

Draft TMDL for Algae, Eutrophic Conditions, and Nutrients

Ventura River and Its Tributaries

**Presentation for
Ventura River Watershed Council**

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Numeric Targets

Indicator	Numeric Target	Water body
Total Algal Biomass	150 mg/m ² chlorophyll <i>a</i> as seasonal average	Ventura River and Tributaries
Macroalgal Cover (attached & unattached)	≤ 30 percent as seasonal average	Ventura River and Tributaries
Phytoplankton Biomass	20 µg/L chlorophyll <i>a</i> as seasonal average	Estuary (shallow subtidal area)
Macroalgal Cover	≤ 15 percent as seasonal average	Estuary (intertidal and shallow subtidal areas)
Dissolved Oxygen	≥ 7 mg/L as a daily minimum	Ventura River, Tributaries and Estuary
pH	6.5 – 8.5 (instantaneous value)	Ventura River, Tributaries, and Estuary



Responsible Parties

- TMDL Section “RPs” is missing
- Allocations are assigned to:
 - Ventura MS4,
 - Caltrans,
 - Ojai Valley WWTP,
 - Agriculture,
 - Horse/Intensive Livestock,
 - General industrial and construction stormwater Permittees,
 - OWTs (septic tanks), and
 - Other NPDES Permittees.

Dry-weather Allocations

Dischargers	% TN Reduction	% TP Reduction
Ventura MS4s	50%	50%
Caltrans	50%	50%
Ojai Valley WWTP	49%	28%
Agriculture	50%	50%
Horse/Intensive Livestock	99%	99%
General industrial and construction SW Permittees	*1.15 mg/L in-stream	*0.115 mg/L in-stream
OWTS	50%	n/a
Other NPDES Permittees	*1.15 mg/L in-stream	*0.115 mg/L in-stream
Grazing Activities	10%	10%

Wet-weather Allocations

- Stormwater, Agriculture, and Horse/Livestock Sources:

Reach	Nitrate-N + Nitrite-N (mg/L)
Estuary	4.6* (TN), 10**
Reach 1	4.6* (TN), 10**
Reach 2	10
Cañada Larga	10
Reach 3	5
San Antonio Creek	5
Reach 4	5
Reach 5	5

*WLAs for stormwater are equal to 4.6 mg/ L TN and WLAs for agriculture and horse/livestock sources are equal to 10 mg/L nitrate-N + nitrite-N.



Wet-weather Allocations

- Ojai Valley WWTP:

TN (mg/L)	TP (mg/L)
7.6	2.6
- OWTS: 50% load reduction
- Other NPDES Permittee:

Reach	Nitrate-N + Nitrite-N (mg/L)
Estuary	N/A
Reach 1	N/A
Reach 2	10
Cañada Larga	10
Reach 3	5
San Antonio Creek	5
Reach 4	5
Reach 5	5



Monitoring Requirements

- Receiving Water Monitoring:

Parameter	Frequency
Total algal biomass, pre-dawn DO	Early and late (2 times) in the growing season (May - Sept.)
Algal percent cover	Monthly
Nutrients (total and dissolved)	Monthly
<i>in situ</i> water quality parameters (DO, pH, temperature, electrical conductivity)	Monthly
Flow	Monthly

- Discharge monitoring to assess attainment of the WLAs and LAs;



Optional Special Studies

- Build upon the algal biomass and total nitrogen relationship established in the 2008 UCSB Study (UCSB, 2009) and collect data to support the establishment of reach-specific relationships.
 - Confirm the conclusion that an algal biomass target of 150 mg/m² is fully protective of aquatic life and minimizes the risk of low DO events.
 - Collect additional source assessment information and model input data to refine model-predicted relationships between watershed loading and in-stream nutrient concentrations.
 - Investigate the influence of OWTS on surface water quality.
 - Collect data to support development of an estuary model, which takes into account tidal influence, the dynamics of macroalgae and phytoplankton growth, residence time, and breaching conditions.
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- Submit results 3 yrs after TMDL effective date

TMDL Implementation Plan

Discharger	RW MP Submittal	IP Submittal	Dry Weather Allocations	Wet Weather Allocations
Ojai Valley WWTP	1 yr	N/A	Interim: TMDL date Final: 10 yrs	TMDL date
Ventura MS4s	1 yr	2 yrs	6 yrs	TMDL date
Caltrans	1 yr	2 yrs	6 yrs	TMDL date
Agriculture	1 yr	N/A	6 yrs	6 years
Horses/Intensive Livestock	5 yrs	N/A	10 yrs	10 years
OWTS	N/A	N/A	10 yrs	10 years
General Industrial & Construction SW Permittees, Other NPDES Permits	Per Permit	N/A	TMDL date	TMDL date



TMDL Adoption Schedule

- Draft TMDL released on July 20, 2012
- Public Comment Period
 - LARWQCB: July 20- Sept. 4, and
 - U.S. EPA: July 27-Sept. 4
- Written Comments due 5 pm on Sept. 4, 2012 to LARWQCB
- LARWQCB Hearing on Oct. 4, 2012 in Simi Valley, CA
- If adopted by LARWQCB, next SWRCB, OAL, U.S. EPA adoption/approvals
- Consent Decree's deadline is March 24, 2013



Any Questions?

- Contact

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- For More information, visit

<http://www.waterboards.ca.gov/losangeles/>