendleton](#)

An SEL was issued to USMC Camp Pendleton on February 6, 2013 for violating effluent limits in WDR Order No. R9-2009-0021. Specifically, the daily maximum discharge specification for chloride, established in the Order as 325 mg/L, was exceeded on August 5, September 3, October 2, and November 4, 2012.

[Staff enforcement letters to Agricultural and Nursery Operations](#)

SELs were sent on February 12, 2013 to four parties ([Anderson](#), [Backstrom](#), [Sibrian](#), and [Walters](#)) identified as not enrolled in the conditional waiver of waste discharge requirements for agricultural and nursery operations (Ag Waiver). The Ag Waiver requires any member who ceases to participate in a monitoring group to file an (individual) Notice of Intent with the San Diego Water Board within 30 days of cessation. The letter stated that identified parties have until March 1, 2013 to notify the Water Board of any changes in their enrollment, ownership, management, or operation.

[Sewage Treatment Plant No. 9, USMC Camp Pendleton](#)

An SEL was issued to USMC Camp Pendleton on February 13, 2013 for effluent and reporting violations of WDR Order No. 98-04 at Sewage Treatment Plant No. 9. Specifically, effluent pH values were reported as 9.1 on both September 5 and 19, 2012, exceeding the instantaneous maximum of 9. Also, effluent pH was not reported for the week of September 20, 2012.

[Sewage Treatment Plant No. 11, USMC Camp Pendleton](#)

An SEL was issued to USMC Camp Pendleton on February 13, 2013 for reporting violations of WDR Order No. 97-13 at Sewage Treatment Plant No. 11. Specifically, effluent biological oxygen demand (BOD) values were not reported for the week of May 16, 2012, and effluent pH was not reported for the week of September 20, 2012.

Sewage Treatment Plant No. 12, USMC Camp Pendleton

An SEL was issued to USMC Camp Pendleton on February 13, 2013 for reporting violations of WDR Order No. 98-05 at Sewage Treatment Plant No. 12. Specifically, effluent BOD values were not reported for the week of May 16, 2012, and effluent pH was not reported for the week of September 20, 2012.

4. Expedited Payment Letters for Public Review

Staff Contact: Chiara Clemente

In February of 2011, the San Diego Water Board endorsed the use of Expedited Payment Letters (EPLs) as an alternative to the formal complaint process for resolving mandatory penalties. An EPL informs the discharger of the alleged violations and associated mandatory penalties, includes an offer to participate in an expedited payment program to avoid formal enforcement by the San Diego Water Board, and explains the process for accepting the offer or contesting certain identified violations. If the discharger agrees to the settlement offer, the signed agreement is publicly noticed for a 30-day comment period to comply with federal regulations regarding settlement of Clean Water Act violations. If after 30 days the Board receives no substantive comments in objection to the settlement agreement, the Executive Officer has the delegated authority to approve and finalize the settlement order.

A list of proposed enforcement actions for public review, including EPLs, is posted on the San Diego Water Board's website at http://www.waterboards.ca.gov/sandiego/water_issues/programs/compliance/acl_complaints.shtml.

The following EPL settlements are currently noticed for 30-day public review.

On February 11, 2013, the Sweetwater Authority accepted [Settlement Offer No. R9-2013-0031](#) for a \$6,000 Mandatory Minimum Penalty (MMP) Administrative Civil Liability (ACL) for two Nickel effluent limit violations of NPDES Order No. R9-2010-0012, NPDES No. CA0108952, from the Richard A. Reynolds Desalination Facility discharge to the Lower Sweetwater River Basin, San Diego County. The penalties are mandatory in accordance with California Water Code Section 13385. Public comments on the settlement are due no later than 5 p.m. on March 29, 2013.

On March 7, 2013, South Orange County Wastewater Authority accepted [Settlement Offer No. R9-2013-0049](#) for a \$3,000 MMP ACL for one settleable solids effluent limit violation of NPDES Order No. R9-2006-0055, NPDES No. CA0107611. The penalty is mandatory in accordance with California Water Code Section 13385. Public comments on the settlement are due no later than 5 p.m. on April 10, 2013.

On March 7, 2013, Mac Cabinetry accepted [Settlement Offer No. R9-2013-0020](#) for a \$1,500 ACL for failing to submit the Fiscal Year 2011-2012 Annual Report in violation of NPDES Order No. 97-03-DWQ, NPDES No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated With Industrial Activities Excluding Construction Activities*. The penalty is mandatory in accordance with California Water Code Section 13399.33. Public comments on the settlement are due no later than 5 p.m. on April 17, 2013.

5. Sanitary Sewer Overflows (SSOs) January – February 2013 (Attachment B-5)

Staff Contact: Chris Means

The following is a summary of the sewage spills occurring during January through February 2013 and reported and certified by February 28, 2013. Sewage collection agencies report Sanitary Sewer Overflows (SSOs) on-line using the State Water Board's CIWQS database pursuant to the requirements of State Water Board Order No. 2006-0003-DWQ (*General Statewide Waste Discharge Requirements for Sewage Collection Agencies*). Reports on sewage spills are available on a real-time basis to the public from the State Water Board's webpage at: <https://ciwqs.waterboards.ca.gov/>.

Public Spills: During January 2013, there were 18 SSOs from public systems in the San Diego Region reported in the CIWQS database. These SSOs included 1 spill of 1,000 gallons or more and 6 spills reaching surface waters, including storm drains. The combined total volume of reported sewage spilled from all publicly-owned collection systems for the month of January 2013 was 7,292 gallons.

During February 2013, there were 16 SSOs from public systems in the San Diego Region reported in the CIWQS database. These SSOs included 6 spills of 1,000 gallons or more and 7 spills that reached surface waters including storm drains. The combined total volume of sewage spills reported from all publicly-owned collection systems for the month of February 2013 was 67,202 gallons.

Reported Private Spills: Thirty five discharges of untreated sewage from private laterals were reported during January through February 2013 by the collection agencies pursuant to San Diego Water Board Order No. R9-2007-0005 (*Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*). These private lateral spills included no spills of 1,000 gallons or more and 10 spills that reached surface waters, including storm drains. The combined total volume of reported sewage discharges from private lateral systems for the months of January through February 2013 was 5,180 gallons.

January – February 2012 and 2013 Comparison:

Month	Rainfall Total (In.)	Public SSOs	Private SSOs
January 2012	0.40	15	15
January 2013	1.21	18	22
February 2012	1.19	15	29
February 2013	0.63	16	13

Attached are three tables titled:

1. “January 2013 Summary of Public Sanitary Sewer Overflows in Region 9”
2. “February 2013 Summary of Public Sanitary Sewer Overflows in Region 9”
3. “Jan - Feb 2013 Summary of Private Lateral Sewage Discharges in Region 9”

Additional information about the San Diego Water Board SSO regulatory program is available at: <http://www.waterboards.ca.gov/sandiego/programs/sso.html>.

6. Recycled Water Annual Summary Report 2012 (*Attachment B-6*)

Staff Contact: Fisayo Osibodu

Every year, the San Diego Water Board surveys recycled water agencies to collect information on production, reuse, and the quality of recycled water in the San Diego Region. This information is analyzed and summarized in the *Recycled Water Annual Summary Report (Report)*. The report for 2012 is included as Attachment B-6 to this Executive Officer's Report. One purpose of the *Report* is to monitor progress in reaching the goals identified in the State's Recycled Water Policy. The *Report* is also designed to 1) raise awareness of the need for recycled water use in the San Diego Region and 2) encourage recycled water producers to take steps to increase the use of recycled water in their service area while maintaining the quality of the water to protect the beneficial uses of groundwater and surface waters of the Region.

The San Diego Region's recycled water agencies used more recycled water in 2012 than 2011. The percent of treated wastewater that was beneficially reused as recycled water increased from 44.6 % in 2011 to 54.8% in 2012 (primarily for landscape irrigation). The number of inspections conducted by recycled water agencies increased from 4,105 to 4,282, with the percent of inspected sites with violations also increasing from 2 percent to 5 percent. The actual number of sites inspected, however, decreased from 2,995 to 2,693. Despite these violations noted at the reuse sites, overall, recycled water quality across the Region met effluent limitations specified in applicable permits. Comparing historical data, there are no discernible trends for individual facilities or constituents, suggesting that the overall quality of recycled water remained consistent for the last two decades. The average total dissolved solids concentration (TDS) in recycled water decreased in 2012, which may have been due to better quality source water.

Chloride and sulfate concentrations in recycled water increased slightly in 2012 (TDS, chloride, and sulfate concentrations in source water decreased in 2012)

Part C – Statewide Issues of Importance to the San Diego Region

1. Drought and Water Supply Update

Staff Contact: Julie Chan

According to the Metropolitan Water District of Southern California, what started as a promising water year in California has turned very dry. The District's March 2013 newsletter reported that although precipitation in November and December was about 200 percent of average in the Northern Sierra, California set a new record for the driest January-February period in recorded history, dating back 90 years.

The Northern Sierra snowpack index, used by the Department of Water Resources (DWR) to calculate runoff and allocate water delivered through the State Water Project, registered only 2.2 inches of precipitation during the first two months of 2013. The average for the period is 17.1 inches. At the beginning of March, snowpack in the Northern Sierra stood at about 60 to 70 percent of normal for this time of year. While the State Water Project allocation remains at 40 percent for now, continuing dry conditions could compel DWR to lower that amount.

Pumping from the Sacramento-San Joaquin Delta has been restricted the past two months to help protect the threatened Delta smelt. About 30 percent of Southern California's total yearly water supplies move across the Delta to State-operated pumps and an aqueduct. At the same time, conditions are no better in the Colorado River Basin, which is in the midst of a 12-year drought. Snowpack in the Upper Colorado River Basin watershed is 78 percent of average, with runoff conditions expected to yield less water because of the dry conditions. Storage in Lake Powell and Lake Mead is at 49 percent and 53 percent of average, respectively.

2. Report to the Legislature on Communities that Rely on a Contaminated Groundwater Source for Drinking Water

Staff Contact: Julie Chan

A significant number of California communities rely on a contaminated groundwater source for their drinking water supply – requiring a comprehensive treatment effort to ensure safe drinking water to the communities. So says a report submitted in February to the Governor and Legislature by the State Water Board. Statewide, 680 of the 3,037 community water systems (22 percent) rely on a contaminated groundwater source for drinking water. In the San Diego Region, this number is 20. Sixteen of those systems serve a population of less than 3,400 people, while four serve populations over 10,000 people. Fifteen of those systems are 100 percent reliant on groundwater. Although many water suppliers draw from contaminated groundwater

sources, most of them are able to treat the water or blend it with cleaner water before serving it to the public. The report also identifies contaminants and chemical constituents in the groundwater, and potential solutions and funding sources to clean up or treat groundwater, or to provide alternative water. For a copy of the report visit:

http://www.waterboards.ca.gov/water_issues/programs/gama/ab2222/index.shtml

Of the 31 principal contaminants identified in the report, arsenic was the most detected naturally-occurring principal contaminant (287 community water systems), and nitrate was the most detected human-caused principal contaminant (205 community water systems). In the San Diego Region, four community water systems had at least two arsenic detections above drinking water standards, and eight community water systems had at least two nitrate detections above drinking water standards. With its abundance of granitic bedrock, the San Diego Region's groundwater is relatively high in radionuclides like uranium. According to the report, nine community water systems had at least two radionuclide detections above drinking water standards.

Groundwater quality information specific to the San Diego Region can be found in publications of the Groundwater Ambient Monitoring and Assessment (GAMA) Program. Rather than wells or community systems affected, the GAMA program reports analyzed the percent of primary aquifers affected by principal contaminants. In the San Diego Region, arsenic and nitrate were present above health benchmarks in only 3 percent of the region's primary aquifers according to the GAMA fact sheet for the San Diego Study Unit. Of greater concern are total dissolved solids (TDS) which are above the upper limit of consumer taste acceptance in 14 percent of the primary aquifers. High TDS levels in groundwater can in part be attributed to the importation of salt in applied irrigation water from the Delta and Colorado River. The GAMA fact sheet can be accessed at http://www.waterboards.ca.gov/gama/docs/san_diego_fs.pdf.

Although groundwater sources can be contaminated, communities typically use a variety of methods to ensure that they deliver safe drinking water. Solutions to address groundwater contamination affecting drinking water supplies fall in to the following three broad categories: 1) pollution prevention or source protection, 2) cleanup contaminated groundwater, and 3) provide safe drinking water through treatment or alternative supplies.

For naturally occurring contaminants like arsenic or radio isotopes, treatment or alternative supplies is typically the only solution available. If a spill or leak has impacted a drinking water well, the San Diego Water Board has moved quickly to expedite cleanups, and compel responsible parties to provide replacement water using Cleanup and Abatement Orders. Non-point source pollutants like nitrates and TDS are being addressed in the San Diego Region through the agricultural and nursery waiver program, TMDL program, and through the stakeholder-led development of Salt and Nutrient Management Plans.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

Significant NPDES Permits,
WDRs, and Actions of the
San Diego Water Board

April 10, 2013

APPENDED TO EXECUTIVE OFFICER'S REPORT

DATE OF REPORT
April 3, 2013

TENTATIVE SCHEDULE
SIGNIFICANT NPDES PERMITS, WDRS, AND ACTIONS
OF THE SAN DIEGO WATER BOARD

Action Agenda Item	Action Type	Draft Complete	Written Comments Due	Consent Item
May 8, 2013 <i>San Diego Water Board Office</i>				
University of California Cooperative Extension Irrigated Lands Education Program (<i>Chan</i>)	Information Item	NA	NA	NA
Informational Item on the University of California, San Diego's Phase II MS4 Permit (<i>Felix</i>)	Information Item	NA	NA	NA
Administrative Civil Liability against the City of San Diego, Sanitary Sewer Overflows to Los Penasquitos Lagoon and the Pacific Ocean (<i>Pulver</i>)	Administrative Civil Liability	100%	10-Apr-13	Maybe
General Permit for Boatyards in the San Diego Region (<i>Schwall</i>)	New NPDES Permit	100%	6-Mar-13	No
June 19, 2013 <i>San Diego Water Board Office</i>				
Addendum to Waste Discharge Requirements for Sycamore Landfill, Inc., San Diego County (<i>Grove</i>)	WDR Addendum	100%	8-May-13	Yes
Rescission of WDRs: Order Rescinding WDRs for Hansons' Aggregate- Otay Plant (Order 94-07) and Shadowridge Wastewater Treatment Plant (Order 93-82) (<i>Kirkendall</i>)	Rescind WDRs	95%	15-May-13	Yes
The Bathymetry of San Diego Bay (<i>Barker</i>)	Information Item	NA	NA	NA
Information Item on San Diego Bay Conditions (<i>Carlisle</i>)	Information Item	NA	NA	NA
US Navy--Naval Base San Diego (including Graving Dock) - San Diego Bay (<i>Schwall</i>)	NPDES Permit Reissuance	80%	28-May-13	No
Total Maximum Daily Loads for the Mouths of Paleta, Chollas and Switzer Creeks (<i>Honma</i>)	Hearing: Basin Plan Amendment	100%	8-Apr-13	No
New Waste Discharge Requirements for Dredging of San Diego Bay in Compliance with the Shipyards Sediment Cleanup Order (<i>Ebsen</i>)	New WDRs	0%	TBD	No
July 2013 <i>No Meeting Scheduled</i>				

January 2013 - Summary of Public Sanitary Sewer Overflows in Region 9										
Responsible Agency	Collection System	Total Number of SSO locations	Total Vol of SSOs (gal)	Total Vol Recovered (gal)	Total Vol Reaching Surface Water	Percent Recovered	Percent Reaching Surface Water	Miles of Pressure Sewer	Miles of Gravity Sewer	Miles of Laterals
Category 1 SSO										
Buena Sanitation District	Buena CS	1	800	800	800	100	100	8	100.9	0
El Toro Water District	El Toro Water District R9 CS	1	50	0	50	0	100	5	142	36
San Diego City	San Diego City CS	4	3,655	2,650	1,005	72	27	145	3,002	2,000
Category 2 SSO										
Carlsbad MWD	Carlsbad MWD CS	1	20	20	0	100	0	4.8	282	0
Eastern Municipal Water District	Temecula Valley RCS	1	55	50	0	90	0	22	457	1
Escondido City	Harrf Disch To San Elijo CS	1	750	750	0	100	0	10	370	0
La Mesa City	City Of La Mesa CS	3	195	160	0	82	0	0	155	0
Laguna Beach City	City Of Laguna Beach CS	1	1	0	0	0	0	4.5	95	0
Rancho California Water Dist	Santa Rosa WRF CS	1	845	0	0	0	0	4	80	1
San Diego City	San Diego City CS	2	671	170	0	25	0	145	3002	2000
UC San Diego	University Of California, San Diego CS	2	250	50	0	20	0	0.5	25	3
TOTALS		18	7292	4650	1855			348.8	7710.9	4041

CS = Collection System

Category 1 SSO = All discharges of sewage from a sanitary sewer system that exceed 1000 gallons, or result in a discharge to a surface water, or discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

Category 2 SSO = All other discharges of sewage resulting from a failure in the sanitary sewer system

February 2013 - Summary of Public Sanitary Sewer Overflows in Region 9										
Responsible Agency	Collection System	Total Number of SSO locations	Total Vol of SSOs (gal)	Total Vol Recovered (gal)	Total Vol Reaching Surface Water	Percent Recovered	Percent Reaching Surface Water	Miles of Pressure Sewer	Miles of Gravity Sewer	Miles of Laterals
Category 1 SSO										
Imperial Beach City	City Of Imperial Beach CS	1	5,760	60	5,700	1	98	4.4	39.5	0.3
Leucadia Wastewater District	Leucadia Wastewater District CS	1	22,000	2,800	800	12	3	16.67	200	0
Oceanside PWD	La Salina WWTP, Oceanside Offl CS	2	17,550	12,200	5,350	69	30	35.6	439.7	0
San Diego City	San Diego City CS	1	2,575	1,600	975	62	37	145	3,002	2,000
Vista City	City Of Vista CS	2	17,750	17,750	17,750	100	100	0	215.1	0
Category 2 SSO										
Carlsbad MWD	Carlsbad MWD CS	1	100	0	0	0	0	4.8	282	0
Coronado City	City Of Coronado CS	2	40	40	0	100	0	6.6	39	1
Escondido City	Harrf Disch To San Elijo CS	2	1,210	1,210	0	100	0	10.7	370	0
La Mesa City	City Of La Mesa CS	3	67	22	0	32	0	0	155	0
San Diego City	San Diego City CS	1	150	0	0	0	0	145	3002	2000
TOTALS		16	67202	35682	30575			368.97	7744.3	4001.3

CS = Collection System

Category 1 SSO = All discharges of sewage from a sanitary sewer system that exceed 1000 gallons, or result in a discharge to a surface water, or discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

Category 2 SSO = All other discharges of sewage resulting from a failure in the sanitary sewer system

January and February 2013 - Summary of Private Lateral Sewage Discharges in Region 9								
Reporting Agency	Collection System	Total Number of PLSD locations	Total Vol of PLSDs (gal)	Total Vol Recovered (gal)	Total Vol Reaching Surface Water	Percent Recovered	Percent Reaching Surface Water	Miles of Private Lateral
Category 1 PLSD								
El Cajon City	City of El Cajon CS	4	937	525	412	56	43	226
Imperial Beach City	City of Imperial Beach CS	1	223	50	173	22	77	103
National City	City of National City CS	1	100	0	0	0	0	48
San Clemente City	City of San Clemente CS	1	714	714	108	100	15	0
San Diego City	San Diego City CS	2	69	20	49	28	71	4,049
Santa Margarita Water Dist	Santa Margarita Water District CS	1	700	0	1,900	0	271	331
Category 2 PLSD								
Coronado City	City of Coronado CS	1	15	15	0	100	0	50
Chula Vista City	City of Chula Vista CS	1	10	10	0	100	0	0
El Cajon City	City of El Cajon CS	1	15	15	0	100	0	226
Encinitas City	City of Encinitas CS	2	60	30	0	50	0	0
Escondido City	Harrf Disch to San Elijo CS	1	30	30	0	100	0	83.2
Imperial Beach City	City Of Imperial Beach CS	2	50	50	0	100	0	103
La Mesa City	City of La Mesa CS	4	663	150	0	22	0	73
Laguna Beach City	City of Laguna Beach CS	1	3	3	0	100	0	102
Leucadia Wastewater District	Leucadia Wastewater District CS	3	16	11	1	68	6	300
Padre Dam Municipal Water District	Padre Dam CS	3	965	965	0	100	0	0
Poway City	City Of Poway CS	3	175	15	0	8	0	127
San Diego City	San Diego City CS	2	285	285	0	100	0	4,049
South Coast Water District	South Coast Water District CS	1	150	150	0	100	0	150
TOTAL		35	5180	3038	2643			10020.2

PLSD = Private Lateral Sewage Discharge

Category 1 PLSD = All discharges of sewage from a private sewer lateral that exceed 1000 gallons, or result in a discharge to a surface water, or discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

Category 2 PLSD= All other discharges of sewage resulting from a failure of a private sewer lateral

California Regional Water Quality Control Board San Diego Region Annual Recycled Water Summary Report 2012

California must diversify its water supply sources to meet the needs of a growing population. Importing water is not sustainable due to droughts, climate change, and complex legal issues. The State Water Board determined that managing a diverse water supply can help alleviate the problems. The State's Recycled Water Policy includes the goals of increasing total recycled water use in California by 1 million acre-feet per year by 2020, and by 2 million acre-feet per year by 2030. "Recycled water use" is defined as a use that replaces the use of potable water. For reference, the average family of four uses 0.45 acre-feet (ac-ft) of water each year.

One purpose of the San Diego Water Board's *Annual Recycled Water Summary Report* is to monitor progress in reaching the goals identified in the State's Recycled Water Policy. The Report also provides an analysis and summary of information on the production, reuse, and quality of recycled water in the San Diego Region. Information analyzed in the report comes from surveys of recycled water agencies. The *Recycled Water Annual Summary Report* is designed to 1) raise awareness of the need for recycled water use in the San Diego Region and 2) encourage recycled water producers to take steps to increase the use of recycled water in their service area while maintaining the quality of the water to protect the beneficial uses of groundwater and surface waters of the San Diego Region.

The San Diego Region's recycled water agencies produced and beneficially reused more recycled water in 2012 than 2011. About 54.8 percent of treated wastewater produced was beneficially reused as recycled water in 2012. Twenty nine of the San Diego Region's 39 recycled water facilities reported that they treated approximately 105,000 acre feet (ac-ft) of wastewater, of which approximately 57,000 ac-ft of recycled water was beneficially reused, with the remaining volume either sent to the ocean for disposal or stored. The volume of recycled water that was reported as reused in the Region increased by 8,000 ac-ft from approximately 49,000 ac-ft in 2011 to 57,000 ac-ft in 2012. The percentage of treated wastewater beneficially reused as recycled water also increased from 44.6 percent in 2011 to 54.8 percent in 2012.

The San Diego Water Board regulates the production and discharge of recycled water through waste discharge requirements, Master Reclamation Permits, Water Reclamation Requirements (collectively referred to as "permits"), and waivers of waste discharge requirements. The Master Reclamation Permits are a tool intended to promote recycled water use by allowing the producer to regulate its users, rather than requiring each user to obtain separate requirements from the San Diego Water Board or the State Water Board.

The San Diego Water Board also collected information on the use type, use location, and compliance with permits. The number of reported use sites increased by 16 from

4,360 in 2011 to 4,376 in 2012. Although the number of inspections conducted by recycled water providers increased from 4,105 in 2011 to 4,282 in 2012, the number of sites inspected decreased from 2,995 to 2,693. The number of violations identified during the inspections, however, increased. In 2011, 2,995 sites were inspected with 341 violations identified at 53 sites; while in 2012, 2,693 sites were inspected, with 605 violations identified at 142 sites. The percent of inspected sites with violations also increased slightly from 2 to 5 percent.

Overall recycled water quality met discharge specifications across the Region, despite the violations noted above. The water quality data indicates that the average concentration of total dissolved solids (TDS), chloride, and sulfate in the source water decreased from 2011 to 2012. There was also a corresponding decrease in the average concentration of TDS in recycled water. Other constituents that showed decreased concentrations in recycled water from 2011 to 2012 were nitrate, total nitrogen, manganese, methylene blue-activated substances, and color. Concentrations of chloride, sulfate, fluoride, iron, percent sodium, boron, and turbidity, however increased from 2011 to 2012. Data for 16 of the wastewater treatment facilities from 2009 to 2012 were compared. The concentrations for 2009 to 2012 were generally within the range of historical data. Furthermore there are no discernible trends for individual facilities or constituents, suggesting that the overall quality of recycled water remained consistent for the last two decades.

The San Diego Water Board gathered data for this report from voluntary and required annual reports. All comparisons are approximations due to inconsistent methods of measuring, reporting and gathering data. In addition, volumes and percentages of recycled water produced and distributed may vary due to storage conditions and due to instances of production/distribution between agencies and jurisdictional areas of the San Diego and Santa Ana Water Boards.

ATTACHMENT B-6b- RECYCLED WATER ANNUAL SUMMARY 2012
Data Tables and Charts

Recycled Water Facility Production

	# of Facilities Reporting	Permitted Flow (mgd)	Total Vol. Treated (ac-ft)	Volume Disposed (ac-ft)	Volume Reused (ac-ft)	Percent Reused (ac-ft)
2009	29	146.9	104,777	49,376	54,928	52.4%
2010	27	148.8	74,043	32,449	41,594	56.2%
2011	30	145.6	109,764	62,913	48,955	44.6%
2012	29	155.9	104,791	38,480	57,397	54.8%

RECYCLED WATER USE SITE SURVEY

Reported User Data

Year	# of Sites	Total Reuse (ac-ft)	Average Reuse (ac-ft)	Median Reuse (ac-ft)	# Inspections	# Sites Inspected	# Violations	# Sites with Violations
2009	3,981	40,764	10.2	3.8	4,403	2,303	405	72
2010	4,095	42,142	10.3	3.2	3,380	2,430	66	33
2011	4,360	42,415	9.7	2.9	4,105	2,995	341	53
2012	4,376	55,069	12.6	3.2*	4,282	2,693	605	142

* median calculation does not include data from Moulton Niguel Water District

Volume of Recycled Water by Hydrologic Area (Ac-ft)

Year	901 San Juan	902 Santa Margarita	903 San Luis Rey	904 Carlsbad	905 San Diego	906 Penasquitos	907 San Diego	908 Pueblo	909 Sweet-water	910 Otay	911 Tijuana
2009	14,539	2,917	313	4,827	2,839	7,413	1,346	0	1,661	2,815	1,477
2010	13,919	2,968	1,074	5,895	3,085	6,473	678	0	1,237	2,372	NR
2011	12,425	5,676	1,101	3,600	2,693	7,677	687	0	1,269	2,396	4,582
2012	10,235	6,421	1,351	8,311	3,299	12,744	1,296	0	2,308	4,458	4,644

NR: Not reported

ATTACHMENT B-6b- RECYCLED WATER ANNUAL SUMMARY 2012
Data Tables and Charts

SOURCE AND RECYCLED WATER QUALITY

Average Source Water Quality

Year	TDS (mg/L)	Chloride (mg/L)	Sulfate (mg/L)
2009	685	126	211
2010	666	125	203
2011	578	120	150
2012	440	83	135

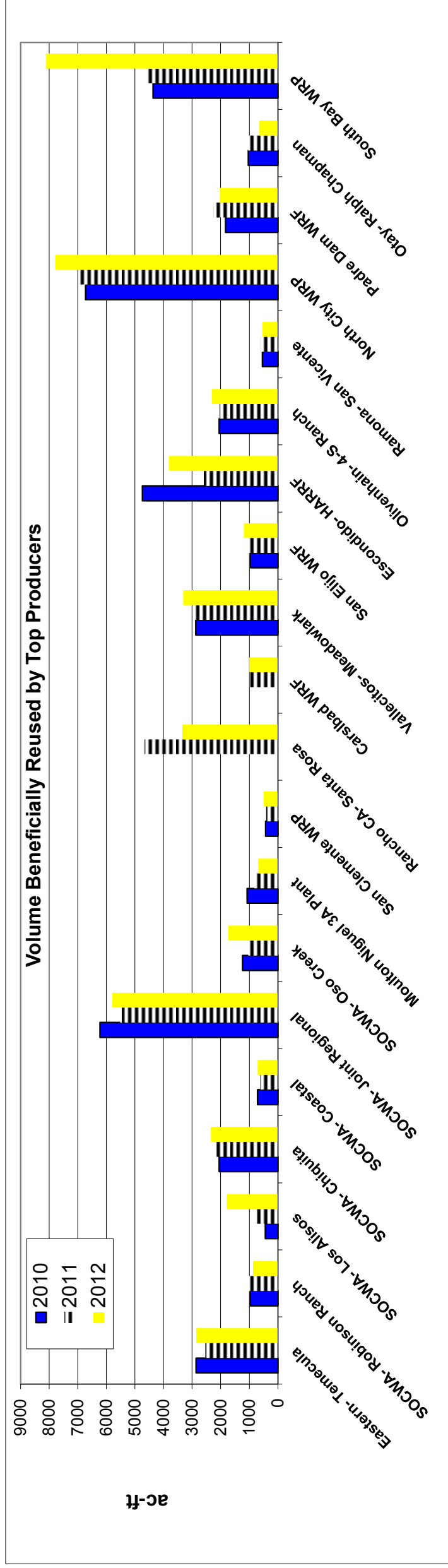
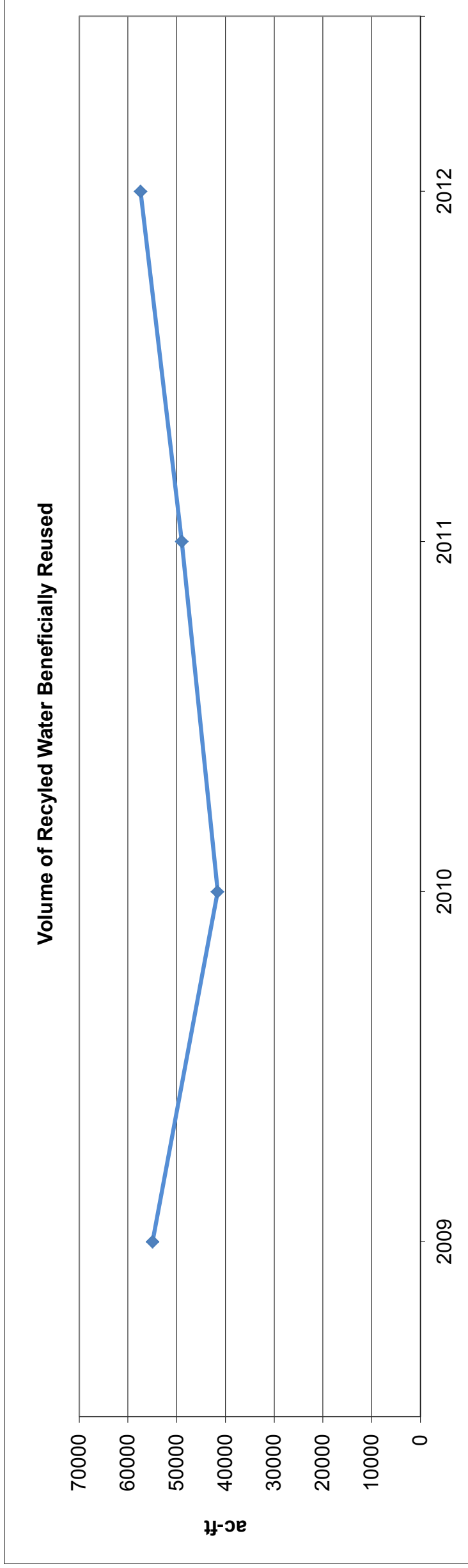
Average Recycled Water Quality

Year	TDS (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Percent Sodium (%)	Nitrate (mg/L)	Total Nitrogen (mg/L)	Iron (mg/L)	Manganese (mg/L)	MBAS (mg/L)	Boron (mg/L)	Turbidity Daily Avg (NTU)	Color (Units)	Fluoride (mg/L)
2009	917	224	245	49.3	18.0	7.4	0.11	0.04	0.16	0.38	1.0	6	0.75
2010	902	219	229	48.7	15.4	16.2	0.12	0.04	0.15	0.38	1.1	11	0.62
2011	796	208	186	48.3	16.6	11.5	0.12	0.05	0.14	0.37	0.9	12	0.62
2012	775	209	188	51.0	11.0	10.3	0.83	0.04	0.13	0.41	1.0	11	0.68

TDS= Total dissolved solids; MBAS= Methylene blue-activated substances

ATTACHMENT B-6b-RECYCLED WATER ANNUAL SUMMARY 2012

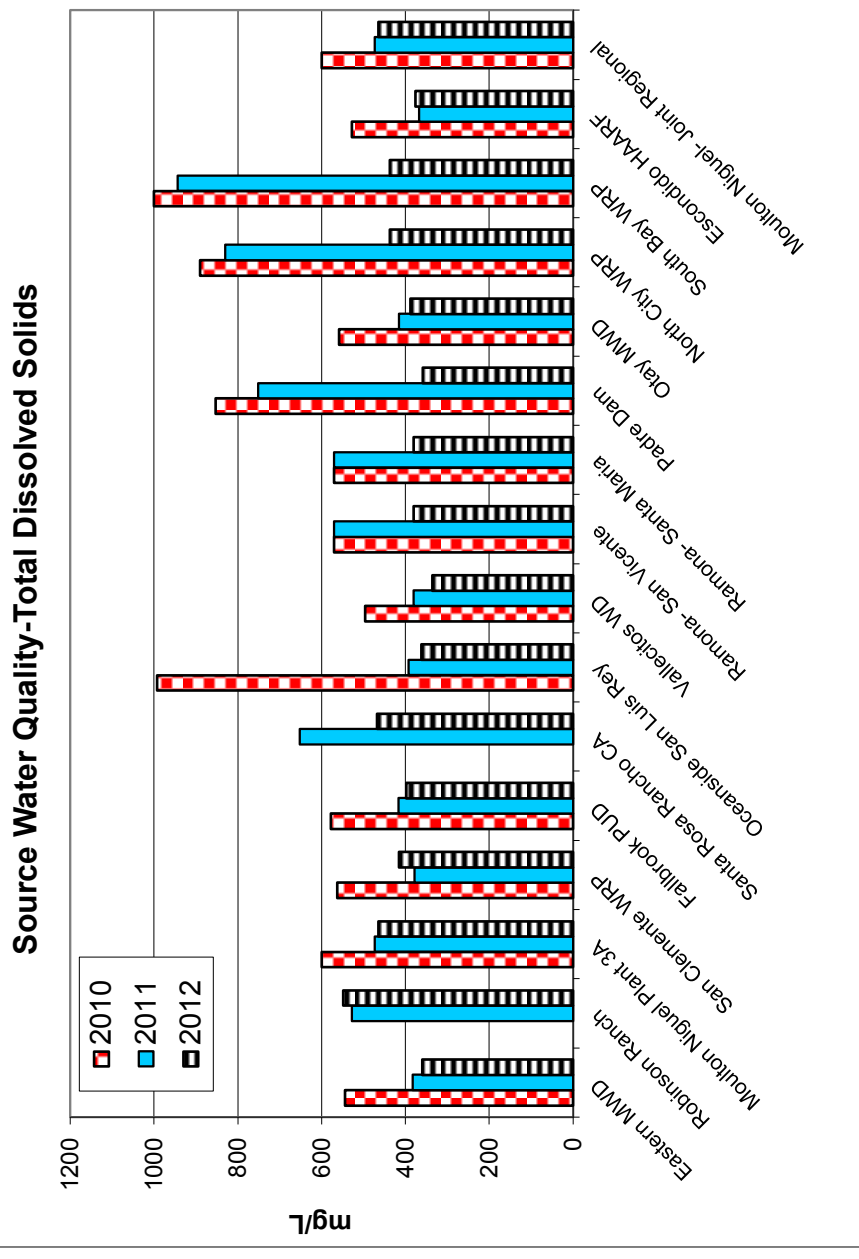
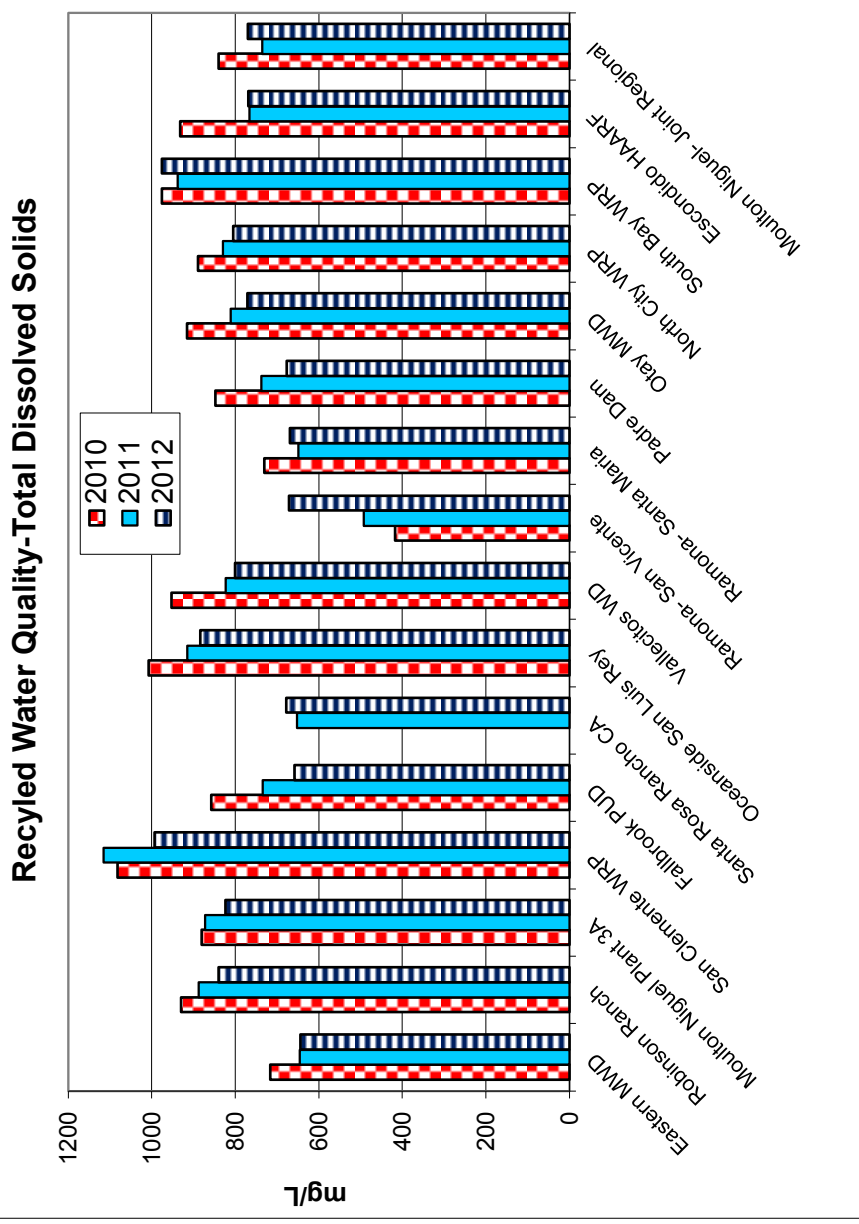
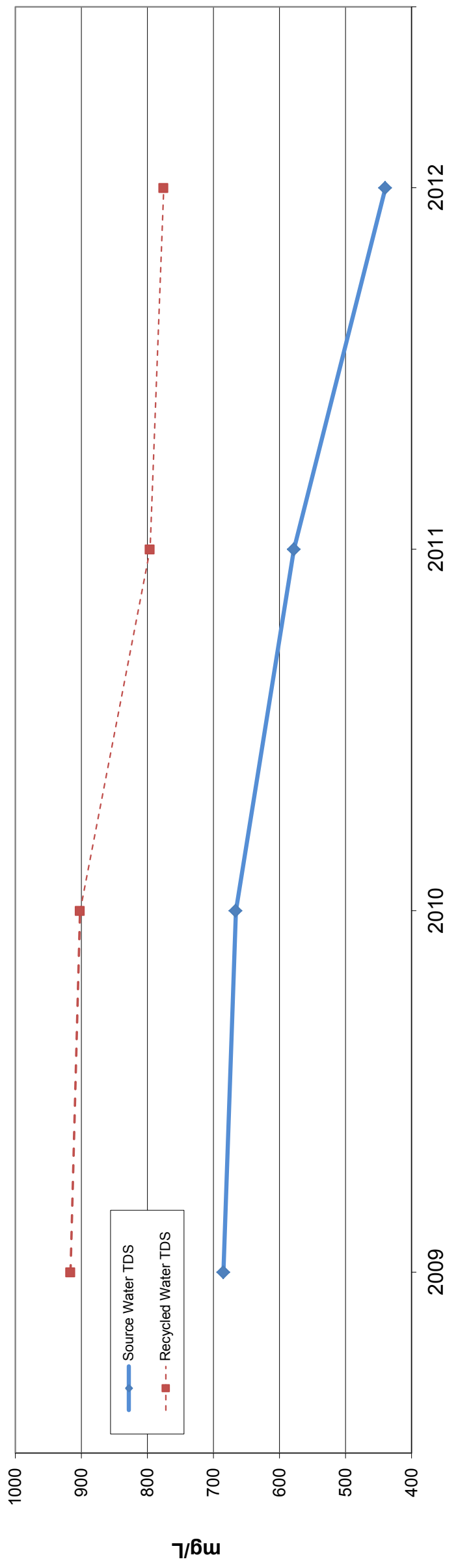
Data Tables and Charts



ATTACHMENT B-6b-RECYCLED WATER ANNUAL SUMMARY 2012

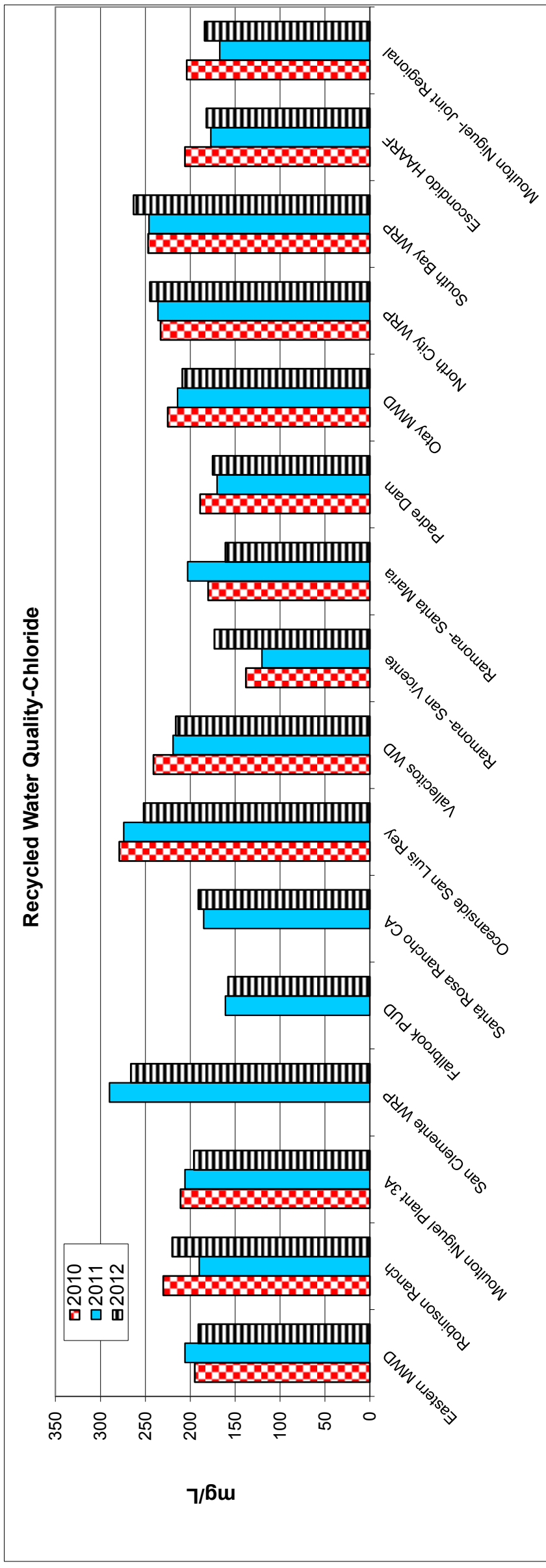
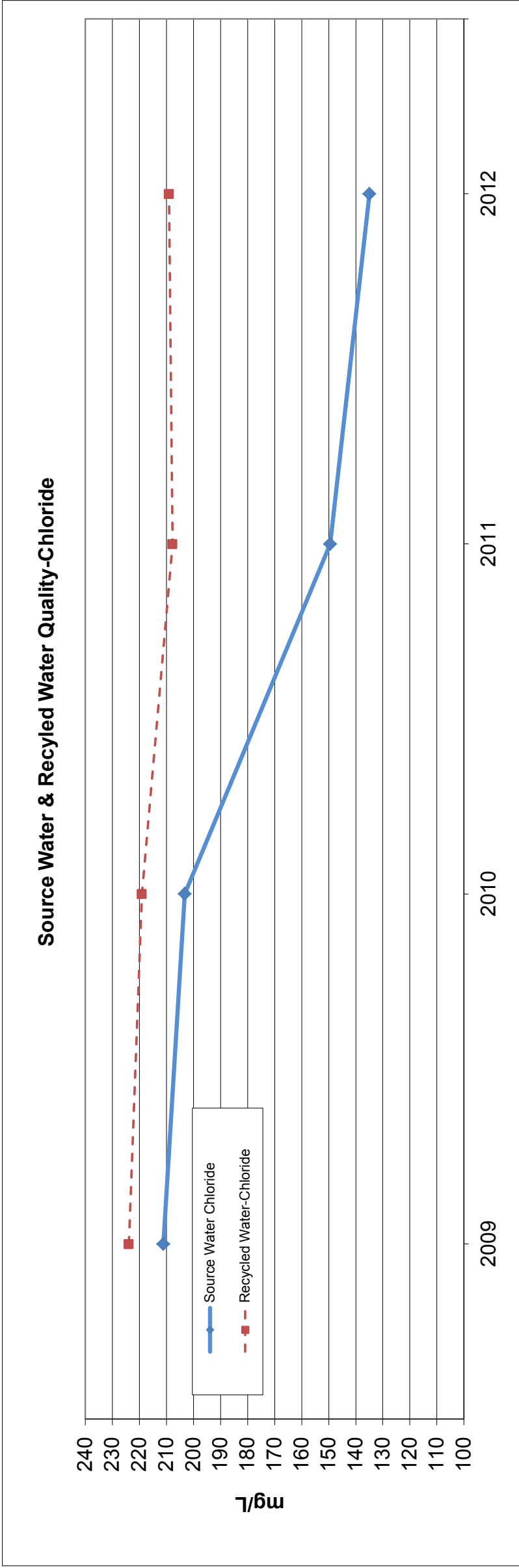
Data Tables and Charts

Source Water & Recycled Water Quality-Total Dissolved Solids



ATTACHMENT B-6b-RECYCLED WATER ANNUAL SUMMARY 2012

Data Tables and Charts



ATTACHMENT B-6b-RECYCLED WATER ANNUAL SUMMARY 2012

Data Tables and Charts

