Water Quality Report Card

Pesticides (DDT) in Palo Verde Outfall Drain and Lagoon

Regional Water Board:	**Colorado River Basin, Region 7**
Beneficial Uses Affected:	**RARE, REC I, REC II, WARM, WILD**
Implemented Through:	-Palo Verde Agricultural General Order of Waste Discharge Requirements -Palo Verde Outfall Drain and Lagoon DDT and Toxaphene TMDL
Effective Date:	May 15, 2019
Attainment Date:	2036

STATUS	Data Inconclusive
Pollutant Type:	Nonpoint Source Legacy
Pollutant Source:	Irrigated Crop Production

Water Quality Improvement Strategy

DDT is a legacy pesticide present in the Palo Verde Outfall Drain (Drain) and Lagoon, located in the Palo Verde Valley and Mesa in Imperial and Riverside counties. The Drain and Lagoon are listed on the USEPA Clean Water Act 303(d) list for impairment due to the detected concentrations of DDT. Water quality sampling in the Drain and Lagoon began in 1985 and discharges from irrigated agriculture were identified as the primary source of DDT.

To address the DDT impairment, waivers of waste discharge requirements (WDRs) and subsequently WDRs that included a total maximum daily load (TMDL) alternative for DDT concentrations in agricultural discharges were adopted by the Regional Board. The TMDL alternative includes load allocations for DDT in water, sediment, and fish tissue. The Order includes the State Board precedential requirements with enhanced management practice implementation, monitoring, and reporting. DDT levels in sediment and the water column are below the assessment guidelines and the detection limit, respectively. However, fish tissue concentrations of DDT continue to be above the assessment guidelines. Enhanced best management practices will be implemented to control the transport of DDT into the Drain and Lagoon.

DDT Load Allocations

DDT Sediment and Water Load Allocations[a] for PVOD and Lagoon

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

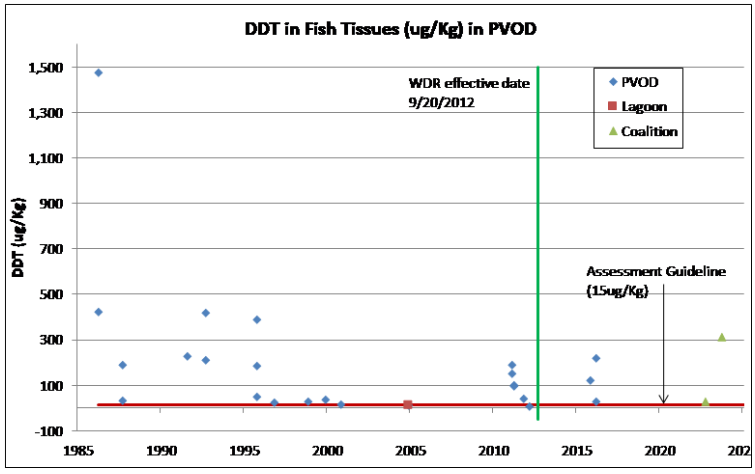
[a] The water and sediment load allocations are assigned on a concentration basis, with the goal of attaining the Assessment Guidelines identified for water and sediment, as well as fish tissue. [b] USEPA, 2000 [c] McDonald et al., 2000

Water Quality Outcomes

- *DDT fish tissue concentrations continue to be above the assessment guideline of 15 µg/Kg. Fish tissue is the only impairment for PVOD.*
- *Available sediment data show concentrations of 4,4'-DDE, a breakdown product of DDT, are present in PVOD and Lagoon sediment and are continuously below the assessment guideline (graph not shown).*
- *Data show that DDT is not detected in the water column (graph not shown).*

Palo Verde Outfall Drain and Lagoon Map

Water Quality



Released October 2024