

San Diego River Watershed Management Plan

Draft Water Quality Report Outline

1.0 Introduction - Purpose of report

- Description of water resources, sub-basins, and receiving waters
 - *Figure. Hydrologic map*
 - *Figure. Major sub-basins*
 - *Figure. Major receiving waters*
 - *Figure. Major groundwater basins*
- Beneficial Uses
- *Figure/Table. Beneficial uses of the watershed per the Basin Plan*
- Biological – Qualitative discussion of impacts from poor water quality/quantity
- Identify known constituents of concern (COCs)
 - 303(d) listings (*Table 1, Figure*)
 - 303(d) monitoring list (*Table 2, Figure*)

2.0 River and Stream Monitoring

- Non-point NPDES monitoring
 - Stormwater and Dry weather monitoring
 - Coastal outfall monitoring
 - Focused monitoring programs: e.g. San Diego River bacteriological surveys
 - Urban stream bioassessment
 - Citizen's Group Monitoring
- Point Source NPDES discharge monitoring
 - Padre Dam MWD
- USGS flow/water quality monitoring
 - Figure. Existing Surface Water quality monitoring stations*
 - Figure. Existing Dry Weather Monitoring Stations*
 - Figure. Existing Hydrologic monitoring stations (USGS, County Alert System)*

3.0 Source Water Evaluations

Water Supply Overview

- Municipal water supply use represents a major beneficial use of surface waters within San Diego River watershed
- Municipal water supply is derived from a number of reservoirs within the San Diego watershed
- Review principal water supply reservoirs and operating agencies
 - San Vicente (City of San Diego)
 - El Capitan (City of San Diego)
 - Lake Murray (City of San Diego)
 - Lake Jennings (Helix Water District)
- Water agency operations
 - Review Helix Water District reservoir operations and water transfer options
 - Review City of San Diego reservoir operations, reservoir interconnections, water transfer options, and operational flexibility

- Review importance of reservoirs in watershed hydrology
 - San Vicente and El Capitan are the most important reservoirs from standpoint of watershed size and the potential for being influenced by upstream activities
 - San Vicente and El Capitan are the most important reservoirs from the standpoint of influencing downstream water quality and flows

Water Supply Monitoring Programs

- Lake Jennings (Helix Water District)
 - Flow transfers
 - Water levels and storage
 - Water quality monitoring data
- Lake Murray (City of San Diego)
 - Flow transfers
 - Water levels and storage
 - Water quality monitoring data
- San Vicente Reservoir (City of San Diego)
 - Flow transfers
 - Water levels and storage
 - Water quality monitoring data
- El Capitan Reservoir (City of San Diego)
 - Flow transfers
 - Water levels and storage
 - Water quality monitoring data

FIGURE – Location of Reservoir Water Quality Monitoring Stations

(This could be part of a figure that shows all surface water quality monitoring locations)

Watershed Sanitary Surveys

- Purpose and objectives of sanitary surveys
- Information assessed in sanitary surveys
- City of San Diego sanitary surveys
- Helix Water District sanitary surveys

4.0 Groundwater Monitoring

Groundwater Supply Overview

- Overview of existing groundwater use in basin
 - Municipal water supply (agencies and annual use)
 1. Padre Dam MWD
 2. City of San Diego
 3. Lakeside Water District
 4. Riverview Water District
 5. Helix Water District
 6. Ramona MWD
 7. Poway Water District
 8. Cuyamaca Water District
 9. Native American Organizations
 - Private well owners (uses and estimated annual use)
 - Hazardous material impacts to groundwater (MTBE/fuel leaks, other contaminants)

Note organized monitoring is by municipal agencies and outside agencies
FIGURE – Superimpose Water Agency Boundaries over Major Groundwater Basins
FIGURE – Superimpose Location of Known Wells over Major Groundwater Basins

Water Supply Agency Groundwater Monitoring

- Water supply well monitoring
 - City of San Diego
 - Lakeside Water District
 - Riverview Water District
 - Helix Water District
- Source water assessments
 - City of San Diego
 - Lakeside Water District
 - Riverview Water District
 - Helix Water District
- Special interagency studies
 - SDCWA Emergency storage project
 - SDCWA Groundwater study
 - Padre Dam MWD Integrated Water Use
- Groundwater monitoring
 - Groundwater quality
 - Groundwater levels

Figure. Key Groundwater monitoring well locations

5.0 Evaluation of Monitoring Program Data and Identification of Data Gaps

Table. Matrix of monitoring activities

<i>Type of monitoring/location</i>	<i>Agency</i>	<i>Parameters</i>	<i>Frequency</i>	<i>Duration</i>
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- Surface water - Evaluation of COCs, Evaluation of hydrologic monitoring, data gaps
 - Discussion of runoff coefficient models and NURMP data
- Groundwater Evaluation of COCs, data gaps

Tables and Figures as-needed (Recommended monitoring stations, etc).

6.0 Monitoring Data Management

- Identify existing databases used in the watershed
- Identify data management and analysis tools for the future

7.0 Summary and Conclusions

Provide conceptual model of hydrologic system and water quality threats/impacts