San Francisco Bay
Regional Water Quality Control Board

Chlorine Water Quality Objectives
Total Residual Chlorine Effluent Limitations

Basin Plan Amendment

WORKSHOP AND
CEQA SCOPING MEETING

Presented by
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May 22, 2020

Meeting logistics

- The meeting is being recorded
- Host already muted everyone, please keep muted
- Sign in using the worksheet with link provided in chat
- Type your questions or comments in chat at anytime

Meeting Logistics (*cont.*) – Making Verbal Comments

- Type "speak" in chat to request to speak
- Meeting host will call on speakers by order of "speak" request received, or by phone numbers
- Unmute and identify yourself before speaking
- Wes will help with sign in

Part 1: Workshop

- Problem - Total residual chlorine effluent limits
- Solution – Water quality objectives (WQOs) and water quality-based effluent limits (WQBELs)
- Implementation provisions for WQBELs
- Two minor editorial changes – mercury WQO, Oil and Grease effluent limit

Part 2: CEQA Scoping Meeting

- CEQA process for Basin Plan Amendment
- Scope of environmental review for new WQOs
- Schedule and ways for input

PART 1

Workshop

Problem being Addressed with Total Residual Chlorine Effluent Limits

- Extremely stringent technology-based effluent limit
- Dechlorination overdosing: cost and discharge of excess chemicals
- Compliance complexity
- Water quality objectives needed for establishing water quality-based effluent limits

Project Components

- Add chlorine water quality objectives (WQOs)
- Replace TRC technology-based effluent limit with water quality-based effluent limits (WQBELs)
- Specify WQBELs implementation provisions
- Make two "clean-up" editorial changes
  - Delete 4-day average freshwater mercury WQO
  - Delete footnote to Oil and Grease effluent limit

Project Area

- WQOs for entire San Francisco Bay region's surface water bodies
- WQBELs for discharges into the regions surface waters
  - 31 Municipal WWTPs/dechlorination facilities
  - Industrial facilities with TRC effluent limit

Chlorine Water Chemistry 101

- Total Residual Chlorine (in freshwater)
  - Free chlorine: hypochlorous acid (HOCl) and hypochlorite ion (OCl-)
  - Combined chlorine: chloramines (mono-, di-)

- Chlorine-Produced Products (in saltwater)
  - Free bromine: hypobromous acid (HOBr), hypobromite ion (OBr-)
  - Combined bromine: bromamines

Proposed Chlorine Water Quality Objectives

Water Body Type	1-hour Average (ug/L)	4-day Average (ug/L)
Freshwater (in Total Residual Chlorine)	19	11
Marine/Estuarine (in Chlorine Produced Oxidants)	13	7.5

(Based on 1984 USEPA national ambient criteria for chlorine)

TRC Water Quality-Based Effluent Limits (WQBELs)

- One-hour Average WQBELs
  - 0.019 mg/L for freshwater discharges
  - 0.013 mg/L for marine/estuarine discharges

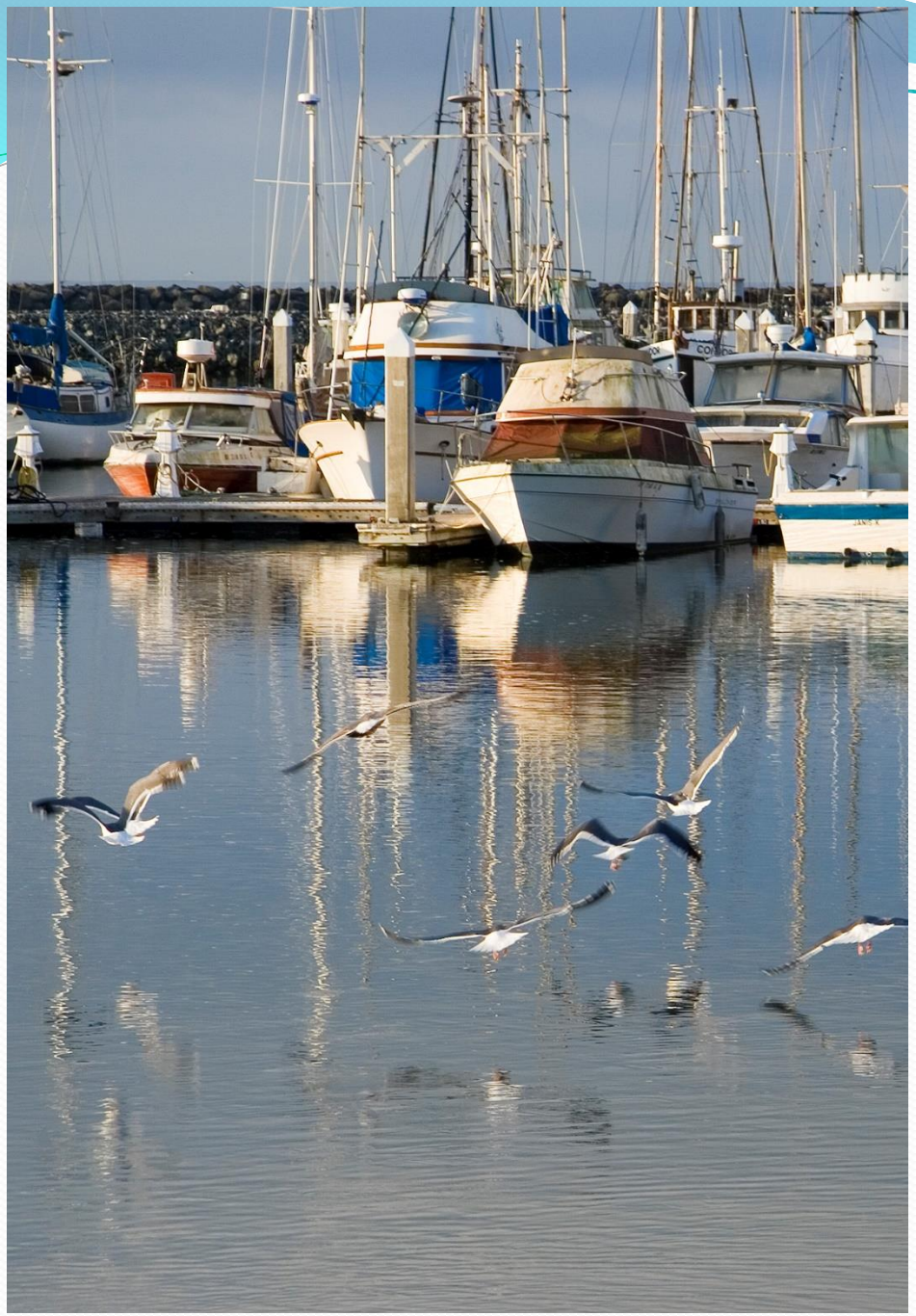
WQBELs Implementation Provisions

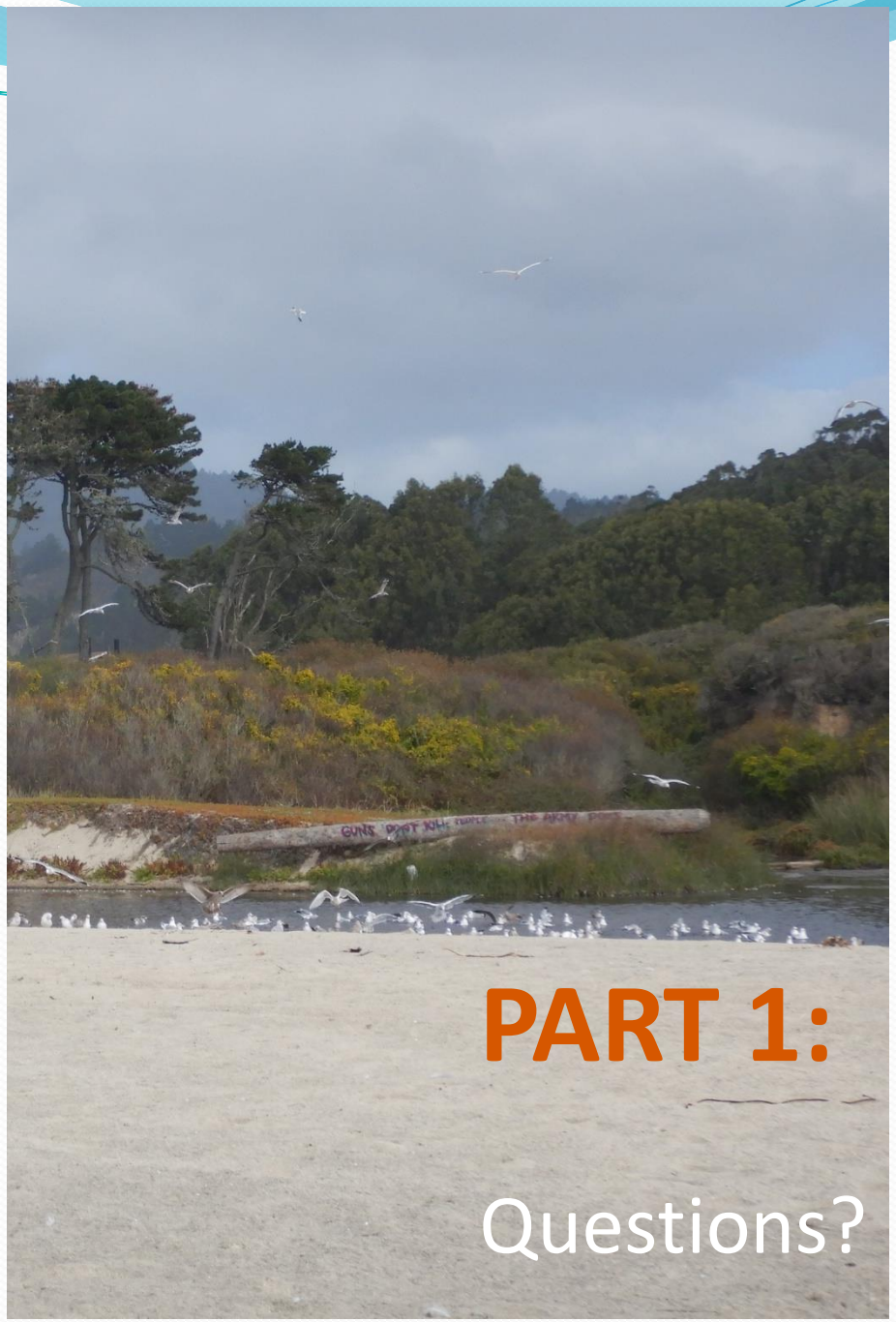
- Dilution credit
- Minimum level: 0.05 mg/L
- Monitoring and reporting frequency
- Averaging period
- 4-day average WQBELs

Scientific Peer Review and Anti-backsliding

- Scientific peer review for new WQOs
  - Required by Section 57004 of the California Health and Safety Code
  - Extensively peer reviewed national criteria
  - Peer review not needed

- Anti-backsliding
  - Allowed by Clean Water Act 303(d)(4)(B) for attainment waters
  - Complied with state antidegradation policy





PART 1:

Questions?

PART 2:

CEQA Scoping Meeting

Purpose of this Meeting

- Hear your comments on the scope of environmental analysis
- Do you foresee any significant adverse environmental impacts from this Project?
- Your comments are important
  - Provide comments on environmental analysis verbally or via chat at today's meeting
  - In writing by June 15, 2020
  - Send comments to: Tong.Yin@waterboards.ca.gov

Environmental Review Process

- The "*project*"" is:
  - Amendment of our Basin Plan to adopt new water quality objectives and WQBEL implementation provisions
  - This process is called “Basin Plan Amendment”
- Water Board’s Basin Planning Process is a "*Certified Regulatory Program*"
  - Exempt from EIR, Neg. Declaration, or Initial Study
  - Instead we prepare Environmental Checklist

CEQA Requirements

- Identify potential adverse environmental impacts that could result from actions taken in response to adopting new WQOs and WQBELs
- Discuss alternatives to the “project”
- Identify mitigation measures to reduce severity of potential impacts
- Provide full public disclosure of documents and decision-making process

Effects to Consider Under CEQA

Will Consider:

- Direct and indirect physical changes in the environment
- Such as impacts from:
  - excavation & grading
  - minor construction
  - waste handling & disposal
- Short-term and long-term impacts

Will NOT consider:

- Speculative changes
- Changes that would occur regardless of the BPA
- Changes with effects already considered

Environmental Checklist Topics

- Aesthetics
- Agricultural resources
- Air quality
- Biological resources
- Cultural resources
- Geology/soils
- Greenhouse gas emissions
- Hazards & hazardous materials
- Water quality & hydrology
- Land use/planning
- Mineral resources
- Noise
- Population/housing
- Public services
- Recreation
- Transportation/traffic
- Tribal cultural resources
- Utilities/service delivery systems

Project Schedule

We are here

- **CEQA Scoping Meeting**
- CEQA Comments due **June 15, 2020**

- Draft Staff Report, Environmental Checklist – **July 2020**
- Public Review and Comments – **July/August 2020**
- Water Board Hearing – **November 2020**

Questions?

Thank you for participating in the meeting!

Send questions/comments to:

Tong.Yin@waterboards.ca.gov