



**CARGILL SOLAR SEA SALT SYSTEM
MAINTENANCE AND OPERATIONS PERMIT -
SF BAY CONSERVATION AND DEVELOPMENT COMMISSION (BCDC)
COMMUNITY MEETING PRESENTATION**

AUGUST 8, 2023



MEETING AGENDA



- Welcome
- Slide presentation on Cargill's Maintenance and Operations activities and Environmental Assessment for the permit renewal
- Public questions and comments
- Meeting adjournment

INTRODUCTIONS

- Phoenix Armenta, BCDC Senior Manager for Climate Equity and Community Engagement
- Sam Fielding, BCDC Permit Analyst
- Jenn Hyman, BCDC Senior Engineer
- Susanne von Rosenberg, GAIA Consulting, Inc.
- Connie Lee, Senior Land Management Engineer, Cargill, Inc.
- Matt Pitcher, Solar Plant Manager, Cargill, Inc.
- Don Brown, Land Resources Manager, Cargill, Inc.
- Christine Boudreau, Boudreau & Associates.
- Sol Garza, Spanish Translation, Focus Interpreting

BCDC'S MISSION

The San Francisco Bay Conservation and Development Commission (BCDC) protects and enhances San Francisco Bay and encourages the Bay's responsible and productive use for this and future generations.

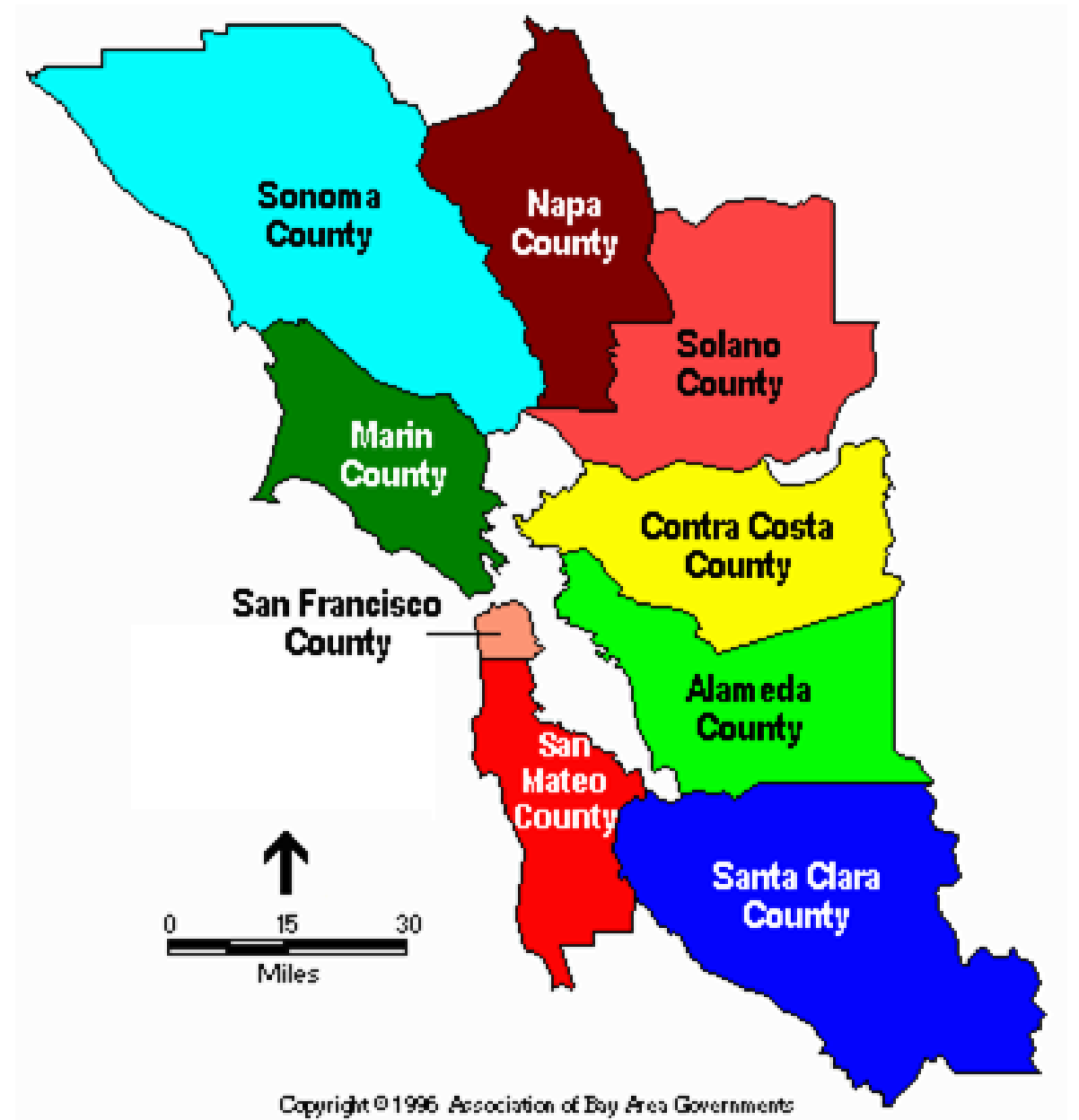
WHAT DOES BCDC DO?



- BCDC is a state agency with permitting authority for projects in and along San Francisco Bay.
- BCDC enforces the Bay Plan Salt Pond policy, which recognizes the unique value of salt ponds.
- BCDC enforces other policies that require projects to incorporate public access to the Bay, sea level rise adaptation, safety, environmental justice, and protection of natural resources (to name a few)

BCDC JURISDICTION

- BCDC has regulatory jurisdiction over the Bay itself, a 100-foot shoreline band, salt ponds, and managed wetlands that cover the 9 counties and over 40 cities that touch Bay waters



CARGILL MAINTENANCE AND OPERATIONS PERMIT



Salt pond berm photo from Cargill Maintenance Memo, 2021

- Cargill currently produces salt on the shores of SF Bay
- Cargill's current maintenance and operations activities are regulated by a 10-year permit issued by BCDC in 1995. This permit has been extended numerous times.
- Cargill has applied to renew the 10-year permit.

THE ENVIRONMENTAL ASSESSMENT FOR THE PERMIT



Salt pond photo by J Hyman, 2023

- For the permit renewal, BCDC is required to evaluate the potential environmental effects of the activities authorized in the permit.
- BCDC is preparing an Environmental Assessment (EA) to comply with CEQA, assessing the potential impacts from Cargill's maintenance and operational activities.
- Cargill will now talk about their salt making operations and maintenance activities

SPECIAL TERMS RELATED TO SALT PONDS



From Cargill web site

- Berm – a raised pile of dirt used to enclose a salt pond
- Brine – salt water concentrated in the salt-making process
- BMPs – Best Management Practices
- Riprap – rock and/or repurposed concrete placed on a berm to reduce erosion from natural forces
- CEQA – the California Environmental Quality Act, which requires the assessment of potential environmental impacts of a project
- M&O – Maintenance and Operations

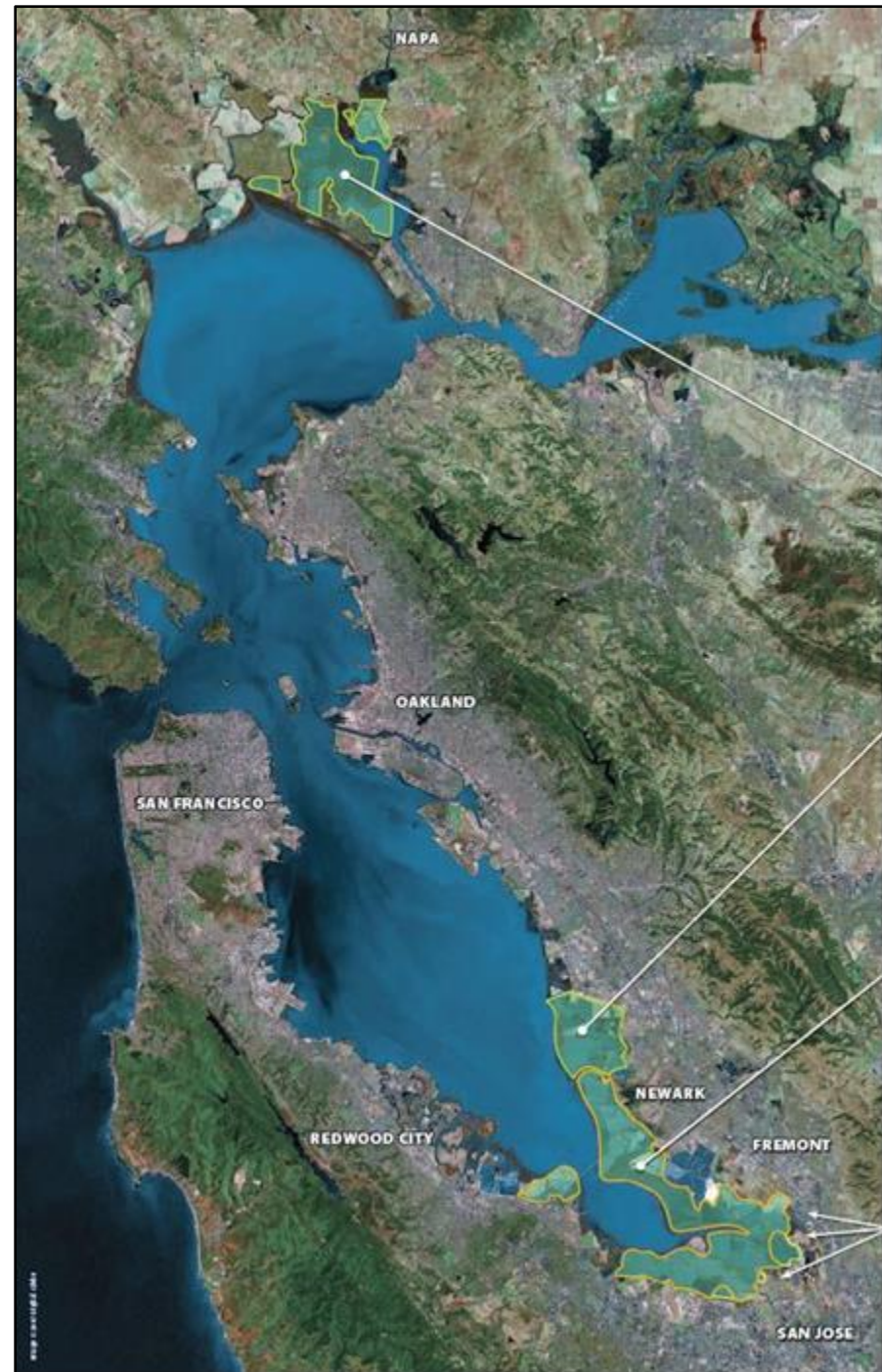
HISTORY OF SALT MAKING IN THE BAY

- Natural salt pans formed on the Bay shore and were harvested by native tribes
- The managed solar salt industry began in the 1850s
- In 1936 the Leslie Salt Company arose from the consolidation of 19 small operations
- Cargill, Inc. purchased Leslie Salt in 1978



CARGILL PROPERTY TRANSFERS

- Over the last 40 years, Cargill has conveyed more than 40,000 acres of Salt Ponds to public wildlife agencies
- Today Cargill owns 4,100 acres in fee title and has operating rights on 8,000 acres within the Don Edwards Wildlife Refuge



MORE THAN 40,000 ACRES... More than \$150 million in land value donations... Cargill's history of cooperation has helped launch what leading environmentalists and government officials hail as "the most important wetlands preservation project in the history of the Bay Area" and "the largest restoration project on the West Coast."

By adopting new harvest techniques, Cargill was able to free up these lands and continue to meet the needs of its customers for higher value salt products.

Meanwhile, Cargill continues working with public agencies to safeguard wildlife habitat within the salt pond ecosystem.



11,400 acres of salt ponds and plant site created the California Department of Fish and Game Napa Wildlife Preserve in 1994 and 2003.



6,000 acres of former Cargill salt ponds created the California Department of Fish and Game Edem Landing Ecological Reserve in Hayward in 1994, and expanded the Reserve in 2003.



20,800 acres of Cargill salt ponds created and expanded the U.S. Fish and Wildlife Service Don Edwards San Francisco Bay National Wildlife Refuge in 1979 and 2003. (Cargill maintains operations on 4,000 acres within the Refuge.)



2,900 acres have been transferred to various local agencies for open space, parks, environmental education and other public purposes. This includes 73 miles of Bay trail.

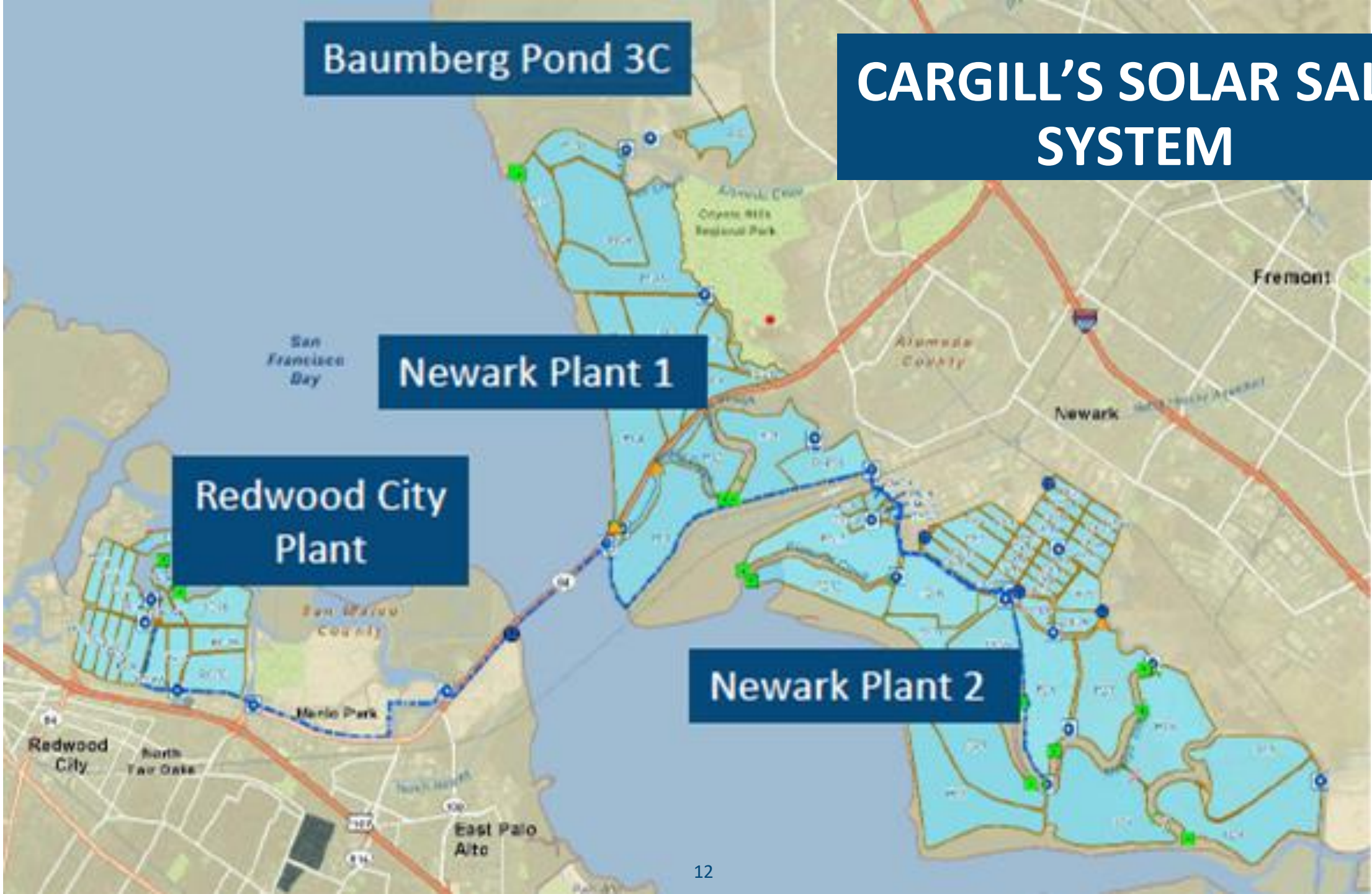
Baumberg Pond 3C

CARGILL'S SOLAR SALT SYSTEM

Newark Plant 1

Redwood City Plant

Newark Plant 2



CARGILL'S SALT POND MAINTENANCE ACTIVITIES INCLUDE:



Photo of berm maintenance, from Draft EA, 2021

- Replacing/repairing soil, filter fabric, and riprap on limited sections of berms,
- Adding soil to berms and grading the tops to address erosion and improve drivability,
- Maintaining and replacing infrastructure such as pumps, tide gates, and platforms
- Removing sediment at pump intakes.
- Best Management Practices have been developed and coordinated with the regulatory agencies and are performed to avoid or minimize potential environmental impacts.

ACTIVITIES THAT WILL BE EVALUATED IN THE ENVIRONMENTAL ASSESSMENT



Photo of salt processing from Cargill web site

- The Environmental Assessment being prepared will examine the impacts of these maintenance and operation activities.
- The Environmental Assessment covers a broader scope than the Cargill Maintenance & Operations permit and will also include an analysis of certain operations, including:
 - Pumping water from the Bay into ponds, primarily in the summer
 - Truck trips in and out of the plants
 - Storage of highly saline brine in ponds adjacent to the Bay

M&O ACTIVITIES - REPLACING/REPAIRING BERMS AND PLACEMENT OF SOIL, FILTER FABRIC, AND RIPRAP



M&O ACTIVITIES – MAINTAINING AND REPLACING INFRASTRUCTURE



August 8, 2023

BENEFITS OF MAINTAINING THE SOLAR SALT SYSTEM



- Protection of approximately 20 miles of public access trails
- Salt ponds serve as a buffer from bay waves and tides during storms
- Provides hundreds of jobs and other economic benefits to the region
- Provides habitat for numerous species of fish and wildlife
- Supports millions of wintering and migratory seabirds, shorebirds, and waterfowl, in addition to various special-status species

ANTICIPATED ENVIRONMENTAL PROTECTION MEASURES FOR MAINTENANCE & OPERATION ACTIVITIES



- Prior to performing work, biological monitoring is performed to determine if special status species are present
- Best Management Practices (BMPs) avoid and minimize impacts to special status wildlife species present in and around the salt ponds
- Cargill is working with state and federal wildlife agencies to conduct a detailed feasibility evaluation of fish screens, which would be used to avoid potential impacts to special status fish species
- Effects of sea level rise on berm integrity are being analyzed

SUMMARY OF THE ENVIRONMENTAL ASSESSMENT PROCESS



Salt marsh harvest mouse image from USFWS; Western snowy plover image from California Audubon Society

- GAIA Consulting is preparing the Environmental Assessment consistent with BCDC's process for environmental review under CEQA.
- The Recirculated Draft Environmental Assessment will be posted on the BCDC web site when it is complete.
- The Recirculated Draft Environmental Assessment will be circulated for at least a 30-day public comment period, sometime this Fall.
- Comments received on the Recirculated Draft Environmental Assessment will be addressed in the Final Environmental Assessment document.
- A Commission hearing will be held to consider the permit application and Final Environmental Assessment in Spring 2024.
- The Environmental Assessment may be used by other State agencies to support their related permit approvals.

KEY ISSUES IN THE ENVIRONMENTAL ASSESSMENT



- Potential effects of maintenance activities on various species and marsh habitat within and adjacent to the Cargill Solar Salt system
- Potential effects related to placement of riprap on the outboard berm slopes
- Potential effects of sea level rise on berm integrity
- Effects of water intakes and sediment removal on special status fish species.
- Potential effects on air quality, greenhouse gas emissions, noise, traffic and water quality are also being evaluated, and are expected to be generally similar to current conditions

NEXT STEPS

Draft
Recirculated
EA
[Fall 2023]

Public
Comment
Period
[30 days]

Final EA
[Spring
2024]

BCDC
Commission
Hearing on
Permit
Application
[Spring 2024]

OPPORTUNITIES FOR ADDITIONAL PUBLIC INPUT ON THE CARGILL PERMIT APPLICATION

- Check back at:
- <https://www.bcdc.ca.gov/>

- The BCDC Engineering Criteria Review Board will meet August 30 to discuss safety of berm issues for two ponds of specific concern. The public can attend and comment at that meeting
- Written comments will be accepted on the Draft Environmental Assessment during the comment period in late 2023
- The Commission will meet to consider the Final Environmental Assessment and permit application in 2024. The public can attend and comment at that meeting
- Contact Sam Fielding at BCDC to be placed on the “Interested Party List” to get notices of all public meetings on the Cargill permit application
- Interpretation is available for individuals preferring to comment in a language other than English

WE WELCOME PUBLIC COMMENTS

BCDC Contacts:

- Phoenix Armenta
Phoenix.Armenta@bcdc.ca.gov
- Sam Fielding:
Sam.Fielding@bcdc.ca.gov
- Jenn Hyman:
Jennifer.Hyman@bcdc.ca.gov

- In Zoom, Raise your hand or put questions in the Chat
- On your phone, press *9
- You have 3 minutes to speak



EXTRA SLIDES

SCHEDULE FOR NEXT STEPS

The Estimated Schedule for Processing the Cargill Maintenance & Operation Permit Application:

- The Draft EA will be recirculated for public comment in Fall 2023
- The Environmental Assessment will be finalized to include responses to comments
- The Final Environmental Assessment and permit application will go before the Commission in Spring 2024

GUIDELINES FOR MAKING PUBLIC COMMENTS

- Raise your hand in zoom
- Speakers will be in the order of when hands are raised
- You have 3 minutes to speak; please state your name when you begin.
- You may also provide written comments in the chat. Please add your name and contact info for follow-up, if needed.
- Comments in the chat will be addressed after verbal comments, if time permits.

OPPORTUNITIES FOR ADDITIONAL PUBLIC ENGAGEMENT

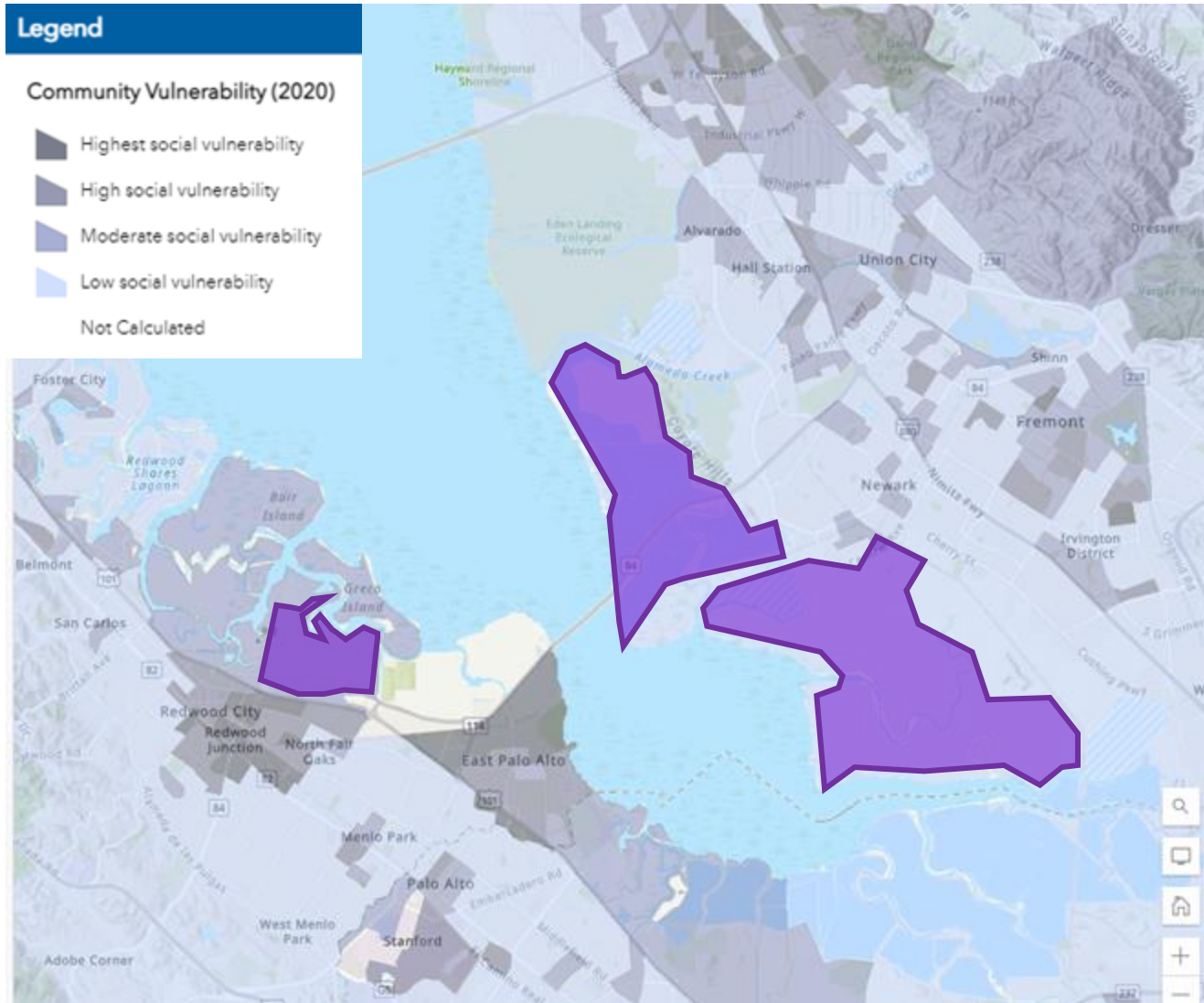
- Written or verbal comments on the proposed permit may be provided to BCDC (Sam Fielding) at any time.
- Written and verbal comments on the Draft EA will be accepted during the comment period
- A BCDC Engineering Criteria Review Board meeting will be held to discuss MSS Pond safety issues in late August or September. The public can attend and comment at that meeting.
- The Commission will meet to consider the Final EA and permit. The public can attend and comment at that meeting.
- Contact Sam Fielding at BCDC to get put on the “Interested Party List” to get electronic notices of all public meetings on the Cargill permit.
- Interpretation is available for individuals preferring to comment in a language other than English.



SAN FRANCISCO BAY

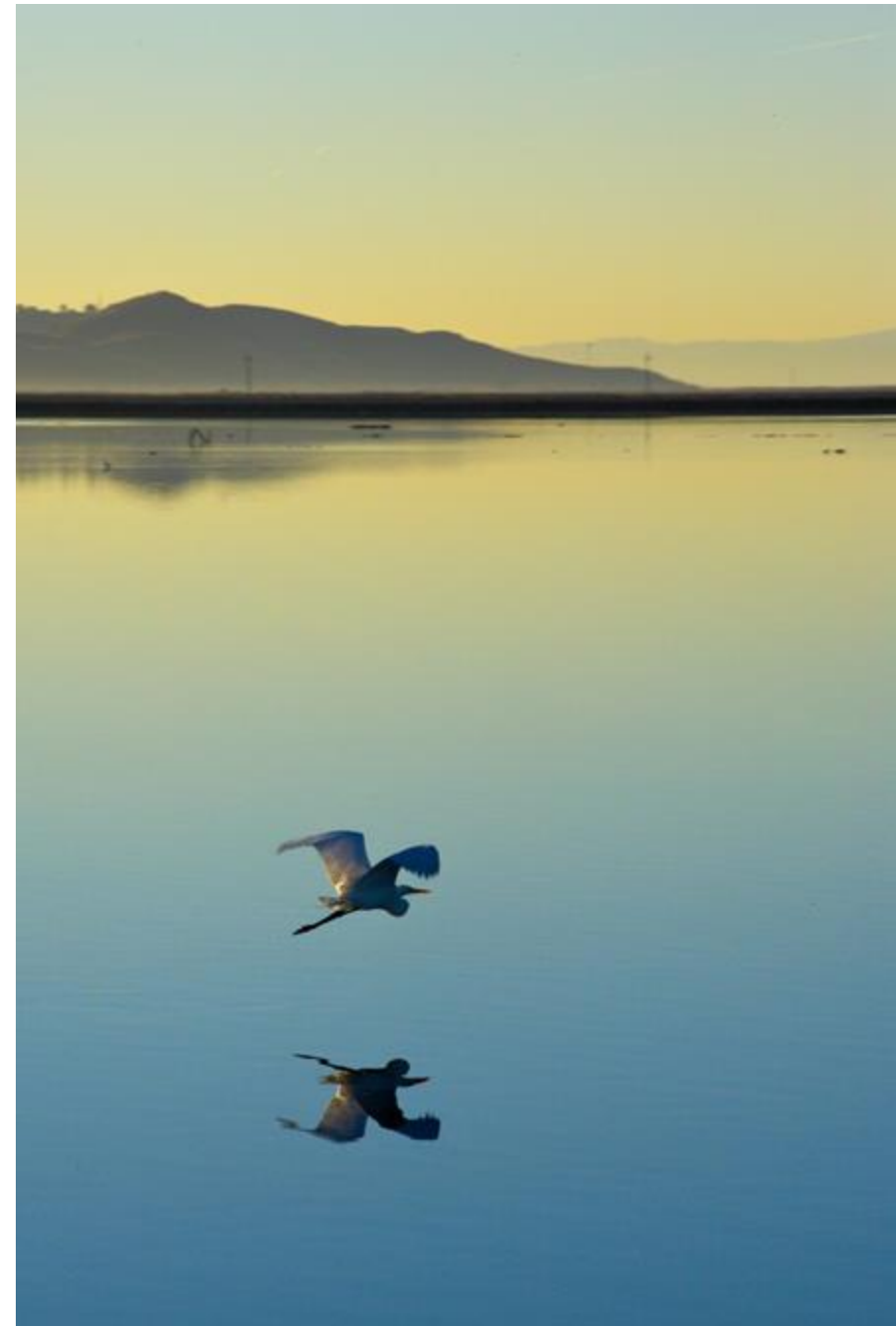
- 50 miles long
- 3-12 miles wide
- 994 miles of shoreline
- 550 square miles
(larger than all but 9 cities in the US!)
- 20% larger than City of Los Angeles
- 18 feet deep (average)
- Largest estuary on the west coast

ENVIRONMENTAL JUSTICE (EJ)



- Outreach to adjacent communities will be a component of the permitting process, in compliance with Bay Plan Environmental Justice and Social Equity policies

**“SALT PRODUCTION IS AN
ECONOMICALLY
IMPORTANT AND
PRODUCTIVE USE OF THE
WATERS OF THE BAY AND
SALT IS AN IMPORTANT
PRODUCT.” –BCDC SALT
POND POLICY FINDINGS**

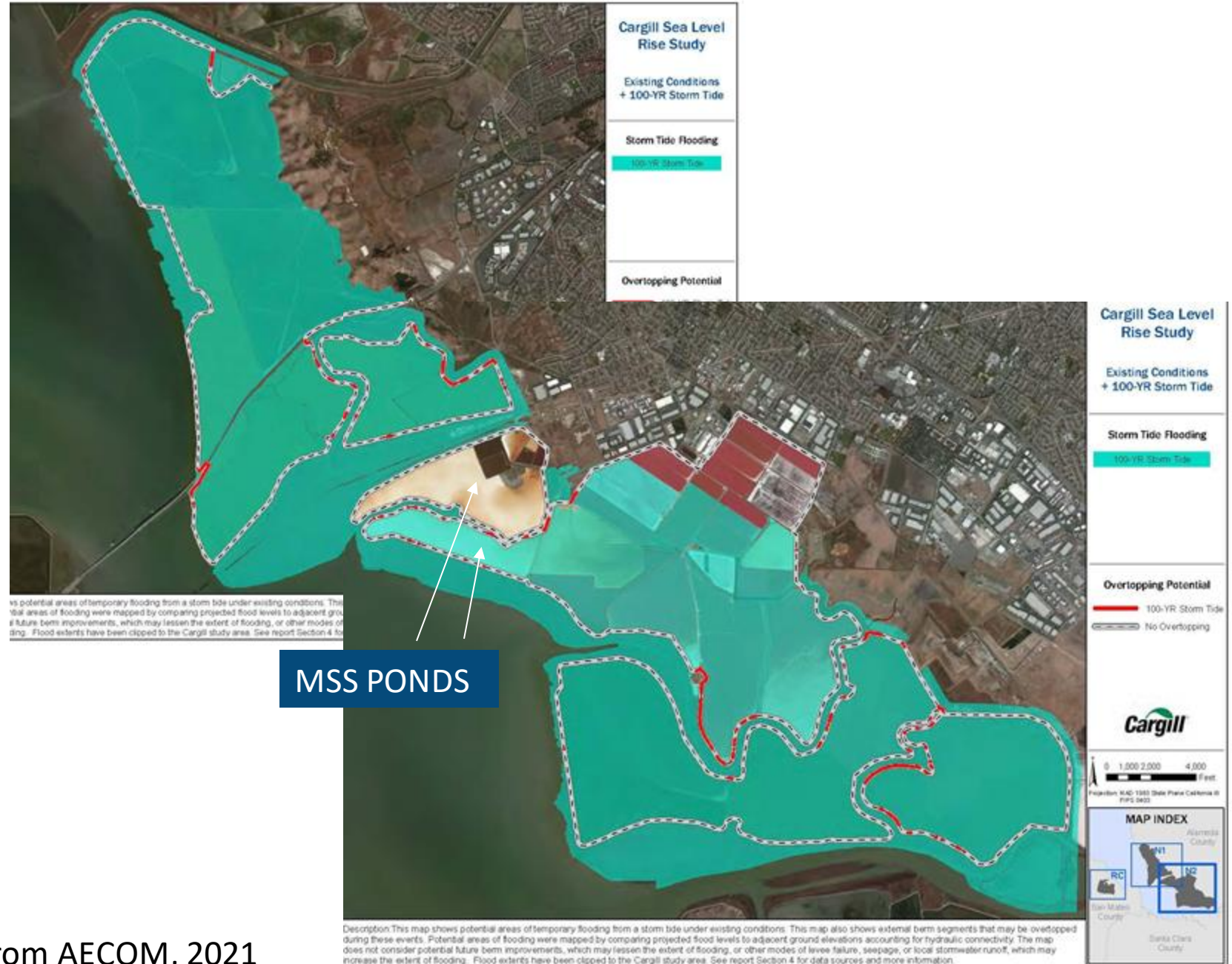


ADDITIONAL STUDIES RELATED TO THE MIXED SEA SALT (MSS) PONDS AT THE NEWARK PLANT



- Government Code section 66605(d) and (e) require that further authorization for fill by the Commission minimize harmful effects of fill on human health and the environment and be constructed to protect against geologic and flood hazards.
- Cargill is performing additional studies on the MSS ponds for:
 - Berm seismic integrity
 - Shoreline erosion protection (riprap)
 - Potential flooding from extreme storms and sea level rise (berm height)
 - Ecological and human health risks
 - Emergency response planning

CURRENT FLOODING MAPS FOR NEWARK PLANTS, 100-YEAR PROBABILITY STORM TIDE



Maps from AECOM, 2021

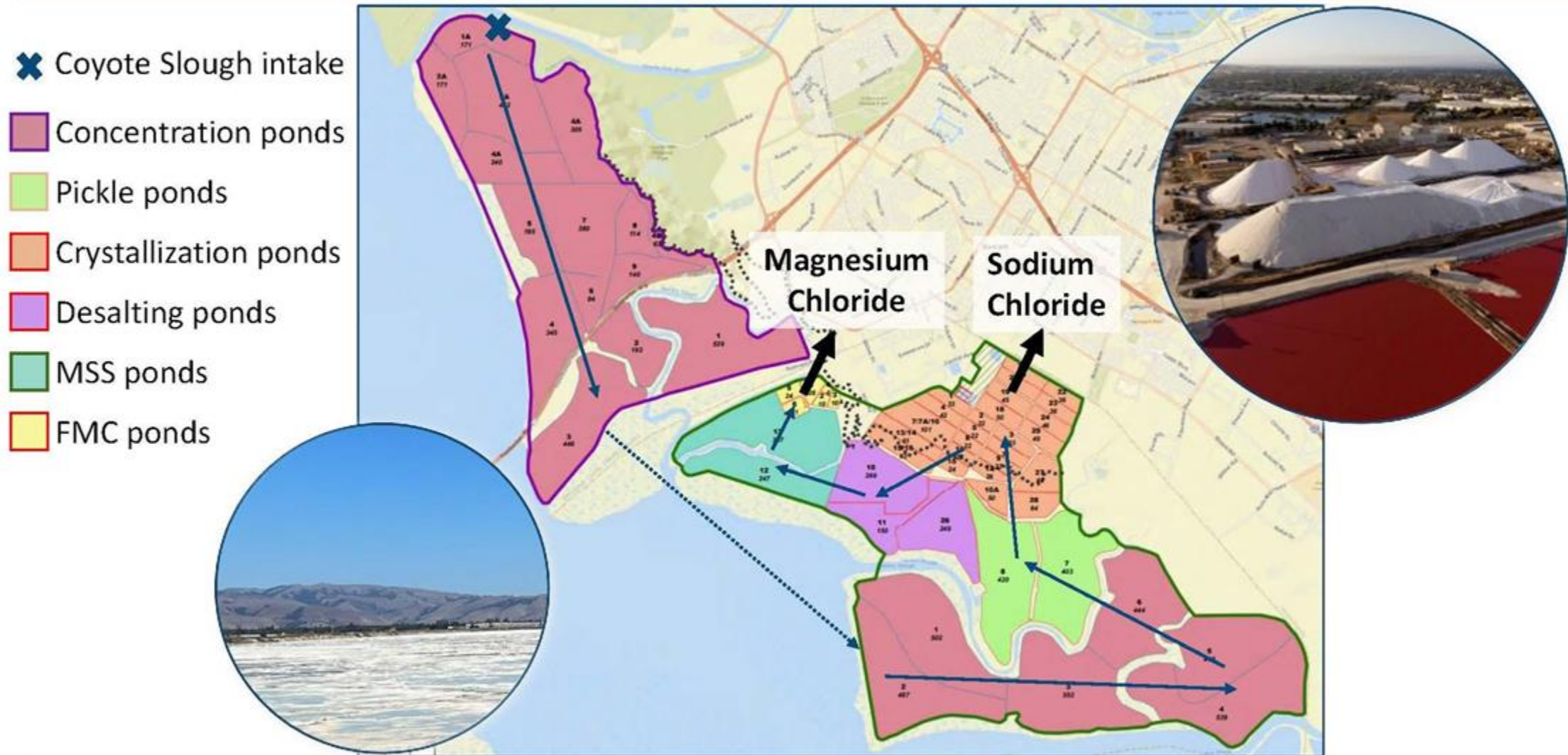
BCDC IS THE CEQA LEAD AGENCY FOR THIS PROJECT

- The project requires no local discretionary approvals.
- BCDC rarely acts as CEQA lead agency – last time it did so was for Cargill’s 1995 O&M permit.
- BCDC’s permitting program constitutes a CEQA-certified regulatory program.
- BCDC prepares an environmental assessment (EA).
- BCDC will comply with its CEQA regulations so that responsible agencies can rely on the EA for CEQA compliance.



Photo from Draft EIR for the Pipeline Project, 2023

Solar Salt Production Process

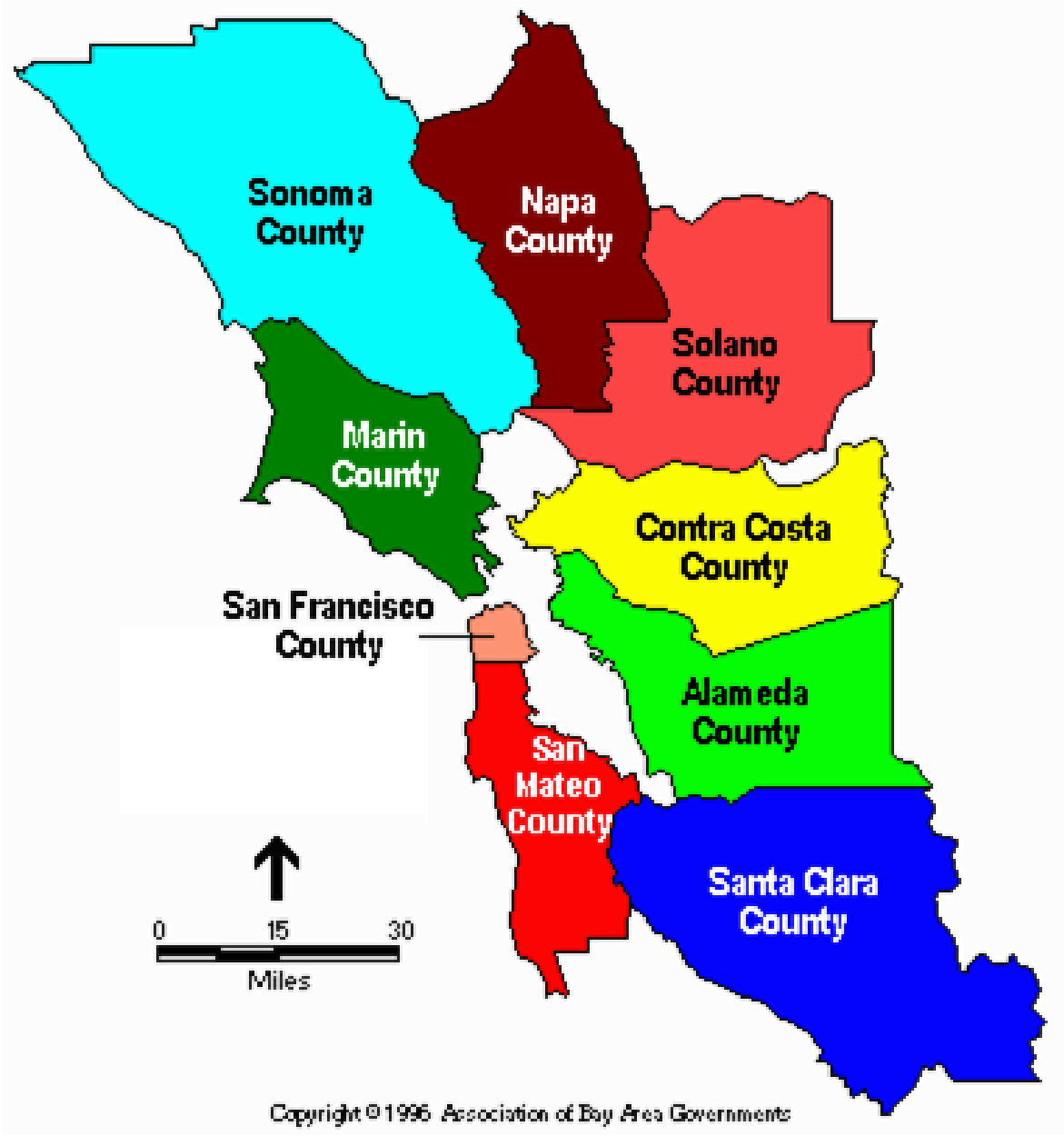


PROPOSED PROJECT FOR MSS RISK REDUCTION

- Will reduce the volume of MSS stored onsite via enhanced harvesting and Bay discharge
- Draft EIR circulated Jan. 2023
- BCDC provided comments
- Final EIR in preparation
- Construction anticipated beginning outside BCDC jurisdiction this summer



9 counties + over 40 cities touch Bay waters



Cargill Property Transfers – North Bay



MORE THAN 40,000 ACRES... More than \$150 million in land value donations... Cargill's history of cooperation has helped launch what leading environmentalists and government officials hail as "the most important wetlands preservation project in the history of the Bay Area" and "the largest restoration project on the West Coast."

By adopting new harvest techniques, Cargill was able to free up these lands and continue to meet the needs of its customers for higher value salt products.

Meanwhile, Cargill continues working with public agencies to safeguard wildlife habitat within the salt pond ecosystem.



11,400 acres

of salt ponds and plant site created the California Department of Fish and Game Napa Wildlife Preserve in 1994 and 2003.

Cargill Property Transfers – South Bay

6,000 acres
of former Cargill salt ponds created the California Department of Fish and Game Eden Landing Ecological Reserve in Hayward in 1996, and expanded the Reserve in 2003.



20,800 acres
of Cargill salt ponds created and expanded the U.S. Fish and Wildlife Service Don Edwards San Francisco Bay National Wildlife Refuge in 1979 and 2003. (Cargill maintains operations on 8,000 acres within the Refuge.)



2,900 acres
have been transferred to various local agencies for open space, parks, environmental education and other public purposes. This includes 73 miles of Bay Trail.

map © cargill.com