



# Eliot Quarry SMP-23 Reclamation Plan Amendment Project Zone 7 Board Presentation

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AUGUST 21, 2019







# Eliot Facility Customers

- Kaiser Permanente (Dublin)
- Zone 7 (Del Valle Treatment Plant)
- Caltrans (Bay Bridge, Hwy. 84, I-580, I-680)
- Calaveras Dam
- Lawrence Livermore Laboratory
- Granite Construction
- Alameda County Fairgrounds
- Livermore Recreation and Park District
- East Bay MUD
- Shea Homes
- Prologis
- BART
- Meritage Homes
- San Francisco Premium Outlets
- Dublin San Ramon Services District
- Oaks Business Park
- Kirby Ranch (Pleasanton)
- Pleasanton Water Treatment Plant
- The Shoppes – Livermore
- Aloft Hotel – Livermore
- Ponderosa Homes









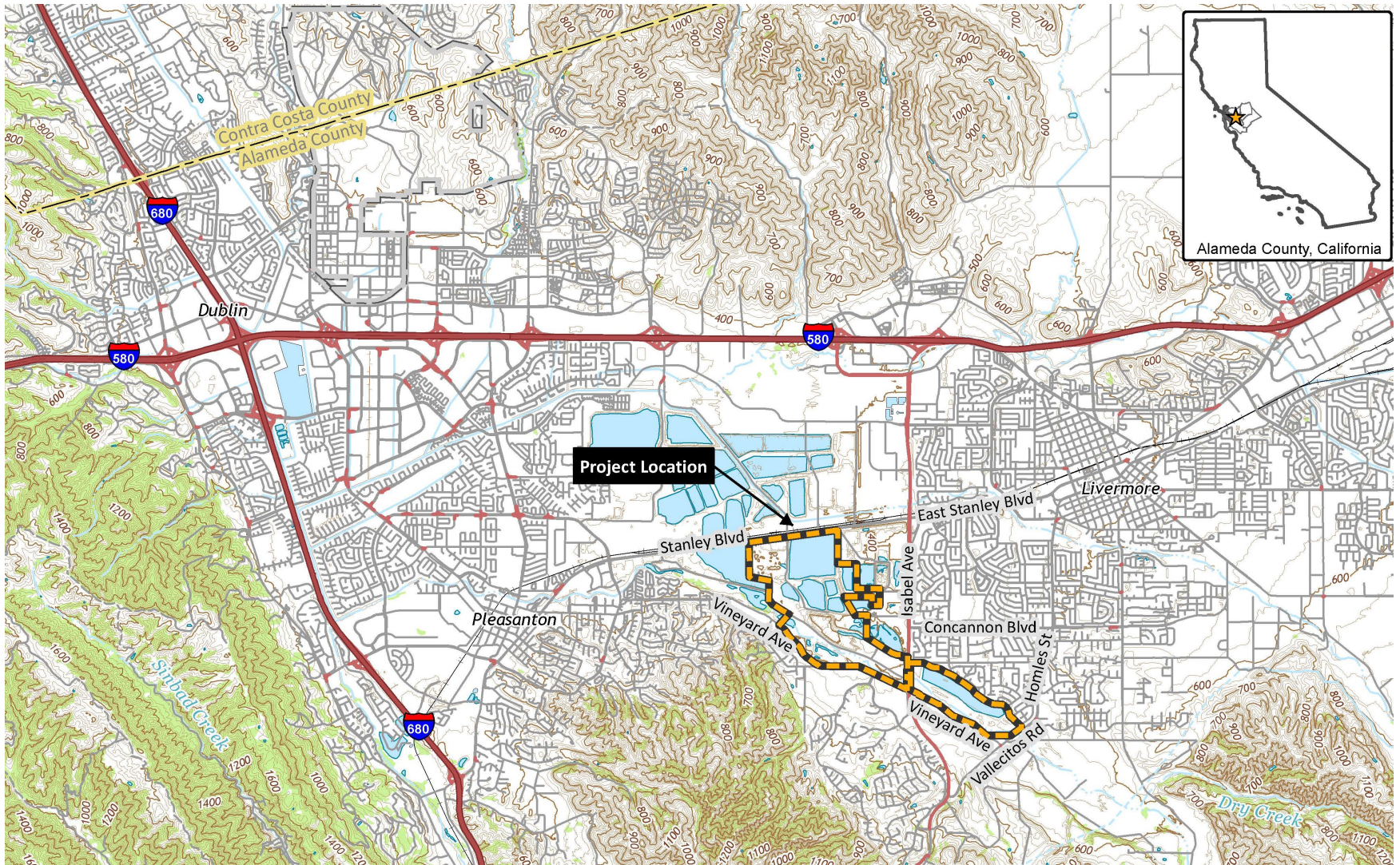
## Topics Covered

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1. Eliot Facility – history and operations
2. Project Goals
3. LAVQAR Specific Plan / Chain of Lakes
4. Reclamation overview
5. Technical overview (geology, hydrology, water quality)
6. Key Project benefits for Zone 7 and ratepayers



# Eliot Facility – Where We Are





## Eliot Quarry – History and Operations

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- Active since ~1906
- “Vested rights” under Pre-1957 mining and Q-1, Q-4, Q-76 permits
- SMP-23 Reclamation Plan (1987)
- Aggregate processing
- Asphalt concrete
- Ready-mix concrete





# Project Goals

- Update 1987 Reclamation Plan
- No changes to operations (uses, production, methods, traffic)
- Restore land to a near natural state and enhance habitat along Arroyo
- Transfer ownership of Lakes A and B to Zone 7
- Install major water infrastructure for reliable water at no cost to Zone 7
- Develop public trail along Vineyard Avenue

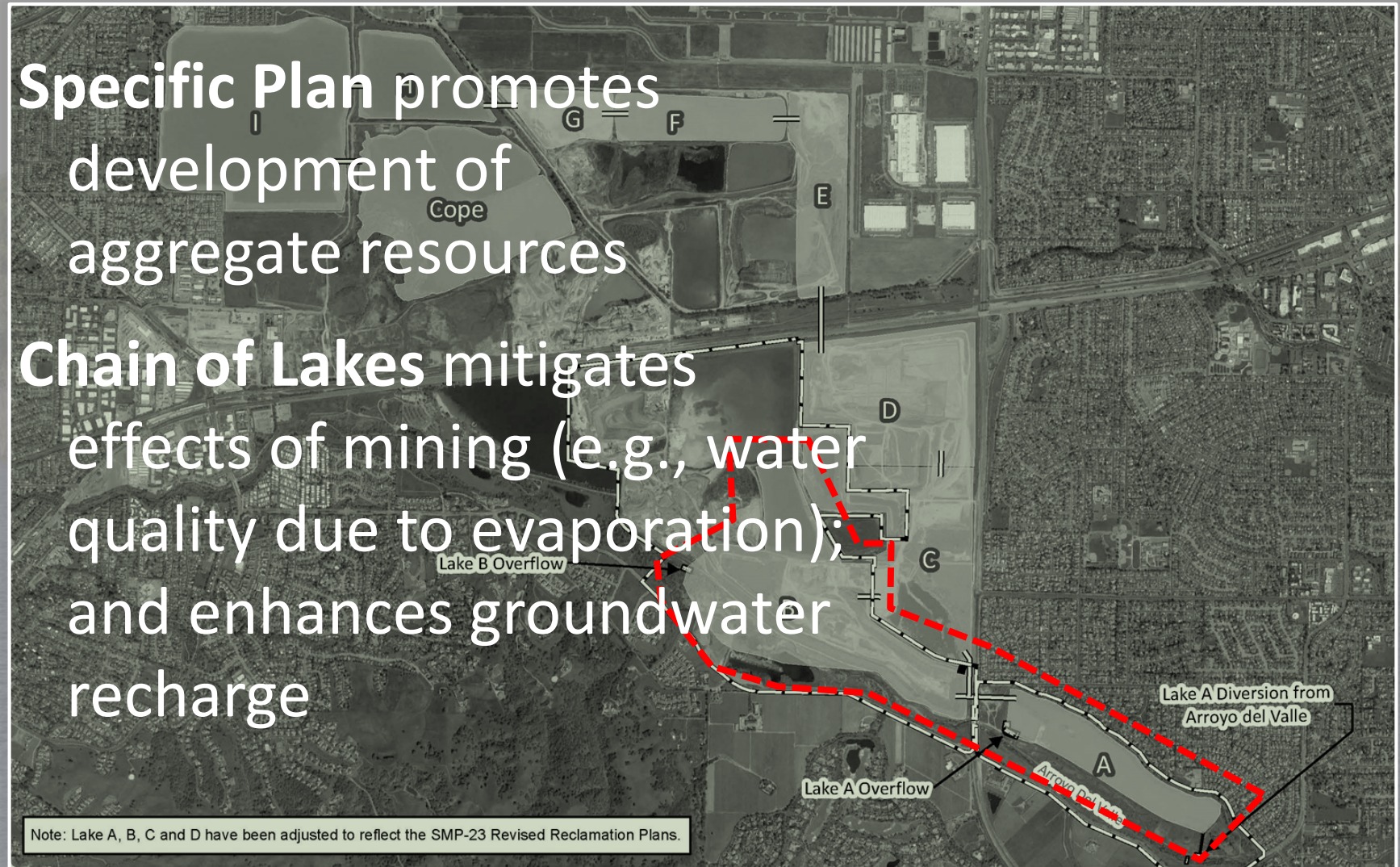




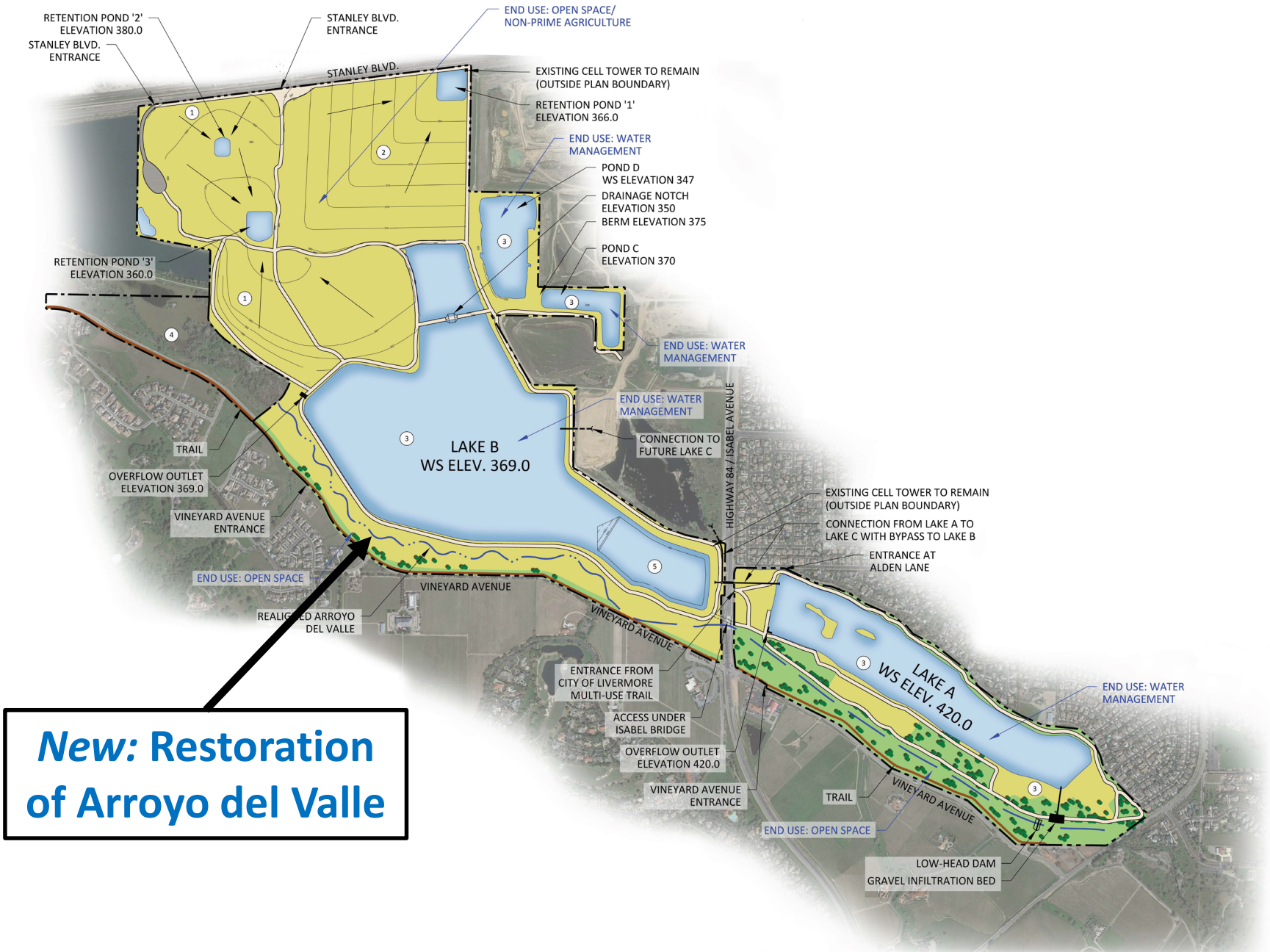
## LAVQAR Specific Plan and the Chain of Lakes

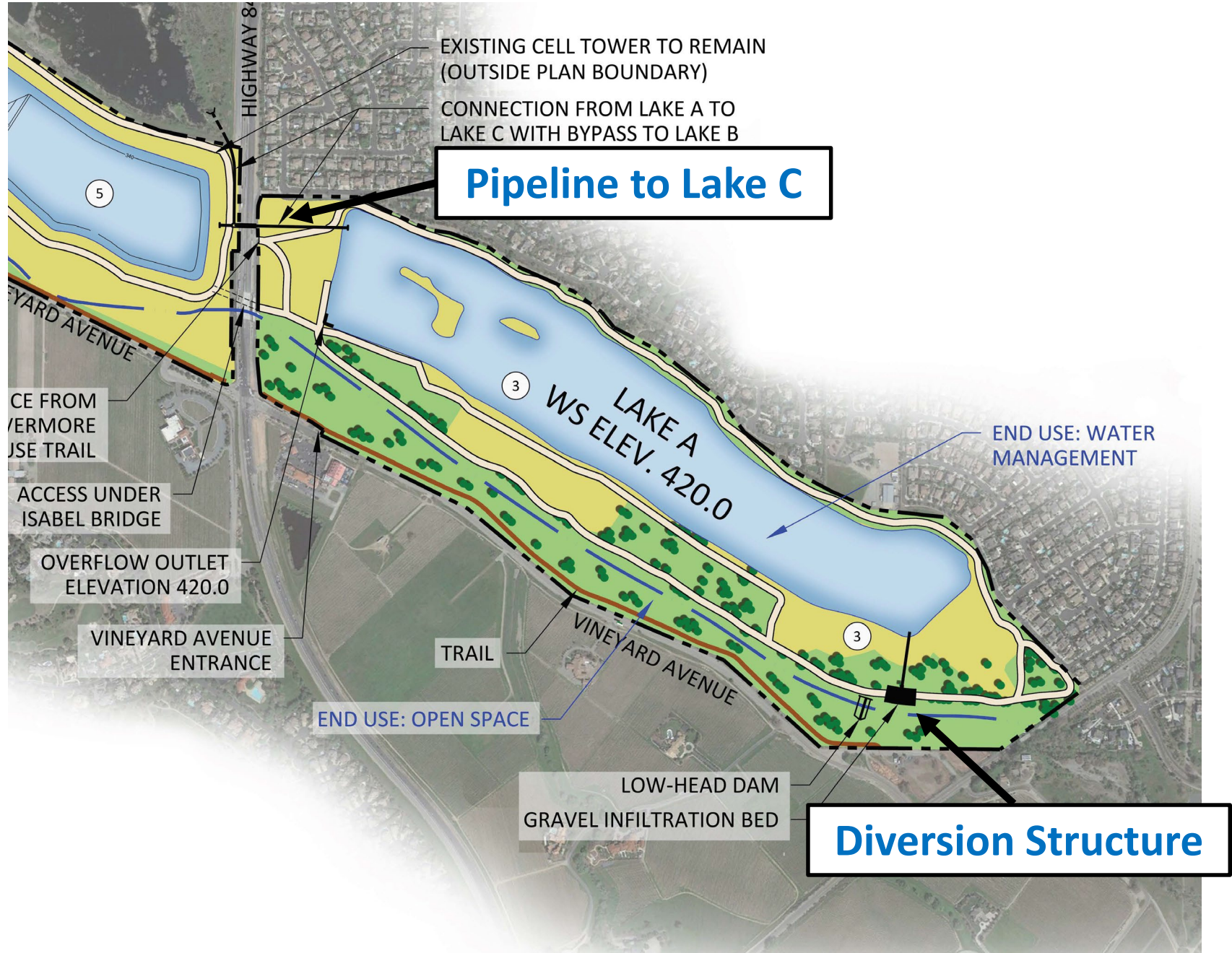
**Specific Plan** promotes  
development of  
aggregate resources

**Chain of Lakes** mitigates  
effects of mining (e.g., water  
quality due to evaporation);  
and enhances groundwater  
recharge















# Lake A Diversion Structure – Arroyo del Valle (2023)

## Purpose:

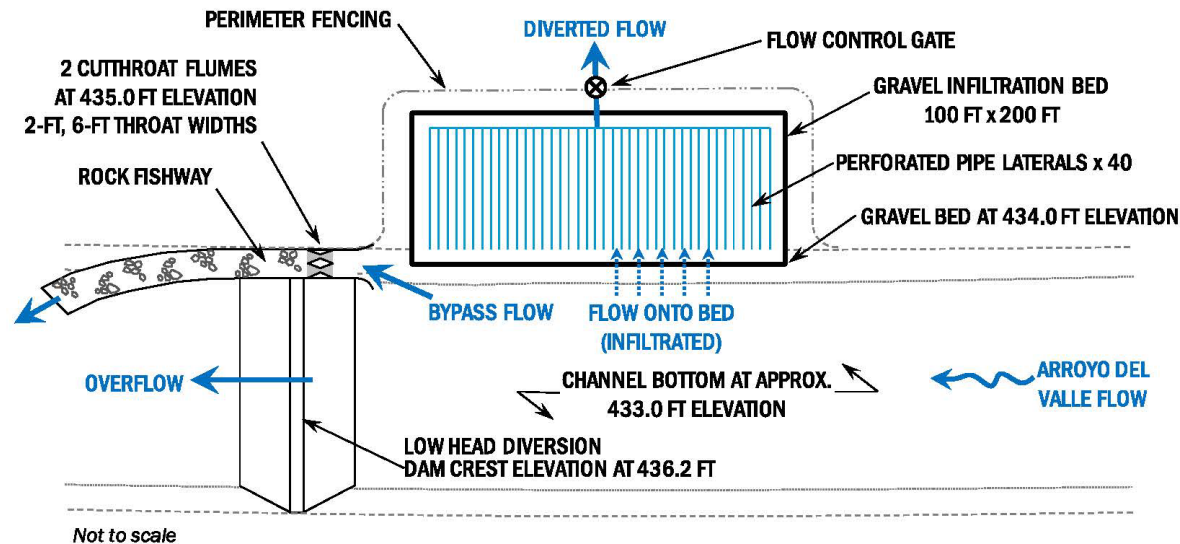
- Move water into Chain of Lakes

## Design Standards:

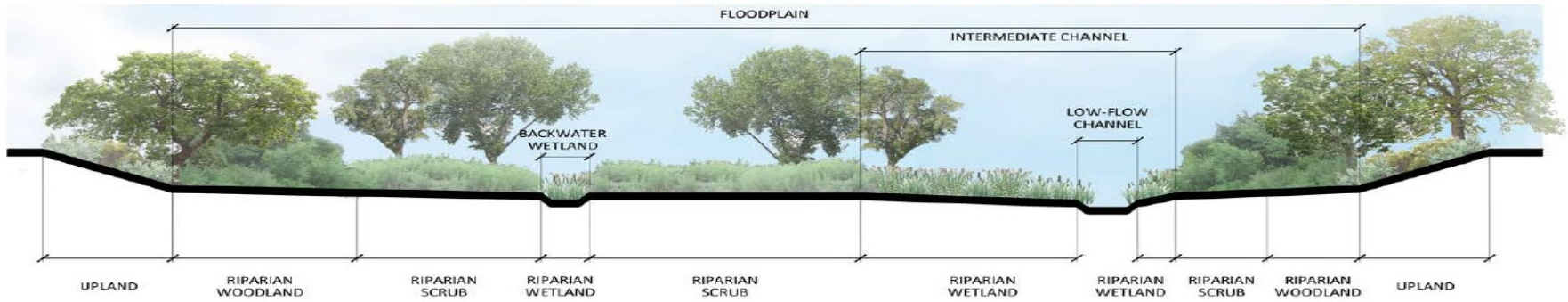
- Divert up to 500 cfs
- Fish bypass

## Next Steps:

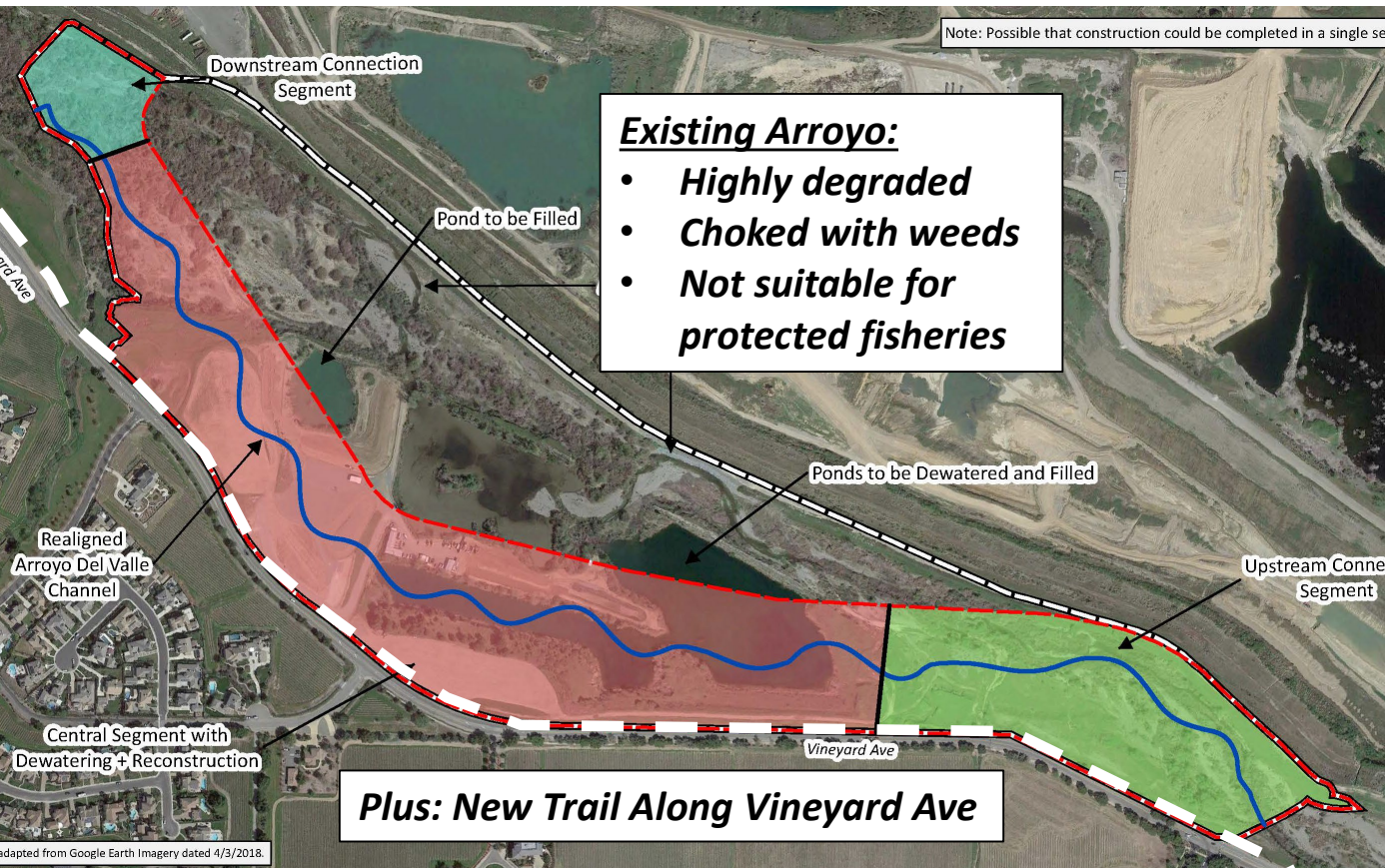
- Refine design with Zone 7
- Regulatory permits (2-3 years)







## Restoration of Arroyo del Valle at Lake B (~2023)



### Benefits:

- Realign around Lake B
- Restore habitat
- Support fish passage
- Convey 100-yr flood
- Permanent easement
- Public trail

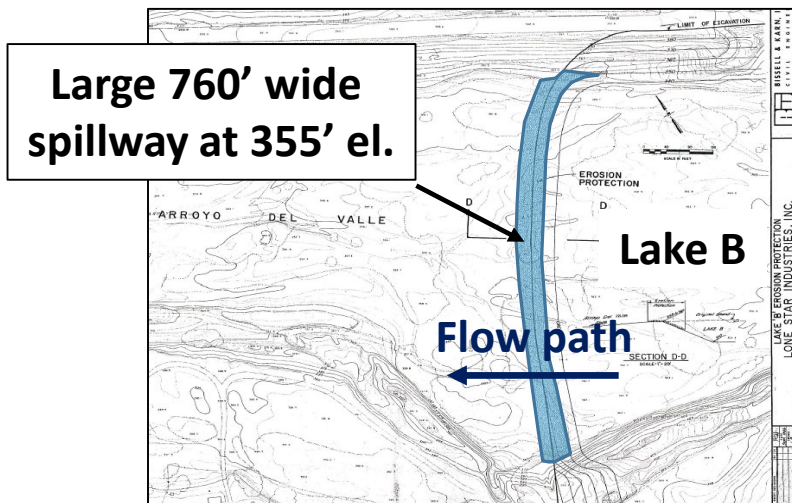
### Next Steps:

- Regulatory permits (1-2 years)

## Technical Overview – *Lake B Overflows*

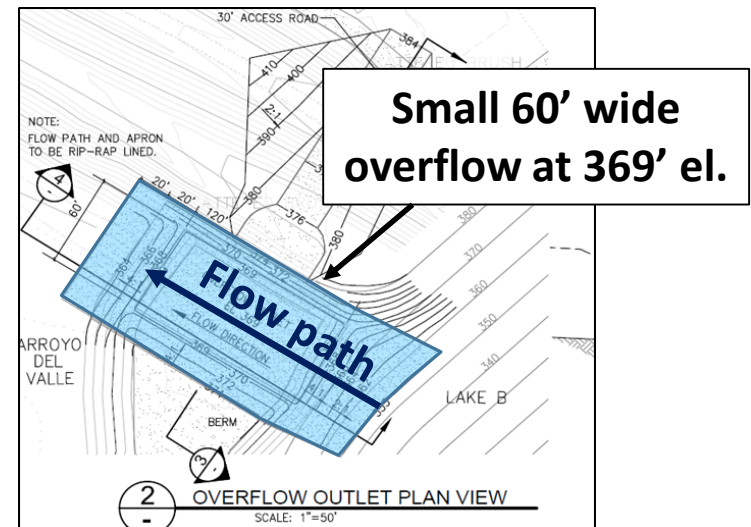
### 1987 Spillway at 355' el.

- Arroyo flows through Lake B
- Continuous flow over spillway



### 2019 Overflow at 369' el.

- Arroyo separate from Lake B
- Lake level (containment) raised by 14 ft



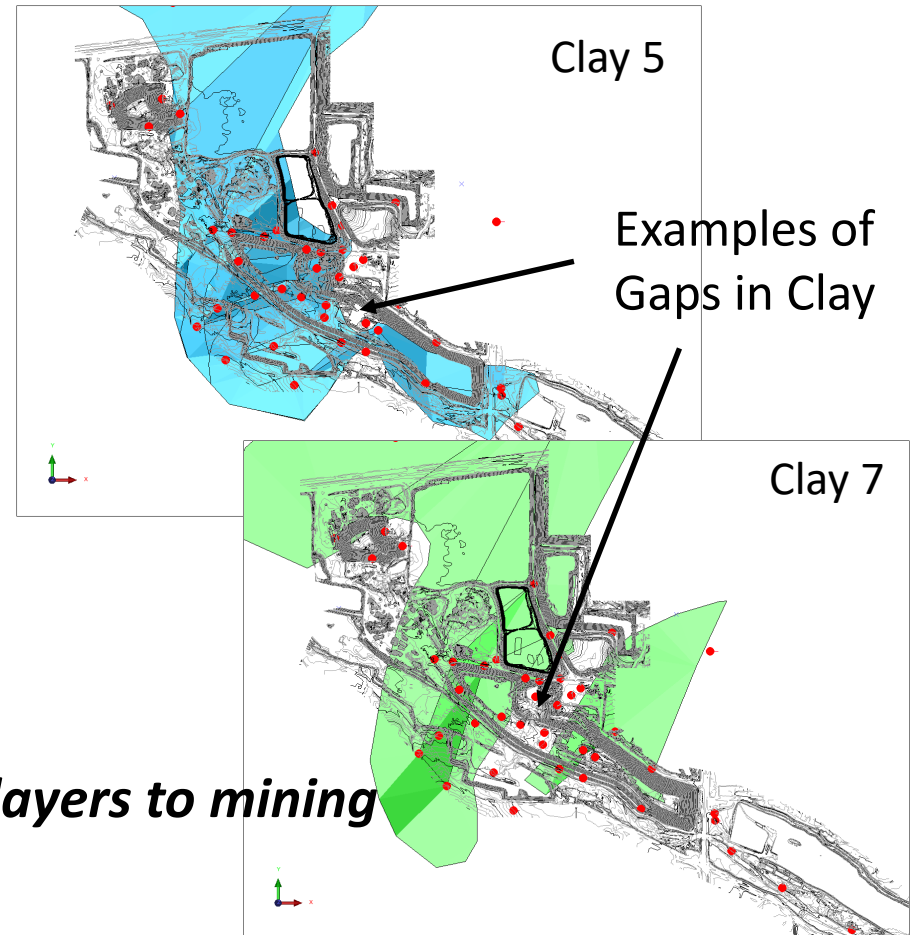
***New Reclamation Plan will spill much less water to SF Bay!***



# ***Ensuring a Safe Source of Water for Ratepayers***

## Technical Overview – *Subsurface Geology*

- In 2018, CEMEX / Zone 7 completed a joint drilling program
- Gravels deposited in a braided stream environment
- 3D geologic model identifies 6 clay intervals to a depth of 350' bgs
- All 6 intervals are discontinuous
- **No aquitards are present at Lake B**



***Not exposing any new groundwater layers to mining***

# ***Ensuring a Safe Source of Water for Ratepayers***

## Technical Overview – *Water Quality*

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- Extensive evaluation of Zone 7's data
- No adverse effects to water quality from excavation, reclamation, or future operation of the Chain of Lakes
- Comply with Waste Discharge Requirements, SPCC Plan, and SWPPP
- Restoration will prevent runoff into Lakes A and B
- Water quality variations in nearby wells are within natural range observed in the basin

*Source: Zone 7, 2011, Hydrostratigraphic Investigations of the Aquifer Recharge Potential for Lakes C and D of the Chain of Lakes, at p. 22)*





## Key Project Benefits for Zone 7 Ratepayers

- Major contribution to water infrastructure at no cost to ratepayers
  - Transfer ownership of Lake A to Zone 7 by 2023
- Spill less water to SF Bay than 1987 reclamation plan
- Improve groundwater recharge potential
- Develop new public trail along Vineyard Avenue near Lake B
- Restore habitats along Arroyo del Valle
- Responsibly develop sand and gravel resources to avoid importing at higher economic and environmental costs



## In Closing...

- Eliot Facility is important to Zone 7 and the Tri-Valley area
- New Reclamation Plan is environmentally superior
- CEMEX will install major water infrastructure at no cost to ratepayers
- New plan accelerates transfer of Lake A to Zone 7 by 2023