Water Quality Report Card		Pesticides and PCBs in McGrath Lake		
Regional Water Board:	Los Angeles, Region 4		☐ Conditions Improving	
Beneficial Uses Affected:	REC1, REC2, COMM, EST, WILD, RARE, WET	STATUS	□ Data Inconclusive☑ Improvement Needed□ Targets Achieved/Water Body Delisted	
Implemented Through:	Memorandum of Agreement and Conditional Waiver of WDRs	Pollutant Type:	☐ Point Source ☑ Nonpoint Source ☑Legac	
			Irrigated Crop Production	Other: Lake Sediments
Effective Date:	June 30, 2011			
Attainment Date:	June 30, 2025			

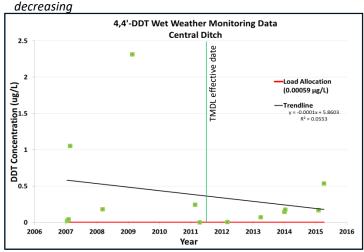
Water Quality Improvement Strategy

McGrath Lake, located in coastal Ventura County, exceeds water quality objectives for several pesticides (dichlorodiphenylchloroethane (DDT), chlordane, dieldrin), polychlorinated biphenyl (PCBs), and toxicity in sediment. These legacy pollutants persist in the environment, bound to sediment, and are carried to McGrath Lake in runoff from agricultural lands via the Central Ditch, which is the only inlet to the Lake. The sediment-bound contaminants settle in the bottom sediments of McGrath Lake at very high concentrations; some are then released back into the water column of the lake. The Los Angeles Regional Water Board adopted a TMDL for PCBs, Pesticides, and Sediment Toxicity in McGrath Lake, which became effective on June 30, 2011. The TMDL assigns load allocations to discharges from the Central Ditch as well as the in-lake contaminated sediments. The Central Ditch load allocations are assigned to agricultural dischargers and will be implemented through the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Agricultural Order); these allocations must be attained by June 30, 2021. The in-lake sediment load allocations must be attained by June 30, 2025 and may be implemented through a memorandum of agreement between cooperative parties to remediate the lake sediments.

TMDL Load Allocations

Pollutant	Water Column Targets (ug/L)	Sediment Targets (ng/dry g)
Chlordane	0.00059	0.5
Dieldren	0.00014	0.02
4,4'-DDT	0.00059	1
4,4'-DDE	0.00059	2.2
4,4'-DDD	0.00084	2
Total DDT		1.58
Total PCBs	0.00017	22.7

 As an example of water quality conditions, data show that DDT concentrations in the water discharged from the Central Ditch are above the load allocation of 0.00059 μg/L, but trends are decreasing



McGrath Lake Subwatershed

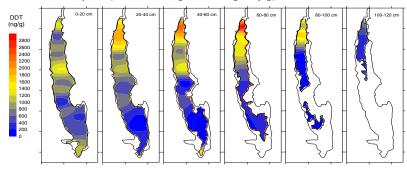


Water Quality Outcomes

- A <u>2012 study</u> performed by UC Riverside found that DDT concentrations in McGrath Lake remain above the sediment numeric target of 1.58 ng/g throughout most of the lake.
- Cooperative parties have executed a memorandum of agreement and are applying for funding to design a sediment remediation plan to attain the in-lake load allocations.
- The Central Ditch load allocations have been incorporated into the Conditional Waiver and will become enforceable discharge limitations on June 30, 2021.
- It is expected that the lake numeric targets will be achieved once the in-lake and Central Ditch load allocations are attained.

Water Quality

Total DDT concentration in McGrath Lake bottom sediments at various depths (numeric target=1.58ng/dry g)



October 2017