Regulations to Restore the Santa Clara River

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Los Angeles Regional Water Quality Control Board
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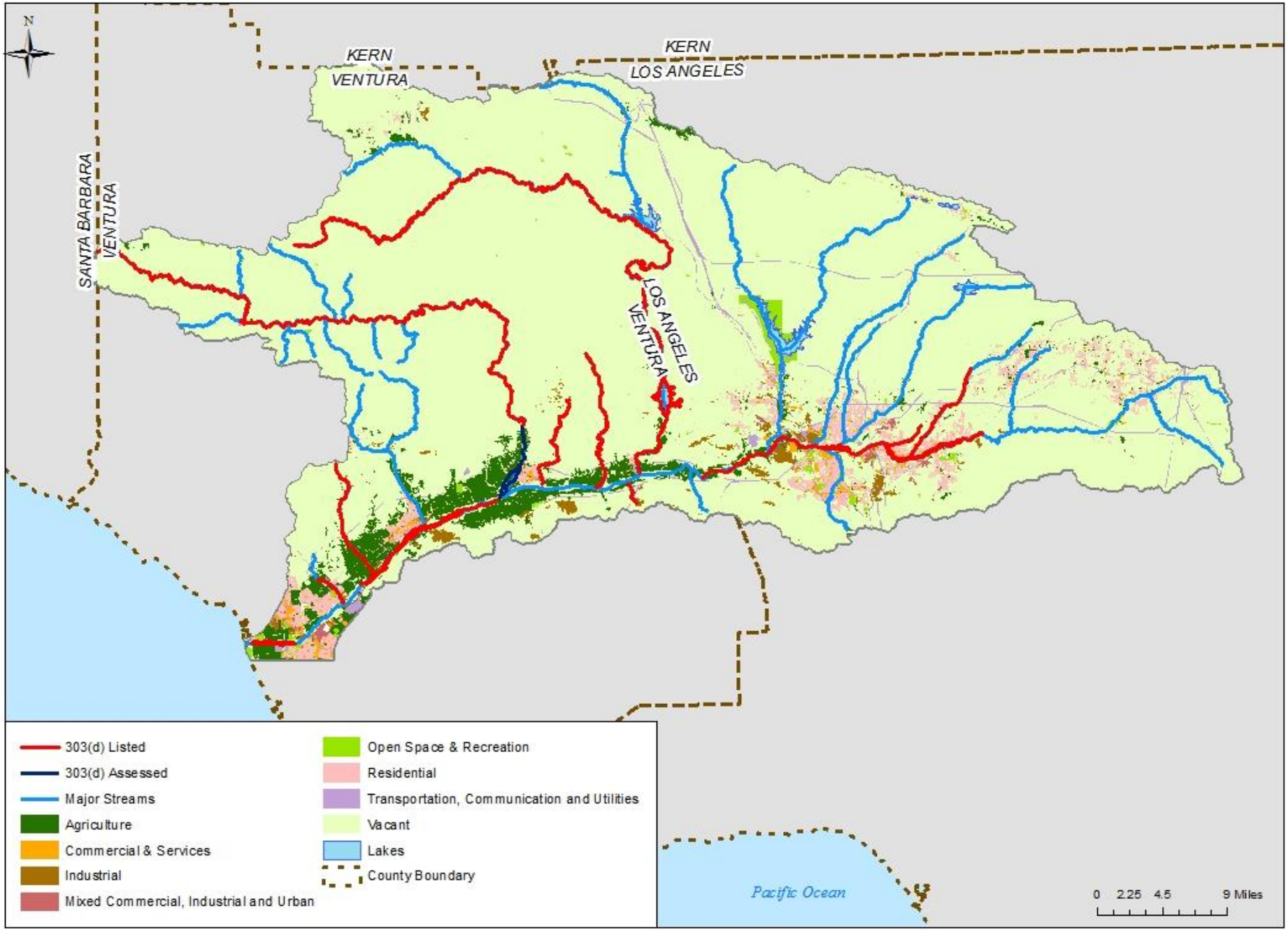
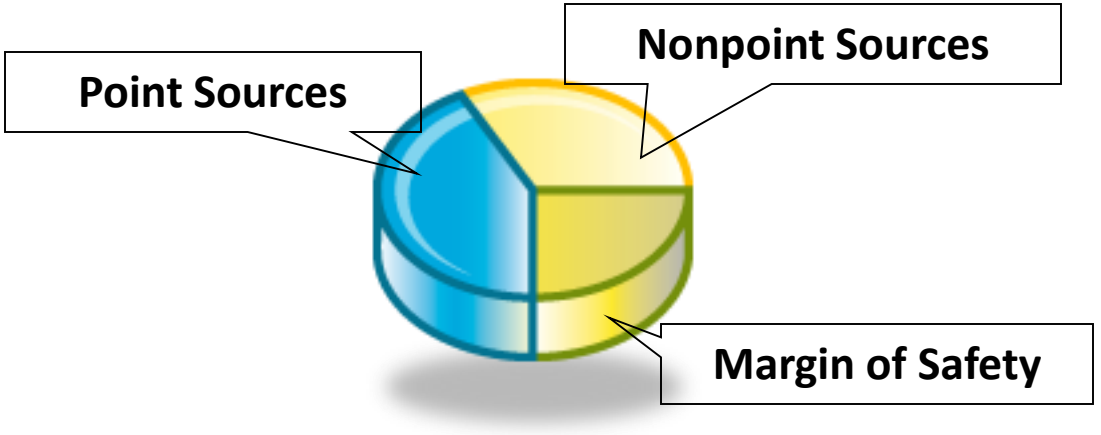
The Los Angeles Region

Santa Clara River Watershed Land Use and 303(d) Impaired Waterbodies



What is a TMDL?

- Total Maximum Daily Load
- How much pollution can be discharged into a waterbody and still meet water quality standards
- Allocation of allowable pollution loads among point and non-point sources
- Seasonal variation and margin of safety



Why TMDLs?

- Required by Clean Water Act Since 1972
- Water quality assessed every 3 years
- Create 303(d) list of impaired waters
- TMDL required for impaired water bodies

Typical Components of TMDLs

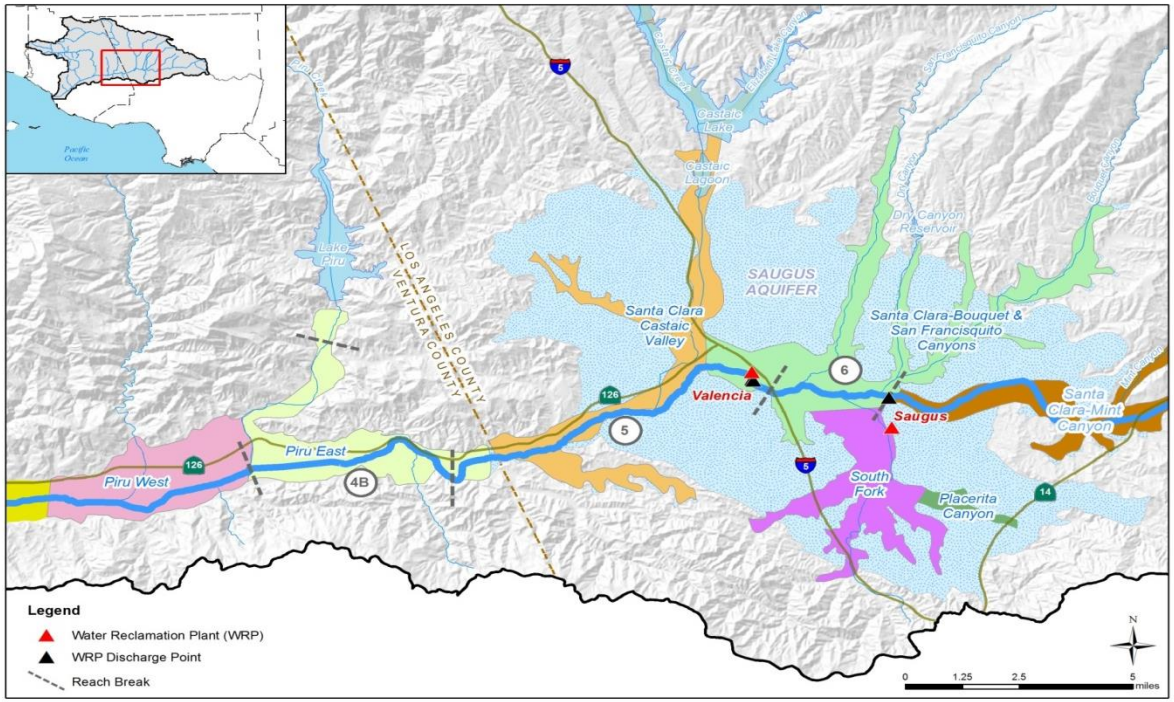
- Numeric targets
- Source assessment
- Linkage analysis/TMDL calculation
- Allocation of allowable loads
- Implementation plan
- Monitoring program

Santa Clara River Estuary Toxaphene TMDL

- Adopted in 2010
- Listings for Chem A and toxaphene (legacy)
- Numeric targets protect fish consumption and aquatic life
- Agricultural runoff is sole source

Upper Santa Clara River Chloride TMDL

- Adopted 2002; revised 2003, 2004, 2006, 2008, 2014
- Applies to Reaches 4, 5, and 6 – POTWs principal source
- Numeric targets protect agricultural use and aquatic life



Santa Clara Nutrient TMDL

- Adopted in 2003
- Listings for ammonia, nitrate, nitrite, organic enrichment
- Numeric targets protect aquatic life and drinking water
  - Waste load allocations for POTWs and stormwater in Reaches 3 and 7
  - Load allocations for agriculture in all reaches and tributaries

Santa Clara River Bacteria TMDL

- Adopted in 2010
- Estuary and Reaches 3, 5, 6, and 7
- Numeric targets set to protect recreation use
  - Waste load allocations for POTWs, stormwater, and other point sources
  - Load allocations for horse/livestock, septic systems, other nonpoint sources

Water Quality Impairments Remaining to be Addressed by TMDLs

Reach/tributary	Pollutants on 303(d) list of impaired waters	Listings remaining to be addressed
Santa Clara River Estuary	Chem A, Toxaphene, Toxicity, Bacteria, Nitrate	Toxicity
Santa Clara River Reach 1	Toxicity	Toxicity
Brown Barranca/Long Canyon	Nitrate and Nitrite	--
Santa Clara River Reach 3	Ammonia, Chloride, Total Dissolved Solids, Toxicity	Toxicity, Total Dissolved Solids
Wheeler Canyon/Todd Barranca	Nitrate and Nitrite, Sulfates, Total Dissolved Solids	Sulfates, Total Dissolved Solids
Sespe Creek	Chloride, pH	Chloride, pH
Pole Creek and Hopper Creek	Sulfates, Total Dissolved Solids	Sulfates, Total Dissolved Solids
Piru Creek	Boron, Specific Conductance, Sulfates, Total Dissolved Solids	Boron, Specific Conductance, Sulfates, Total Dissolved Solids
Santa Clara River Reach 5	Ammonia, Chloride, Bacteria, Iron, Nitrate and Nitrite	Iron
Santa Clara River Reach 6	Ammonia, Chloride, Chlorpyrifos, Bacteria, Copper, Diazinon, Iron, Toxicity	Chlorpyrifos, Diazinon, Iron, Toxicity
Santa Clara River Reach 7	Bacteria	--
Mint Canyon	Nitrate and Nitrite	--

TMDL Implementation

- TMDLs are not self-implementing
- Regulatory mechanisms, e.g.
  - NPDES permits
  - MS4 permits
  - Agriculture Waiver
- Monitoring
  - Effectiveness
  - Compliance
- Reconsiderations

Tools for Successful Implementation

- Collaboration
  - IWRMP groups
  - MS4 EWMP Groups
  - Farm Bureau
  - NRCS
  - RCD
  - UCCE
- Funding
  - Prop 1
  - CWA 319(h)

Leveraging authorities and responsibilities