



# North Bay Water Reuse Program

BACWA Recycled Water Committee Meeting  
July 19, 2022



# Agenda

- 💧 Part 1: Overview of North Bay Water Reuse Authority (NBWRA)
  - What is the NBWRA?
  - Overview and status of the North Bay Water Reuse Program (NBWRP)
  - Benefits of NBWRA
- 💧 Part 2: Future of NBWRA
  - Resiliency Arenas
  - Near term Focus
- 💧 Questions





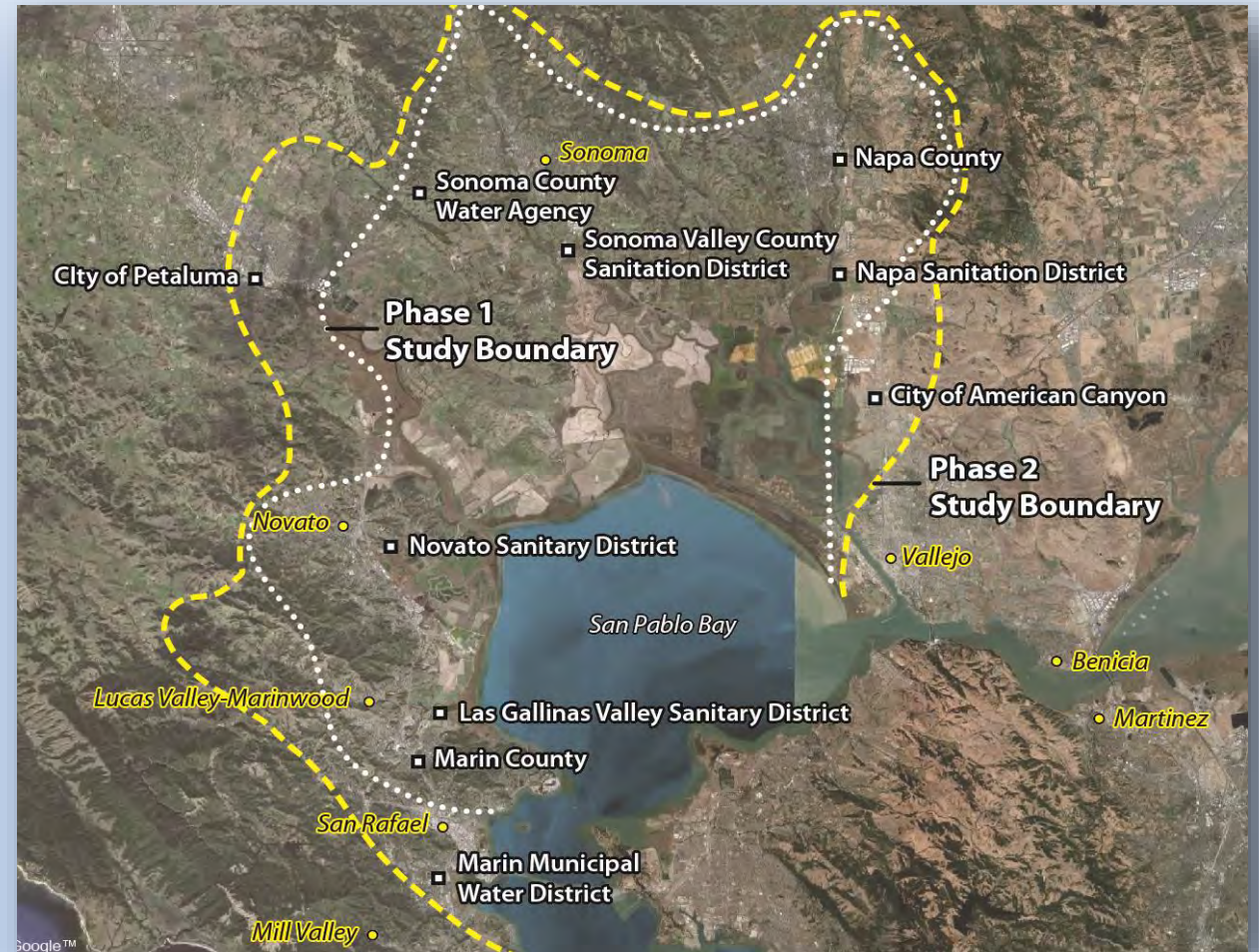
## Part 1: Overview of the North Bay Water Reuse Authority



**NORTH BAY WATER REUSE PROGRAM**  
*Water Supply Reliability through Regional Reuse*

# NBWRA - Working Together to Meet Common Goals

- North Bay Water Reuse Authority (NBWRA) is a “virtual” Authority - organized under a Memorandum of Understanding (MOU)
- In 2002, NBWRA agencies undertook the cooperative, watershed-based, regional planning effort that initiated the North Bay Water Reuse Program (NBWRP).
- Purpose was to develop and distribute recycled water for urban, agricultural, and environmental uses
- US Bureau of Reclamation has been a key partner to the success of the program



# NBWRA Agencies, Leadership, and Support Team

## Member Agencies

- 💧 Wastewater Agencies
  - Las Gallinas Valley Sanitary District
  - Novato Sanitary District
  - Napa Sanitation District
  - Sonoma Valley County Sanitation District
- 💧 Water Agencies
  - North Marin Water District
  - Marin Municipal Water District
  - Sonoma Water
- 💧 Counties
  - County of Marin
  - Napa County
- 💧 Cities
  - City of Petaluma
  - City of American Canyon

## NBWRA Board Leadership

- 💧 David Rabbit, Chair
- 💧 Jack Gibson, Vice-Chair

## Program Management

- 💧 Weir Technical Services

## Consultant Team

- 💧 Brown and Caldwell (Prime)
- 💧 Kennedy Jenks
- 💧 Environmental Science Associates (ESA)
- 💧 Data Instincts



# NBWRA Governance

- NBWRA operates under an MOU
  - First approved in 2005
  - Amended in 2008, 2010, 2013, and 2017
- Members and Associate Members (i.e., no projects)
- Budget and Cost Sharing takes two forms:
  - Feasibility Studies, EIR/EIS, other studies – shared on the basis of benefit (value of Phase 1 or Phase 2 projects)
  - Joint Use Costs for administration and program management (shared equally by all agencies with projects)



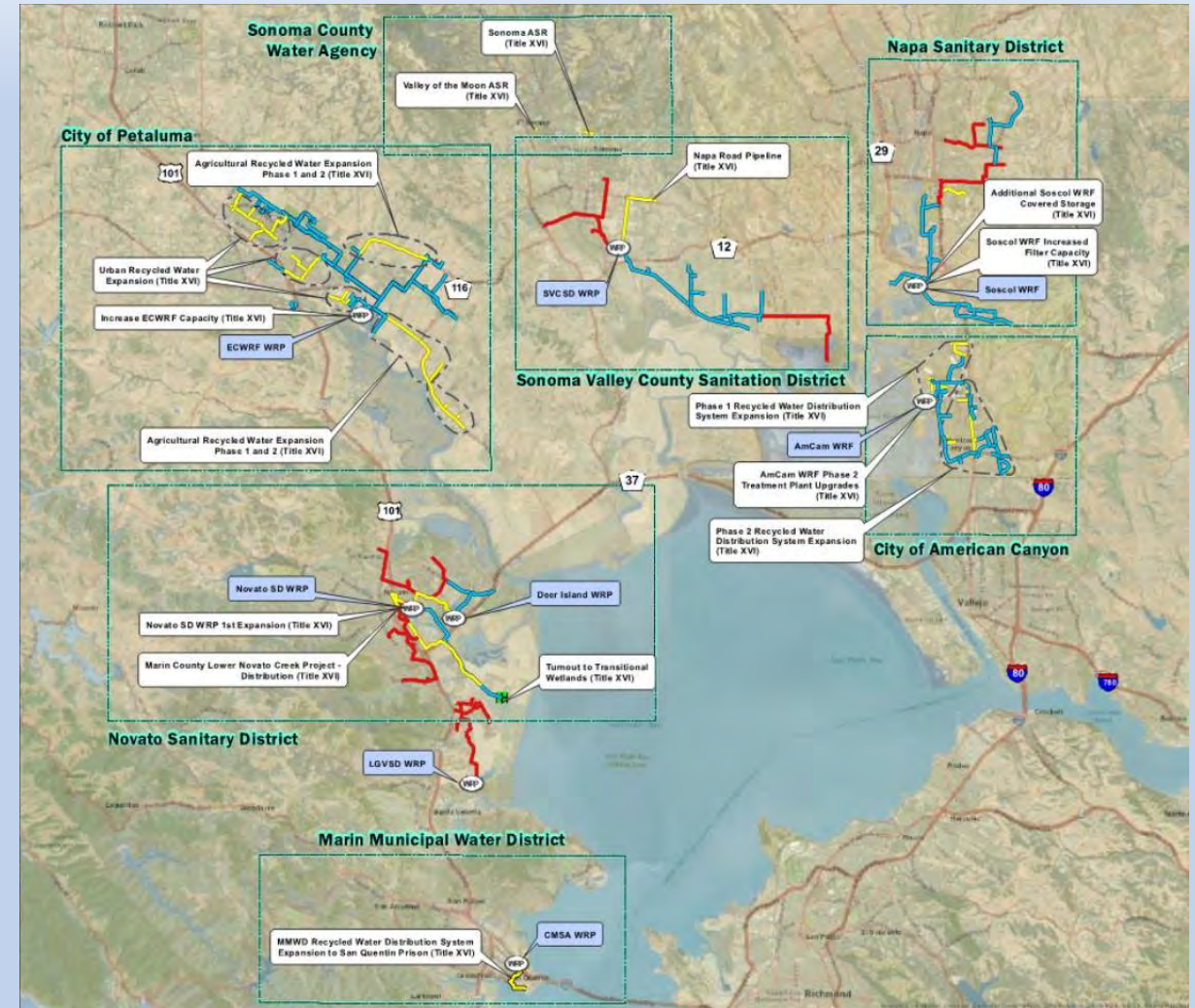
# NBWRP – Summary of Phase 1

- 💧 The NBWRP was designed to be implemented in two phases
- 💧 Phase 1 primarily focused on the planning, design and construction of treatment and conveyance systems
- 💧 Construction of the \$104 million program began back in 2009 and was just completed this year
- 💧 The Phase 1 Program is providing more than 3,700 acre-feet per year (AFY) of water for urban and agricultural irrigation and approximately 1,700 AFY for environmental enhancement



# NBWRP Phase 2 – Increasing Yield and Maximizing Infrastructure Investments

- Phase 2 builds upon Phase 1 investments to further develop recycled water
- Phase 2 Program's projects increase** the ability to treat, store, and distribute recycled water
  - Treatment plant upgrades
  - Distribution system expansions
  - Seasonal recycled water storage
- Total Phase 2 Program cost is \$83 million and is projected to yield an additional 5,364 AFY of recycled water





# NBWRP – Status of Phase 2 Program



- 💧 Planning, engineering, and environmental analysis for Phase 2 has been completed
  - Title XVI FS has been completed
  - CEQA has been completed
  - Need to work with Reclamation to complete NEPA
- 💧 City of Petaluma and City of American Canyon have started implementing some of the distribution system expansion projects included as part of Phase 2 Program
- 💧 State funding for these projects has been procured



# Economic Benefits of NBWRA



- Provides ‘economies of scale’ where all agencies – regardless of size – have access to resources that support project implementation
- NBWRA has effectively secured substantial funding assistance for studies and implementation of regional projects
- Funding Summary
  - From 2002-2022 member agencies have invested \$12.86M in supporting the NBWRP and studies
  - From 2002-2022 member agencies have received \$38.81M in State and Federal grant assistance



# NBWRA – Benefits beyond Dollars

- Benefits to the region go beyond the dollar value of projects:
  - Regional identity
  - Forum to work together to address water supply issues
  - Contributions toward a stable water supply = strong economy, vibrant communities
  - Urban potable offsets
  - Irrigation supplies for agriculture
  - Relief from surface diversions, pumping groundwater and associated saltwater intrusion
  - Slew of environmental benefits





## Part 2: Future of the North Bay Water Reuse Authority



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# Exploring new opportunities for NBWRA

- NBWRA agencies expressed interest in expanding the focus of this Authority to provide value to the North Bay beyond recycled water
- North Bay agencies all face common resiliency threats
  - Water supply/ drought, saline intrusion, sea level rise, changing regulations
- Through recycled water, NBWRA has successfully implemented a program for a more resilient local water supply
- Beyond recycled water, there is no framework for sub-regional resilience planning and implementation in the North Bay
- Expanding the focus of NBWRA to a broader resilience planning approach increases funding source opportunities for the identified areas of interest



# Resilience Planning Approach – Identified Resilience Arenas



- Resilience can be an organizing principle across all these areas of interest
- Based on feedback, the following Resilience Arenas were identified:
  - Recycled Water – continue to support ongoing efforts to implement recycled water projects in the region
  - Potable Reuse – explore conjunctive use opportunities through the implementation of indirect and direct potable reuse
  - Coordinated Drought Response Planning – consider development of regional based drought response
  - Sea Level Rise Adaptation – identify strategies to mitigate the adverse effects of sea level rise to critical infrastructure in the region



# Near Term Focus

- NBWRA will continue to investigate options that add both resilience and reliability to the North Bay's water supply portfolio
- Recycled Water – Continue to support implementation of Phase 2 Program
- Drought Contingency Planning – Work with the NBWRA agencies to develop a Sonoma/Marin based DCP like the study developed for the Napa Valley
- Sea Level Rise Adaptation – Develop a Marin County based sea level rise adaptation plan





## Questions?

Project Information:  
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