



Alamitos Bay Water Quality Enhancement Project

Public Works Community Meeting

Monday, January 29, 2024



LONG BEACH
COMMUNITY
DEVELOPMENT

CITY OF
LONG BEACH

Agenda

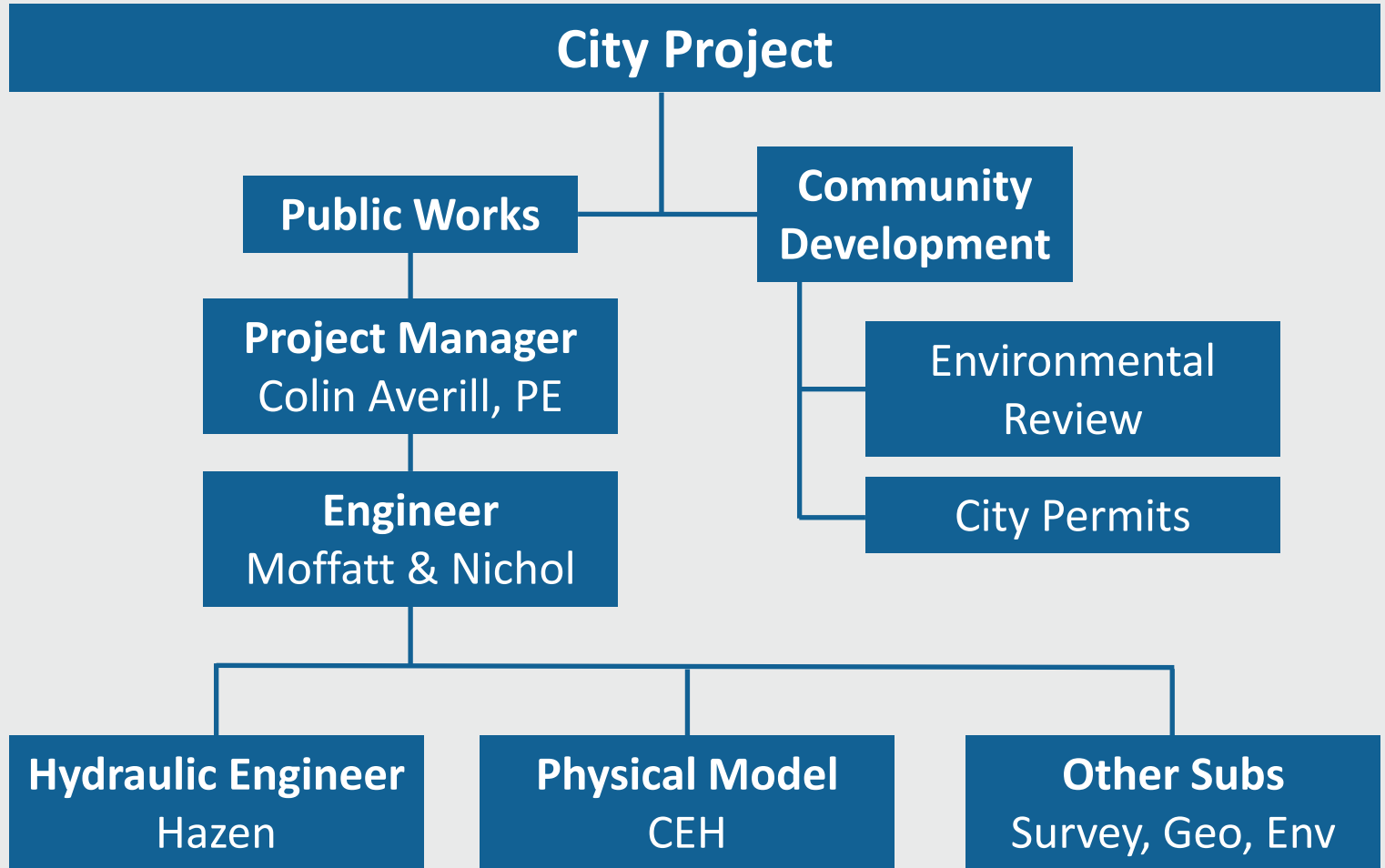
- Introductions
- Meeting Format
- Summary
- Project updates
- Environmental Review
- Schedule
- Budget
- FAQ
- Q&A

Virtual Meeting

- Hosted on Zoom
- Presentation will be available on project website
- Frequently Asked Questions (FAQs) will be reviewed at conclusion of presentation
- Question and Answer (Q&A) session will follow; additional written questions may be submitted on Zoom
- Unanswered questions may be sent to: TidelandsCIP@LongBeach.gov

Introduction

Alamitos Bay Water Quality Enhancement (ABWQE)



Alamitos Bay Water Circulation Summary

Existing Alamitos Bay Water Circulation

- Development and flood control activities altered Alamitos Bay
- Power plant operations have contributed to circulation for 60 years

Phase Out of Once Through Cooling (OTC)

- State Water Board Policy

No Pumping

- Immediate effect on circulation
- Secondary effects on water quality:
 - Bacteria concentrations harmful for human contact
 - Increase in temperatures and nutrients harmful for marine life
 - Trash accumulation throughout bay

Alamitos Bay Water Quality Enhancement (ABWQE) Project

- Maintains existing water quality through circulation
- New fish-friendly pump house

Historic Context - Alamitos Bay and the San Gabriel River



1922



Location of Intakes and Outfalls



AES Facilities



● AES Pump locations

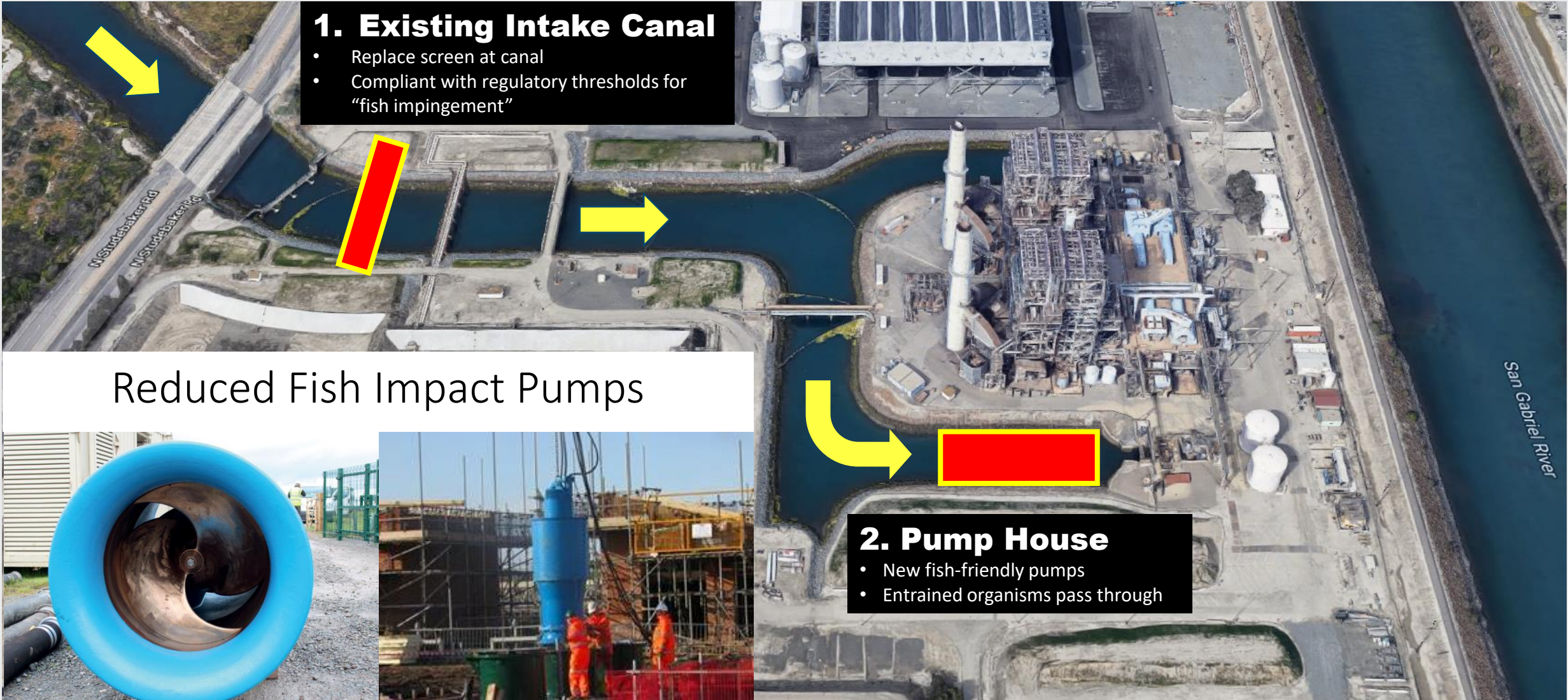
Currently planned shutdown dates determined by State Water Board:

- AES Unit 1, 2, 6 = Retired
- AES Unit 3, 4, 5 = Operations extended through December 2026 for extreme energy demand events

Water Circulation maintained with proposed Pump House



Water Circulation maintained with proposed Pump House



1. Existing Intake Canal

- Replace screen at canal
- Compliant with regulatory thresholds for "fish impingement"

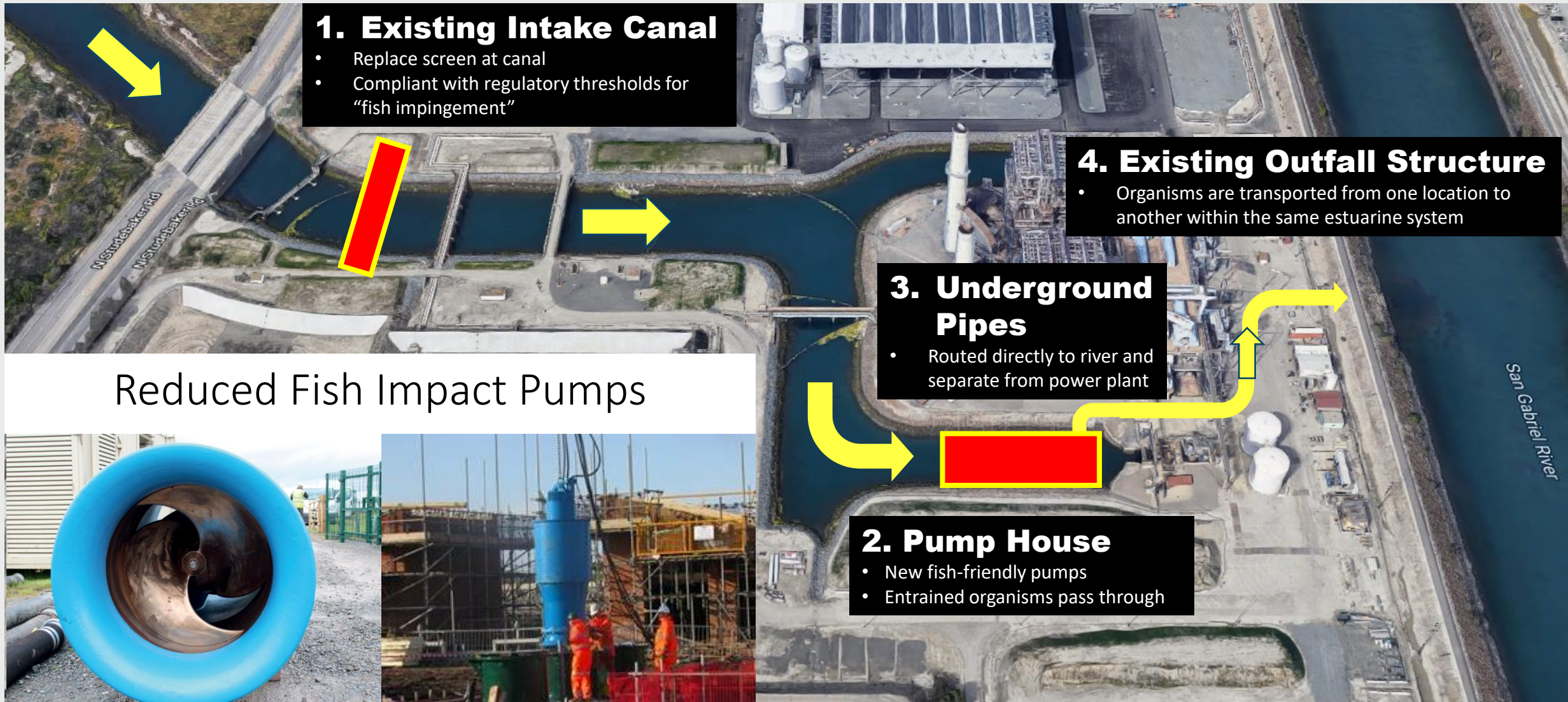
Reduced Fish Impact Pumps



2. Pump House

- New fish-friendly pumps
- Entrained organisms pass through

Water Circulation maintained with proposed Pump House



Reduced Fish Impact Pumps



Project Recap and Look Ahead

- 2020 - 2023 – Conceptual Design, Engineering, Site Investigation, and Regulatory Research
- 2023 – Preliminary Engineering
 - Preliminary Engineering Design
 - Water Quality Monitoring
 - Grant Applications
 - Environmental Review (scope development)
 - Community Updates 2/9 MAC, 8/29 CECP, 9/13 CD3
- 2024 – Environmental Review

Community Development Introduction

- The Community Development Department (Planning Bureau) follows and administers the California Environmental Quality Act (CEQA).
- CEQA is a statewide process to inform the public and decisionmakers of potential environmental impacts through the analysis of impacts on air quality, noise, transportation, and other specific topics.

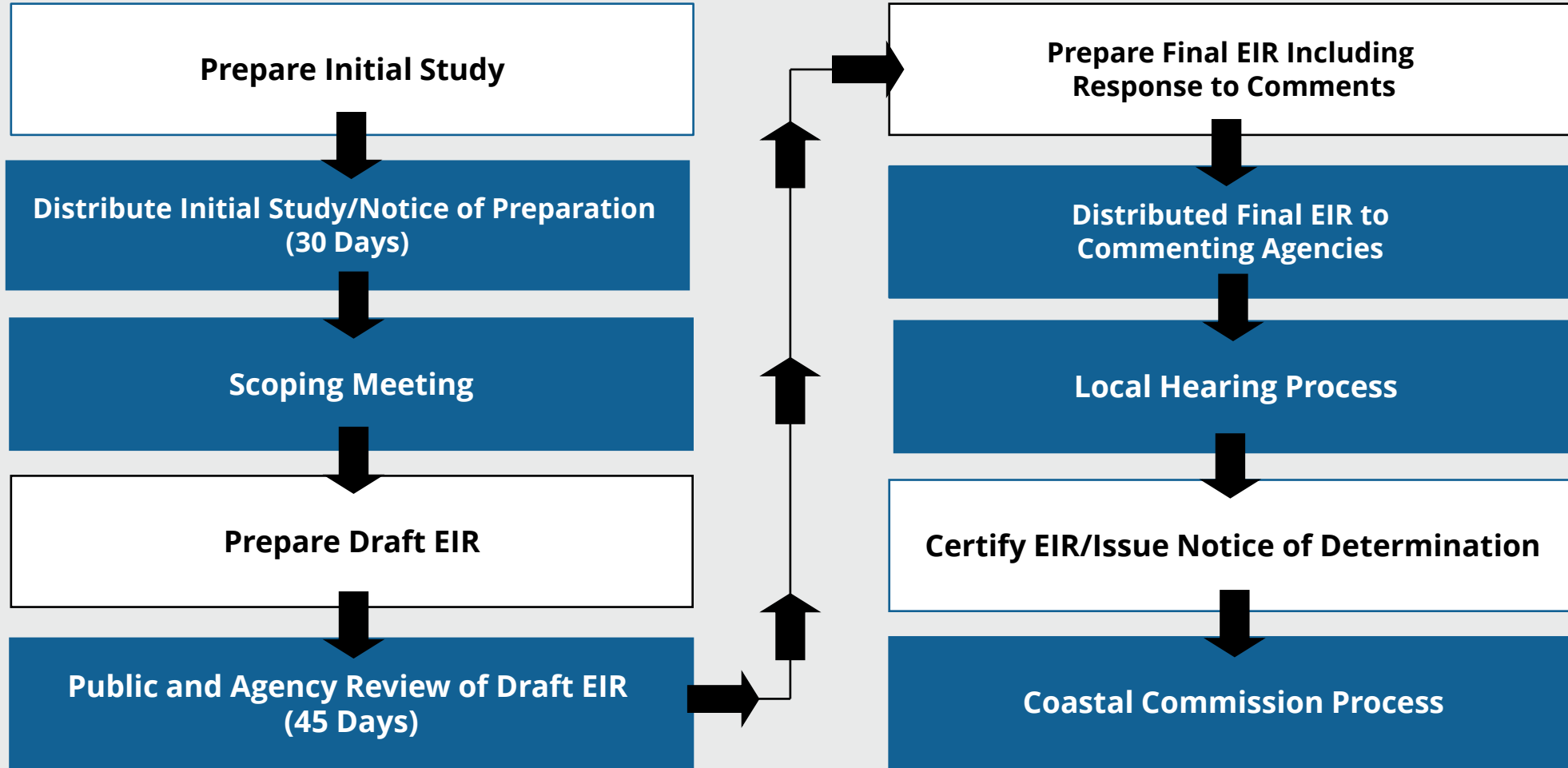
Note: Today's Meeting and Q&A are not part of the environmental review process. Future opportunities include formal scoping meetings and CEQA public review opportunities for this project. To be included in the distribution list for the project, please sign up on the project website: longbeach.gov/abwqe

Why CEQA?

- CEQA is intended to inform government decisionmakers and the public about the potential environmental effects of proposed activities.
- The purpose of CEQA is to:
 - Disclose information about potentially significant environmental effects of a project
 - Identify ways to avoid or mitigate significant environmental impacts
 - Enhance public participation in the planning process
 - Encourage stakeholder collaboration in the review of projects

Environmental Review

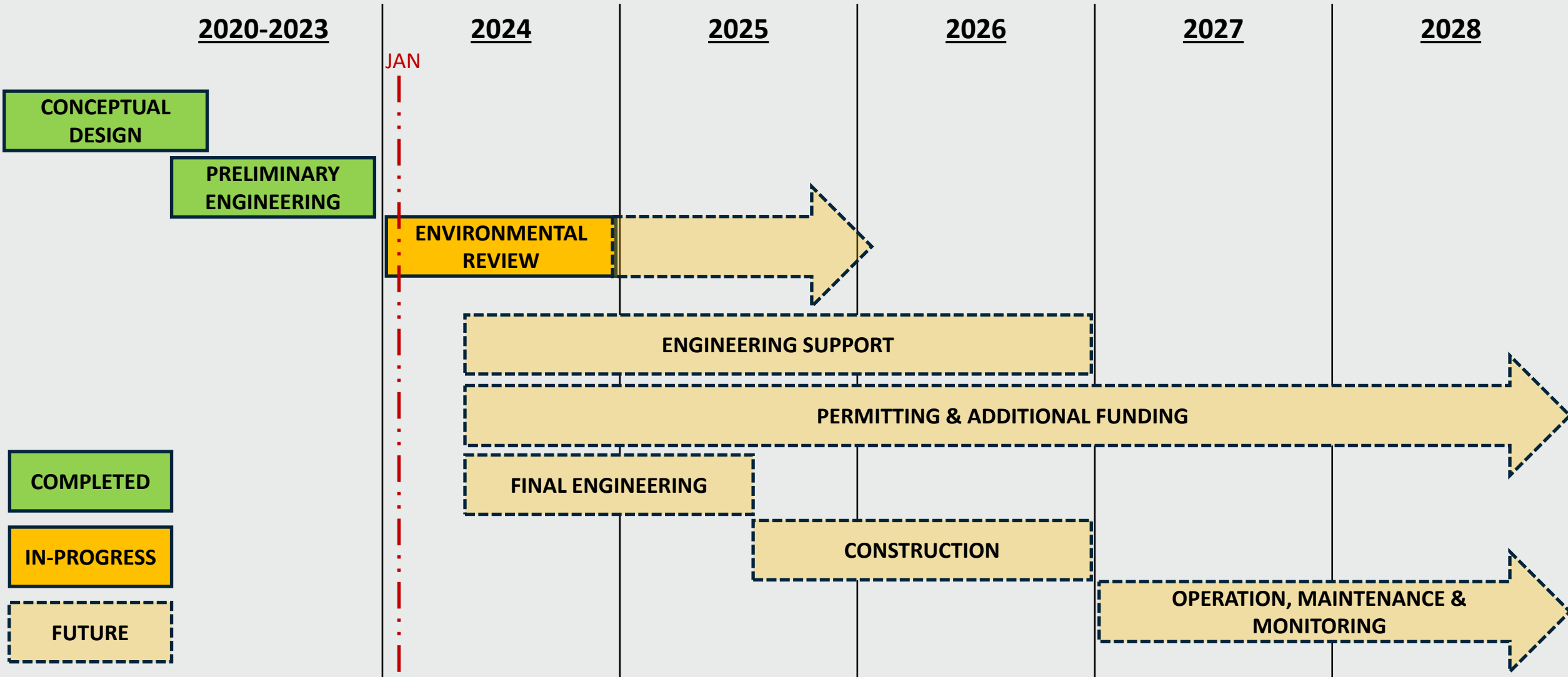
CEQA Process



Timelines

- CEQA contains processing time requirements, including requirements for public review periods.
- A typical EIR may take up to a year to complete. These time frames are consistent with legal requirements of CEQA on previous slide.
- Next step: Initial Study/Notice of Preparation and Scoping Meeting.
 - Tentatively planned for Spring of 2024

Tentative Project Schedule Summary



Project Costs

- Revised project costs pending additional engineering and environmental review

Current Funding – Preliminary Engineering / Environmental Review

- \$2.85M
 - Measure A (\$1.2 million in Five Year Infrastructure Plan)
 - Tidelands (\$1.5 million, includes \$500K in FY 24 CIP)
 - AES Contribution (\$150K)

Frequently Asked Questions



Frequently Asked Questions

Are there current impacts to water quality in Alamitos Bay?

What are the bacteria levels in Alamitos Bay?

Is Alamitos Bay safe for recreation?

- Refer to LB Health & Human Services Recreational Water Monitoring for current water quality conditions.
- Water samples are collected three times a week and tested routinely for indicator bacteria.
- [longbeach.gov/health/inspections-and-reporting/inspections/water-quality/ocean-water-monitoring/](https://www.longbeach.gov/health/inspections-and-reporting/inspections/water-quality/ocean-water-monitoring/)

Frequently Asked Questions

Are there current impacts to water quality in Alamitos Bay?

What are the bacteria levels in Alamitos Bay?

Is Alamitos Bay safe for recreation?

- Long Beach received A and B summer dry grades for 2022 - 2023 from Heal the Bay
- Additional information from Heal the Bay:
healthebay.org/beachreportcard2022-2023/

Frequently Asked Questions

What are the schedules and rates of pumping?

What impacts are seen from decreased pumping?

- Power plant operations are not subject to a set schedule and vary with electricity demand and regulations.
- Pumping rates are reported quarterly to the State Water Board by permittees.
- The City is analyzing several data sets and collecting additional data.

What data and information are available?

- LB Health & Human Services recreational water monitoring data: longbeach.gov/health/inspections-and-reporting/inspections/recreational-water-samples
- Information on ABWQE website: longbeach.gov/abwqe

Frequently Asked Questions

What data and information is available?

- Technical permit data from the State Water Board
- Example data output: [//ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?inCommand=reset&reportName=esmrAnalytical](http://ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?inCommand=reset&reportName=esmrAnalytical)

CA.GOV CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

Home About Us Public Notices Board Info Board Decisions Water Issues Publications/Forms Press Room

GOVERNOR Gavin Newsom

Visit his Website

- Cal/EPA
- State and Regional Water Boards' Map
- Laws/Regulations
- Plans/Policies
- Programs
- Decisions Pending and Opportunities for Public Participation

CIWQS Resources

- CIWQS Home
- CIWQS NPDES
- CIWQS SSO
- CIWQS SMARTS
- Contact Us
- Public Reports

eSMR Analytical Report

Region: Region 1 - North Coast
Region 2 - San Francisco Bay
Region 3 - Central Coast
Region 4 - Los Angeles

Report Document Type: Any

Program: Any

Parameter: 1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloro-1,2,2-Trifluoroethane

WDID:

Sample Date Range: Start: End:

Order Number:

Facility: Select Facility

Party: Select Party

County: Alameda
Alpine
Amador
Butte

Monitoring Location Type: Any

Record Type: All

Run Report

Note: Hold "Ctrl" while clicking to select multiple values

Location	Parameter	Analytical Method	Calculate	Qual	Result	Units	MDL	ML	RL	Sampling Date	Analysis Date
EFF-002	Flow	Data Unavailable	=		195.34	MGD				1/1/2023	23:59:00 1/1/2023
EFF-002	Temperature	Instantani	=		78.9	Degrees F				1/1/2023	23:59:00 1/1/2023
EFF-002	Flow	Data Unavailable	=		277.94	MGD				1/2/2023	23:59:00 1/2/2023
EFF-002	Temperature	Instantani	=		74.7	Degrees F				1/2/2023	23:59:00 1/2/2023
EFF-002	pH	Standard Method (15	=		7.9	SU	0.03		0.05	1/3/2023	9:01:00 1/3/2023
EFF-002	pH	Standard Method (15	=		7.89	SU	0.03		0.05	1/3/2023	9:00:00 1/3/2023
EFF-002	Temperat	Standard Method (15	=		15	Degrees C	0.03		0.05	1/3/2023	9:01:00 1/3/2023
EFF-002	Temperat	Standard Method (15	=		14.9	Degrees C	0.03		0.05	1/3/2023	9:00:00 1/3/2023
EFF-002	Flow	Data Unavailable	=		284.73	MGD				1/3/2023	23:59:00 1/3/2023
EFF-002	Temperature	Instantani	=		61.3	Degrees F				1/3/2023	23:59:00 1/3/2023
EFF-002	Chlorine	Standard Method (15DNQ	=		0.03	mg/L	0.02		0.05	1/4/2023	15:45:00 1/4/2023
EFF-002	Flow	Data Unavailable	=		367.05	MGD				1/4/2023	23:59:00 1/4/2023
EFF-002	Chlorine	Standard Method (15	=		0.05	mg/L	0.02		0.05	1/4/2023	15:46:00 1/4/2023
EFF-002	Chlorine	Standard Method (15	=		0.05	mg/L	0.02		0.05	1/4/2023	15:45:00 1/4/2023
EFF-002	Chlorine	Standard Method (15DNQ	=		0.04	mg/L	0.02		0.05	1/4/2023	14:22:00 1/4/2023
EFF-002	Chlorine	Standard Method (15DNQ	=		0.04	mg/L	0.02		0.05	1/4/2023	14:23:00 1/4/2023
EFF-002	Chlorine	Standard Method (15DNQ	=		0.02	mg/L	0.02		0.05	1/4/2023	15:46:00 1/4/2023
EFF-002	Chlorine	Standard Method (15	=		0.05	mg/L	0.02		0.05	1/4/2023	14:23:00 1/4/2023
EFF-002	Chlorine	Standard Method (15	=		0.06	mg/L	0.02		0.05	1/4/2023	14:22:00 1/4/2023
EFF-002	Chlorine	Free Availi	Daily Max DNQ		0.03	mg/L	0.02		0.05	1/4/2023	15:45:00 1/4/2023
EFF-002	Chlorine	Total Resic	Daily Max		0.06	mg/L	0.02		0.05	1/4/2023	14:22:00 1/4/2023
EFF-002	Chlorine	Free Availi	Daily Max DNQ		0.04	mg/L	0.02		0.05	1/4/2023	14:22:00 1/4/2023
EFF-002	Chlorine	Free Availi	Instantani DNQ		0.04	mg/L	0.02		0.05	1/4/2023	14:22:00 1/4/2023
EFF-002	Chlorine	Free Availi	Instantani DNQ		0.03	mg/L	0.02		0.05	1/4/2023	15:45:00 1/4/2023
EFF-002	Temperature	Instantani	=		73.3	Degrees F				1/4/2023	23:59:00 1/4/2023
EFF-002	Chlorine	Total Resic	Daily Max		0.05	mg/L	0.02		0.05	1/4/2023	15:45:00 1/4/2023
EFF-002	Flow	Data Unavailable	=		378.13	MGD				1/5/2023	23:59:00 1/5/2023
EFF-002	Temperature	Instantani	=		83.5	Degrees F				1/5/2023	23:59:00 1/5/2023
EFF-002	Flow	Data Unavailable	=		378.19	MGD				1/6/2023	23:59:00 1/6/2023
EFF-002	Temperature	Instantani	=		66.979	Degrees F				1/6/2023	23:59:00 1/6/2023
EFF-002	Flow	Data Unavailable	=		309.93	MGD				1/7/2023	23:59:00 1/7/2023
EFF-002	Temperature	Instantani	=		67.6	Degrees F				1/7/2023	23:59:00 1/7/2023
EFF-002	Flow	Data Unavailable	=		231.38	MGD				1/8/2023	23:59:00 1/8/2023
EFF-002	Temperature	Instantani	=		67.4	Degrees F				1/8/2023	23:59:00 1/8/2023
EFF-002	Chlorine	Standard Method (15	=		0.05	mg/L	0.02		0.05	1/9/2023	14:32:00 1/9/2023
EFF-002	pH	Standard Method (15	=		7.89	SU	0.03		0.05	1/9/2023	11:35:00 1/9/2023

How much will the project cost?

- Revised project costs pending additional engineering and environmental review

How is this project being funded?

- \$2.85M Preliminary Engineering / Environmental Review
 - Measure A (\$1.2 million in Five Year Infrastructure Plan)
 - Tidelands (\$1.5 million, includes \$500K in FY 24 CIP)
 - AES Contribution (\$150K)
- Potential grant opportunities

What is the schedule?

- 2024 – Environmental review
 - Spring 2024 Anticipated Initial Study/Notice of Preparation and Scoping Meeting
- Future schedule dependent on environmental review process, permitting, and funding.

What are the next steps?

- Environmental review
- Engineering Support
- Permitting
- Final Engineering
- Additional Funding
- Construction
- Operation, Maintenance and Monitoring

What is the status of Once-Through-Cooling (OTC)?

- On August 15, 2023: The State Water Board adopted the Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (OTC).
- Compliance Schedule for the Alamitos generating station revised from December 31, 2023, to December 31, 2026
- waterboards.ca.gov/water_issues/programs/ocean/cwa316/

What about other solutions and addressing pollution sources?

- The City and partner agencies have invested over \$100M in watershed projects to improve upstream water quality in Long Beach over the past decade.
- Additional \$75M+ in planning.
- Low Flow Diversions, Los Cerritos Subbasin Stormwater Capture, Catch Basin Trash Capture, Colorado Lagoon Improvements, Stormwater treatment, and Future projects.

What about other solutions and addressing pollution sources?

- The City continues to work with its partners to implement watershed management programs under the stormwater permit.
- Beyond City limits, additional watershed projects are funded by the Safe, Clean Water Program which generates up to \$285 million per year.

What about other solutions and addressing pollution sources?

- Upstream projects do not address circulation.
- Numerical modeling studies determined maintaining a constant rate of circulation in Alamitos Bay was the most effective measure.
- *Modeling and Alternatives Analysis for Water Quality Improvements in Alamitos Bay* report available on project website: [longbeach.gov/abwqe](https://www.longbeach.gov/abwqe)

What about impacts to marine life?

- Fish friendly pumping
- Regulatory limits for intake velocities and screen sizes to reduce fish impingement
- New pumps are designed for safer passage of entrained organisms
- *Evaluation of Using Existing Alamitos Generating Station Intake System to Maintain Water Quality in Alamitos Bay* report available on project website: longbeach.gov/abwqe

How can I participate in the Environmental Review?

- Spring 2024
 - Comment on Initial Study
 - Participate in Scoping Meeting
- Additional opportunities to participate through public review of the Draft EIR and public hearing process
- Details will be distributed and posted on project website

Thank you

Colin Averill, PE
Senior Civil Engineer
Colin.Averill@longbeach.gov

Maryanne Cronin
Planner
Maryanne.Cronin@longbeach.gov

TidelandsCIP@longbeach.gov
longbeach.gov/abwqe