

Water Quality Report Card

Regional Water Board:	Central Coast, Region 3
Beneficial Uses Affected:	MUN, AGR
Implemented Through:	Conditional Waiver of WDRs
Effective Date:	March 7, 2014 (TMDL)
Attainment Date:	October 2016

Nitrates in Glen Annie Canyon Creek Watershed

STATUS	<input checked="" type="checkbox"/> Conditions Improving
Pollutant Type:	<input checked="" type="checkbox"/> Nonpoint Source
Pollutant Source:	Irrigated Crop Production

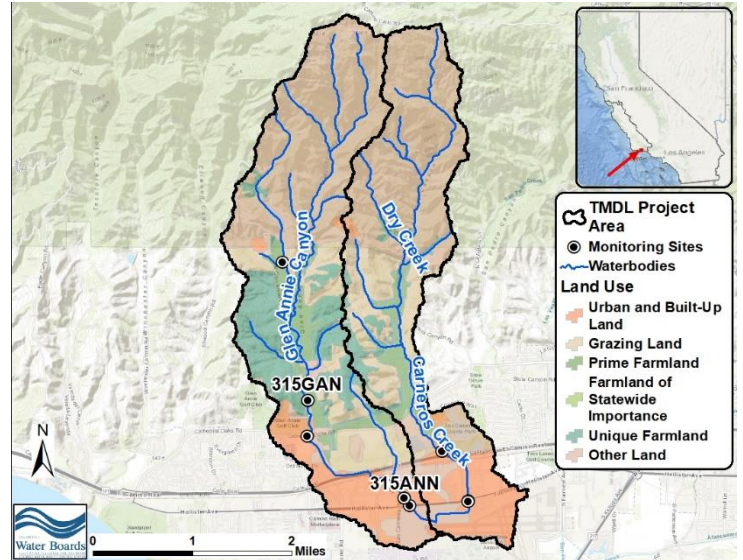
Water Quality Improvement Strategy

The Glen Annie Canyon Creek Watershed is approximately 3,500 acres located in Santa Barbara County. The watershed is a south trending drainage extending from the southern face of the Santa Ynez Mountains, through the City of Goleta and Goleta Slough, and into the Pacific Ocean. Primary land uses in the watershed are characterized by shrub/scrub and forested lands in the upper watershed, cultivated crops and grazing in the middle watershed, and low and medium density development in the lower portions of the watershed. Glen Annie is on the [Clean Water Act Section 303\(d\) List](#) of polluted waters due to exceedances of nitrate levels protective of both municipal/domestic supply and agricultural supply beneficial uses. Discharges from irrigated agriculture were established as the primary controllable source of nitrate pollution within this watershed. The [Glen Annie Canyon, Tecolotito Creek, and Carneros Creek Nitrate TMDL](#) was approved in March 2014 to address the impairments. The Total Maximum Daily Load (TMDL) establishes numeric targets and load allocations for nitrate as nitrogen. For this report, nitrate as nitrogen is comparable to joint nitrate + nitrite as nitrogen because nitrite generally comprises less than one percent of the joint nitrate/nitrite concentrations. The 2017 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Agricultural Order) implements the TMDL.

TMDL Load and Wasteload Allocations

Waterbodies Assigned TMDLs (including all tributaries)	Responsible Parties Assigned TMDLs (Source)	Receiving Water Allocation
Glen Annie Canyon Carneros Creek Tecolotito Creek	Owners/operators of irrigated agricultural lands (Irrigated lands discharges)	10 mg/L Nitrate as N

Glen Annie Canyon Creek Watershed Map



Water Quality Outcomes

- Nitrate concentrations show improvements in reaching the TMDL allocation (10 mg/L Nitrate as N), but routinely exceed the objective at the upper watershed site (315GAN).
- Nitrate concentrations now meet the water quality objective for agricultural supply (30 mg/L Nitrate as N).
- There are a limited number of water quality samples at the lower Glen Annie site (315ANN) since the TMDL became effective in 2014. However, nitrate concentrations have been declining at this monitoring station over previous [Central Coast Ambient Monitoring Program](#) sampling years.
- Additional surface water quality data will be collected at both Glen Annie Creek watershed sites in 2020. Additional assessments will be necessary to determine future status and water quality conditions.

Nitrogen Compound Concentrations at Glen Annie Creek Surface Water Quality Monitoring Sites 315GAN and 315ANN

