Salt & Nutrient Management Plan Development

Upper Los Angeles River Area (ULARA)

Presented to the

Regional Water Quality Control Board – LAR

December 4, 2014, Culver City, CA

Presented By:

Richard Slade - ULARA Watermaster

Anthony Hicke – Assistant ULARA Watermaster

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UPPER LOS ANGELES RIVER AREA WATERMASTER

What and Where is ULARA?

Presented By

Richard C. Slade

ULARA Watermaster

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Definition:
Upper Los Angeles River Area (ULARA)

- An area created by adjudication in the case of City of Los Angeles vs. City of San Fernando, et al.
- Key results of Court Judgment dated January 1979
- Defined the watershed boundaries
- Identified 4 Groundwater Basins within ULARA
- Established Parties to the Judgment
- Established pumping rights for those Parties
- Created a Court-appointed Watermaster.

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ULARA Parties

- Principal Parties to the Judgment
  - City of Burbank, pumping from San Fernando Basin only
  - City of Glendale, SFB and Verdugo Basin
  - City of Los Angeles, SFB and Sylmar Basin
  - City of San Fernando, SB only
  - Crescenta Valley Water District, VB only

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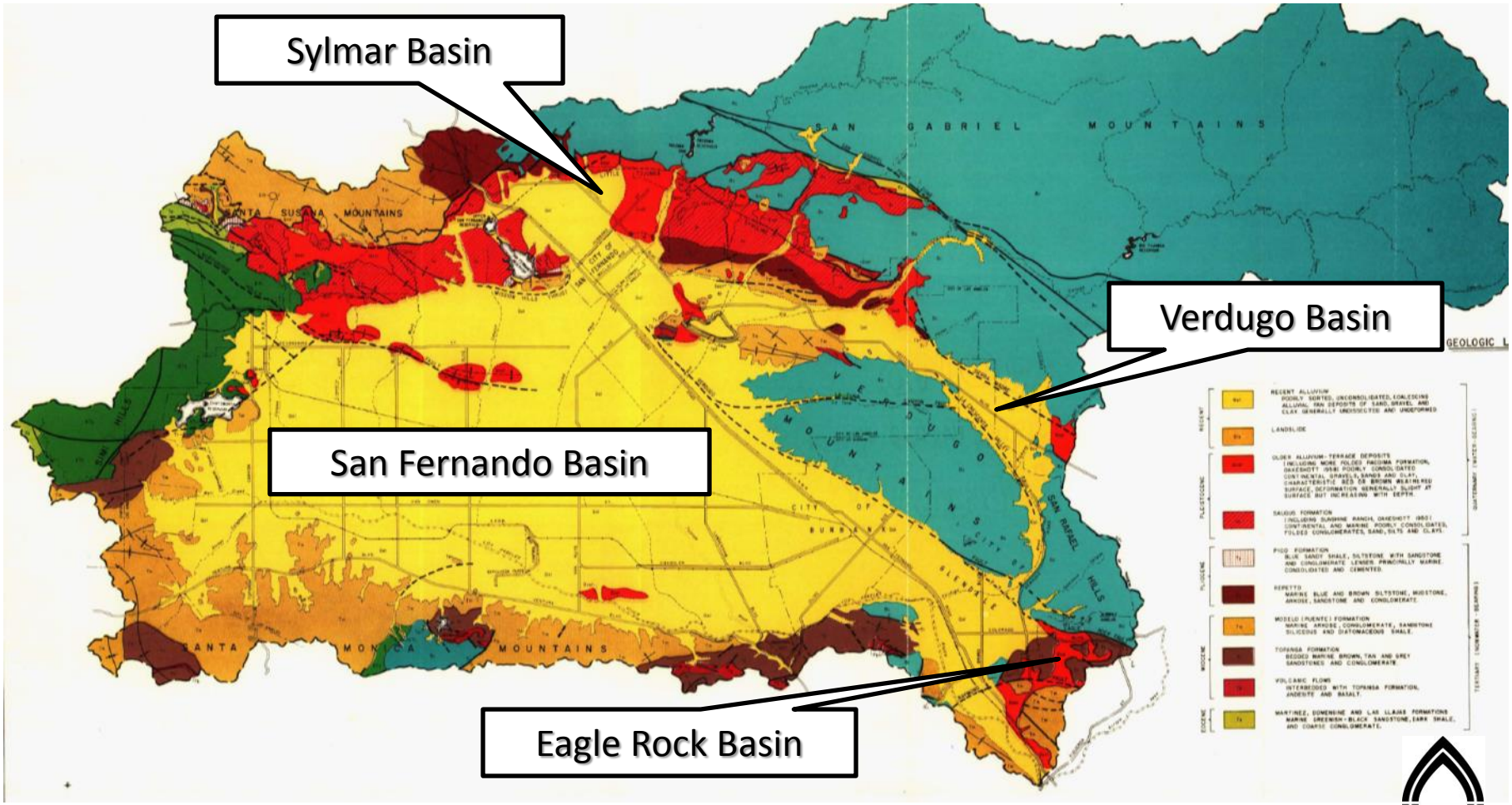
ULARA Boundaries and Groundwater Basins

Geologic Map – Report of Referee



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SNMP Plan Development

Presented By

Anthony Hicke

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SNMP Overview

- Technical Team Members
- SNMP Development Process
- Conceptual Flow Model
- Basic Plan Elements
- Current Work Status
- Contact Information

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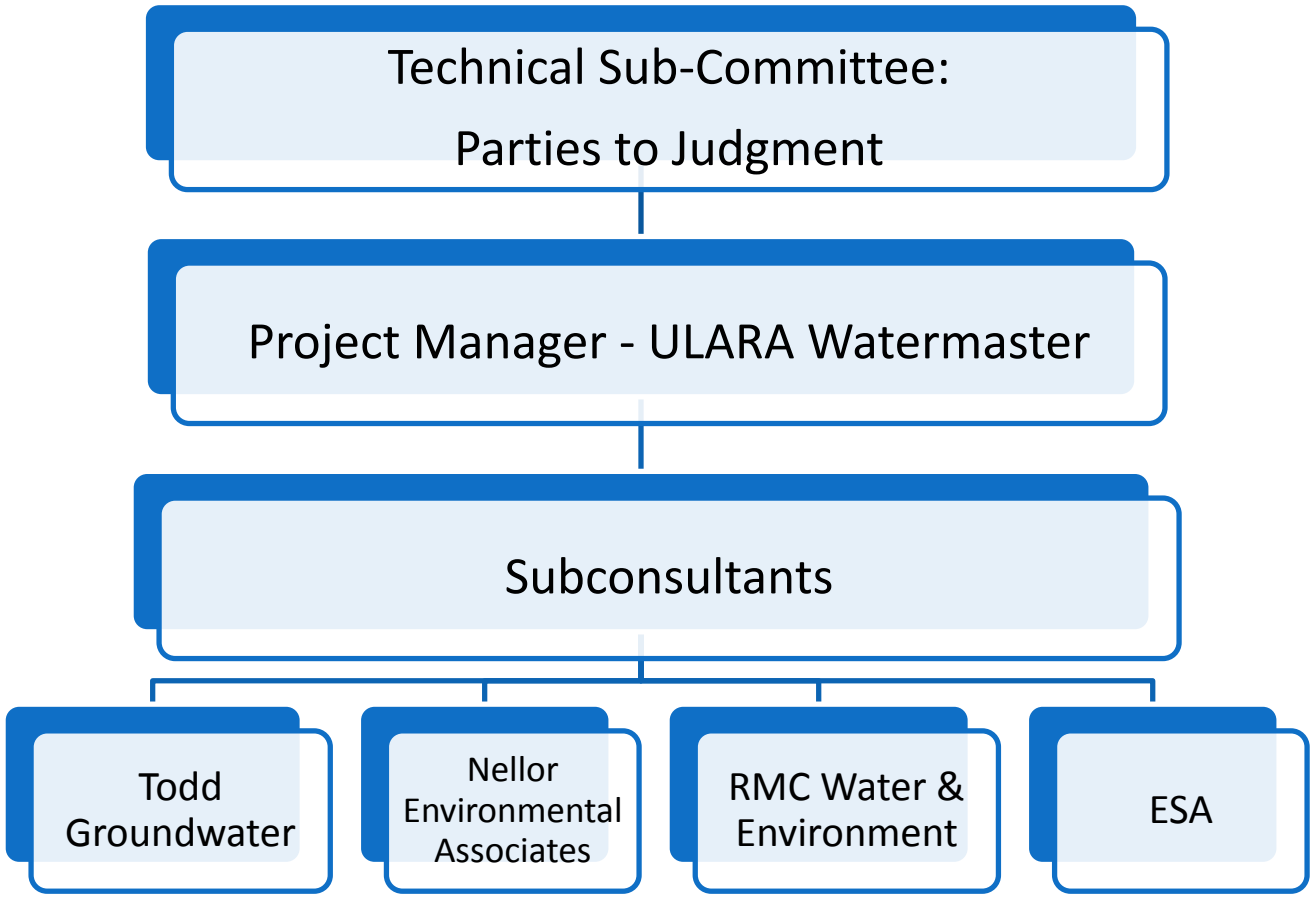
ULARA SNMP Technical Team



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ULARA SNMP Process

Data Collection
- Watermaster
- Parties
- Key Stakeholders
- Regulators

Data Analysis &Tech Memos
- Tech Sub Committee (Parties)
- Docs for review at various points in the process

Review & Comment
- Regulators & Interested Stakeholders
- Finalize document

Public Meetings
- Held at major milestones throughout the process
- Significant docs

GOAL: To gain consensus & “buy-in” from all Parties involved at key points throughout the process

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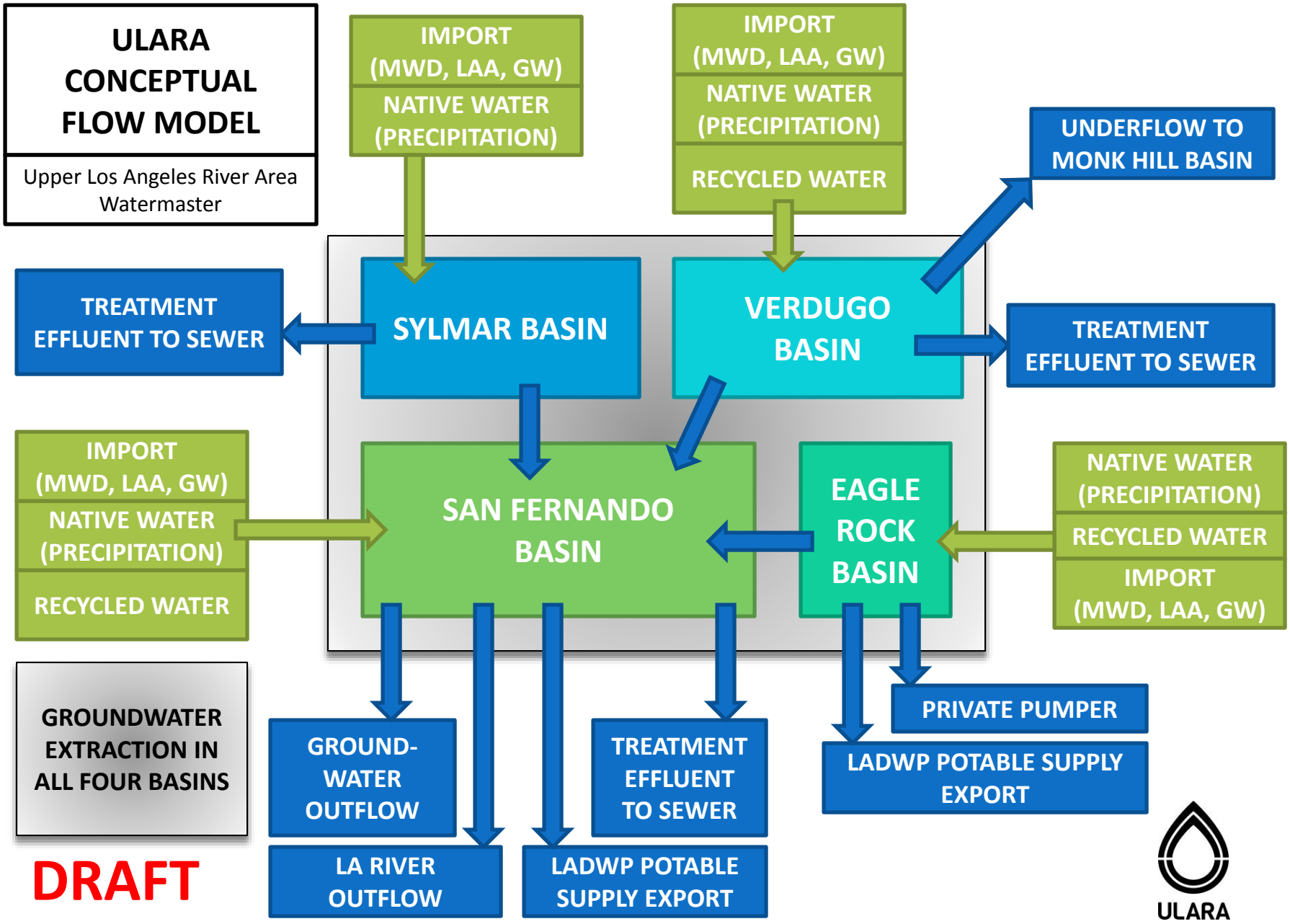
ULARA CONCEPTUAL FLOW MODEL
Upper Los Angeles River Area Watermaster
IMPORT (MWD, LAA, GW)
NATIVE WATER (PRECIPITATION)
IMPORT (MWD, LAA, GW)
NATIVE WATER (PRECIPITATION)
RECYCLED WATER
UNDERFLOW TO MONK HILL BASIN
TREATMENT EFFLUENT TO SEWER
SYLMAR BASIN
VERDUGO BASIN
TREATMENT EFFLUENT TO SEWER
IMPORT (MWD, LAA, GW)
NATIVE WATER (PRECIPITATION)
RECYCLED WATER
SAN FERNANDO BASIN
EAGLE ROCK BASIN
NATIVE WATER (PRECIPITATION)
RECYCLED WATER
IMPORT (MWD, LAA, GW)
GROUNDWATER EXTRACTION IN ALL FOUR BASINS
GROUND-WATER OUTFLOW
TREATMENT EFFLUENT TO SEWER
PRIVATE PUMPER
LADWP POTABLE SUPPLY EXPORT
LA RIVER OUTFLOW
LADWP POTABLE SUPPLY EXPORT
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- Identify Salt and Nutrient (S/N) Water Quality Issues
  - Define “Baseline” groundwater quality
  - Characterize quality of imported water, recycled water, stormwater, etc.
  - Define what constituents will be managed
    - Example: VOCs and chromium not a part of SNMP, only TDS, Cl, NO_3
    - Handled by other agencies (EPA, DTSC, RWQCB, etc.)
- Estimate changes in S/N concentrations in the groundwater basins (GWB) due to current practices and projects
- Define management goals vs. monitoring goals
  - Create a Monitoring and Management Plan for S/N in GWBs
  - Create a Monitoring Plan for CECs in GWBs

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ULARA SNMP

- Estimate changes in S/N concentrations in the GWBs due to planned/future practices and projects
  - LADWP's proposed San Fernando Valley Groundwater Remediation facilities
  - City of Los Angeles Groundwater Replenishment Project
  - Various stormwater infiltration projects, LID projects, etc.
  - Plans for increased recycled water use for irrigation

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Baseline Data vs BPOs/MCL

- Reviewed available data (2002-2012)- median values
  - TDS, Chloride, Nitrate
  - Each Constituent By Basin (& Management Area)

Basin / Management Areas		TDS (mg/L)	TDS [BPO]	Chloride (mg/L)	Chloride [BPO]	Nitrate (NO3) (mg/L)	Nitrate (NO3) [MCL]
Sylmar Basin		353	[600]	25	[100]	26	[45]
Verdugo Basin		548	[600]	86	[100]	44	[45]
Eagle Rock Basin		838	[800]	106	[100]	23	[45]
San Fernando Basin	West of 405	768	[800]	32	[100]	32	[45]
	Sunland-Tujunga	N/A	[400]	N/A	[50]	N/A	[45]
	Foothill	N/A	[400]	N/A	[50]	N/A	[45]
	Major Wellfield	521	[600]	32	[100]	23	[45]
	Narrows	564	[900]	70	[150]	27	[45]

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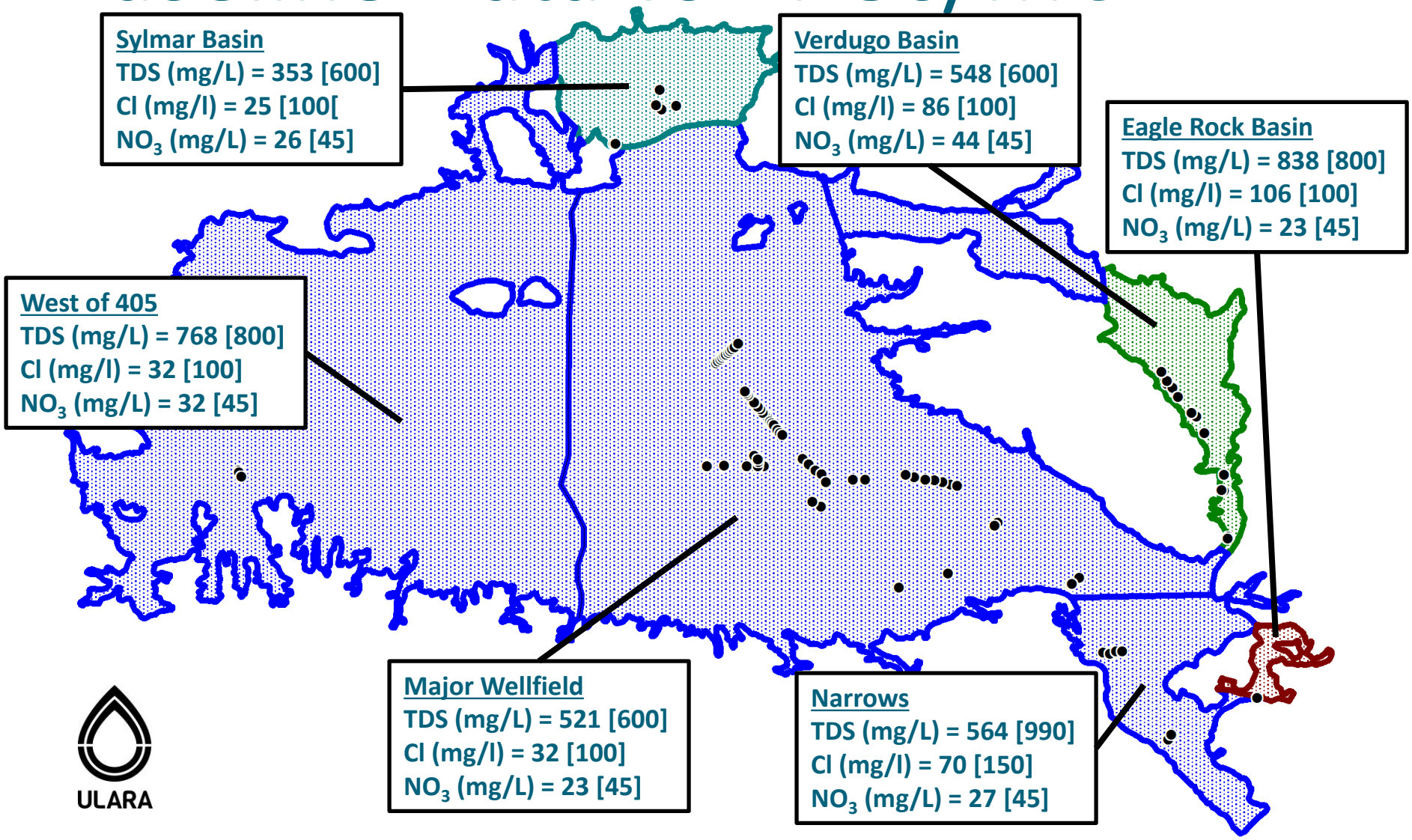
Baseline Data vs BPOs/MCL



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Next Steps

- Spreadsheet mixing model to begin in Early 2015
- Ongoing identification of projects/activities that affect salt and/or nutrient loading in the basins
  - Existing, Planned, Conceptual
- Public meetings following major milestones
- Continue to include LARWQCB in our SNMP development meetings (next meeting in January 2015)

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