

Urban Monitoring Program – Pyrethroids



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DPR Monitoring Regions



Post PY Regulations Monitoring

➤ Ambient Water & Sediment Monitoring

- What we are doing: NORCAL
 - Spatial: seven sites in SAC area (6 stormdrain outfalls, 1 urban creek receiving water)
 - Temporal: 2 dry season, 2 rainfall events
 - Two sites associated with mitigation, + two additional dry season events
 - Some sites for sediment, only 2x year

Post PY Regulations Monitoring

➤ What we have seen: NORCAL – Water monitoring

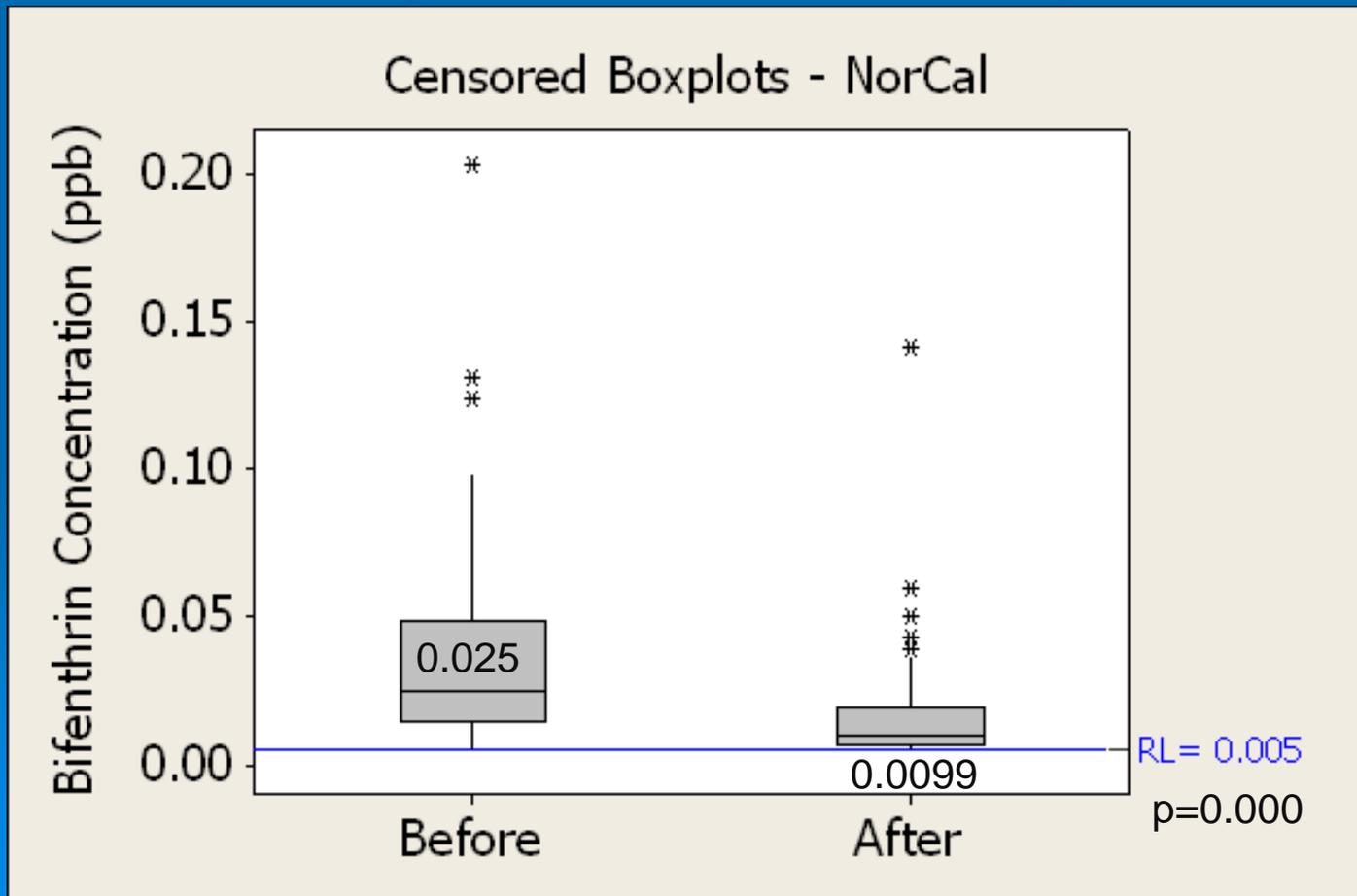
Regulation Period*	# Storm drain outfalls (urban neighborhoods)	Number of Sampling Events	Data points	Dates
Pre	7	17	50	2/13/2009 – 6/19/2013
Post	6**	8	31	7/31/2012 – 8/6/2013

*PY regulations adopted June 19, 2012 and took effect July 19, 2012

**One less site (PGC020) removed but within ~100 feet of PGC019 (in both pre and post periods)

Post PY Regulations Monitoring

- NorCAL: Storm drain outfalls of specific neighborhoods have lower bifenthrin median water concentrations (most recent data is preliminary):



Post PY Regulations Monitoring

➤ Ambient Water & Sediment Monitoring

- SOCAL

- Spatial: 10 sites (7 storm drains, 3 receiving waters)
- Temporal: 2 dry season, 2 rainfall events
- Media: water collected at all stations, sediment monitored at subset (~5 locations)

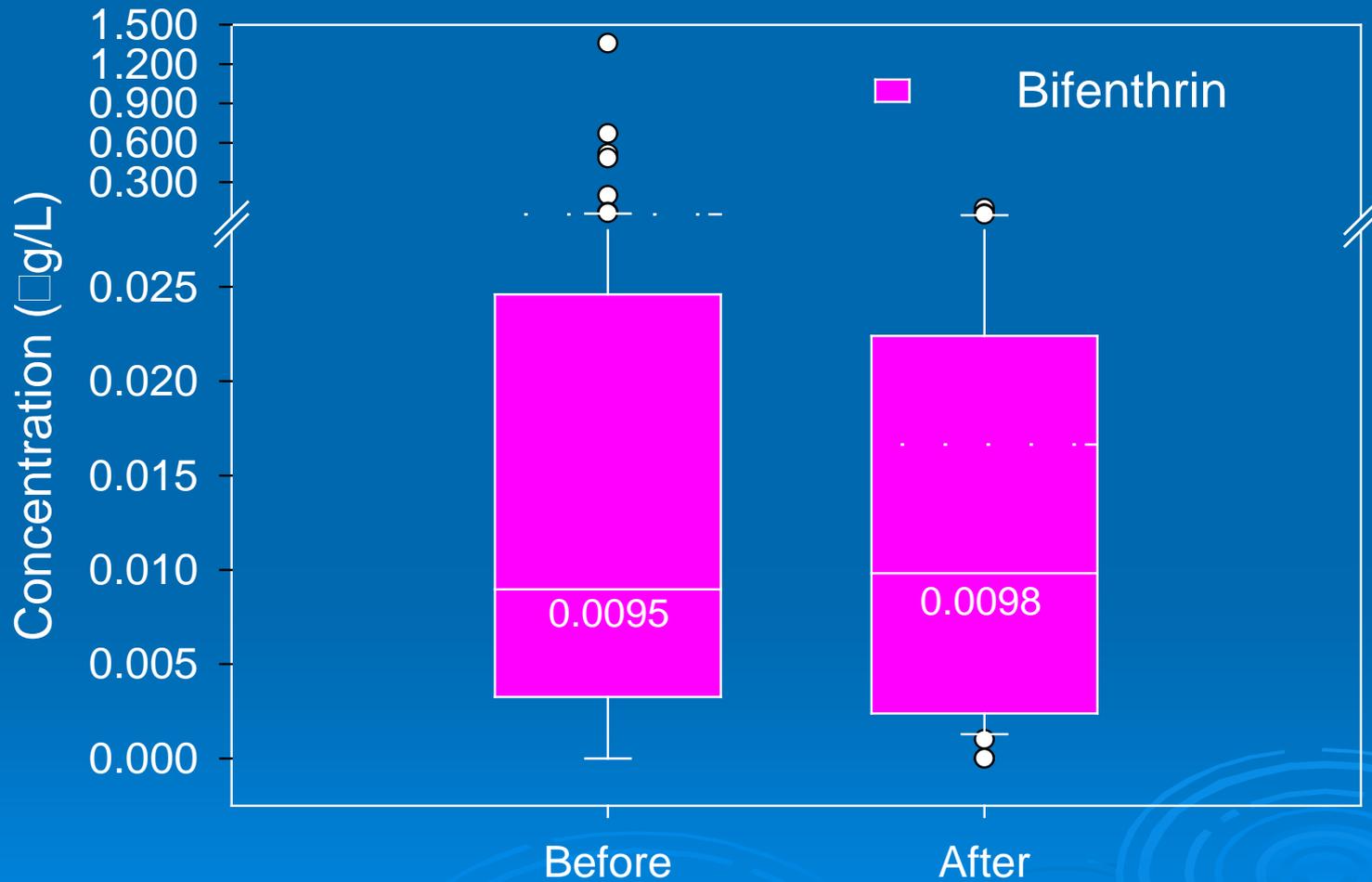
Post PY Regulations Monitoring

➤ What we have seen: SOCAL – Water monitoring

Regulation Period*	# Storm drain outfalls (urban neighborhoods)	Number of Sampling Events	Data points	Dates
Pre	6	18	71	5/5/2009 – 6/25/2013
Post	6	6	35	8/20/2012 – 8/28/2013

*PY regulations adopted June 19, 2012 and took effect July 19, 2012

Post PY Regulation Monitoring - SoCal (most recent data is preliminary)



*Preliminary data; Sites located after treatment not evaluated

Post PY Regulations Monitoring

➤ Pesticide detection technology



Continuous low level
aquatic monitoring
(C.L.A.M.)

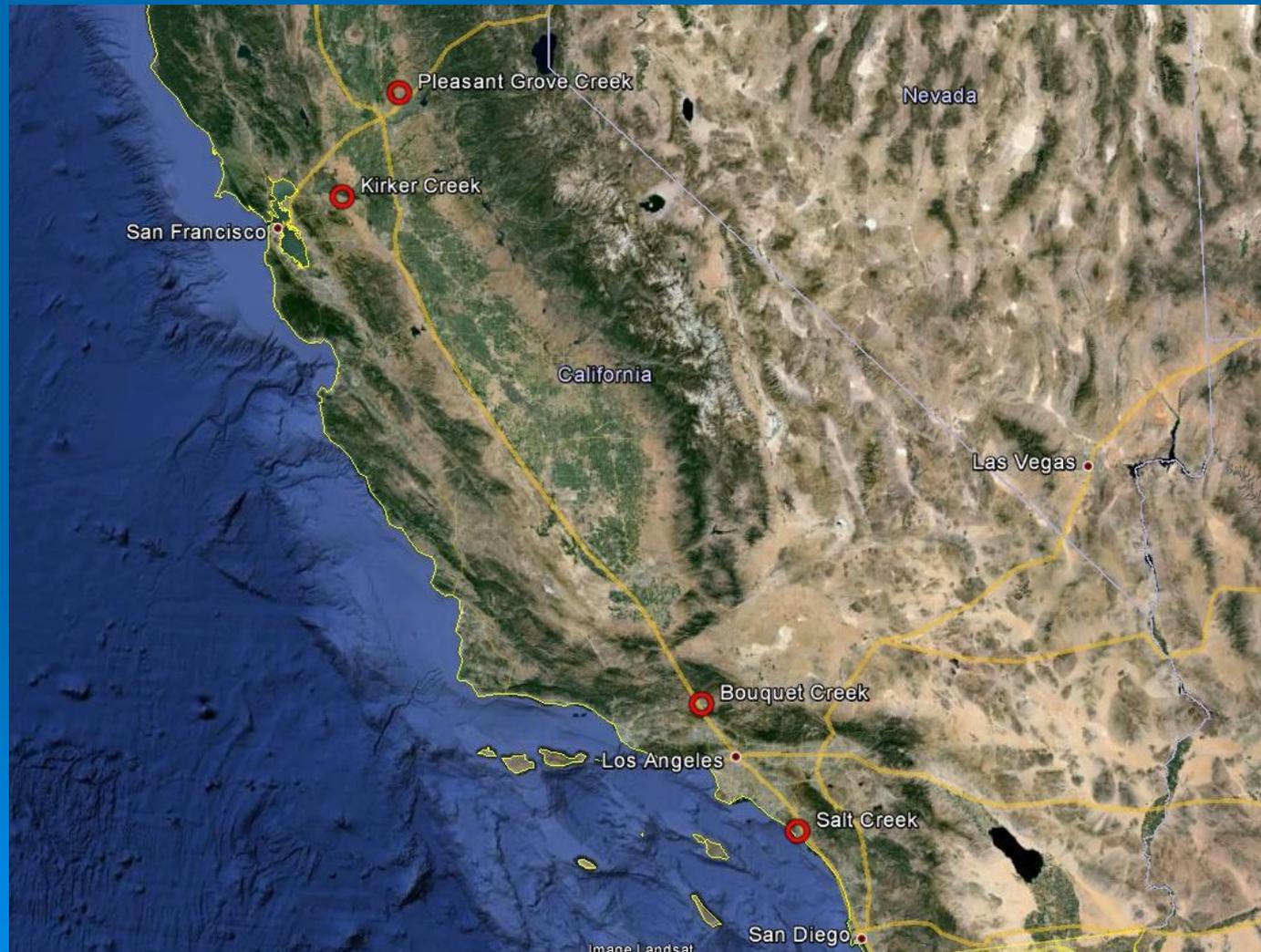


Semipermeable
Membrane Device
(SPMD)

Collaboration with SPOT Program

- SPOT program monitors sediment pyrethroid concentrations at >100 sites statewide
- DPR contract supports
 - 10 base stations (1 sample/yr)
 - 4 intensive stations (4 sample/yr)
 - 2 coincide with DPR stations
- Goal: increased spatial analysis of SW regulations effectiveness

SPOT Intensive Monitoring Locations



Outreach Contract in SoCal

- Determine major applicators in Laguna Niguel area
- Survey to determine how much pesticide is applied by PMP's
- Consolidate training materials
 - Workshops
- Use of IPM
- Goal: decrease in insecticide use in Salt Creek Watershed