

Water Quality Report Card		Pesticides (DDT) in Palo Verde Outfall Drain and Lagoon	
Regional Water Board:	Colorado River Basin, Region 7	STATUS	<input type="checkbox"/> Conditions Improving <input checked="" type="checkbox"/> Data Inconclusive <input type="checkbox"/> Improvement Needed <input type="checkbox"/> Targets Achieved/Water Body Delisted
Beneficial Uses Affected:	REC I, REC II, WARM, WILD, RARE		Pollutant Type: <input type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input checked="" type="checkbox"/> Legacy
Implemented Through:	Conditional Waiver of Waste Discharge Requirements	Pollutant Source:	Irrigated Crop Production
Effective Date:	September 20, 2012		
Attainment Date:	2036		

Water Quality Improvement Strategy

The Palo Verde Outfall Drain (PVOD) and Lagoon is located in Palo Verde Valley and Mesa (approximately 131,000 acres of agricultural land) in Imperial and Riverside counties. PVOD and Lagoon are impaired by the legacy pesticide Dichlorodiphenyltrichloroethane (DDT) and listed on the Clean Water Act Section 303(d) List. Discharges from irrigated agriculture were identified as the primary source of DDT. This impairment is being addressed by the [Palo Verde Agricultural Conditional Waiver](#) (Agricultural Order) of Waste Discharge Requirements, adopted by the Regional Water Board in September 2012. The Responsible Parties (RPs) for complying with the Agricultural Order are agricultural and drain maintenance dischargers. The Agricultural Order requires the dischargers to: a) implement management practices to effectively control discharges of waste and meet water quality standards; b) monitor and report consistent with the [Implementation and Enforcement of the Non-Point Source Control Program Policy](#); and c) pay state fees. The Palo Verde Outfall Coalition (Coalition) was formed to assist member RPs, in complying with Agricultural Order requirements. The Agricultural Order expired on September 20, 2017 and the Region Water Board plans to replace it with a General Order of Waste Discharge Requirements (WDRs) that will require monitoring DDT in water and fish tissue.

DDT Load Allocations

DDT Sediment and Water Load Allocations^a for PVOD and Lagoon

Constituent	Water (ug/L)	Sediment (ug/Kg)
4,4'-DDE	0.00059 ^b	31.3 ^c
Total DDT		572 ^c

^a The water and sediment load allocations are assigned on a concentration basis, with the goal of attaining the Assessment Guidelines identified for water and sediment, as well as fish tissue.

^b USEPA, 2000

^c McDonald et al., 2000

Water Quality Outcomes

- DDT fish tissue concentrations have reduced significantly from peak concentrations in the 1980s.
- Data collected since 2000 shows that DDT concentrations in fish tissue are still above the assessment guideline ([OEHHA, 2008](#)).
- Available sediment data shows that concentrations of 4,4'-DDE, a breakdown product of DDT, are present in PVOD and Lagoon sediment and are below the assessment guideline.
- Water data shows that DDT is not usually found in PVOD waters and is inconclusive that DDT is below the assessment guideline (not shown).
- The General Order of WDRs will require monitoring DDT in water and fish tissue.

Watershed Map

