

Salt & Nutrient Management Plan Development Upper Los Angeles River Area (ULARA)

Presented to the
Regional Water Quality Control Board – LAR
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Presented By:
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What and Where is ULARA?

Presented By
Richard C. Slade
ULARA Watermaster



ULARA

UPPER LOS ANGELES RIVER AREA WATERMASTER

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.



ULARA Parties

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



ULARA Boundaries and Groundwater Basins



SNMP Plan Development

Presented By

Anthony Hicke

Assistant ULARA Watermaster



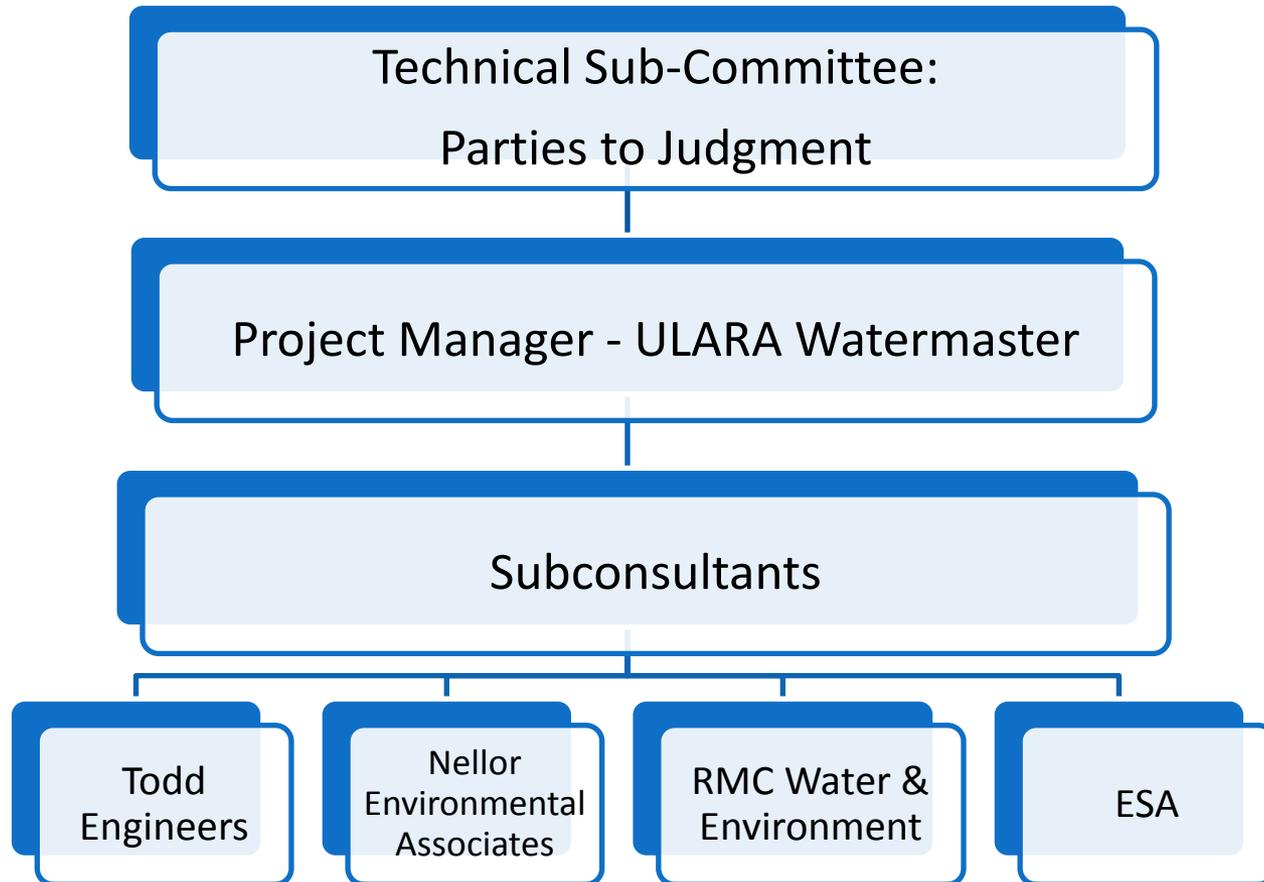
ULARA

UPPER LOS ANGELES RIVER AREA WATERMASTER

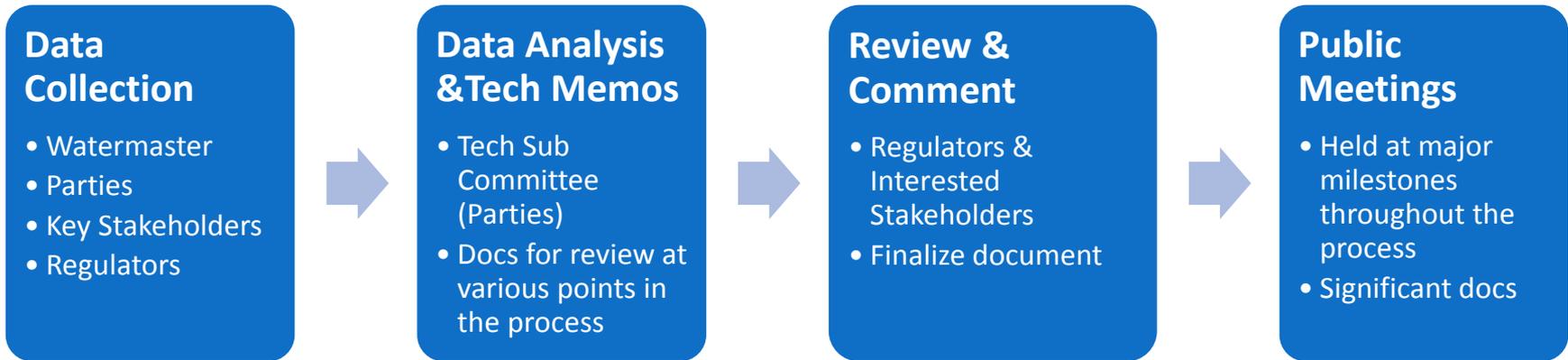
SNMP Overview

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

ULARA SNMP Technical Team



ULARA SNMP Process



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

**ULARA
CONCEPTUAL
FLOW MODEL**
Upper Los Angeles River Area
Watermaster

TREATMENT
EFFLUENT TO SEWER

IMPORT
(MWD, LAA, GW)
NATIVE WATER
(PRECIPITATION)

IMPORT
(MWD, LAA, GW)
NATIVE WATER
(PRECIPITATION)
RECYCLED WATER

UNDERFLOW TO
MONK HILL BASIN

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

DRAFT



ULARA SNMP

- 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, NO₃
 - 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



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



Baseline Data vs BPOs/MCL

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

		TDS		Chloride		Nitrate (NO3)	
Basin / Management Areas		(mg/L) [BPO]	(mg/L) [BPO]	(mg/L) [BPO]	(mg/L) [MCL]	(mg/L) [MCL]	(mg/L) [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]



Baseline Data vs BPOs/MCL

Sylmar Basin

TDS (mg/L) = 353 [600]
Cl (mg/l) = 25 [100]
NO₃ (mg/L) = 26 [45]

Verdugo Basin

TDS (mg/L) = 548 [600]
Cl (mg/l) = 86 [100]
NO₃ (mg/L) = 44 [45]

Eagle Rock Basin

TDS (mg/L) = 838 [800]
Cl (mg/l) = 106 [100]
NO₃ (mg/L) = 23 [45]

West of 405

TDS (mg/L) = 768 [800]
Cl (mg/l) = 32 [100]
NO₃ (mg/L) = 32 [45]

Major Wellfield

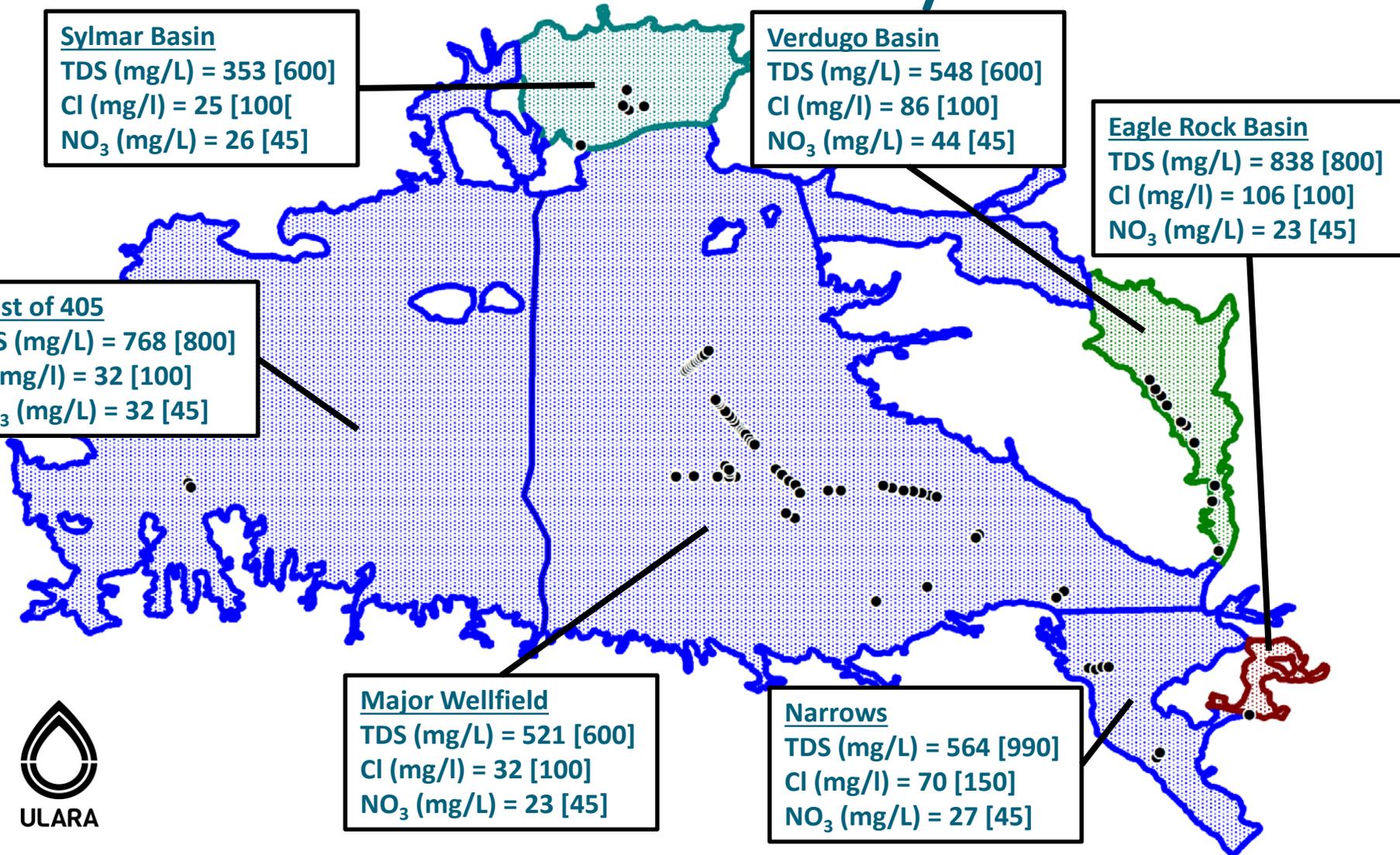
TDS (mg/L) = 521 [600]
Cl (mg/l) = 32 [100]
NO₃ (mg/L) = 23 [45]

Narrows

TDS (mg/L) = 564 [990]
Cl (mg/l) = 70 [150]
NO₃ (mg/L) = 27 [45]



ULARA



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)



Contact Information

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