SANTA ANA WATERSHED PROJECT AUTHORITY

SAWPA Building Lobby Remodel (Security Improvements and ADA Upgrades Project

July 2, 2024
Item No. 6.A
David Ruhl
Executive Manager of Engineering and Operations

Recommendation

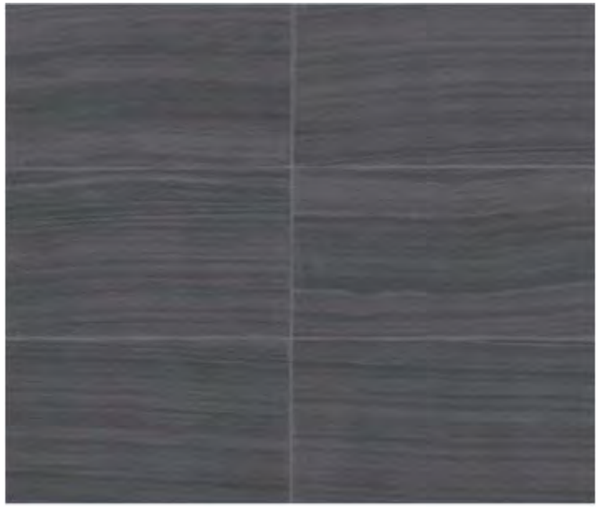
- Direct the General Manager to file a Notice of Exemption for the Lobby Remodel and ADA Upgrades Project with the Riverside County Clerk's Office; and

- Direct the General Manager to issue a Notice Inviting Bids, upon completion of the Final Plans and Specifications, for the Construction of the Lobby Remodel and ADA Upgrades Project.

Project Drivers

- Harden the entrance to add a layer of security
- Maintain lobby open during business hours
- Improve functionality and appearance of reception work area
- Improvements consistent with prior Phase 1 and 2
- Provide exterior and interior ADA Upgrades

Proposed Lobby



03 DAL TILE - TILE FLOORING
REVOTILE STONE LOOK
GRAPHITE RV61

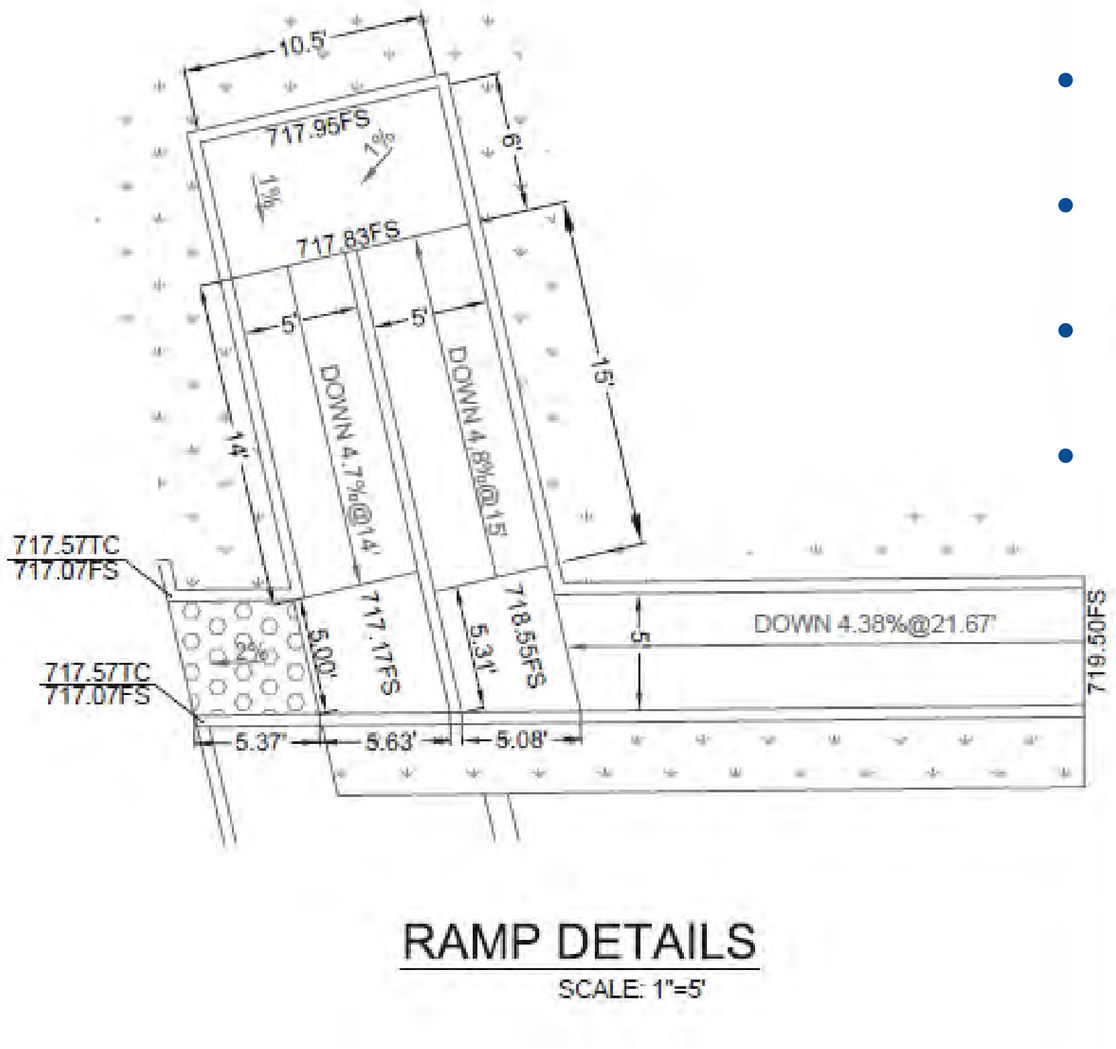
01 KOROSEAL -
WALLCOVERINGS
INTERLOOM PRUSSIAN -
NM21-19

02 CLEAR ADONIZED
STOREFRONT SYSTEM

04 DAL TILE -
ENGINEERED STONE
OQ34 - ROCKY MOUNTAIN

05 WILSONART -
PLASTIC LAMINATE
WALNUT HEIGHTS - 7965

Exterior Entrance Redesign



- Provides path of travel
- Adds a ramp from the ADA parking
- Preserves 2/3 of the exterior concrete area
- Includes aesthetic features

Estimate of Construction Cost and CEQA

Estimate of construction costs

- Lobby and ADA Improvements $519,587

As of 4/30/24, the Building Reserve fund has $620,007 available.

CEQA

- Project is categorically exempt from CEQA under the Public Resources Code Section 15301 (a)

Schedule of Critical Activities

CEQA Notice of Exemption	July 2, 2024
Commission Approval – Notice Inviting Bids	July 2, 2024
Final Plans and Specifications	August 1, 2024
Issue Notice Inviting Bids	August 5, 2024
Commission Approval – Award Construction Contract	November 5, 2024
Construction	Dec 2024 – Mar 2025

Recommendation

- Direct the General Manager to file a Notice of Exemption for the Lobby Remodel and ADA Upgrades Project with the Riverside County Clerk's Office; and

- Direct the General Manager to issue a Notice Inviting Bids, upon completion of the Final Plans and Specifications, for the Construction of the Lobby Remodel and ADA Upgrades Project.

Questions?

Thank You

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LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

City of Lake Elsinore • City of Canyon Lake • County of Riverside
Elsinore Valley Municipal Water District • Santa Ana Watershed Project Authority

SAWPA

SANTA ANA WATERSHED PROJECT AUTHORITY

Lake Elsinore & Canyon Lake TMDL Task Force Status Update

Commission Meeting
Item No. 6.B
Rick Whetsel
Senior Watershed Manager
July 2, 2024

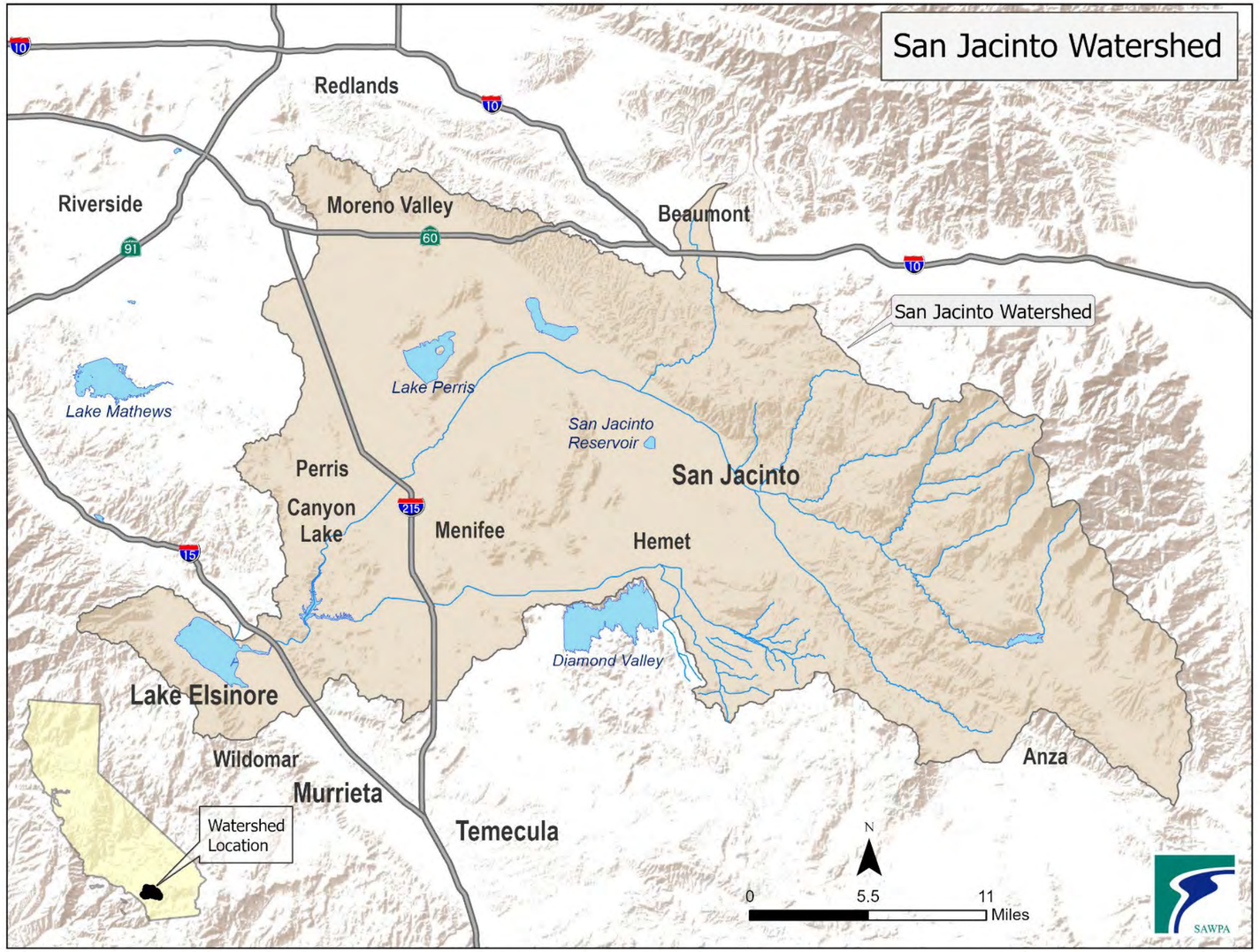
Agenda

- Background on LESJWA
- Lake Elsinore and Canyon Lake Water Quality
- Lake Elsinore and Canyon Lake TMDLs (2004)
- TMDL Events / Implementation Activities
- 2024 Updates to TMDLs

Lake Elsinore and San Jacinto Watersheds Authority (LESJWA)

- LESJWA is a Joint Powers Authority
- Five member agencies:
  - Elsinore Valley Municipal Water District
  - City of Lake Elsinore
  - City of Canyon Lake
  - County of Riverside
  - SAWPA (also LESJWA administrator)

- LESJWA goals:
  - Support projects to improve water quality at Lake Elsinore, Canyon Lake, and the San Jacinto River Watershed.
  - Secure reliable funding to operate and maintain water quality improvement projects
  - Administer the Lake Elsinore and Canyon Lake TMDL Task Force.



P:\Projects\RachelGray\SanJacintoWatershedDAC\SJWatershed.aprx LoSJWatershed SW-3284


Canyon
Lake
Lake
Elsinore
Lake St
Lincoln St
Riverside Dr
Corona Freeway
Central Ave
Dalton Ave
N Main St
Greenwald Ave
Canyon Lake Dr S
Goetz Rd
Railroad Canyon Rd
Canyon Hills Rd
Temescal Valley Fwy
Grand Ave
74
15
© 2017 Google
Google earth
lat 33.681316° lon 117.305024° elev 1744 ft eye alt 10.01 mi

Lake Elsinore and Canyon Lake Basin Plan Objectives and Impairments

LAKES AND RESERVOIRS	BENEFICIAL USE																	
	MUN	AGR	IND	PROC	GWR	NAV	POW	REC1	REC2	COMM	WARM	LWRM	COLD	BIOL	WILD	RARE	SPWN	EST
Peters Canyon, Rattlesnake, Sand Canyon, and Siphon Reservoirs	+	X						X[4]	X		X				X	X		
SAN JACINTO RIVER BASIN																		
Canyon Lake (Railroad Canyon Reservoir)	X	X			X			X	X	X	X				X			
Elsinore, Lake	+							X	X	X	X				X	X		
Fulmor, Lake	X	X						X	X		X		X		X			
Hemet, Lake	X	X			X		X	X	X	X	X		X		X	X	X	
Mystic Lake	I							I	I		I			X	X	X		
Perris, Lake	X	X	X	X	X			X	X	X	X		X		X	X		

X Existing or Potential Beneficial Use
I Intermittent Beneficial Use
+ Excepted from MUN (see text)

[4] Access prohibited per agency/company with jurisdiction

Lake Elsinore

- Nutrients (N, P)
- Low Dissolved Oxygen
- PCBs
- DDT
- Toxicity

Canyon Lake

- Nutrients (N, P)

Lake Elsinore and Canyon Lake WQ Problems

- Algal blooms
- Fish kills

Cause of WQ Problems

- Excessive phosphorus and nitrogen (nutrients)
- Depletion of oxygen

Sources of Nutrients

- Urban, agriculture, erosion, septic systems
- Nutrient loading occurs during large storm events

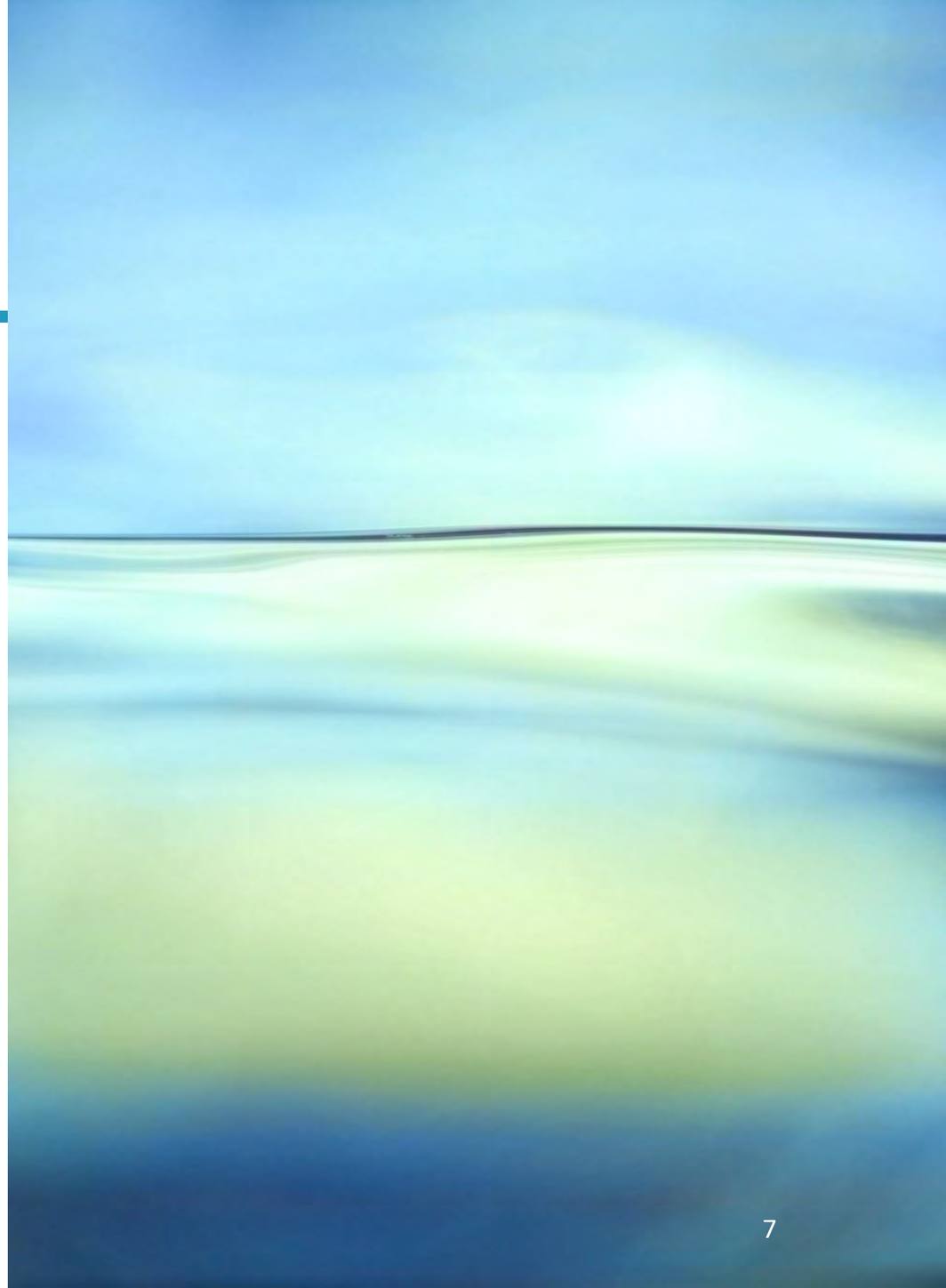
Impairments Triggered Need for TMDLs

Purpose and Goal of TMDLs

- Attain and maintain applicable water quality standards
- Account for seasonal variations
- Pollutant by pollutant basis

Implementation of TMDLs

- Identification of actions/activities (i.e., tasks)
- Numeric targets
- Incorporated into discharge permits



The 2004 TMDLs

Total Loads, Targets & Load Allocations

Lake Elsinore and Canyon Lake TMDL Task Force

- Water Quality Control Plan for the Santa Ana River Basin amended to include nutrient TMDLs for Canyon Lake and Lake Elsinore (2004)
  - DO, Chlorophyll a, Ammonia, Total Phosphorus (TP) and Total Nitrogen (TN)
  - Load Allocations (LA) and Waste Load Allocations (WLA) for discharge (non-point sources and point sources)
  - Implementation Plan (activities to meet water quality standards)
- Lake Elsinore & Canyon Lake TMDL Task Force formed by stakeholders (2005)
- LESJWA administers Task Force
  - Coordinate costs of all implementation efforts.
  - Implement TMDL Implementation Plan
  - Reviews TMDL Basin Plan Amendment

Task Force Agreement

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

City of Lake Elsinore • City of Canyon Lake • County of Riverside
Elsinore Valley Municipal Water District • Santa Ana Watershed Project Authority

TMDL Water Quality Objectives

Indicator	Lake Elsinore (by 2020)	Canyon Lake
Total Phosphorous	Annual average of <0.1 mg/L	Same (by 2020)
Total Nitrogen	Annual average of <0.75 mg/L	Same (by 2020)
Ammonia Nitrogen	Acute and Chronic calculated levels	Same (by 2020)
Chlorophyll-a	Summer avg <25 ug/L	Same (by 2020)
Dissolved Oxygen	>5 mg/L 1 meter above lake bottom	Daily avg in hypolimnion of >5 mg/L by 2015

Wasteload Allocations: Canyon Lake

Canyon Lake Nutrient TMDL	Final Total Phosphorus Load Allocation (kg/yr)[b, c]	Final Total Nitrogen Load Allocation (kg/yr)[b, c]
TMDL	**8,691**	**37,735**
Wasteload Allocations (WLA)	**486**	**6,248**
Supplemental Water	48	366
Urban	306	3,974
CAFO	132	1,908
Load Allocations (LA)	**8,205**	**31,487**
Internal Sediment	4,625	13,549
Atmospheric Deposition	221	1,918
Agriculture	1,183	7,583
Open/Forest	2,037	3,587
Septic Systems	139	4,850

[a] TMDL allocations for Canyon Lake apply to those land uses located upstream of Canyon Lake
[b] Final allocation compliance to be achieved as soon as possible, but no later than December 31, 2020
[C] TMDL and allocations specified as 10-year running average

Wasteload Allocations: Lake Elsinore

Lake Elsinore Nutrient TMDL	Final Total Phosphorus Load Allocation (kg/yr)[b, c]	Final Total Nitrogen Load Allocation (kg/yr)[b, c]
TMDL	**28,584**	**239,025**
Wasteload Allocations (WLA)	**3,845**	**7,791**
Supplemental Water[d]	3,721	7,442
Urban	124	349
CAFO	0	0
Load Allocations (LA)	**21,969**	**210,461**
Internal Sediment	21,554	197,370
Atmospheric Deposition	108	11,702
Agriculture	60	213
Open/Forest	178	567
Septic Systems	69	608
Canyon Lake Watershed[e]	2,770	20,774

[a] The Lake Elsinore TMDL allocations for urban, agriculture, open/forest, septic systems and CAFOs only apply to those land uses located downstream of Canyon Lake.

[b] Final allocation compliance to be achieved as soon as possible, but no later than December 31, 2020.

[c] TMDL and allocations specified as 10-year running average.

[d] WLA for supplemental water should be met as soon as possible as a 5 year running average.

[e] Allocation for Canyon Lake overflows.

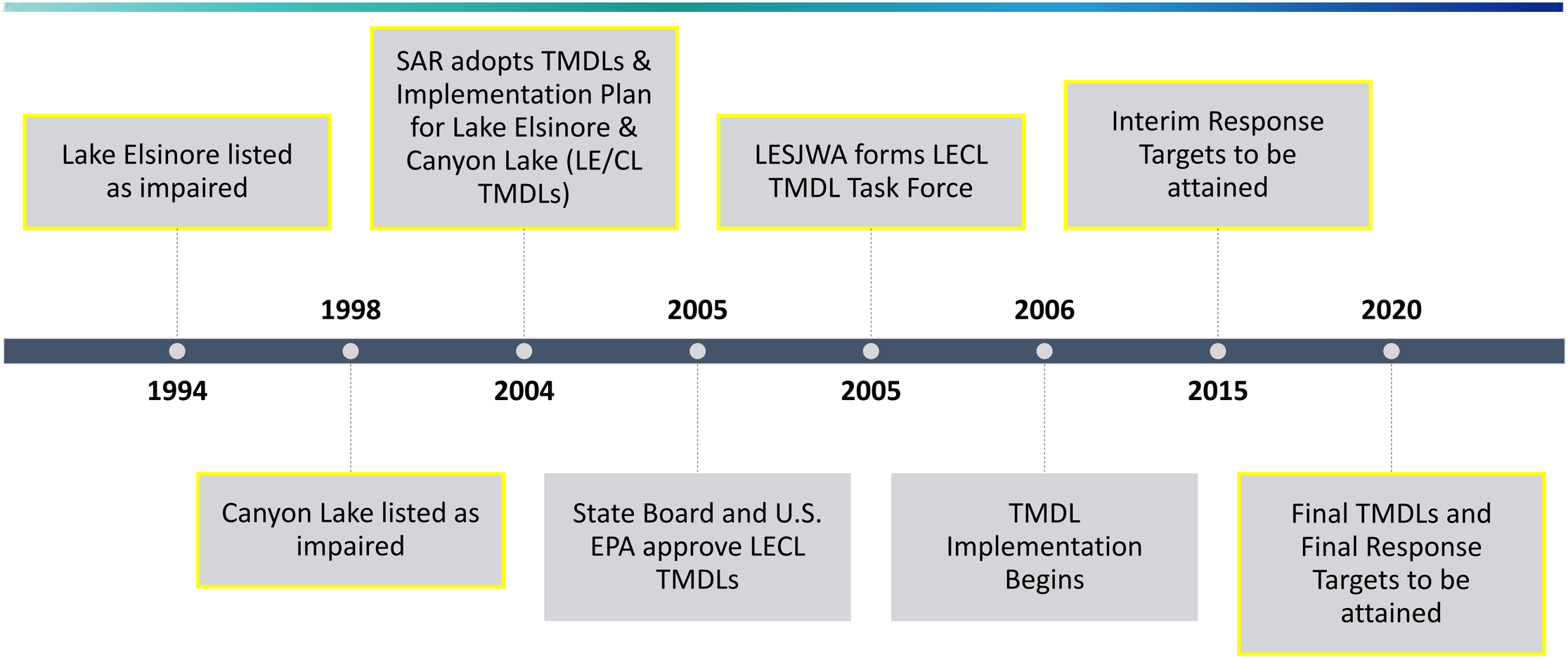
Task Force Members for LECL TMDL Task Force

- Riverside County
- Riverside County Flood Control and Water Conservation District
- City of Beaumont
- City of Canyon Lake
- City of Hemet
- City of Lake Elsinore
- City of Moreno Valley
- City of Murrieta
- City of Menifee
- City of San Jacinto
- City of Riverside
- City of Perris
- City of Wildomar
- Caltrans
- CA Dept. of Fish and Wildlife
- Elsinore Valley Municipal Water District
- March Air Force Reserve JPA
- March Air Force Base
- Eastern Municipal Water District
- San Jacinto Ag Operators
- San Jacinto Dairy Operators

2004 TMDL Key Events

Timelines for TMDL compliance, implementation and related activities

Timeline TMDL Key Events



Key Implementation Actions

Projects/Studies

- Recycled water to Lake Elsinore (2002)
- Carp Removal Program (2002-2008)
- Lake Elsinore Aeration & Mixing System (LEAMS) (2008)
- Application of Alum to Canyon Lake (2013)
- Draft Technical TMDL Report (2018)
- Ag Surface Runoff Water Quality Index (2019)
- Comprehensive Fish Survey Study (2020)

Regulatory

MS4 Permit included TMDLs (2010)

Nutrient Reduction Plan Implementation (2013/4)

Agricultural Nutrient Management Program (AgNMP) submitted to Reg Board (2013)

Conditional Waiver for Agricultural Operations adopted (2013/6)

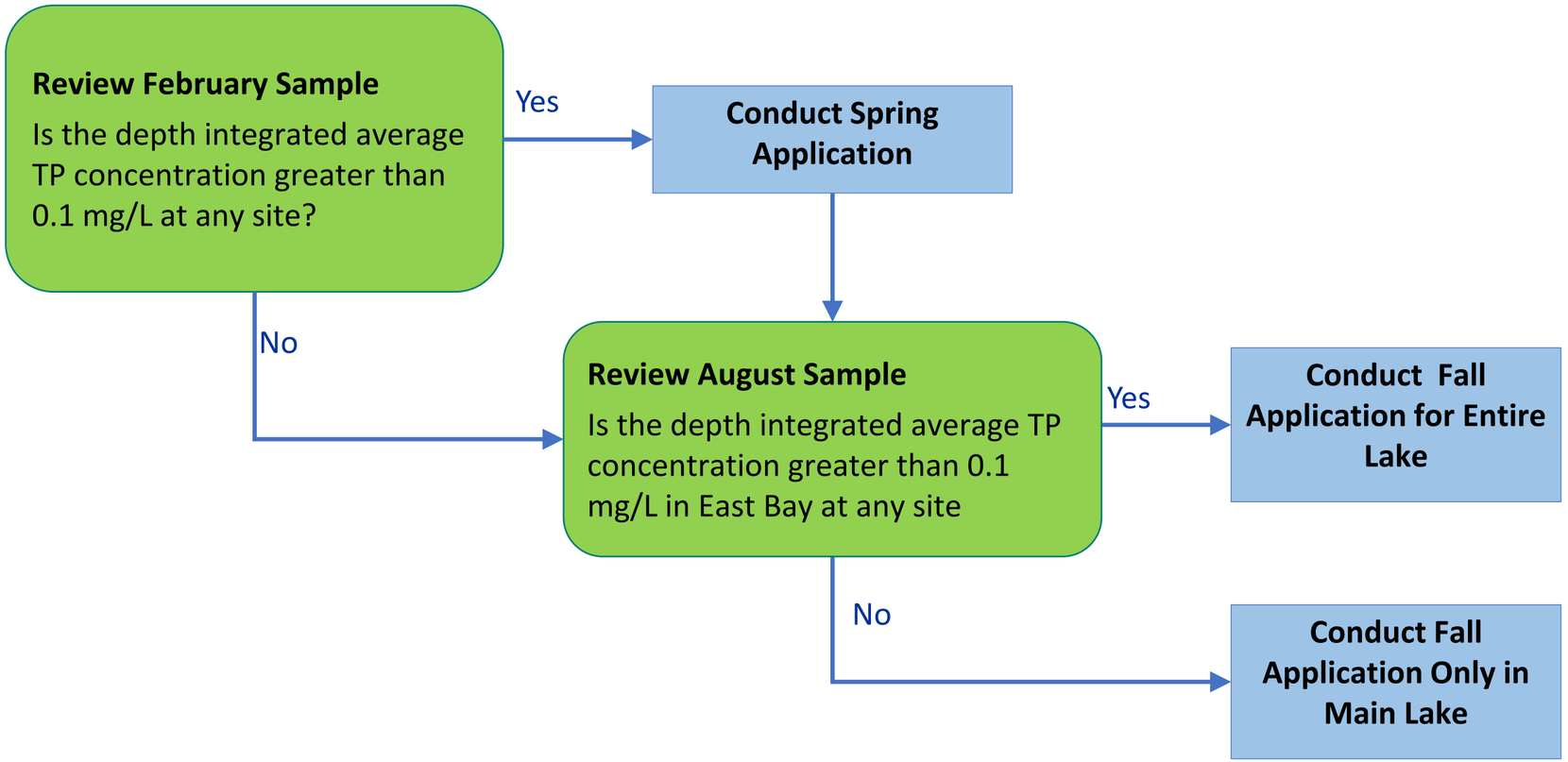
Compliance Assessment Report submitted to SAR (2020)

Task Force Investments

Activity	Estimated Annual Cost	Estimated One Time Cost
Administration/Regulatory Facilitation	$145,000	N/A
Monitoring & Reporting	$235,000	N/A
Canyon Lake Alum Applications	$240,000	$120,000 per event
LEAMS Operations & Offsets	$125,000	N/A
2018 Draft TMDL Technical Report	N/A	$875,000 - $1,000,000
2019-2020 Fisheries Study	N/A	$200,000

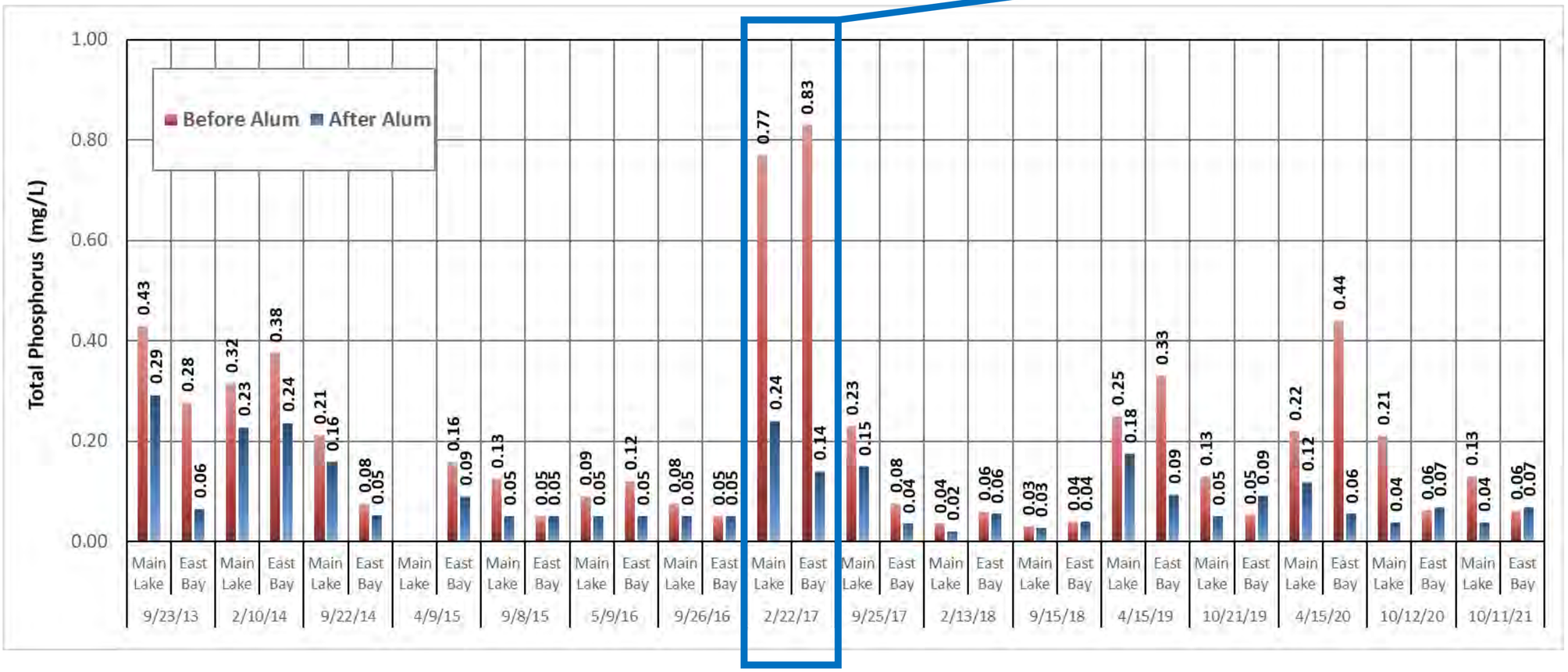
Routine Alum Application in Canyon Lake

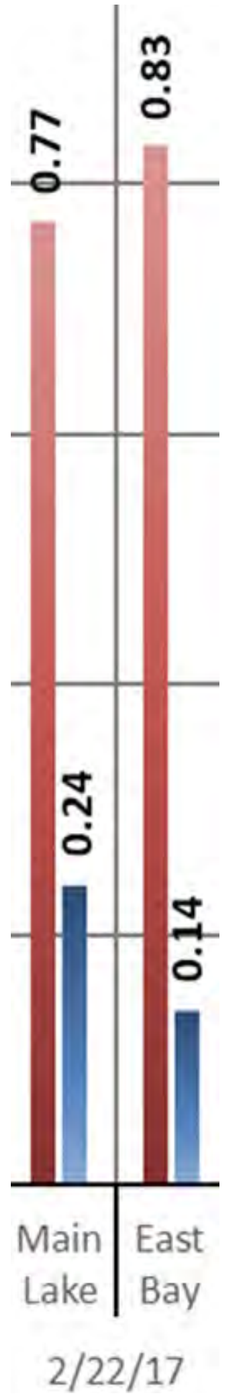
- Alum binds to phosphorous removing it from the water column
- Alum applied lake-wide semi-annually in spring and fall seasons



Effectiveness of Alum Applications

- Monitoring data in Canyon Lake since 2013 show consistent reductions in **Total Phosphorus** (TP)

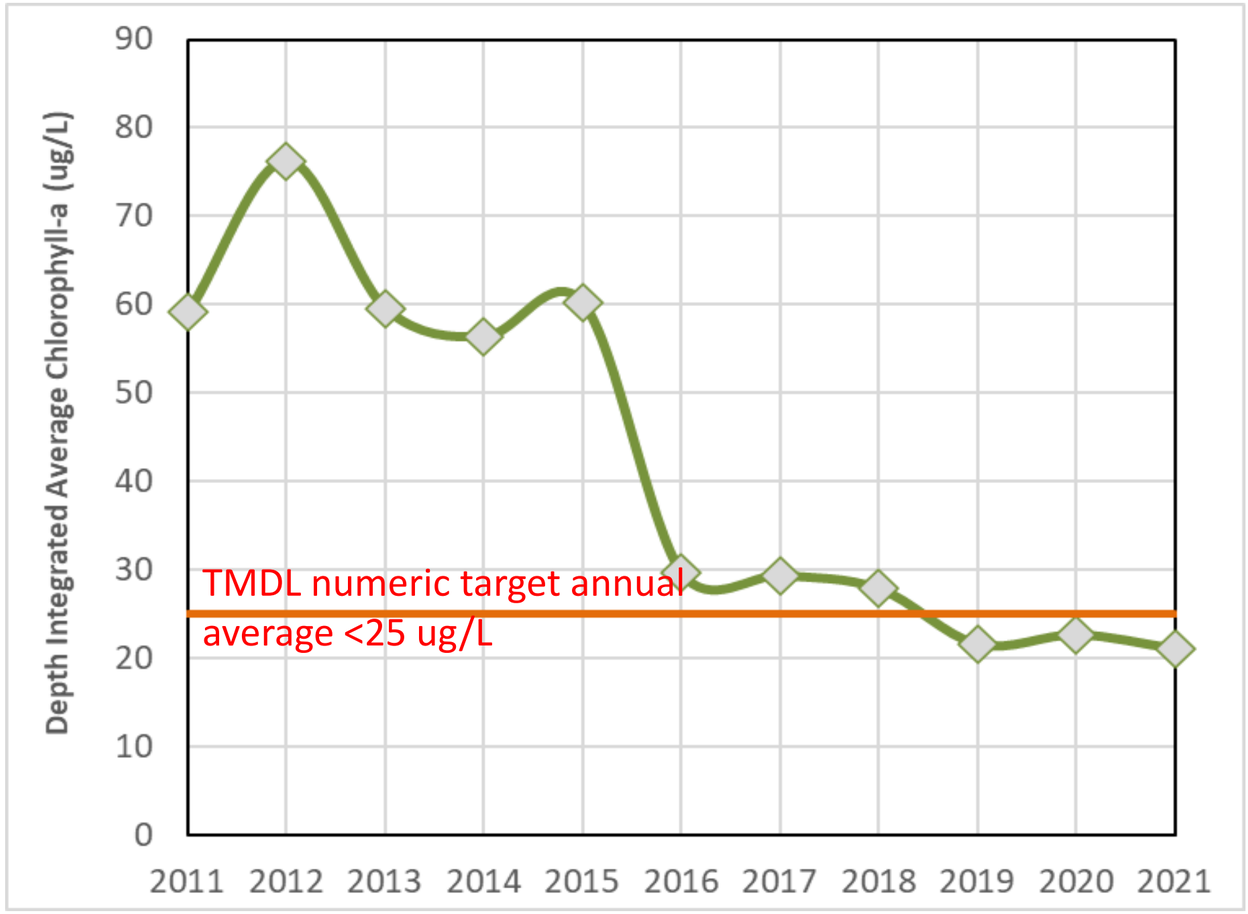




Note: before and after alum sampling dates 8 weeks apart

Effectiveness of Alum Applications

- Routine, low-dose, alum additions in Canyon Lake
- Improved water quality that is meeting 2004 TMDL numeric targets for algae



Overflows to Lake Elsinore

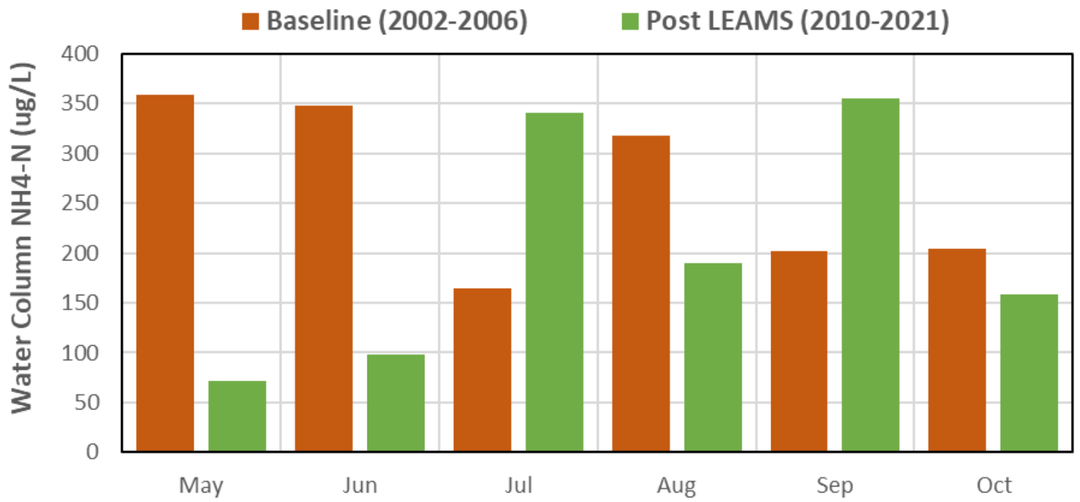
Alum in Canyon Lake causes notable reduction in TP load to Lake Elsinore

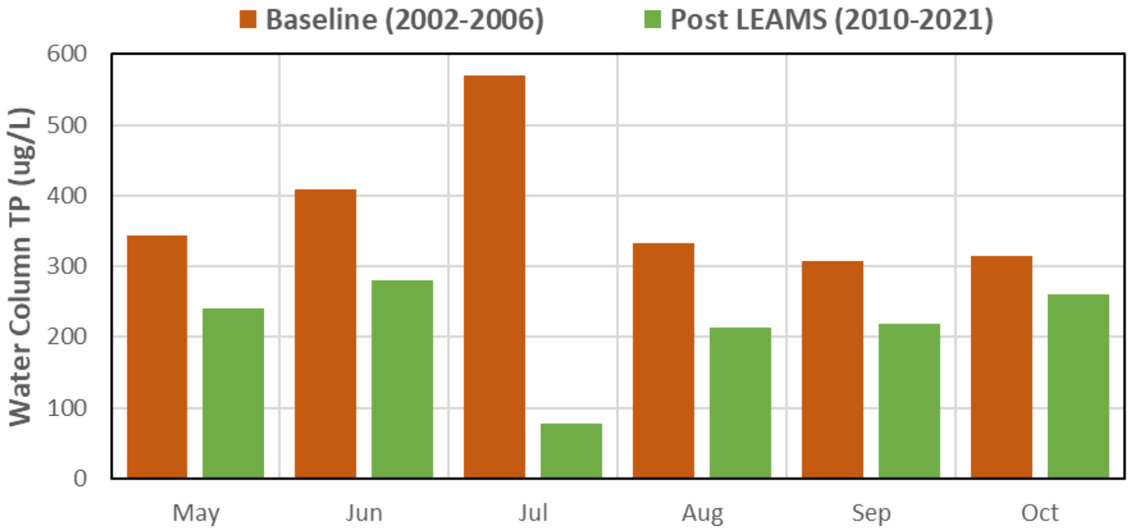
Average Wet Weather Nutrients in Overflows to Lake Elsinore	TP (mg/L)	TN (mg/L)
Before Canyon Lake Alum	0.58	1.92
After Canyon Lake Aum	0.27	1.93

Photo from Wood, 2021 Annual Monitoring Program Report, March 10-15, 2021

Lake Elsinore Project Implementation

- Ongoing project implementation including LEAMS, fishery management, and reclaimed water addition
- Monthly effectiveness monitoring comparing nutrients in-lake during baseline (2002-2006) to post project period (2010-2021)
- Results during May-Oct period of LEAMS operation
- Data showed the lake produced sufficient oxygen during the winter months.





2020 TMDL Compliance

TMDL	Final Total Phosphorus TMDL (kg/yr)[a, b]	Final Total Nitrogen TMDL (kg/yr)[a, b]
Canyon Lake	8,691	37,735
Lake Elsinore	28,584	230,025

[a] Final compliance to be achieved as soon as possible, but no later than December 31, 2020
[b] TMDL specified as 10-year running average

In 2020, Stakeholders as a collective met the overall TMDL Allocations

But, Compliance with 2004 TMDL Is Not Enough

TMDL needs to be revised based on 20-years of new data & knowledge gained.

Goals of Revised TMDL

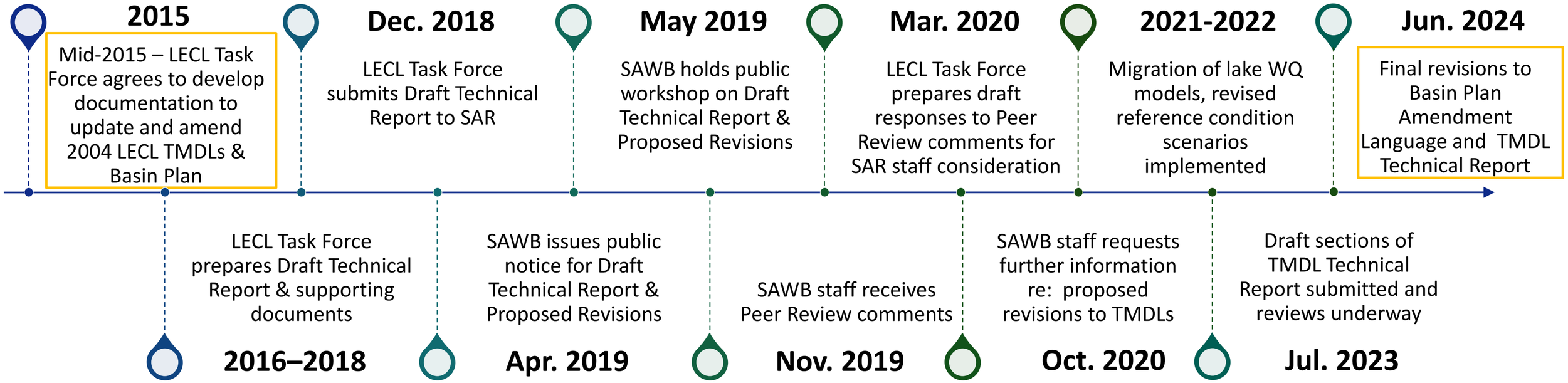
Goal 1 – Identify and manage **controllable watershed sources of nutrients** that flow into Canyon Lake and Lake Elsinore

Goal 2 – Identify long-lasting **in-lake controls** that address sediment fluxes and dissolved oxygen levels for protection of aquatic life & recreational beneficial uses

Goal 3 – Identify **appropriate water quality criteria** for protecting beneficial uses in two dynamic lake systems

Goal 4 – Provide controllable sources with a **reasonable, feasible and practical pathway** for meeting appropriate water quality criteria

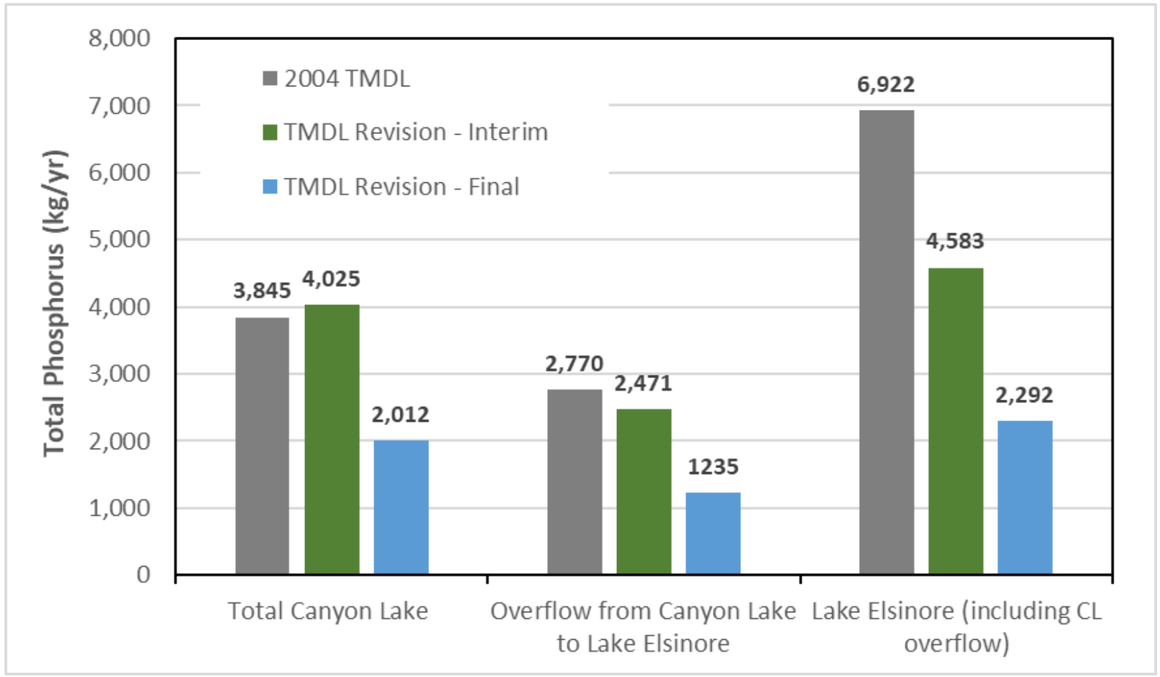
Timeline of TMDL Update

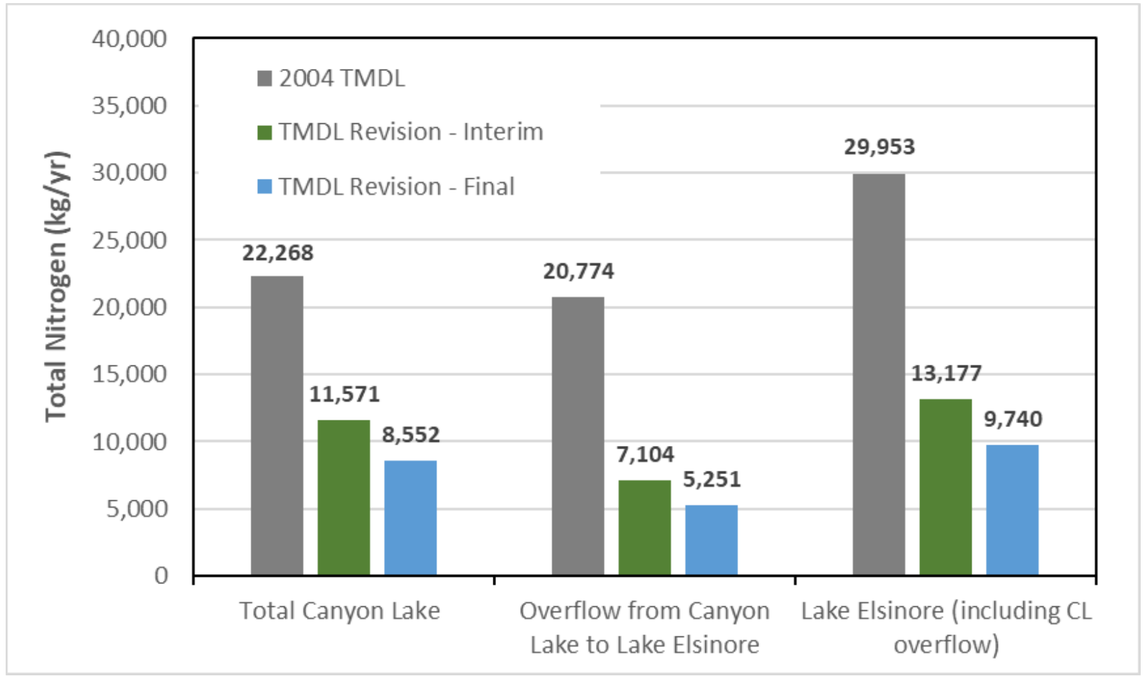


General Approach in the Draft Revised TMDL

- Numeric targets (chlorophyll a, dissolved oxygen, ammonia) expressed as cumulative distribution frequencies (CDFs)
- Waste load and load allocations for Total N and Total P based on reaching the reference condition
  - That is, natural occurring levels of Total N and P that would enter the lakes from the upper watershed)
- Reference condition defined as being the median and 25th percentiles of TP and TN data at Cranston Guard Station

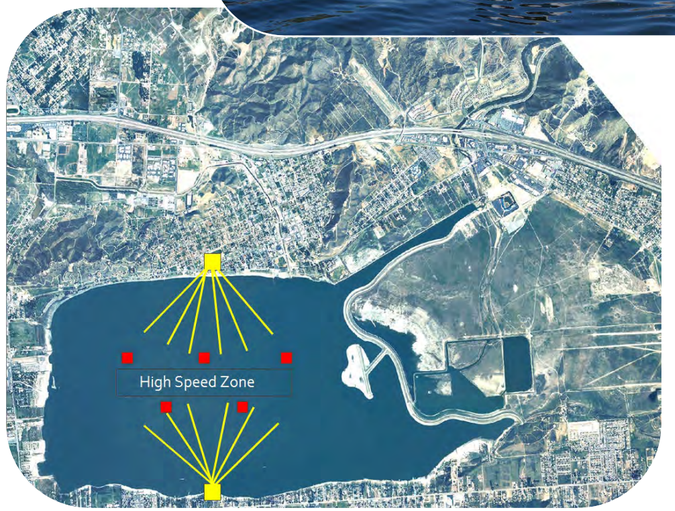
Revised TMDL Targets





Draft Plan for Meeting the Interim TMDLs (Phase 2 – Years 1 through 20)

- Evaluate existing In-Lake Water Quality Controls
- Implement Preferred Options
- Special studies
  - Lake bottom sediment sampling
  - Cyanobacteria in Lake Elsinore
  - Fisheries Management
- Evaluate Final TMDLs/Revise if appropriate
- Update and continue monitoring plan



Draft Plan for Meeting the Final TMDLs (Phase 3 – Years 21 through 30)

- Evaluate In-Lake Water Quality Controls
- Implement new or revised controls, if necessary
- Identify additional load reductions necessary to meet Final TMDLs, and implement
- Special Studies
  - Lake bottom sediment sampling
  - Fisheries Management

Task Force Efforts Provide Significant Benefits for LESJWA

Conducts comprehensive watershed and in-lake monitoring

Conducts special studies to better understand lake dynamics

Conducts special studies to evaluate fisheries resources

Provides resources for implementation of in-lake controls through use of offset credits

Evaluates impacts of watershed and in-lake controls

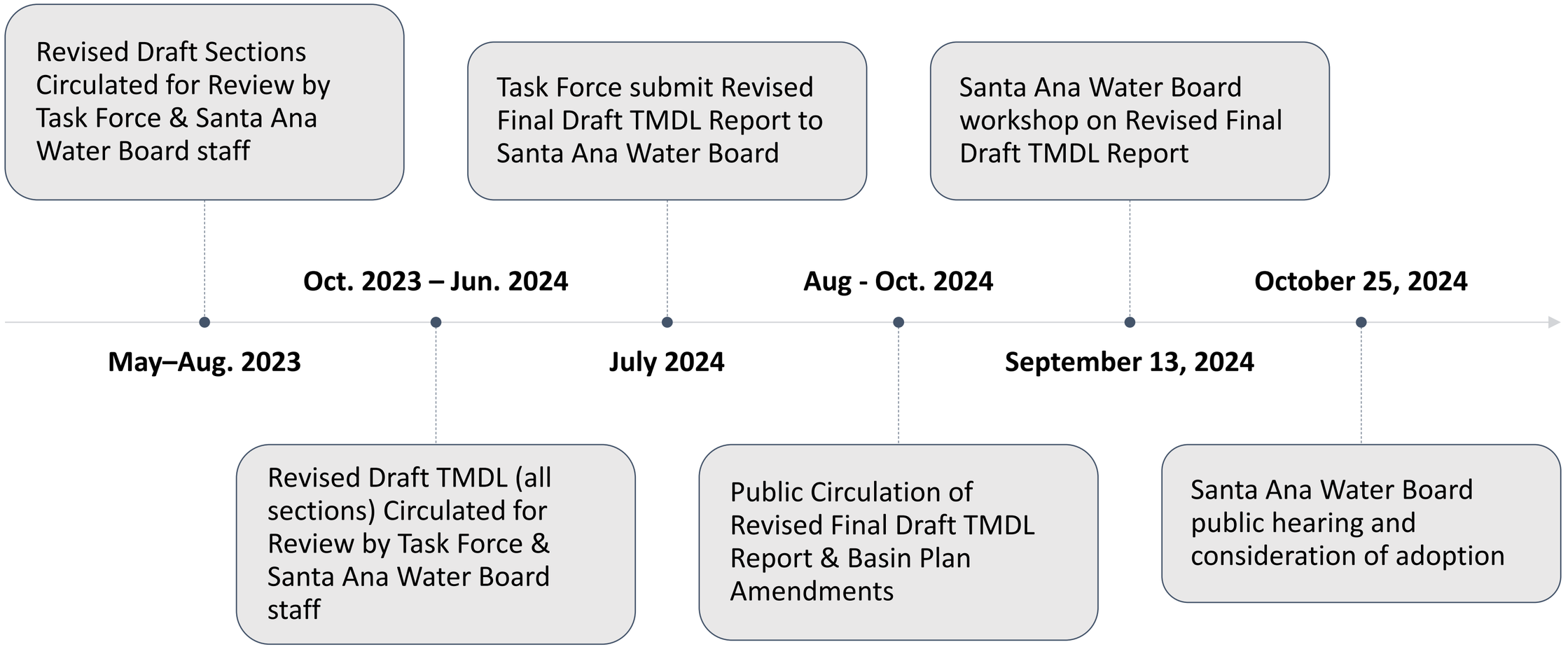
Uses best available science to identify appropriate water quality criteria for controlling nutrient impacts in the lakes

Works closely with Santa Ana Water Board to address nutrient impairments by updating TMDLs

Collaborative Process including watershed stakeholders

Cost savings to individual stakeholders

Timeline for Revised TMDL and Next Steps



Questions?

Thank You

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