



RECONSIDERATION OF DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS TOXIC POLLUTANTS TMDL

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

PUBLIC MEETING

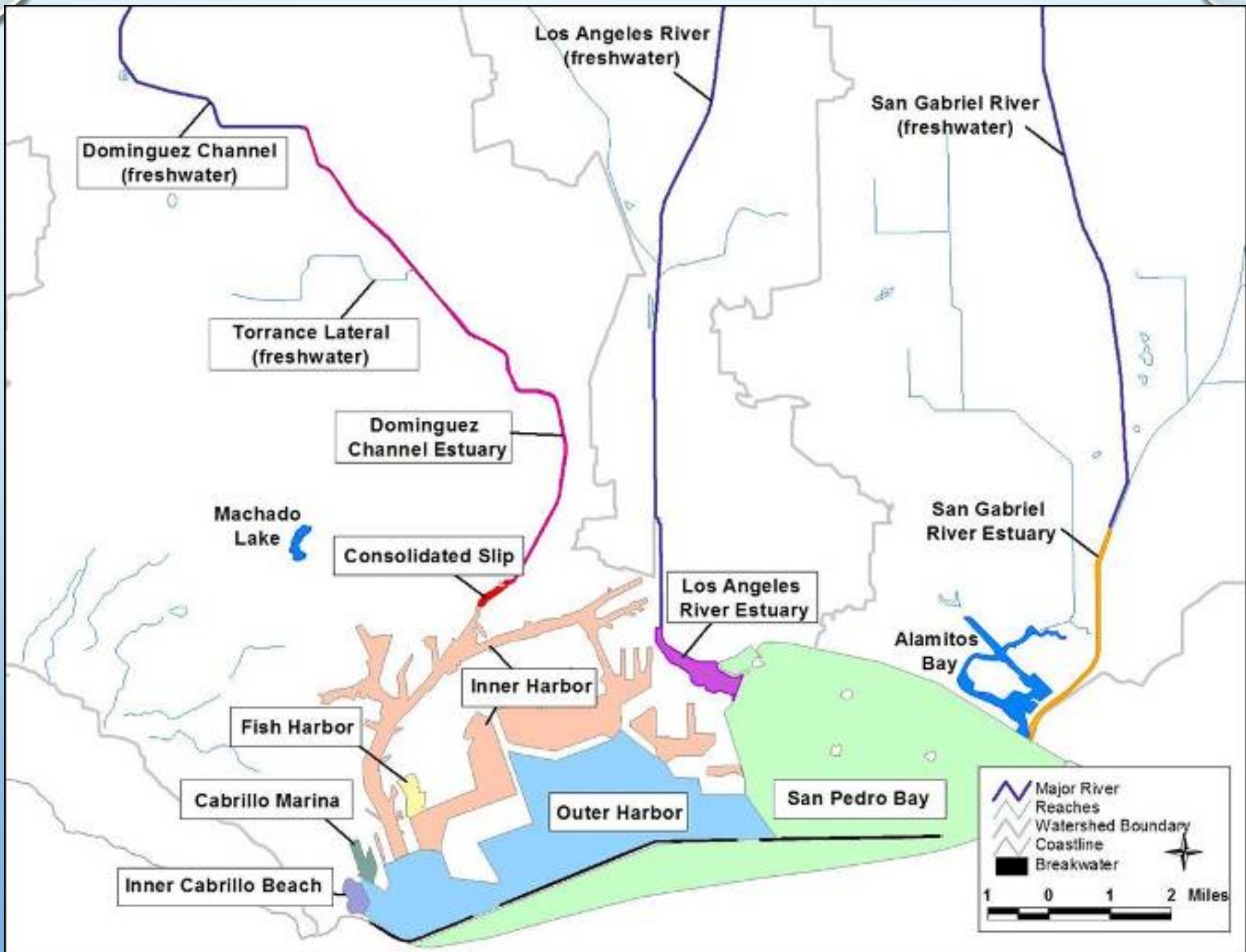
JUNE 8, 2018

TODAY'S AGENDA

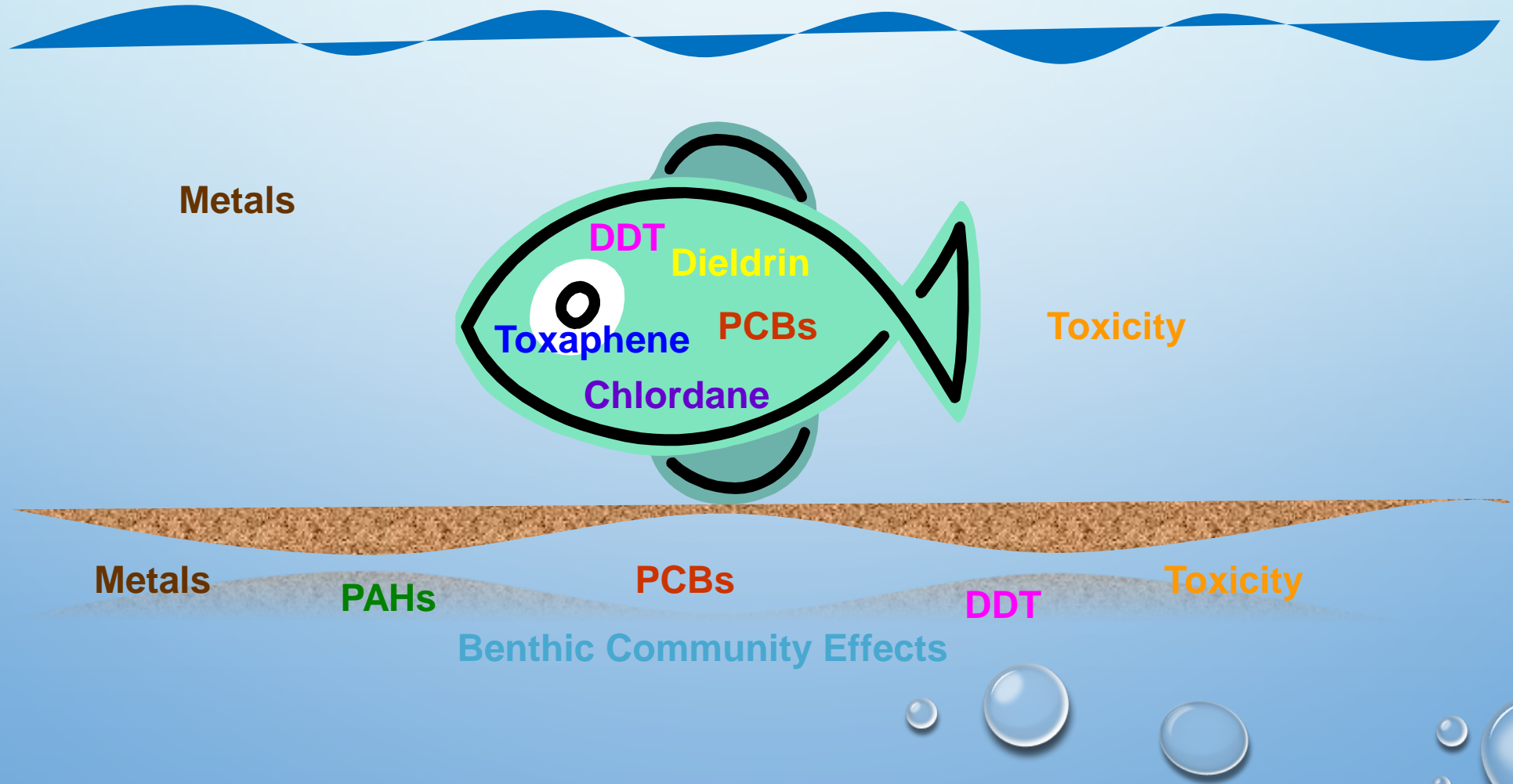
- BRIEF REVIEW OF TMDL
- TMDL IMPLEMENTATION SCHEDULE AND STATE BOARD'S DIRECTIVES
- TMDL IMPLEMENTATION UPDATE
- ASSESSMENT OF CURRENT CONDITION
- AVAILABLE SPECIAL STUDIES TO SUPPORT TMDL RECONSIDERATION
- REGIONAL BOARD'S POTENTIAL REVISIONS
- OVERVIEW AND SCHEDULE OF RECONSIDERATION PROCESS

TMDL DATES

- IMPAIRMENT: 100 LISTINGS MADE IN 1990S, TOXIC HOTSPOTS DESIGNATED IN **1999**
- LOS ANGELES WATER BOARD ADOPTED TMDL **MAY, 2011**
 - RESTORE BENEFICIAL USES IMPAIRED BY TOXIC POLLUTANTS IN SEDIMENT AND FISH
- STATE BOARD APPROVED TMDL **FEBRUARY, 2012**
 - STATE BOARD AND REGIONAL BOARD STAFF DIRECTED TO COMPLETE SQOS PROTECTIVE OF HUMAN HEALTH
- SQO ADVISORY COMMITTEE MEETING: USE HARBORS TMDL AS TEST DRIVE **MAY, 2012**
- STATE BOARD APPROVED THE SQO POLICY UPDATE **2018**
- **TMDL RECONSIDERATION 2018/19**



SEDIMENT, FISH (AND WATER) IMPAIRMENTS

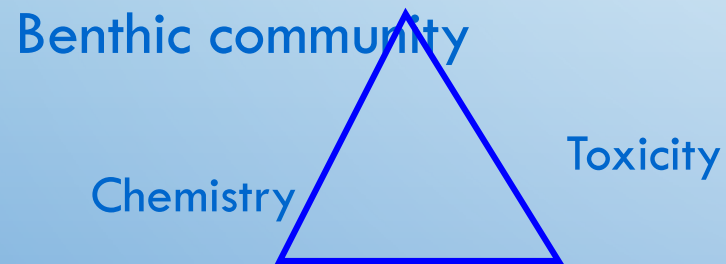


SEDIMENT QUALITY OBJECTIVES SQOS

SQOS FOR BENTHIC ORGANISMS

PHASE I, DIRECT EFFECTS

“TRIAD” APPROACH: 3 LINES OF EVIDENCE



Station Categories: “Unimpacted,” “Likely unimpacted...”

SQOS FOR HUMAN HEALTH

PHASE II, INDIRECT EFFECTS

TIERED APPROACH: 3 TIERS

Tier 1 – low data requirements

Tier 2 – more data

Tier 3 – detailed assessment

Site Categories: “Unimpacted,” “Likely unimpacted...”

THE TMDL REQUIREMENTS 6 YEARS AFTER EFFECTIVE DATE

“REGIONAL BOARD WILL RECONSIDER TARGETS, WLAS, AND LAS BASED ON NEW POLICIES, DATA OR SPECIAL STUDIES. REGIONAL BOARD WILL CONSIDER REQUIREMENTS FOR ADDITIONAL IMPLEMENTATION OR TMDLS FOR LOS ANGELES AND SAN GABRIEL RIVERS AND INTERIM TARGETS AND ALLOCATIONS FOR THE END OF PHASE II.”

STATE BOARD DIRECTIVES

- PRIORITIZE DEVELOPMENT OF SQO INDIRECT EFFECTS
- CONTINUE WORKING WITH STAKEHOLDERS ON:
 - FISH: RANGES, CONSUMPTION RATES, LINK TO SEDIMENT
 - SEDIMENT: TRANSPORT AND DEPOSITION
 - LOADINGS: AIR DEPOSITION, LOS ANGELES AND SAN GABRIEL RIVERS
- REVIEW AND EVALUATE RESULTS OF SPECIAL STUDIES BEFORE RECONSIDERING THE ALLOCATIONS
- REPORT PROGRESS TO STATE WATER BOARD SPRING 2015
- RECONSIDERATION OF THE TMDL 2018

AVAILABLE SPECIAL STUDIES TO SUPPORT TMDL RECONSIDERATION

- HYDRODYNAMIC MODEL UPDATES
- FORAGE RANGES OF FISH
- SEDIMENT TO FISH LINKAGE
- SEDIMENT DEPOSITION AND TRANSPORT
- WATERSHED LOADINGS TO HARBORS
- STRESSOR ID STUDIES

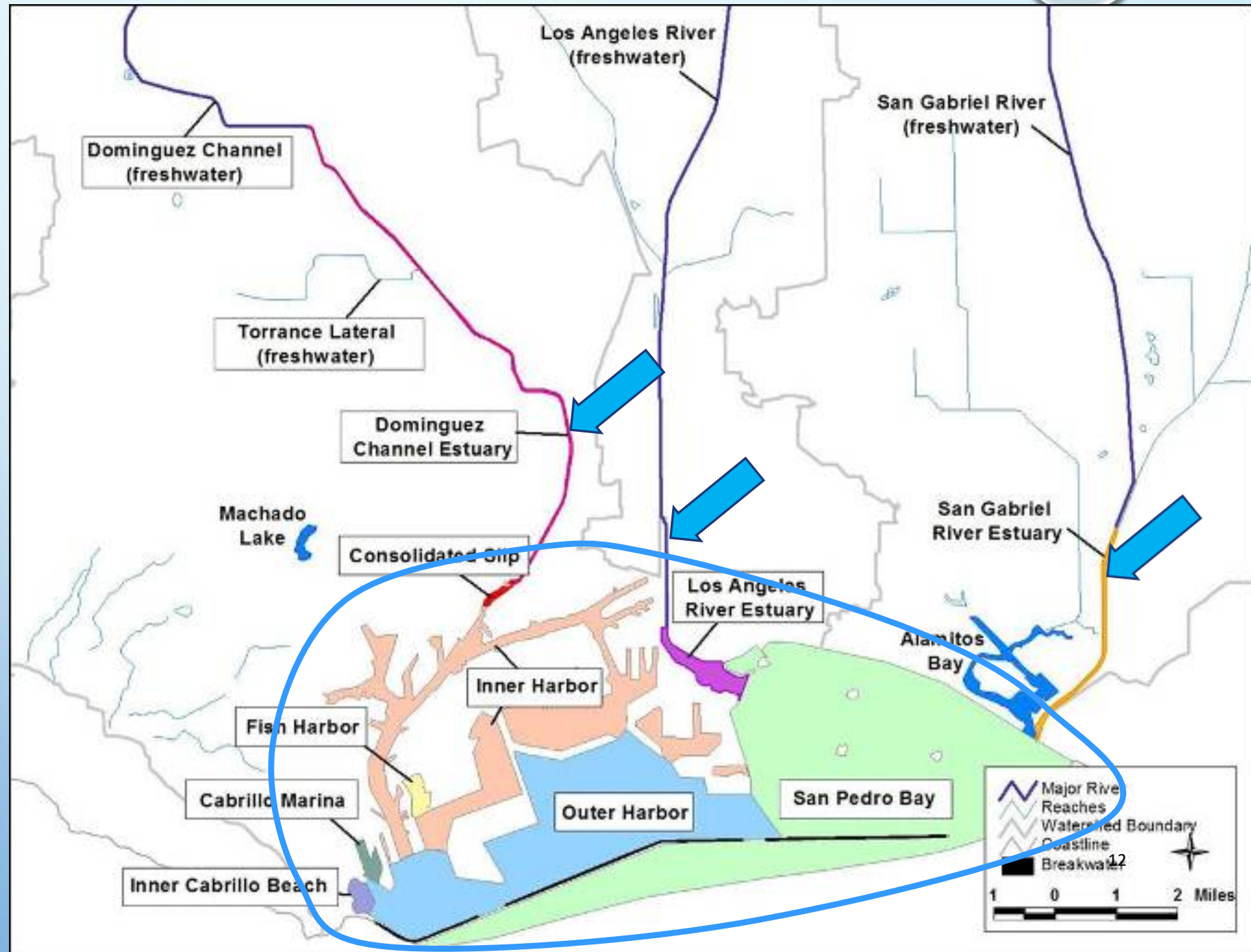
TMDL MONITORING

- TMDL MONITORING WORK PLAN - MARCH 2014
 - GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS
 - REGIONAL MONITORING COALITION FORMED
 - MONITORING PLAN SUBMITTED
 - *REVIEWED, REVISED, AND APPROVED*
- MONITORING BEGUN
 - BIGHT MONITORING: SUMMER 2013, PLANNING FOR BIGHT 2018
- CONTAMINATED SEDIMENT MANAGEMENT PLANS - 2014
 - LONG BEACH HARBOR, EASTERN SAN PEDRO BAY, AND LOS ANGELES RIVER ESTUARY CSMP
 - DOMINGUEZ CHANNEL ESTUARY CSMP
 - LOS ANGELES HARBOR AND CONSOLIDATED SLIP CSMP
 - *REVIEWED AND NOT APPROVED*

TMDL IMPLEMENTATION

- WRAP - WATER RESOURCES ACTION PLAN
- MS4 AND UPSTREAM WATERSHED IMPLEMENTATION
 - LOS ANGELES MS4, DECEMBER 2012
 - LONG BEACH MS4, MARCH 2014
 - EWMPS
 - WMPS
 - INDEPENDENT
 - CONTROL MEASURES
 - INSTITUTIONAL BMPS
 - GREEN STREETS
 - LOW IMPACT DEVELOPMENT
 - REGIONAL BMPS

CURRENT CONDITION ASSESSMENT



CURRENT CONDITION ASSESSMENT GREATER HARBOR WATERS (2013-2016)

WATER

- CHEMICAL RESULTS WERE ALL BELOW APPLICABLE WATER QUALITY OBJECTIVES IN GENERAL
- EXCEED DISSOLVED COPPER TARGET IN CONSOLIDATED SLIP, CABRILLO MARINA, INNER LONG BEACH HARBOR, AND LOS ANGELES RIVER ESTUARY
- EXCEED CHLORDANE TARGET IN INNER LONG BEACH HARBOR, OUTER LONG BEACH HARBOR, AND EASTERN SAN PEDRO BAY
- MEET OTHER APPLICABLE WATER QUALITY CRITERIA EVERY WHERE ELSE

GREATER HARBOR WATERS (CONT.)

SEDIMENT – ERL

- CHEMISTRY
 - METALS ARE MEASURED AT CONCENTRATIONS GREATER THAN ERL VALUES
 - 4,4'-DDD AND 4,4'-DDE ALSO EXCEEDED THE ERL TARGET
 - TOTAL CHLORDANE , TOTAL DDTs, AND TOTAL PCBS WERE MEASURED AT CONCENTRATION ABOVE ERLS AND FCG TARGETS.

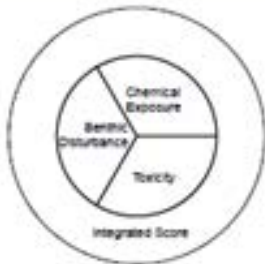
SEDIMENT – 2016 SQO ASSESSMENT

- 9 STATIONS TO BE UNIMPACTED
- 8 STATIONS TO BE LIKELY UNIMPACTED
- 1 STATION TO BE POSSIBLY IMPACTED
- 4 STATIONS TO BE LIKELY IMPACTED
- NO LIKELY IMPACTED STATION



LEGEND:

- | Individual Category | Integrated Score |
|---------------------|---------------------|
| ● High | ● Clearly Impacted |
| ● Moderate | ● Likely Impacted |
| ● Low | ● Possibly Impacted |
| ● Reference | ● Likely Unimpacted |
| | ● Unimpacted |



■ TMDL Waterbodies



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GREATER HARBOR WATERS (CONT.)

FISH

• 2013 ASSESSMENT

- TOTAL PCBS EXCEED THE FCG IN ALL FISH FROM ALL STATIONS
- TOTAL DDXS EXCEED THE FCG IN ALL WHITE CROAKER AND WHITE SURFPERCH AT ALL STATIONS
- TOTAL DDXS WERE BELOW THE FCG IN CALIFORNIA HALIBUT SAMPLES.
- TOTAL CHLORDANE EXCEED THE FCG IN ONLY THREE SAMPLES.

• 2016 ASSESSMENT

- TOTAL PCBS EXCEED THE FCG IN ALL FISH FROM ALL STATIONS
- TOTAL DDXS EXCEED THE FCG IN ALL WHITE CROAKER AND WHITE SURFPERCH AT ALL STATIONS
- TOTAL DDXS WERE GREATER THAN FCG IN SOME CALIFORNIA HALIBUT SAMPLES.
- TOTAL CHLORDANE EXCEED THE FCG IN ALL WHITE CROAKER, SHINER SURFPERCH, AND ANCHOVY.

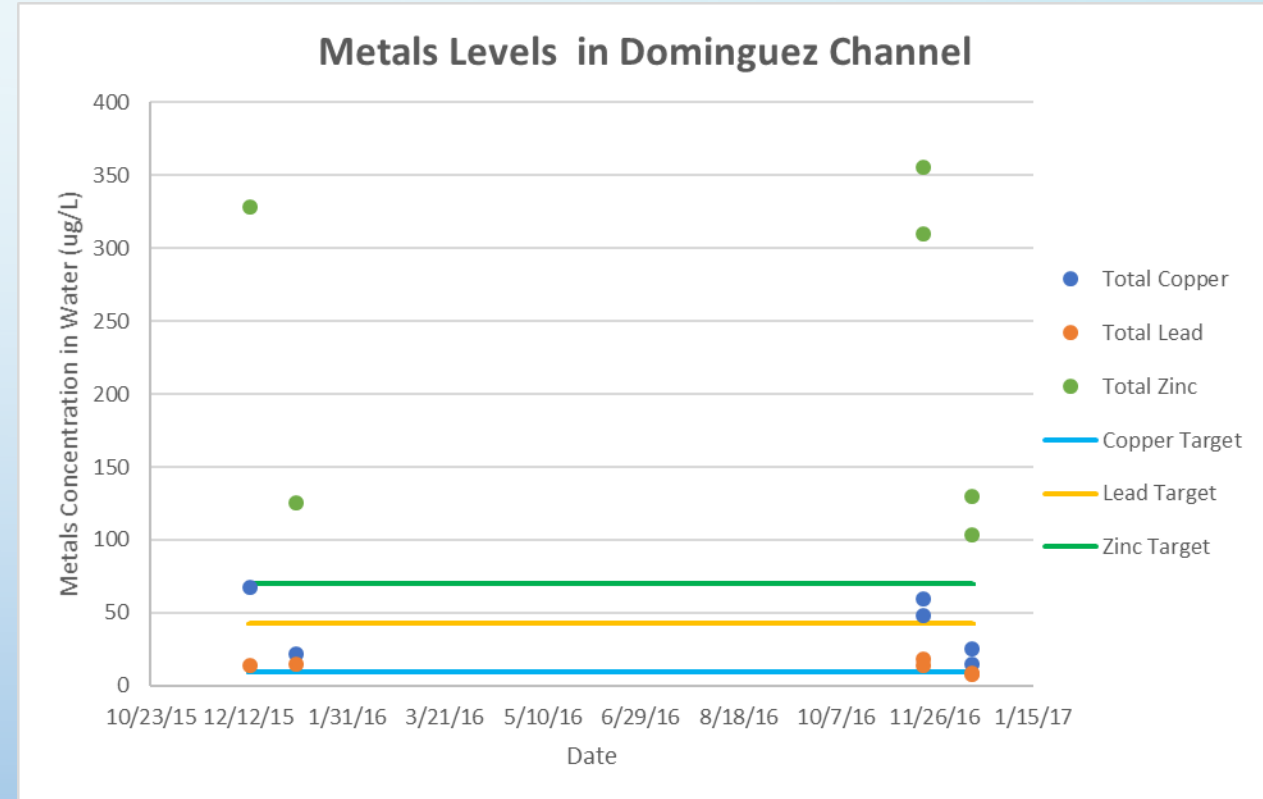
DOMINGUEZ CHANNEL

WATER

- TWO YEAR OF DCWVG MONITORING DATA 15-16 AND 16-17
- NO DRY WEATHER DATA
- WET WEATHER DATA MEETING INTERIM LIMITS
- LEAD CURRENTLY MEETING TARGET BUT COPPER AND ZINC DATA ARE ALL ABOVE TARGETS

SEDIMENT AND FISH TISSUE

- SEDIMENT AND FISH TISSUE DATA ARE NOT REPORTED



LOWER LOS ANGELES RIVER

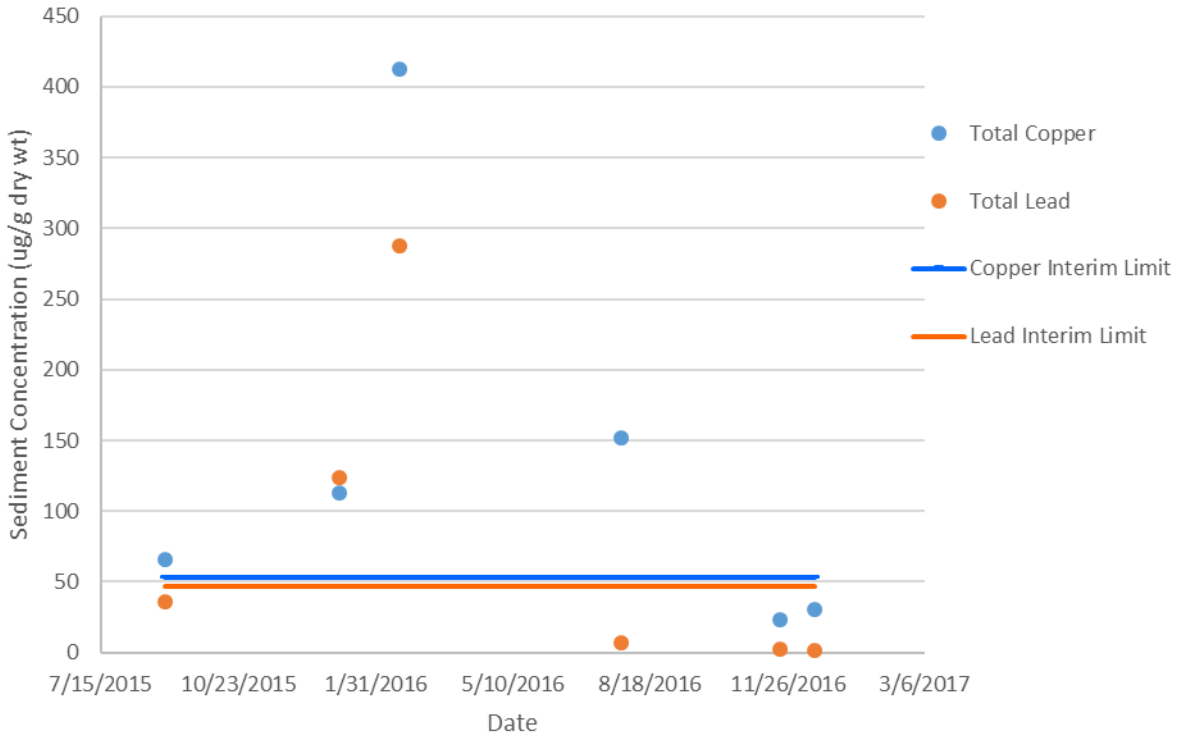
WATER

- DATA COLLECTED FROM 2015 TO 2017
- DRY WEATHER DATA FOR COPPER AND LEAD BELOW TARGETS
- WET WEATHER DATA ARE BELOW TARGETS EXCEPT FOR ZINC

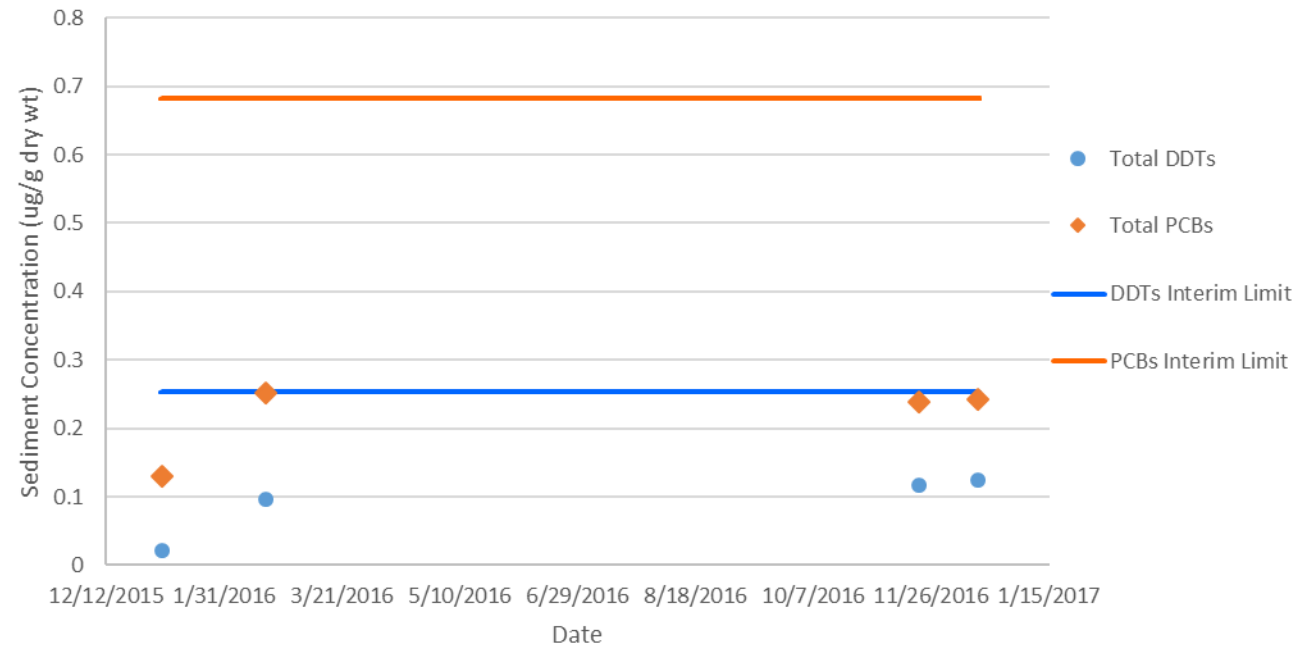
SEDIMENT

- DATA COLLECTED FROM 2015-2017
- METAL AND PAHS CONCENTRATIONS IN SUSPENDED SEDIMENT ARE ABOVE THE INTERIM LIMITS
- TOTAL PCBS AND DDTs ARE BELOW THE INTERIM LIMITS

Metals Levels in Lower Los Angeles River



PCBs and DDTs Levels in Lower Los Angeles River



LOWER SAN GABRIEL RIVER

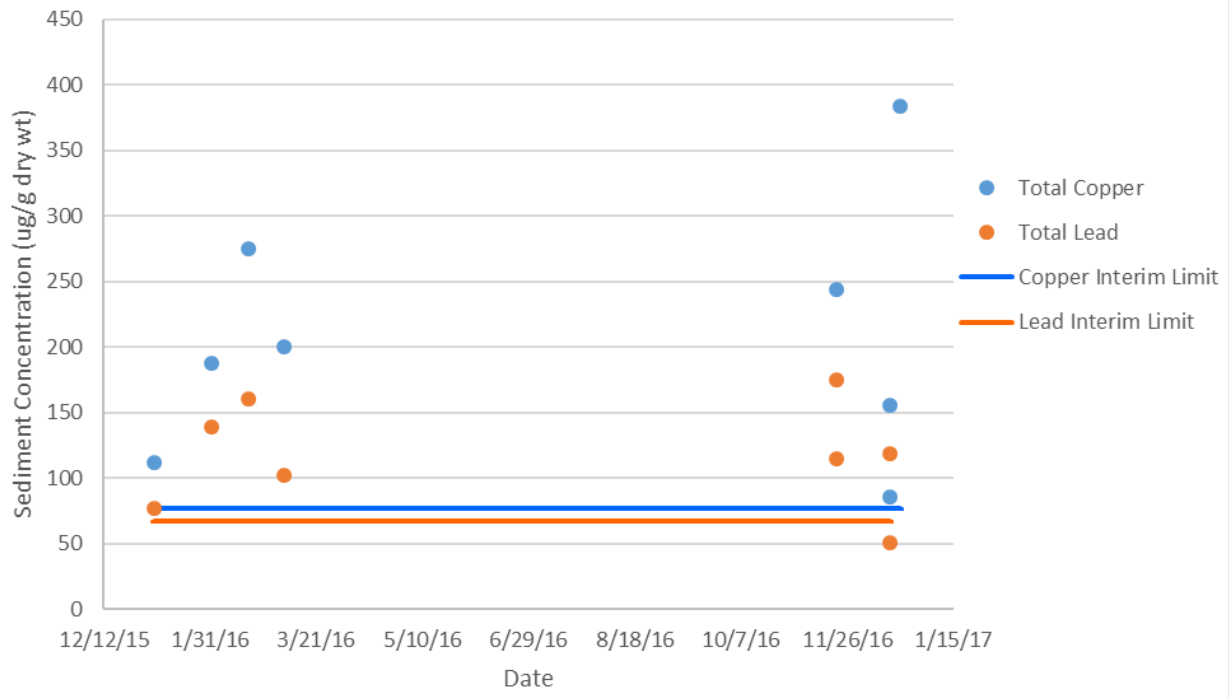
WATER

- LIMITED DATA AVAILABLE
- STILL WORKING ON COMPILING AVAILABLE DATA FOR BETTER ASSESSMENT

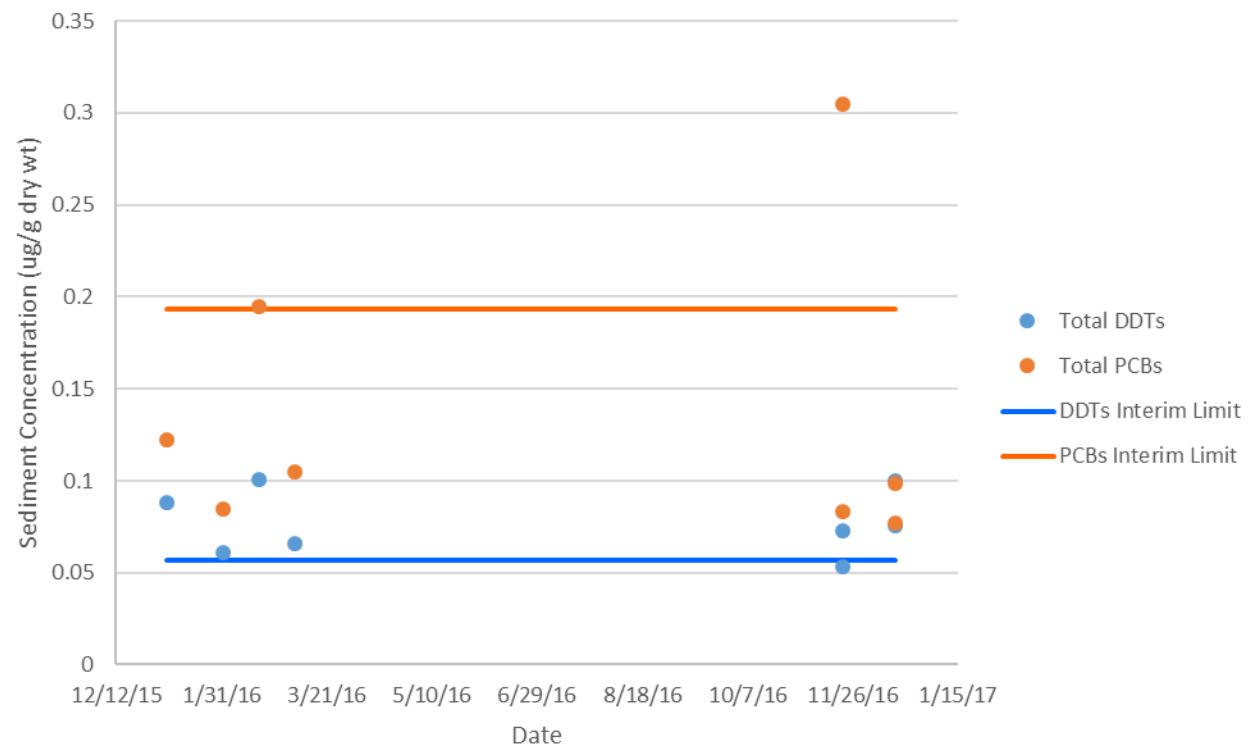
SEDIMENT

- BASED ON 15/16 AND 16/17 ANNUAL REPORT
- ALL METALS, PAHS, PCBS AND DDTS CONCENTRATIONS IN SUSPENDED SEDIMENT ARE ABOVE INTERIM LIMITS

Copper and Lead Levels in Lower San Gabriel River



PCBs and DDTs Levels in Lower San Gabriel River



LOS ANGELES WATER BOARD'S POTENTIAL REVISIONS

- REVISE THE ALLOCATION SECTION TO INCLUDE THE SQO FOR HUMAN HEALTH/INDIRECT EFFECT
- RECONSIDER ALLOCATIONS FOR MS4
- DETERMINE IF ADDITIONAL IMPLEMENTATIONS/TMDLS FOR LOS ANGELES RIVER AND SAN GABRIEL RIVER ARE NEEDED
- REVISE IMPLEMENTATION SCHEDULE TO INCLUDE REQUIRED PERCENT REDUCTION AND SPECIFIED SCHEDULE FOR HOT SPOTS REMOVAL
- MAKE MINOR CHANGES FOR CLARIFICATION

OVERVIEW AND SCHEDULE OF RECONSIDERATION PROCESS

- POTENTIAL SCHEDULE FOR RECONSIDERATION
 - FINALIZE SCOPE: SEPTEMBER 2018
 - PEER REVIEW (IF NEEDED/REQUIRED): NOVEMBER 2018
 - PUBLIC REVIEW: JANUARY 2019
 - LOS ANGELES WATER BOARD HEARING: APRIL 2019

REGIONAL BOARD CONTACT INFORMATION

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 - EMAIL THANHLOAN.NGUYEN@WATERBOARDS.CA.GOV
- LINK TO DOMINGUEZ CHANNEL AND GREATER HARBOR WATERS TOXIC POLLUTANTS TMDL WEBSITE
 - [HTTPS://WWW.WATERBOARDS.CA.GOV/LOSANGELES/BOARD_DECISIONS/BASIN_PLAN_AMENDMENTS/TECHNICAL_DOCUMENTS/BPA_128_RXX-XXX_TD.HTML](https://www.waterboards.ca.gov/losangeles/board_decisions/basin_plan_amendments/technical_documents/BPA_128_RXX-XXX_TD.html)