Santa Ana River Wasteload Allocation Model Update

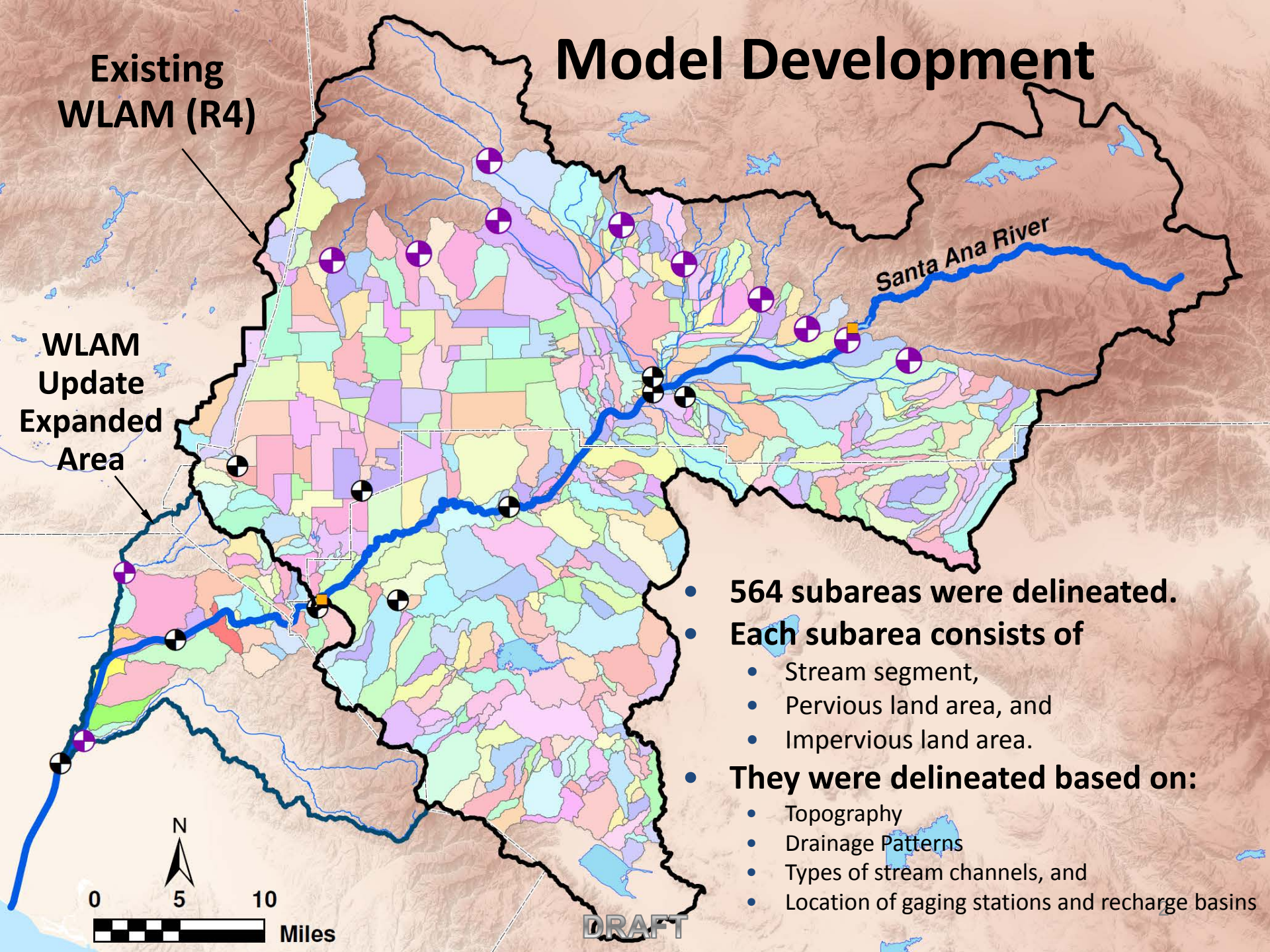
BASIN MONITORING PROGRAM TASK FORCE

August 16, 2017

SAWPA

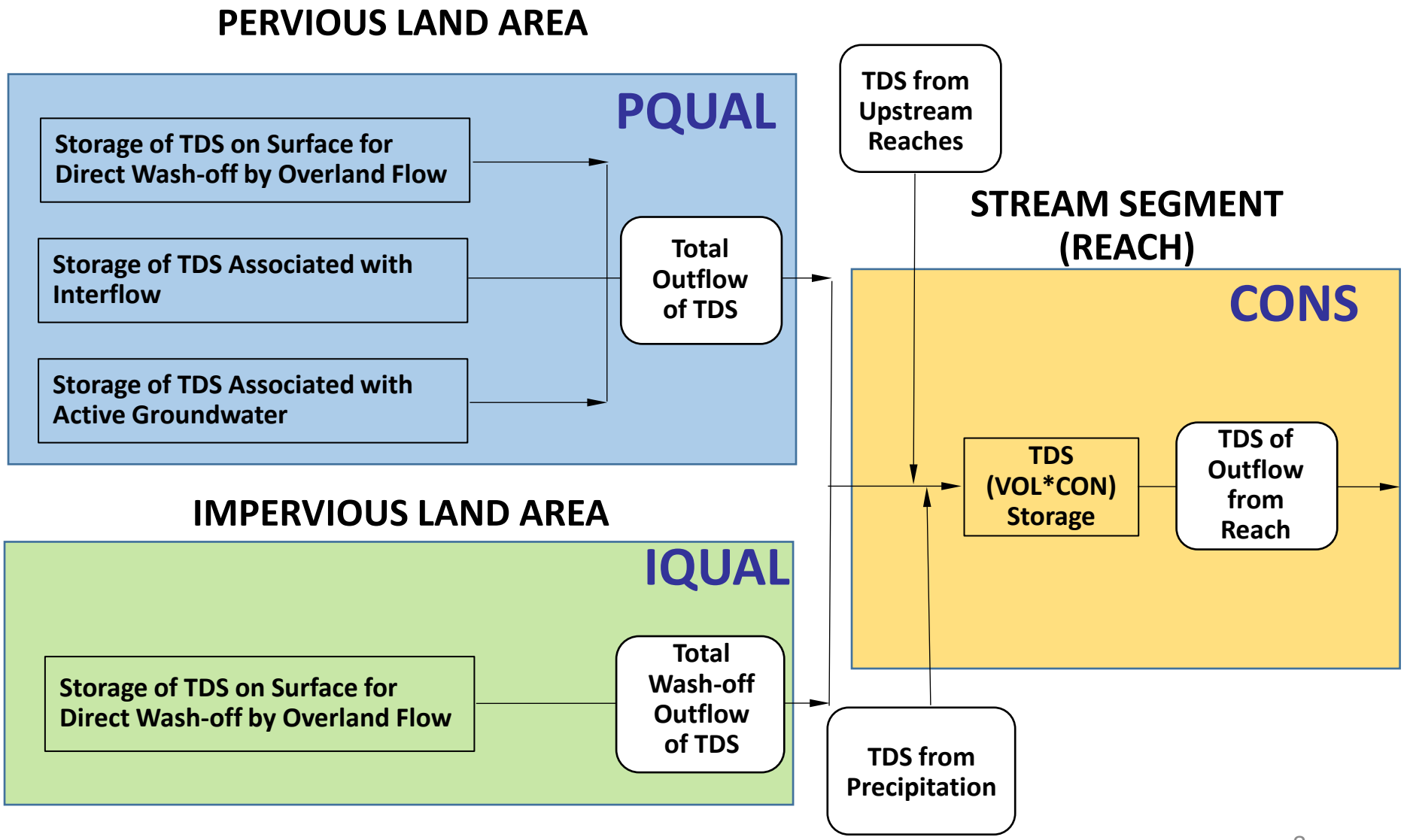
GEOSCIENCE

Model Development



- **564 subareas were delineated.**
- **Each subarea consists of**
  - Stream segment,
  - Pervious land area, and
  - Impervious land area.
- **They were delineated based on:**
  - Topography
  - Drainage Patterns
  - Types of stream channels, and
  - Location of gaging stations and recharge basins

Schematic Diagram of HSPF TDS Simulation



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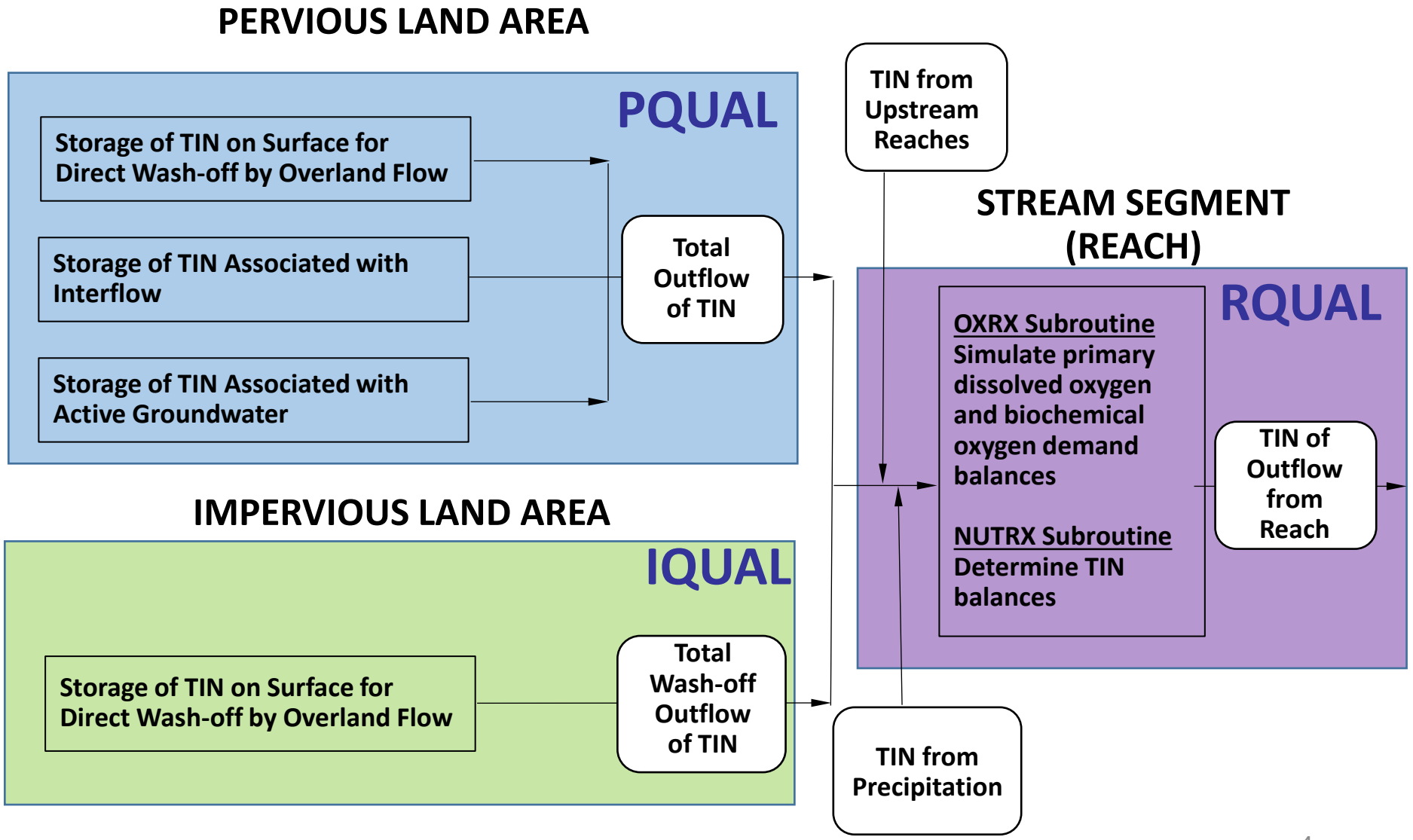
Schematic Diagram of HSPF TIN Simulation



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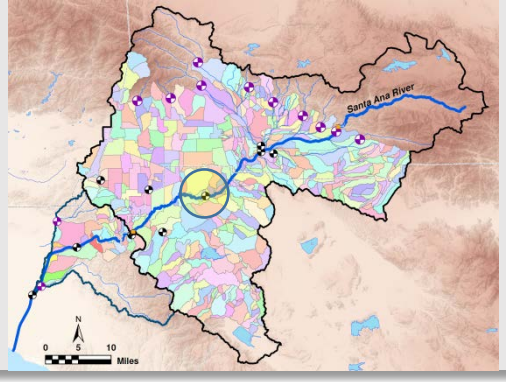
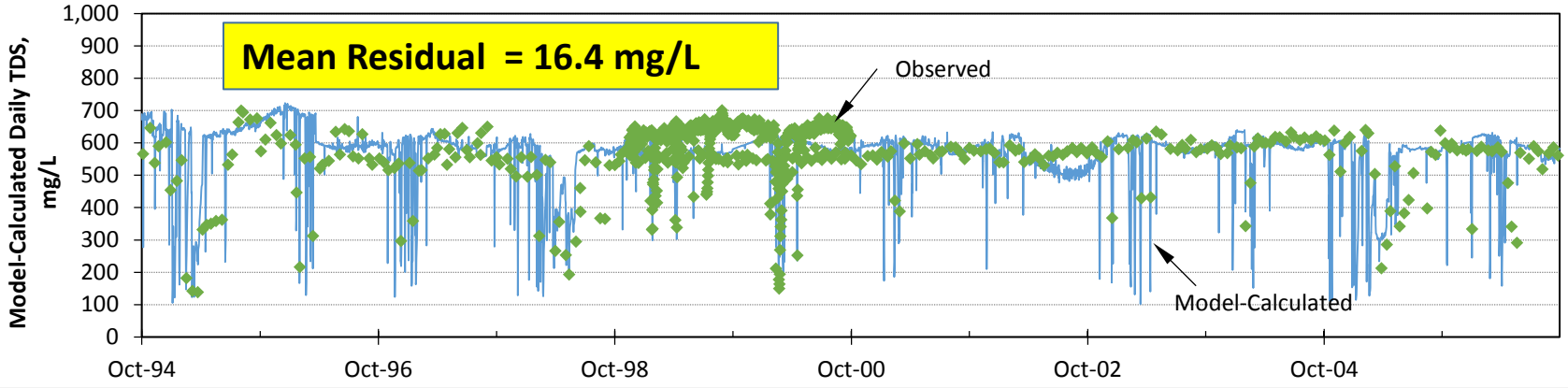
Daily TDS at Santa Ana River at MWD Crossing

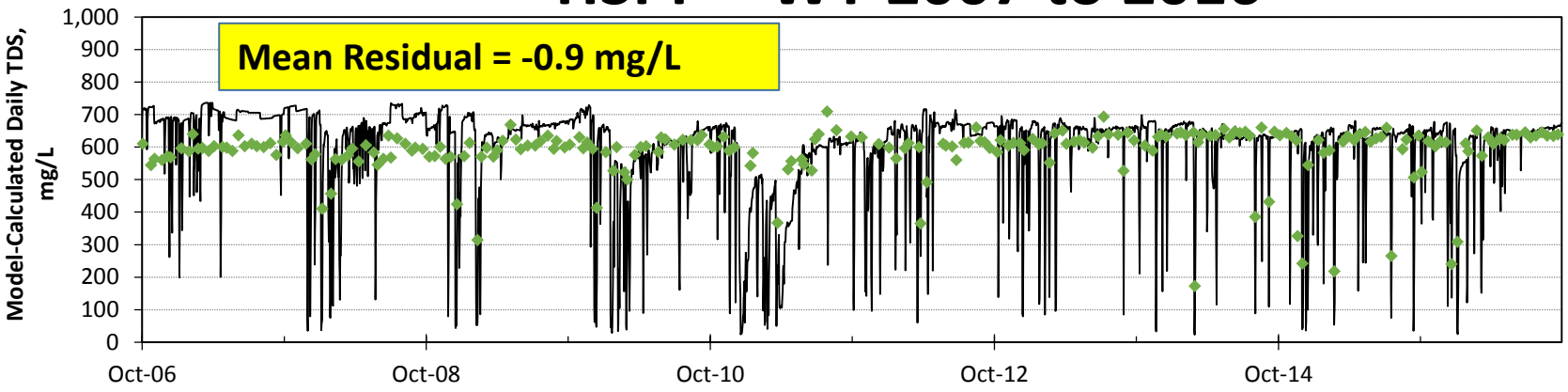


GEOSCIENCE

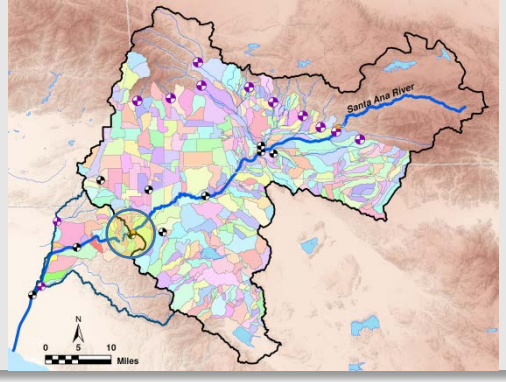
R4 – WY 1995 to 2006



HSPF – WY 2007 to 2016



Daily TDS at Santa Ana River below Prado



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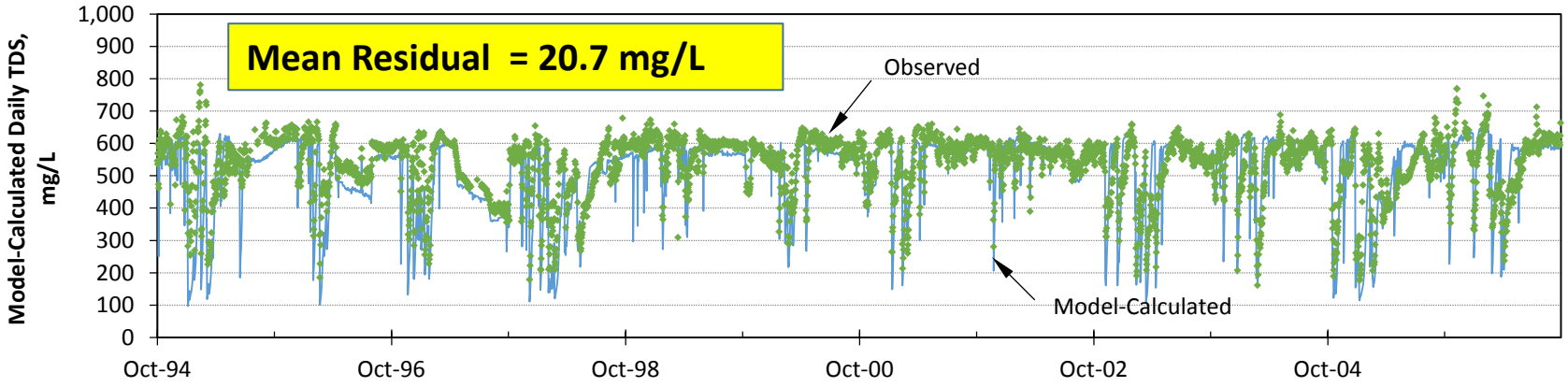

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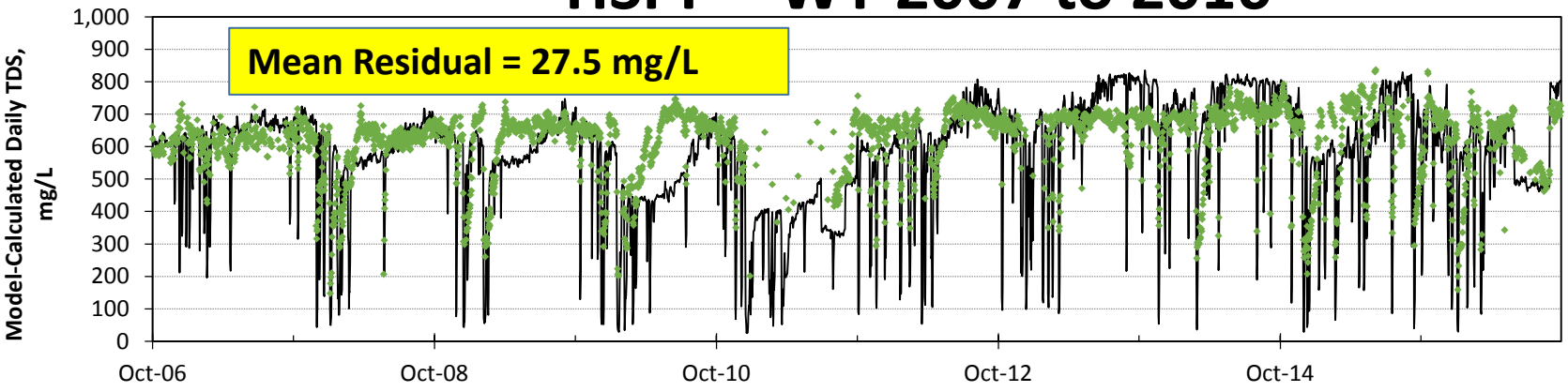

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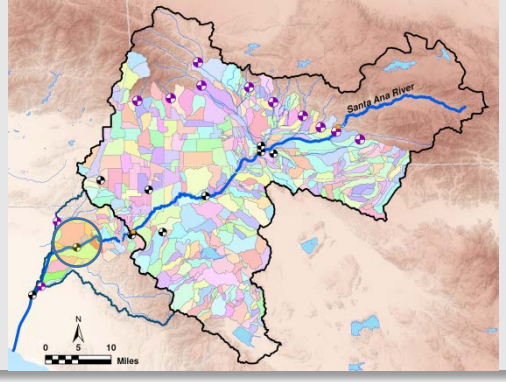
Daily TDS at Santa Ana River at Imperial HWY near Anaheim



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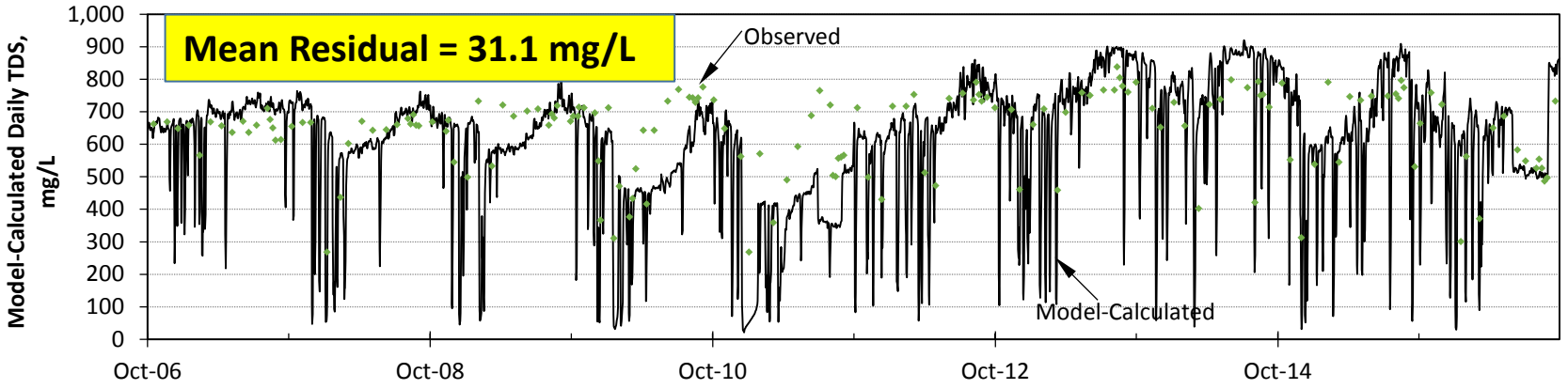
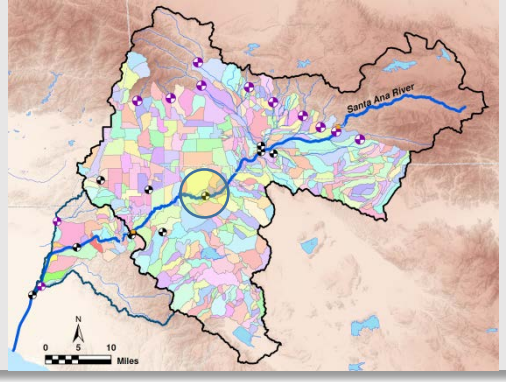


Daily TIN at Santa Ana River at MWD Crossing



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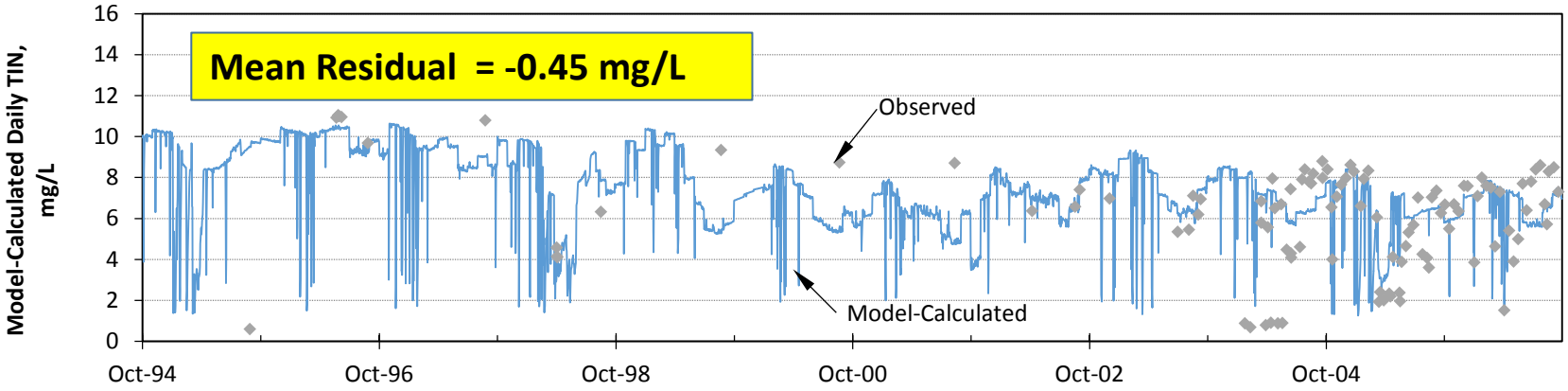

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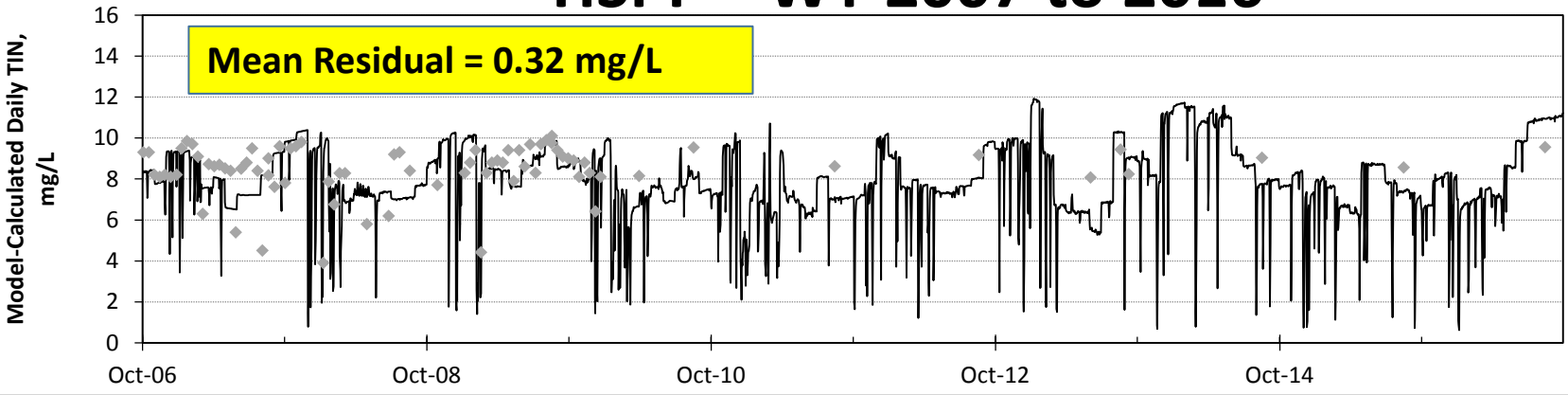

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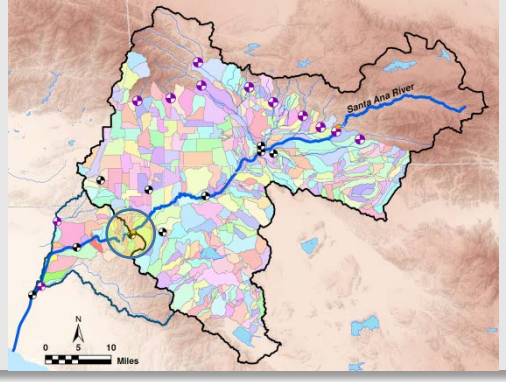

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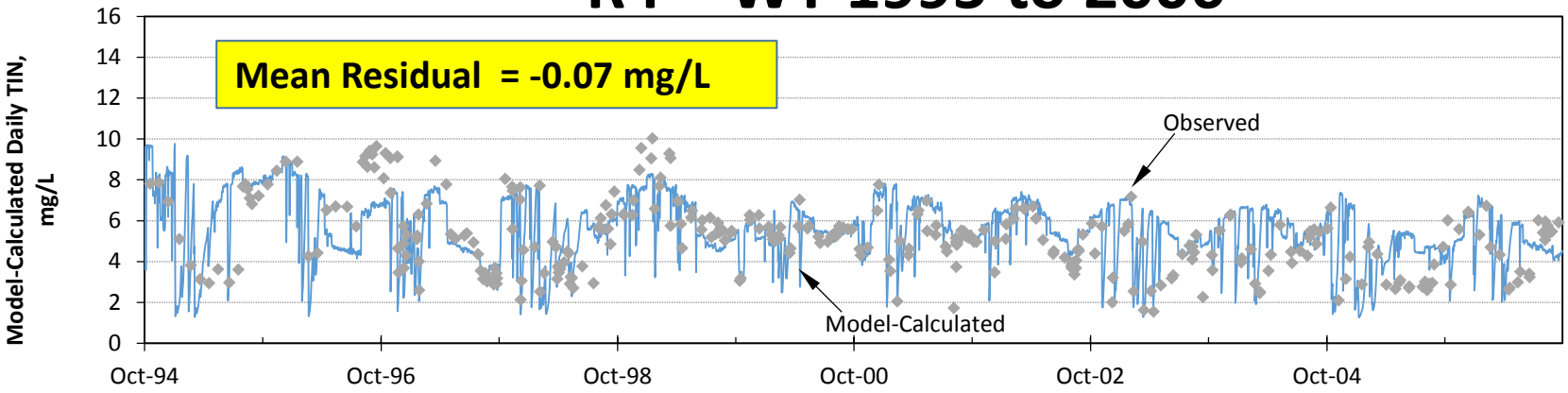

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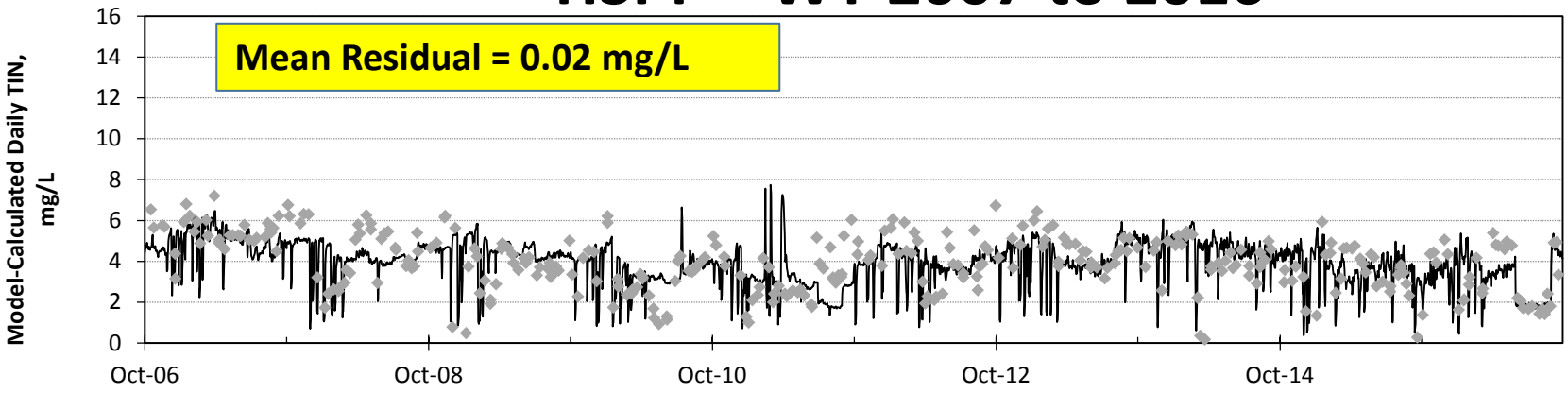
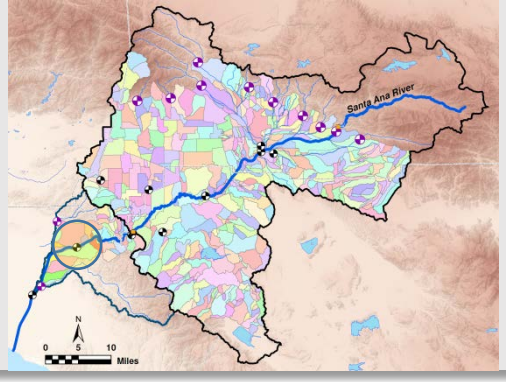


Daily TIN at Santa Ana River at Imperial HWY near Anaheim



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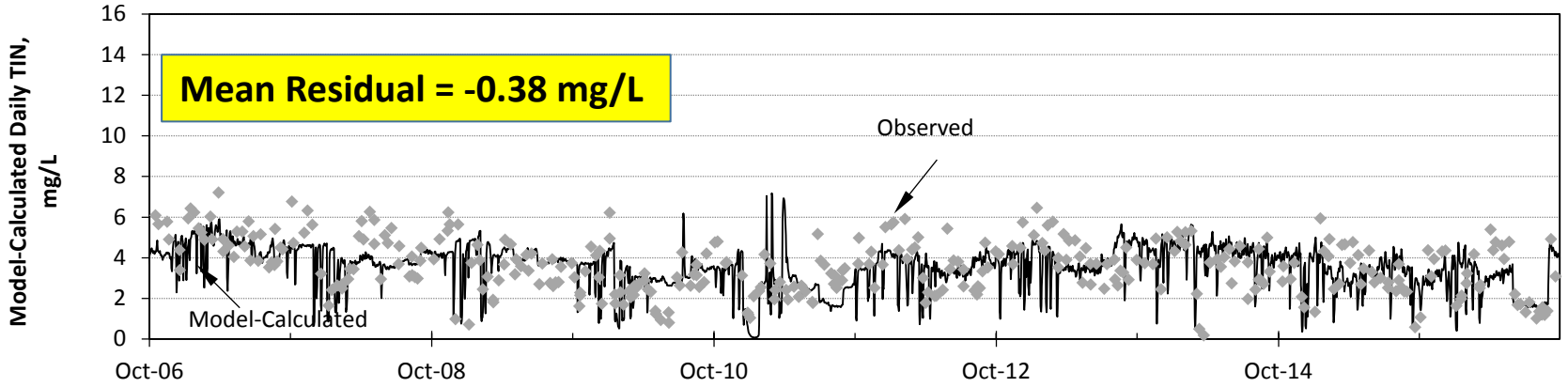
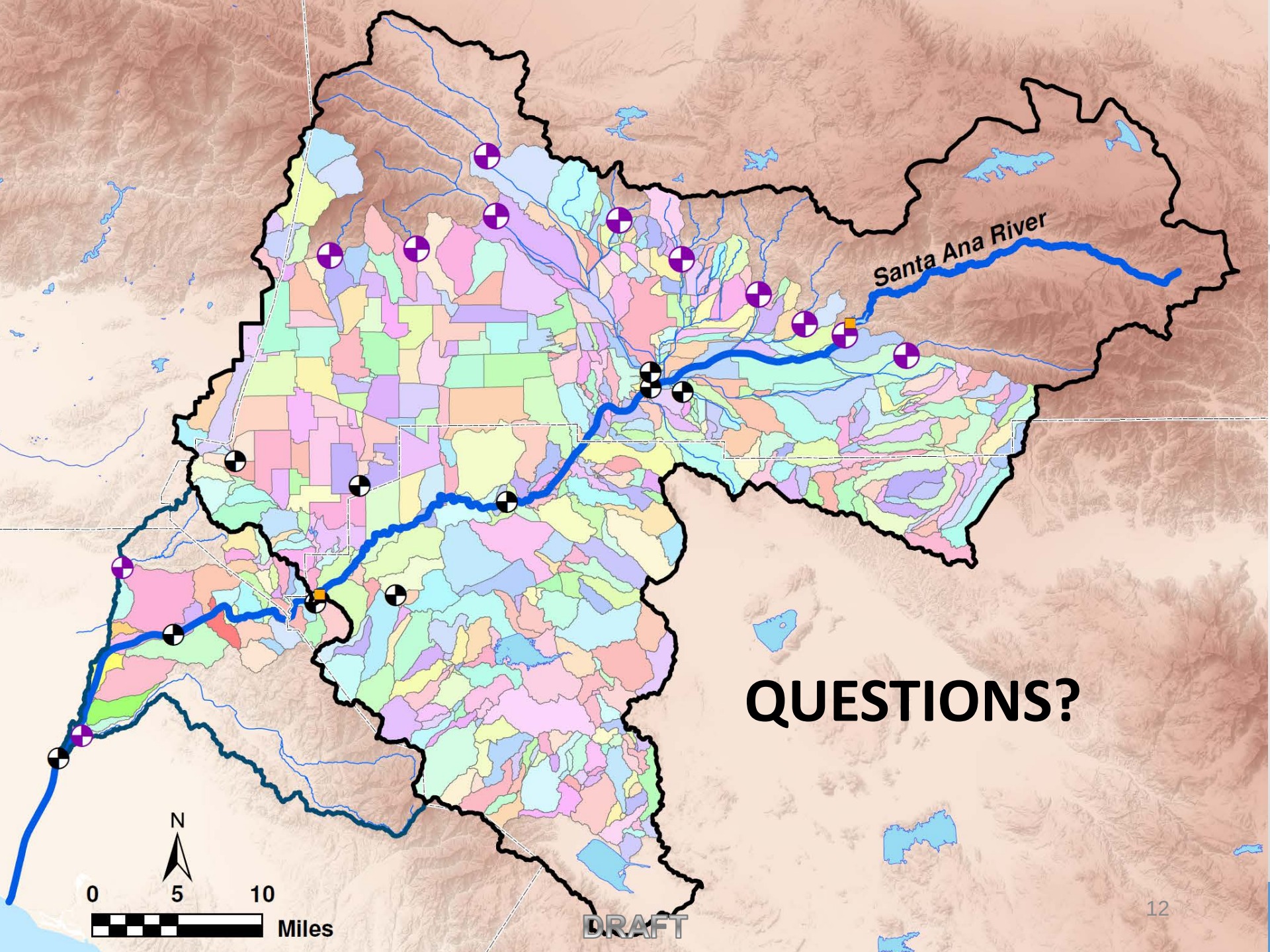


Next Steps

- **Complete TDS and TIN Recalibration of WLAM**
- **Work with SAWPA staff, Basin Monitoring Program Task Force Representatives, and the Regional Board staff**
  - To specify range of portable discharge conditions including:
    - Maximum expected discharge of treated water under current and 2040 conditions
    - Maximum expected re-use of recycled water under current and 2040 conditions
    - Effluent limits for TIN and TDS in the most recent NPDES permit
  - To identify percolation ponds and retention basins where treated wastewater is regularly recharged to groundwater and where such discharge are presently governed by permits issued by the Regional Board



QUESTIONS?