MORMON SLOUGH RESTORATION PROJECT

Presented by Project Manager: Artie Valencia, Flood & Land Restoration Manager at Restore the Delta



Agenda Outline

- Mormon Slough History
- Flood Risks
- Probability
- Solutions
- Mormon Slough Project Vision
- MSRA Origin and Process
- Q & A
- Survey



Mormon Slough during the 2023 Atmospheric River Storm | Image: Restore the Delta

History

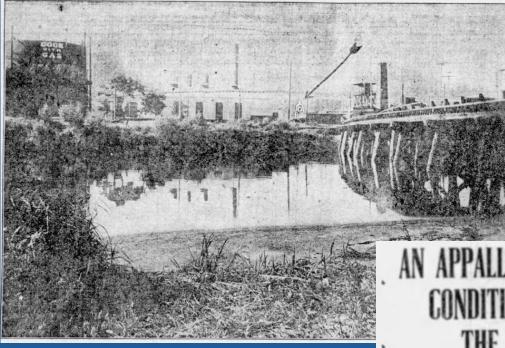


Image | Stocktonia, Mormon Slough Archives

IN APPALLINU CONDITION ON THE CHANNEL

Entire Discharge of Stockton Sewers Goes Into Mormon Channel at Pump Station

- MENACE TO CITY'S HEALTH DEMANDS ATTENTION
- A Fetid, Odorous Lake of Vileness Created Within the City Limits

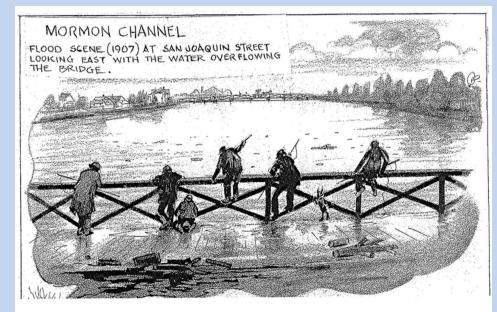
Mormon Slough used to be watered until...

- The diverting canal project was completed in 1910.
- The City had for years pumped excess sewer water (2,750,000 gallons/day) into the Mormon Channel and relied on the remaining river flow to wash the sewage out to the Delta.
- By 1911, the channel was almost entirely dry due to the upstream diversion. The result was that Stockton's sewage was being pumped into the channel, without any sanitation or water to flush the sewage away...affecting immigrant Bi-POC communities that lived near Mormon Channel south of downtown

Continued Disinvestment

- Army Corps rejected upgrades due to outdated methods of determining flood protection such as low benefit-cost ratios. An analysis deemed the area unworthy of upgrades due to low economic development promise in the area.
- Inequitable way to measure flood protection investments in historically disinvested communities.

Flood Risks Along the Mormon Slough



Flooded Mormon Channel, Stockton, 1907. Haggin Museum Library Archive, Stockton, California.

Why are we susceptible to flooding?

- In the 2017 Central Valley Flood Protection Plan, increased river flow from Calaveras during extreme periods of rain and high volumes of rapid snowmelt are reported to be the main causes of flooding
 - If there is excessive water beyond our levee design that flows through, it can overtop and flood communities
 - If a connection between Mormon Slough and the Calaveras were built, flood flows would be able to go through the slough, reduce flood risk, and take pressure off the Calaveras
- The Calaveras River system has upstream and downstream erosion issues, which may increase flood risk.
- Sea-level rise in the San Joaquin River near the watered part of the slough can cause flooding due to increasing king tides in the Delta

How does Climate change play a role in flooding?

- Drought and Flood are two sides of the same coin. Both are prone to happen at the same time.
 - CA's highly variable climate setting will lead to less frequent but more extreme daily rain as year-to-year precipitation becomes more intense and the number of dry years increases

Probability & Effects



- Though it is less likely that floods will occur today, by the time today's kindergartners start retiring, over 1 in 5 Delta residents will be flooded each year.
- City-wide flood damages to public buildings like hospitals, offices, etc. will cost the city \$48 Billion in damages.
- It is projected that 17,000 homes are at risk of flooding
 - This will primarily impact communities of color, which were redlined into flood zones
 - This is an equity issue

indicators.

 One-third of the City is an economically disadvantaged community, living at the bottom 75-99 percentile of environmental health



Mormon Slough during the 2023 Atmospheric River Storm | Image: Restore the Delta

SJAFCA: Solutions for Flood Threats



- Local Flood Improvements: San Joaquin Area Flood Control Agency (SJAFCA) is working on multi-benefit flood projects that improve levee systems that account for climate change by incorporating preventative flood infrastructure.
 - Currently, SJAFCA, RTD, and various partners are working to improve and restore Mormon Slough here in Stockton and upgrade levees on Paradise Cut in lower San Joaquin which includes communities like South Stockton, Weston Ranch, Lathrop, Manteca, and Tracy.
 - Mormon Slough Multi-Benefit Solution
 - Urban ponds that resemble small wetlands reduces flood risk and increase habitat restoration and recreational opportunities.



Mormon Slough Restoration

Project Vision:

- Clean-up initiatives to restore the slough's natural beauty
- Upgrade levees and create urban nature-based flood mitigation
- **Expand recreation space:** green park in the city with walking trails, relaxation spots, and fun nature activities
- **Tackle health hazards**: fighting harmful algae to keep our waterways healthy
- Restore fish and bird habitat
- Cultivate art and history
- Building a community-driven economic development plan to support workforce development
- Working with SJ Housing Authority and Continuous Care to support the development of a plan to safely relocate unhoused folks along the slough

Current



Mormon Slough during JAN 2023 Atmospheric River Storms | Image: Restore the Delta

Future



UC Davis Arboretum | Image: The Davis Enterprise

MSRA Origin & History



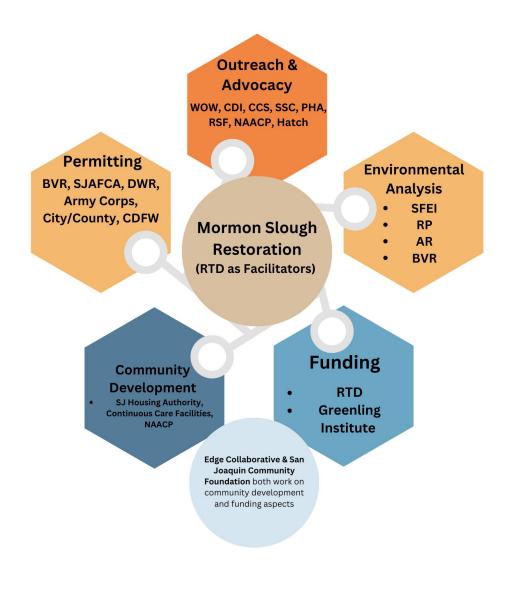
MSRA: A Coalition built by and for community water safety, health, and wellness

<u>About us</u>

MSRA is working closely with community-based organizations, tribes, and local flood agencies to shape the Mormon Slough Restoration project through the lens of environmental justice communities and tribal groups. This includes engaging community in the planning process from the start through several community meetings, visioning and planning sessions.

Who is Involved

- Restore the Delta (Facilitators)
- •Buena Vista Rancheria Band of Me-Wuk Indians (BVR)
- San Joaquin Area Flood Control Agency (SJAFCA)
- •River Partners (Floodplain Experts & Planners)
- American Rivers (Restoration Planners)
- San Francisco Estuary Institute (Landscape Architects to Draw Plans through Charrette Sessions)
- SJ Housing Authority
- Green Lining Institute
- CBOs: NAACP, Hatch Workshop, With our Words, Concrete Development, PHA, Catholic Charities, SSC, RSF
- Future Collaboration with US Army Corps, SJC Flood Division, DWR, City of Stockton





What Makes the Mormon Slough Project Different?

- Normally, most projects will be proposed by a government agency and won't engage the community until the project is 75% complete (this includes designs, planning documents, permits, and environmental analysis).
- By then, most of the planning is done and excludes the community from making certain changes and suggestions that address their needs, concerns, or interests.
- What sets Mormon Slough apart is that this project is 100% community-driven from the start.
 - We are collaborating with residents, CBOs, Tribal and the local government to develop these plans, and designs and acquire permits through community visioning and planning sessions that we will host multiple times a year.

Interested?

 Sign up via our email sheet at the table to join our newsletter! We'll send out notifications for our next community visioning meetings and updates on the project.

Feel Free to Reach Out! Project Manager: Artie Valencia Email: artie@restorethedelta.org Phone: (209) 479-6629





Preliminary Project Design Survey

- Please take a moment to fill out this survey to help inform future project design elements. This information will give architects and engineers an idea of where to start in providing project concepts for the community to weigh in on and engage with in the future.
- When you're done, please turn in your survey at the sign-in table and pick up a goody bag (as supplies last!)