



# Beneficial Reuse of Excavated Material in Tidal Marsh Restoration

Scoping Meetings / Open House  
February 6 and 7, 2024



*Solutions that move you*

# Presenters



**Ann Calnan**

**Environmental Lead**



**Luis Paiz**

**Operations Manager**

# Scoping and Environmental Review



# Scoping and Environmental Review

- What is the purpose of scoping?
- Who is leading the environmental effort?
- What is the need for and purpose of the project?
- Where is the project and what does it involve?
- How do we transport the excavated material to the ponds?
- How do we place the excavated material into the ponds?
- Is the material acceptable for use in the ponds?
- What happens when the project is complete?
- What are the benefits of the project?
- What is the environmental clearance schedule?
- How do we submit scoping comments?



# What is the purpose of scoping?

The first step in preparing an environmental document is to determine the scope in consultation with agencies, the public, and interested stakeholders

- Notice of Preparation of an Environmental Impact Report (EIR) with Supplemental Project Information including a preliminary project description
- Notice of Intent of an Environmental Impact Statement (EIS) to be published in the Federal Register
- Specifically, the purpose of scoping is to:
  - Gather input of the scope of the environmental document
  - Identify key environmental issues
  - Identify potential alternatives and options



## Who is leading the environmental effort?

- The U.S. Fish and Wildlife Service is the lead agency under the National Environmental Policy Act (NEPA) and will be preparing an EIS
- The Santa Clara Valley Transportation Agency is the lead agency under the California Environmental Quality Act (CEQA) and will be preparing an EIR
- The EIS/EIR will:
  - Identify potential environmental impacts
  - Recommends ways to avoid, minimize, or mitigate any identified impact
  - Informs decision-makers about the project and its impacts so they can make an informed decision about whether to approve the project

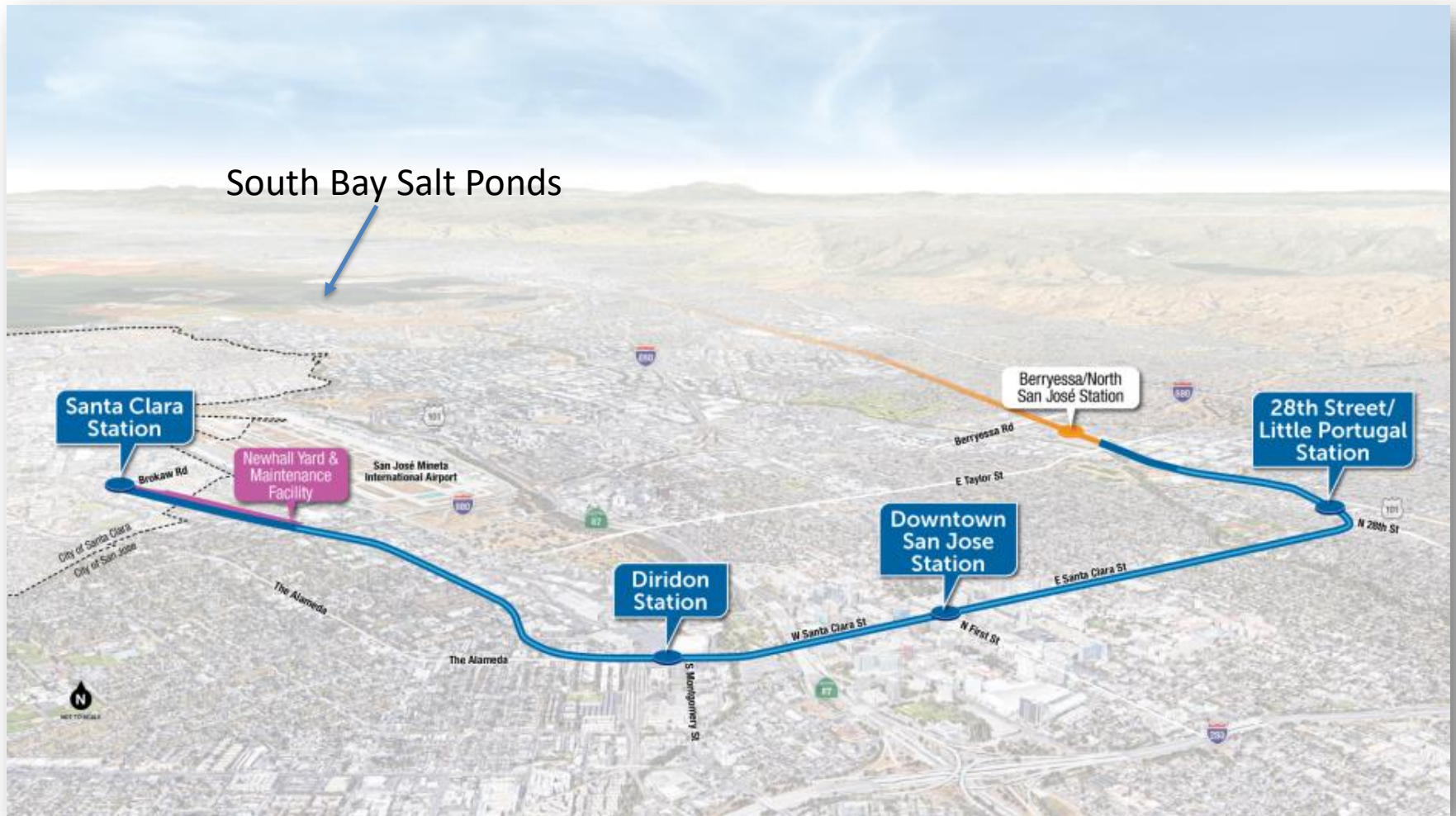


## What is the need for and purpose of the project?

- The BART Extension Project will generate a lot excavated material during construction of the tunnel and other facilities.
  - The Beneficial Reuse Project proposes to transport that material to the salt ponds for beneficial reuse.
- The former salt production ponds require large quantities of sediment to raise the pond bottoms to eventually restore tidal marsh habitat.
  - The Beneficial Reuse Project proposes to place BART excavated material into the ponds to help raise the pond bottoms.
- There is high mercury concentration in the sediments of some south bay ponds due to historic mining operations.
  - The Beneficial Reuse Project proposes to cover sediment contaminated with mercury and reduce the potential for mercury to spread into the aquatic environment.

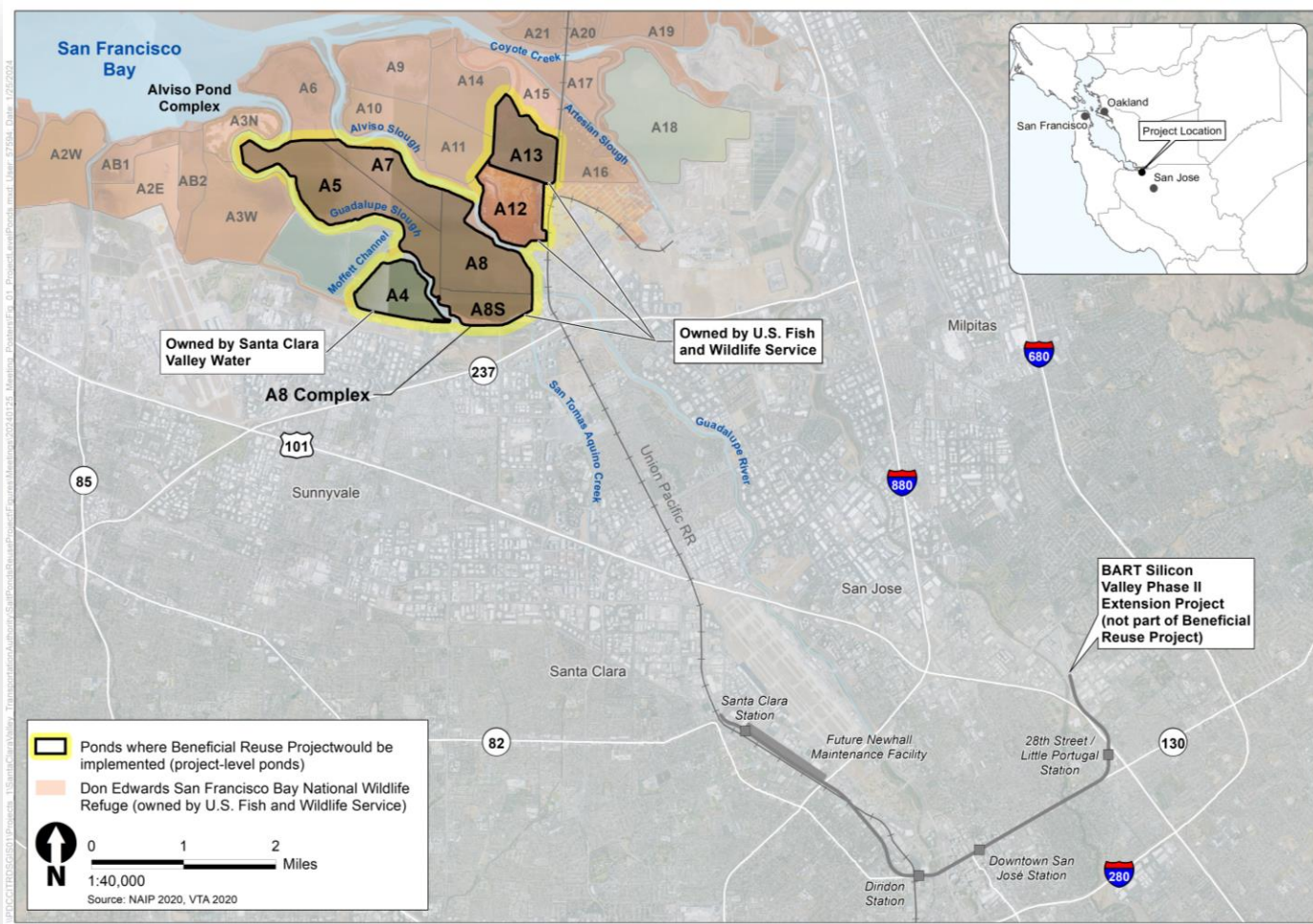


# Where is the project and what does it involve?



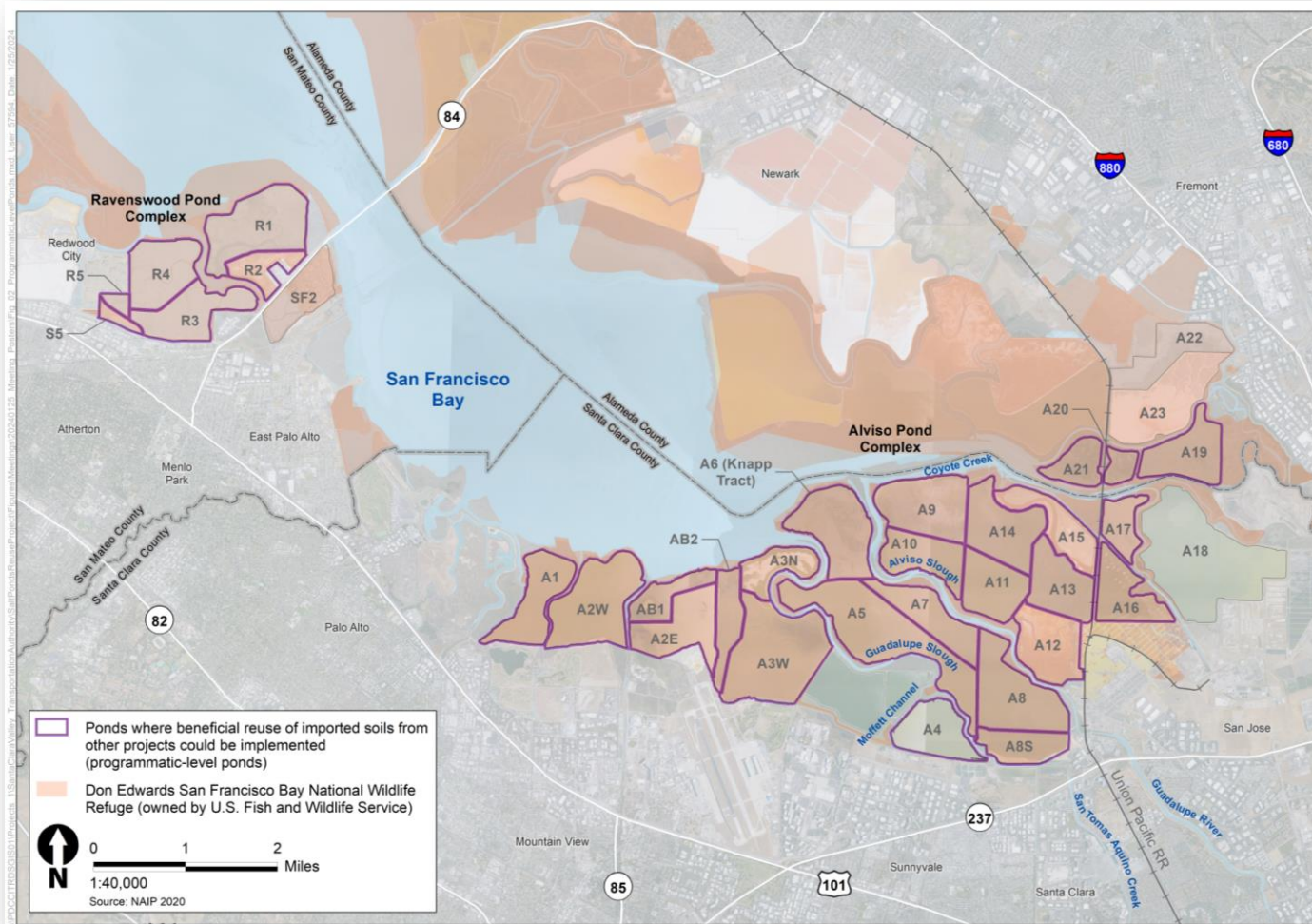


# Where is the project and what does it involve?



## Project-Level Ponds

# Where is the project and what does it involve?



## Programmatic-Level Ponds

*Solutions that move you*

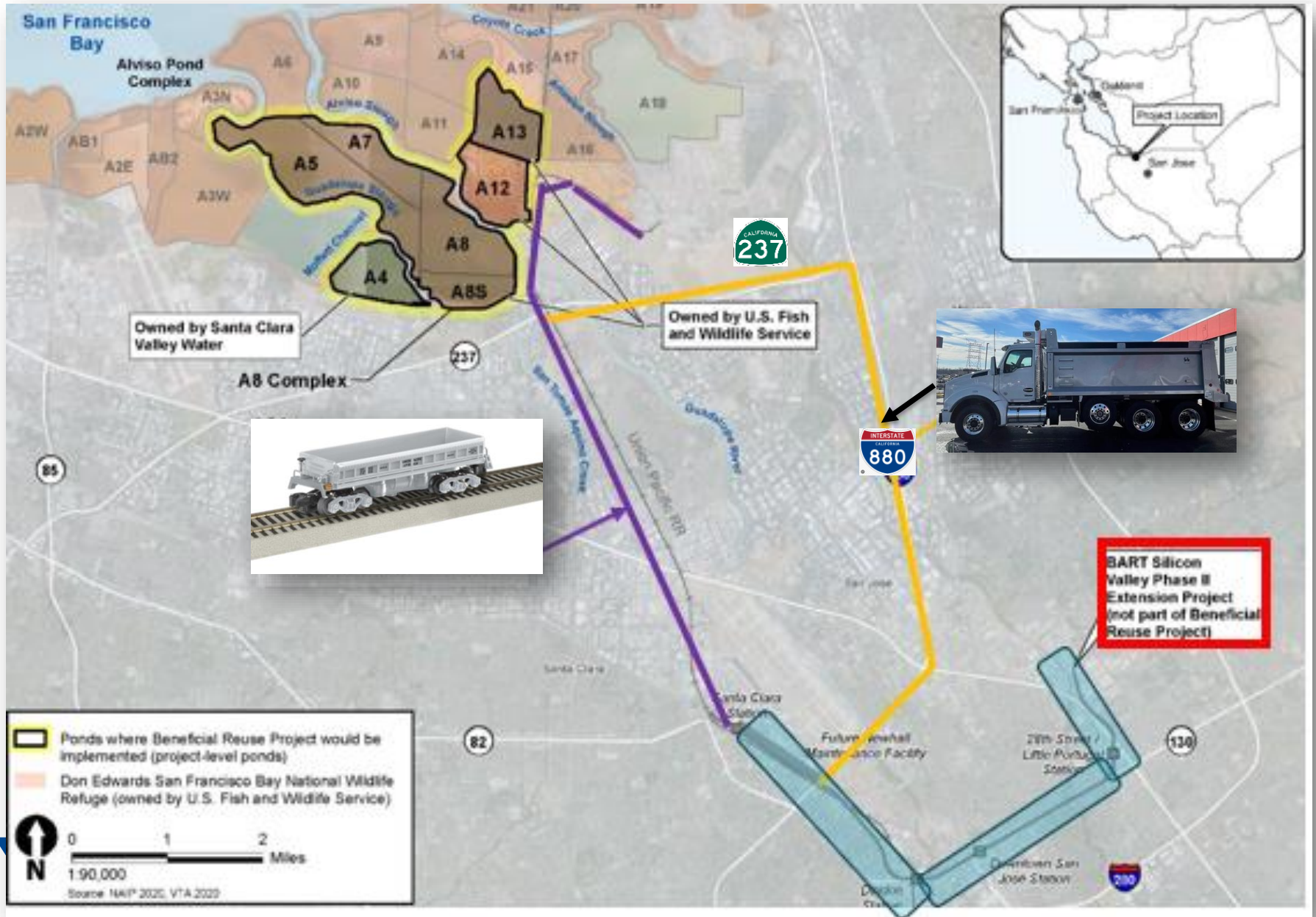
# Proposed Construction Methods

- Hauling Methods and Routes
- Material Placement Methodologies and Infrastructure Improvements





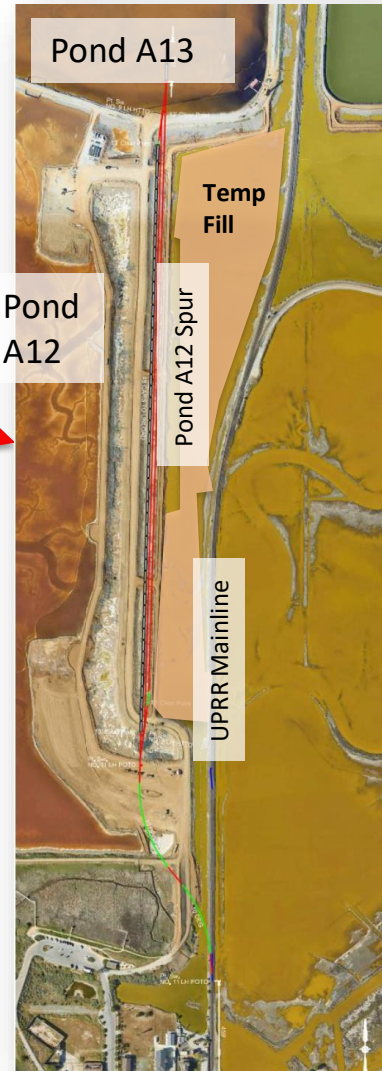
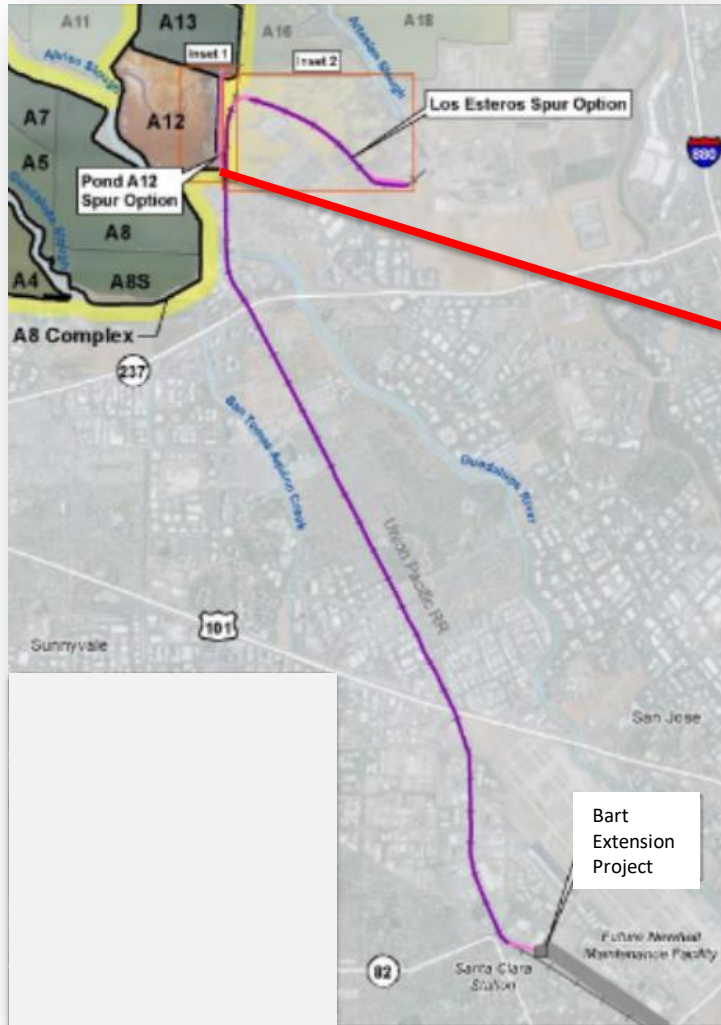
# Hauling Methods and Routes – Project Level Ponds



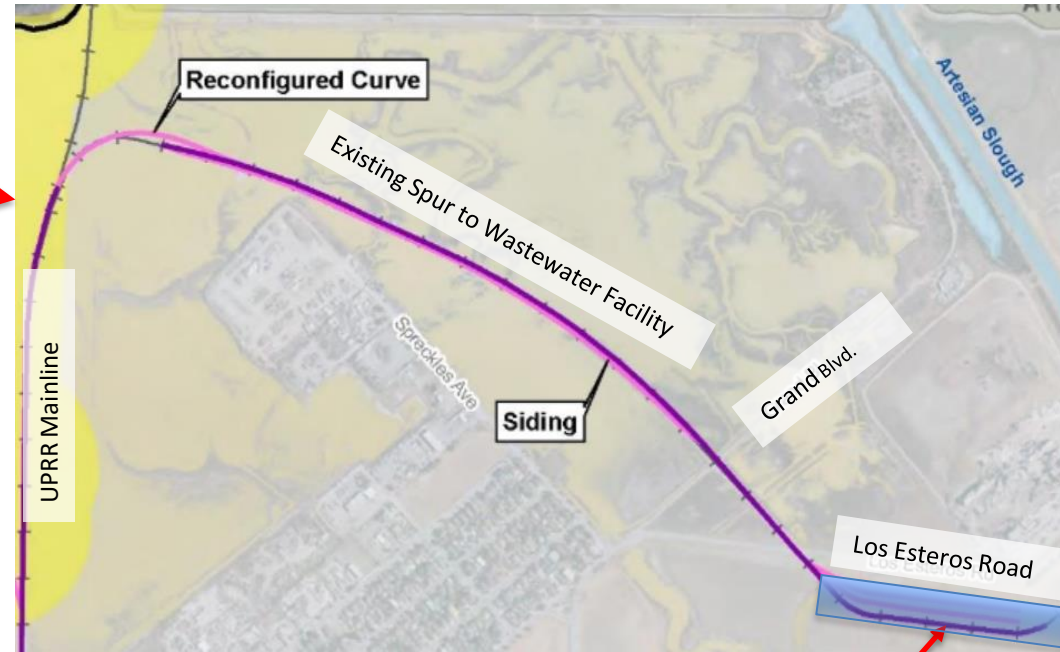
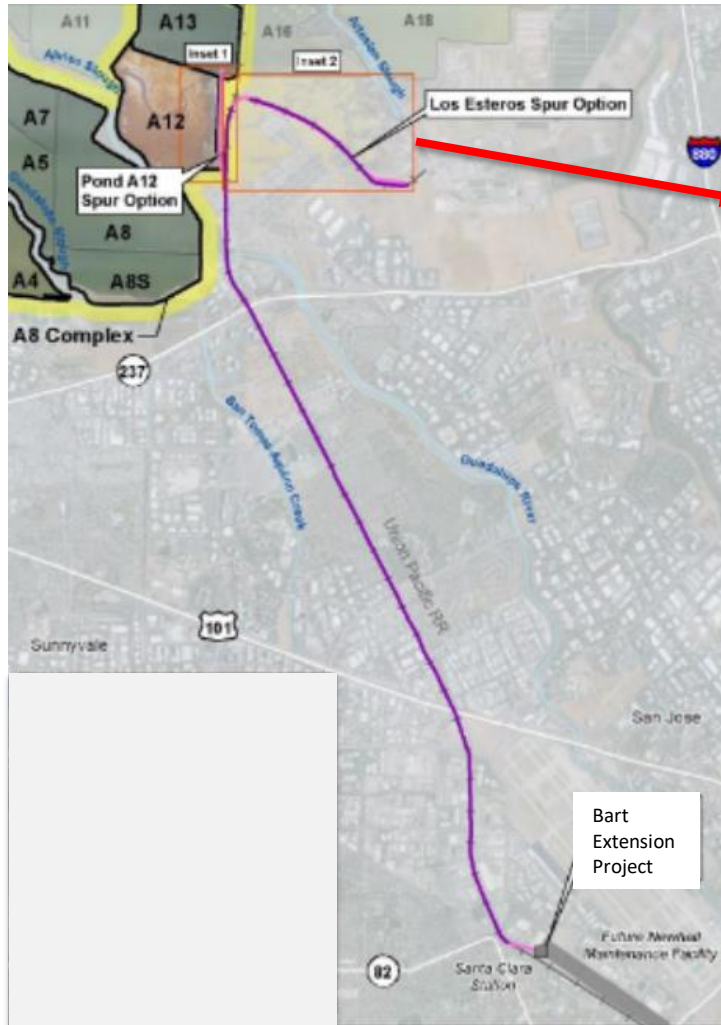




# Hauling by Rail – Pond A12 Spur Option



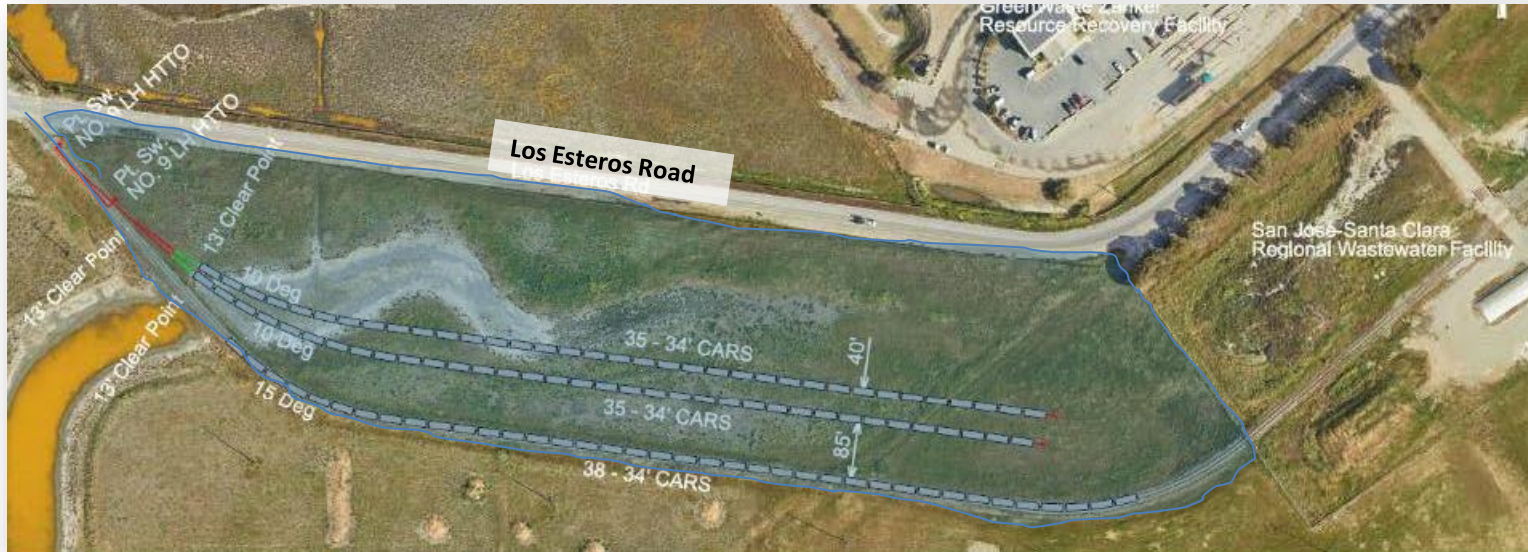
# Hauling by Rail – Los Esteros Spur Option



Los Esteros Road Offloading Area



# Hauling by Rail – Los Esteros Spur Option



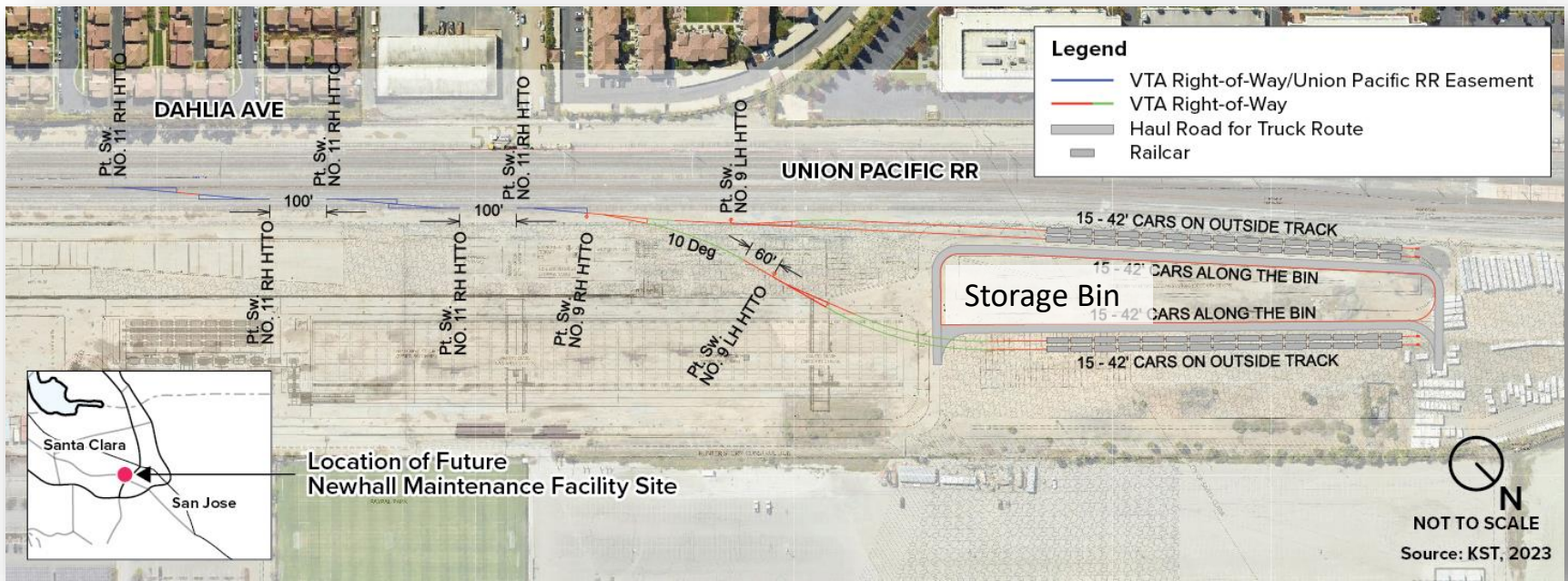


# Hauling by Rail – Los Esteros Spur Option

Curve Modification



# How do we transport the excavated material?



## Hauling by Rail – The Newhall Facility



# How do we place the excavated material into the ponds?

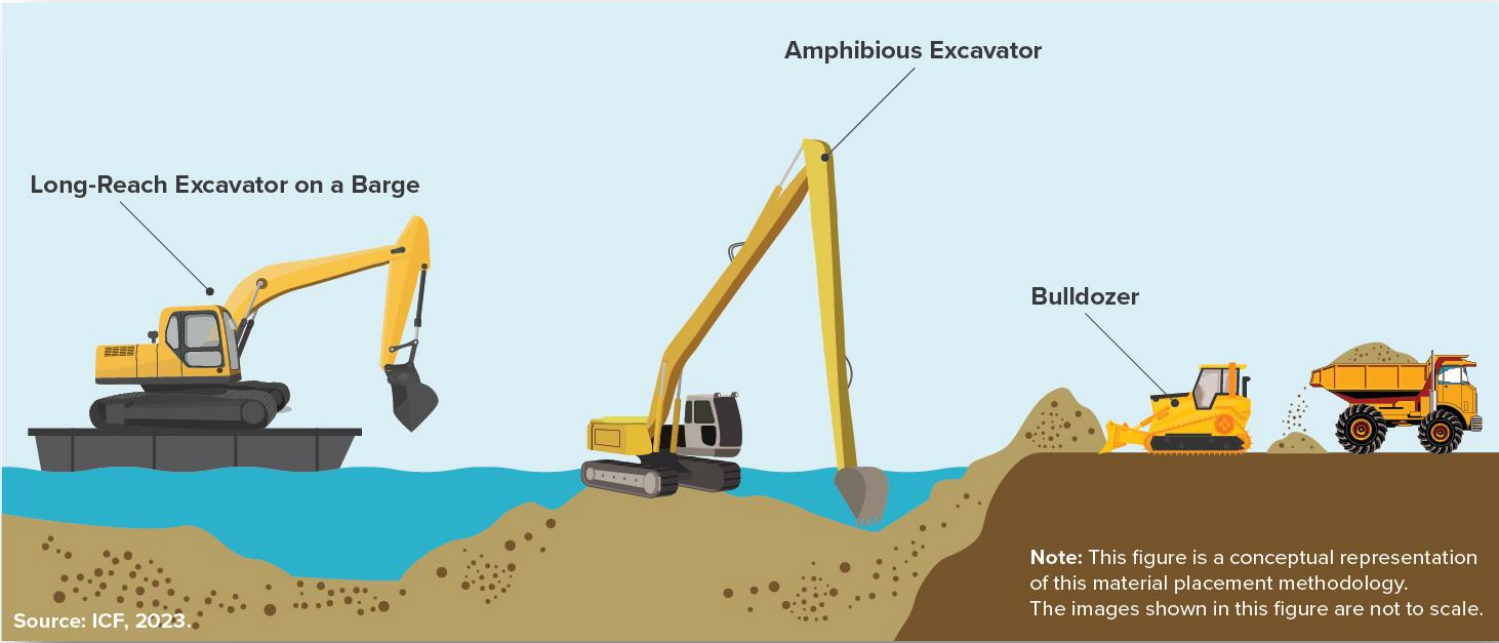
The Beneficial Reuse Project would include three methods for the placement of excavated material within the project-level ponds: conventional equipment, hydraulic placement, and/or conveyor system.

- Conventional Equipment
- Hydraulic Methodologies
- Conveyor System





# Conventional Equipment



Example of Amphibious Excavator

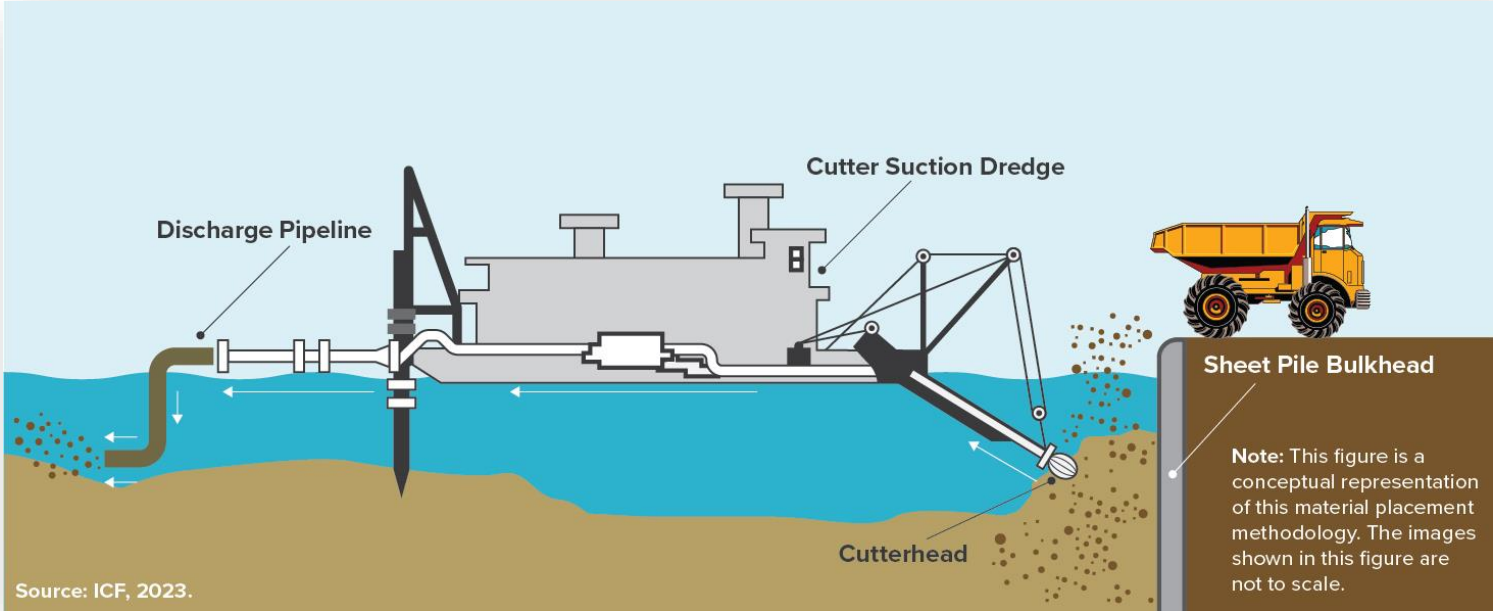


# Turbidity Curtain

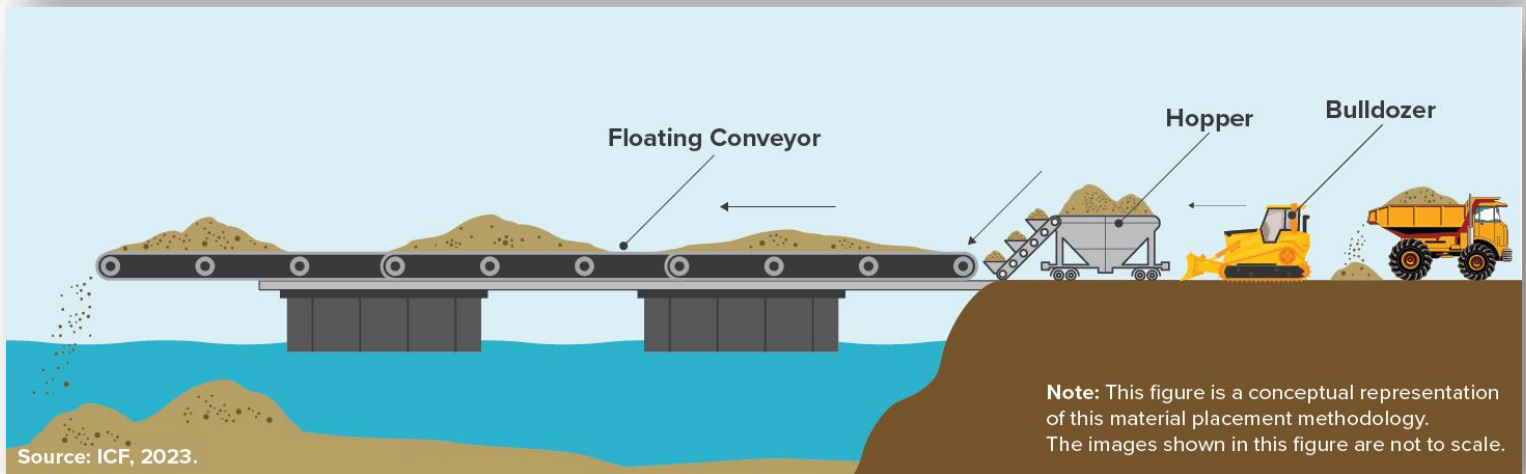
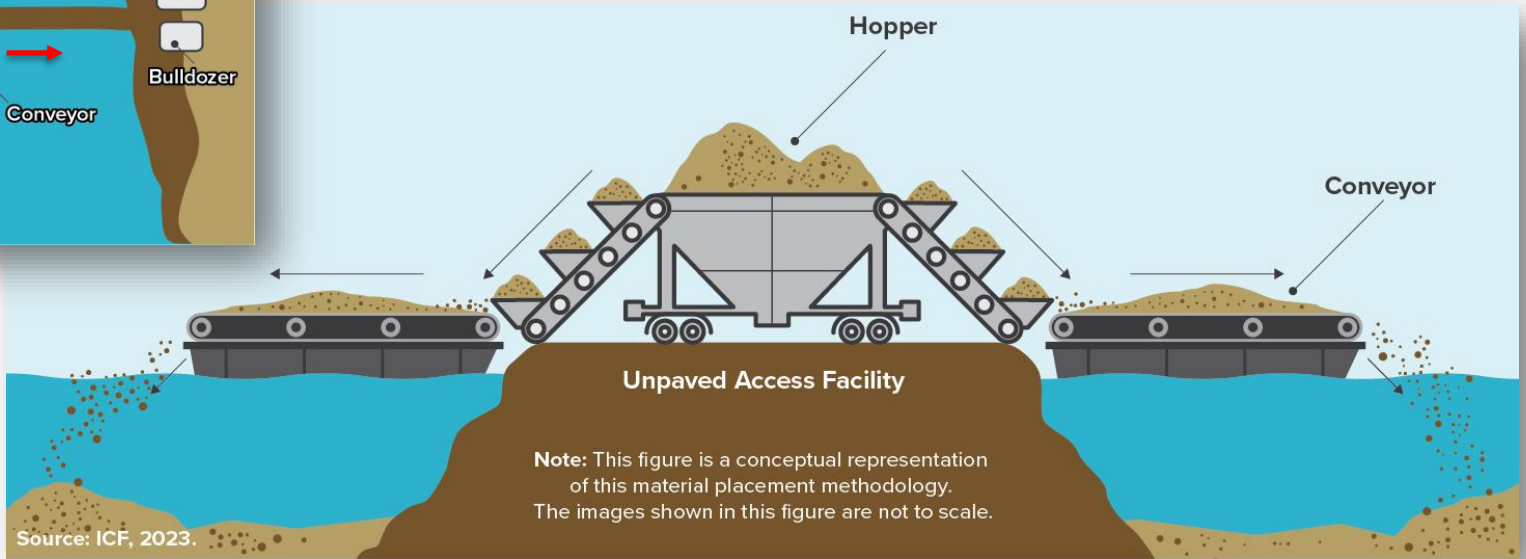
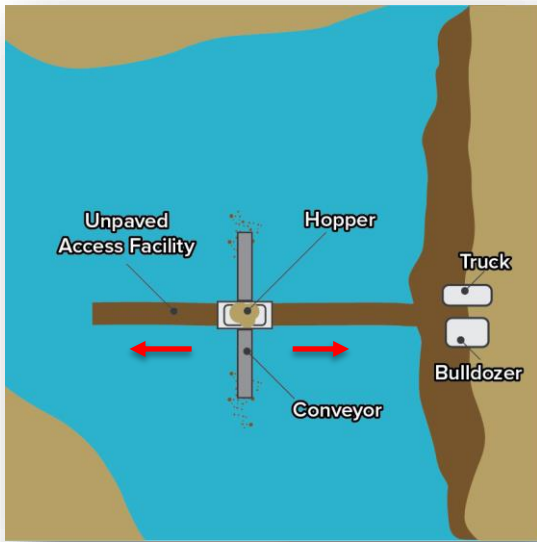




# Hydraulic Dredging



# Conveyor System





## Is the material acceptable for use in the ponds?

- All excavated materials reused at the ponds must meet the criteria established in the San Francisco Regional Water Quality Control Board (RWQCB) *Master Quality Assurance Project Plan for Don Edwards San Francisco Bay National Wildlife Refuge*.
- VTA will work with the RWQCB and San Francisco Bay Conservation and Development Commission to ensure that all excavated material meets criteria that avoid risks to wildlife and water quality.



# What happens when the project is complete?

- After all excavation for the BART Extension Project is complete and no additional material is available, the construction equipment would be removed.
- Sheet pile bulkheads would be removed.
- Any unpaved access facilities constructed within the ponds would be dismantled and the material would be used to raise the pond bottoms.
- If the Los Esteros Spur Option is implemented, the two storage tracks south of Los Esteros Road would be removed.
- If the Pond A12 Spur Option is implemented, it would be removed.



# What are the benefits of the project?

- Direct benefits:
  - Construction waste reuse
  - Reduction in greenhouse gases emissions and other air quality pollutants by diverting transport of material to the salt ponds that would otherwise be destined for landfills and quarries farther away.
- Indirect benefits:
  - Facilitating future restoration of tidal marsh habitat.
  - When tidal marsh becomes established, it would provide such benefits as sea-level rise resilience, water quality improvements, flood risk management, habitat creation for threatened and endangered species, and greenhouse gas sequestration.



# What is the environmental clearance schedule?

Kick-off of the environmental process	January/February 2024
Technical analysis	2024
Draft environmental document for public review	Early 2025
Final environmental document with responses to public comments	Mid 2025

Thank You

