

UPDATE ON TOTAL MAXIMUM DAILY LOADS AND STORMWATER QUALITY ISSUES IN THE CITY OF RIVERSIDE

Public Works Department

Utility Services/Land Use/Energy Development Committee
December 10, 2018

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BACKGROUND

At the September 10, 2018 meeting of the Utility Services/Land Use/Energy Development Committee, Chair MacArthur requested an update on water issues in runoff to the Santa Ana River and Greenbelt.



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TOTAL MAXIMUM DAILY LOAD

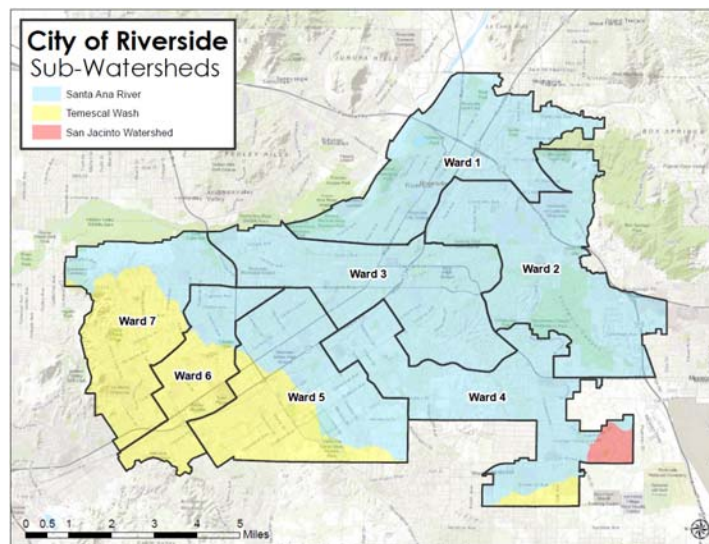
1. A Total Maximum Daily Load (TMDL) establishes the maximum amount of a pollutant that a waterbody can receive and still meet water quality objectives;
2. TMDLs have been established for:
 - a. Middle Santa Ana River – Bacterial Indicators
 - b. Lake Elsinore/Canyon Lake - Nutrients



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WATERSHEDS



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LAKE ELSINORE/CANYON LAKE NUTRIENT TMDL

1. Approved by the EPA in 2005;
2. LE/CL TMDL Task Force created in 2005 to coordinate and share costs among all stakeholders.



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LE/CL TMDL REVISION

1. Current TMDL established unachievable objectives;
2. 2016 – TMDL revision commenced; and
3. New draft TMDL takes into account drought conditions and history of low water levels.

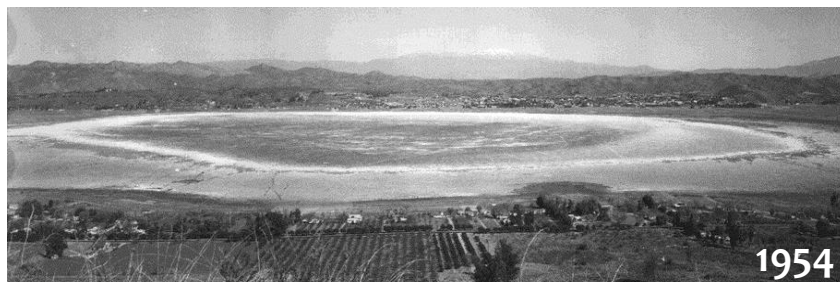


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LAKE ELSINORE – WATER LEVEL FLUCTUATIONS



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CANYON LAKE – ALUM APPLICATIONS



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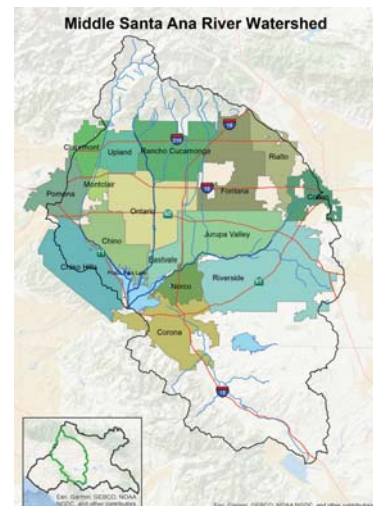


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MONITORING

1. 2011 – Tier 1 Monitoring – 34 locations, 8 in Riverside:

- a. 4 sites – No Flow
 - a. Phoenix
 - b. Magnolia Center
 - c. Tequesquite Channel
- b. 3 sites – Low Priority
 - a. Phoenix
 - b. Magnolia Center
 - c. Tequesquite Channel
- c. 1 site – High Priority
 - a. Hole Lake



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MONITORING (CONT.)

2. Additional monitoring upstream of Tier 1 sites:

- a. Investigations on controllable (human origin) vs uncontrollable (native animals) sources;
- b. DNA analysis;
- c. Questions about impact of homeless encampments; and
- d. Moderate Successes:
 - a. Small sources found and eliminated; and
 - b. Water conservation efforts.



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MSAR BACTERIA TMDL – ARLINGTON GREENBELT

1. Significant runoff from agricultural activities;
2. Much of the area drains to Hole Lake (High Priority);
3. City and Task Force have been proactive in trying to find sources of bacterial indicators; and
4. City lacks jurisdiction to regulate agricultural discharges.



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MSAR BACTERIA TMDL – AUDIT

1. January – May 2018;
2. No Violations;
3. Focus on homeless encampments;
4. Suggested:
 - a. Better internal communication; and
 - b. Document policies and procedures



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MSAR – POTENTIAL FUTURE ACTIONS

1. Increased monitoring and source elimination;
2. Dry weather runoff diversion to the sanitary sewer; and
3. Capture of dry weather flows.



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RECOMMENDATIONS

That the Utility Services/Land Use/Energy Development Committee:

1. Receive an update on total maximum daily loads and stormwater quality issues; and
2. Provide direction/input on potential future actions.

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