

# Post-fire Sediment Removal and Nutrient Load Reduction Study

LECL TMDL Taskforce  
Meeting

October 23, 2019

# Overview

2



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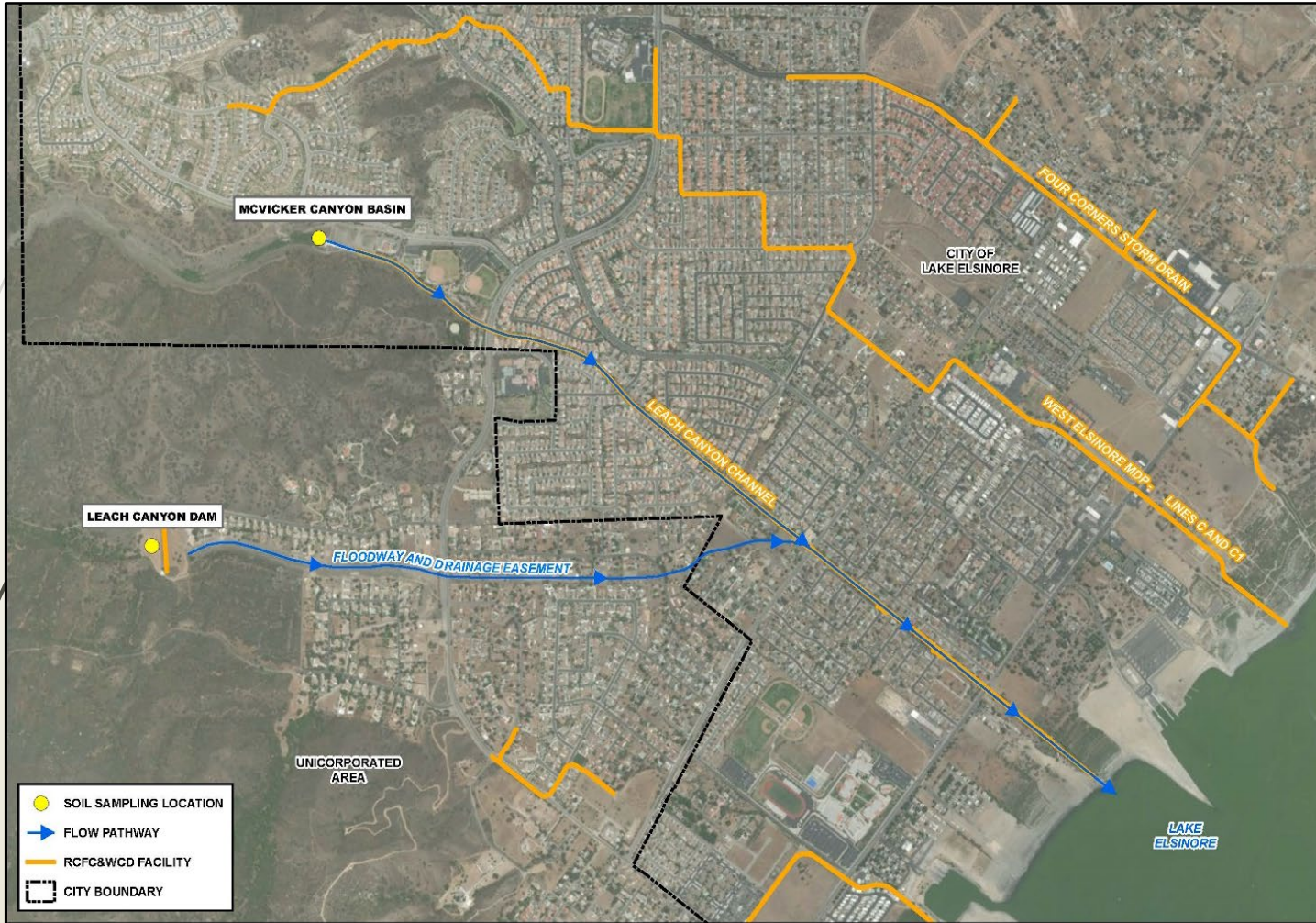
- ▶ District's response to the Holy Fire
- ▶ Sediment removal from District facilities
  - ▶ Leach Canyon Dam
  - ▶ McVicker Canyon Basin
- ▶ Quantify sediment removed from basins
- ▶ Evaluate sediment nutrient load concentrations

# Sediment Removal and Nutrient Load Study

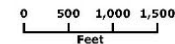
3



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**LEACH CANYON DAM AND MCVICKER CANYON BASIN  
DRAINAGE FLOW PATHWAY**





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4

## Leach Canyon Dam

- Post 2/14/2019 Storm Event
- Determine total volume of sediment removed from Leach Canyon Dam
- September 2018 – April 2019
- Prevented **184,884 tons** (or 11,928 truckloads) from impacting Lake Elsinore

# McVicker Canyon Basin



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- Post 2/14/2019 Storm Event
- Determine total volume of sediment removed from basin
- September 2018 – April 2019
- Prevented **150,118 tons** (or 9,685 truckloads) from impacting Lake Elsinore

# Nutrient Reduction Analysis



- Interested parties:
  - RWQCB
  - Riverside County Flood Control
  - LE/CL TMDL Taskforce
- Evaluate Total nitrogen and Total phosphorus load captured and removed from basins
- Prevented from discharging to Lake Elsinore (listed as "impaired" for nutrients and dissolved oxygen)

Sample Location	Leach Canyon Dam (LC3)	McVicker Canyon Basin (MV2)
Sample Date	3/1/2019	3/1/2019
Total Wet Weight (tons)	184,884	150,118
Wet Weight Converted to Dry Weight (tons)	129,419	105,082
Total Wet Sediment Removed (Tons)	<b>335,002</b> ←	
<b>Analyte Concentrations</b>		
TN (mg/kg)	20,000	47,000
TP (mg/kg)	368	689
<b>Estimated Nutrient Load Reduction</b>		
TN (tons)	2,588	4,939
TP (tons)	48	72
Total nitrogen removed (tons)	<b>7,527</b> ←	
Total phosphorus removed (tons)	<b>120</b> ←	



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# Questions?

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