


AWA WATERWISE INFORMATIONAL SERIES


Thursday, February 18, 2021

WELCOME!


AWA Chairman
Sheldon Berger




AWA Managing Director
Kelle Pistone



AWA Administrative Specialist
Michelle Johnson





Coastal Brackish Groundwater Extraction and Treatment Project Update

DR. MARYAM BRAL, PE, Chief Engineer
United Water Conservation District

NATHAN JACOBSEN, PE, Water Program Manager
US Naval Base Ventura County


SPECIAL GUEST APPEARANCES:
Captain Kirk A. Lagerquist, Chief Staff Officer for Naval Base Ventura County
Mauricio E. Guardardo, Jr, General Manager United Water Conservation District

PROGRAM WILL BEGIN AT 8:00 A.M.


1



2



United Water
CONSERVATION DISTRICT



COASTAL BRACKISH GROUNDWATER TREATMENT

Progress Update

MARYAM BRAL, PH.D., P.E.
Chief Engineer
United Water Conservation District

NATHAN JACOBSEN, P.E.
Water Program Manager
US Naval Base Ventura County

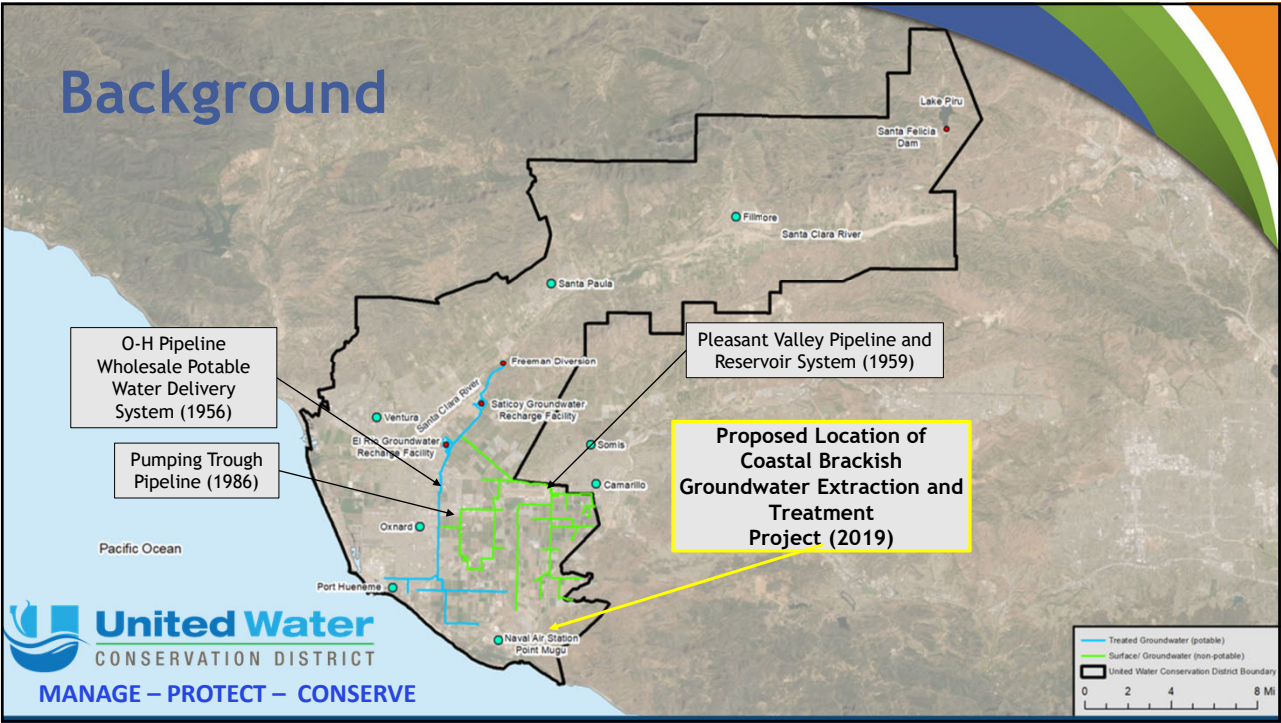
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Outline

- ◆ Background
- ◆ Project Objectives
- ◆ Extraction Barrier Concept
- ◆ Project Progress Update
- ◆ DWR Funding and Regulators Engagement
- ◆ U.S. Navy’s Role and Project Support
- ◆ Next Steps
- ◆ Benefits and Challenges
- ◆ Q/A

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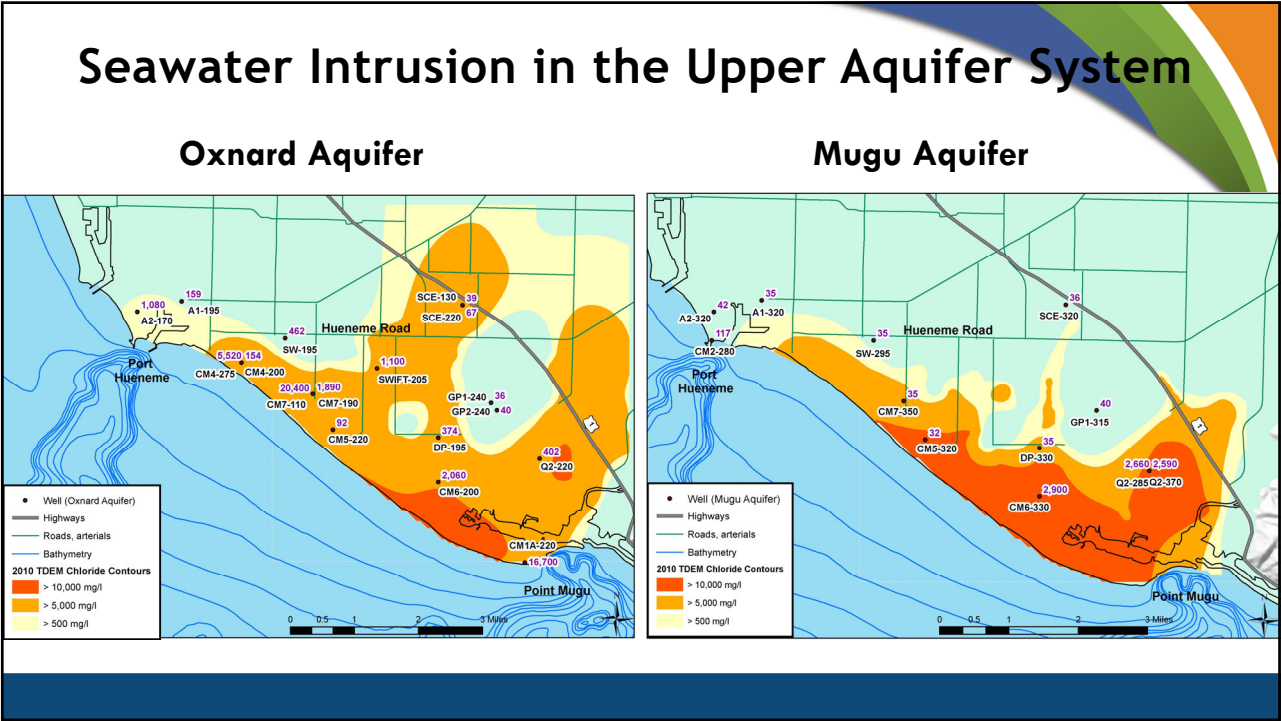
Project Objectives

- ◆ **Provide a Sustainable Solution to combat Seawater Intrusion and Treat Aquifer Salinity Contamination**
- ◆ **Protect Local Groundwater Resources**
- ◆ **Enable NBVC to Meet its Water Security Goals (i.e., Supplemental Potable Supply)**
- ◆ **Increase Resilience of Regional Water Supplies** (create a New drought-proof supply)
- ◆ **Contribute to Sustainable Yield of Oxnard and Pleasant Valley Basins** (Largest Water Supply Project)
- ◆ **Gain Regional Endorsement**

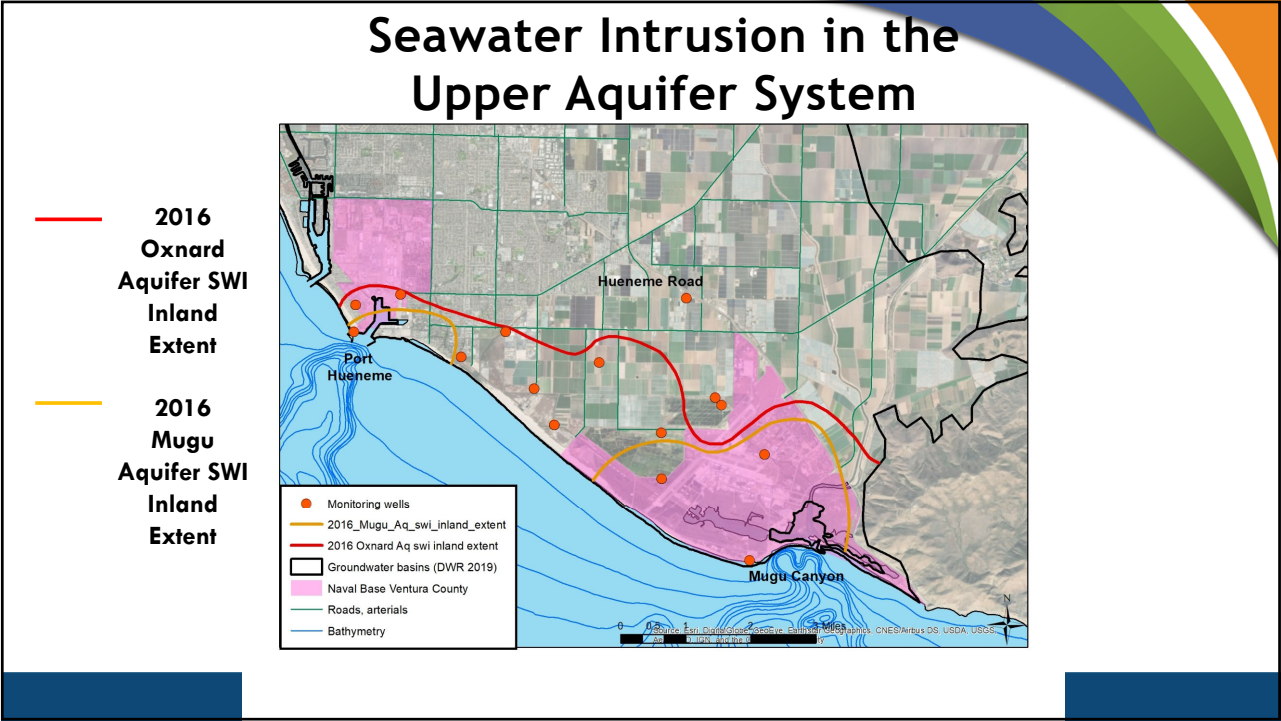
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Extraction Barrier Concept

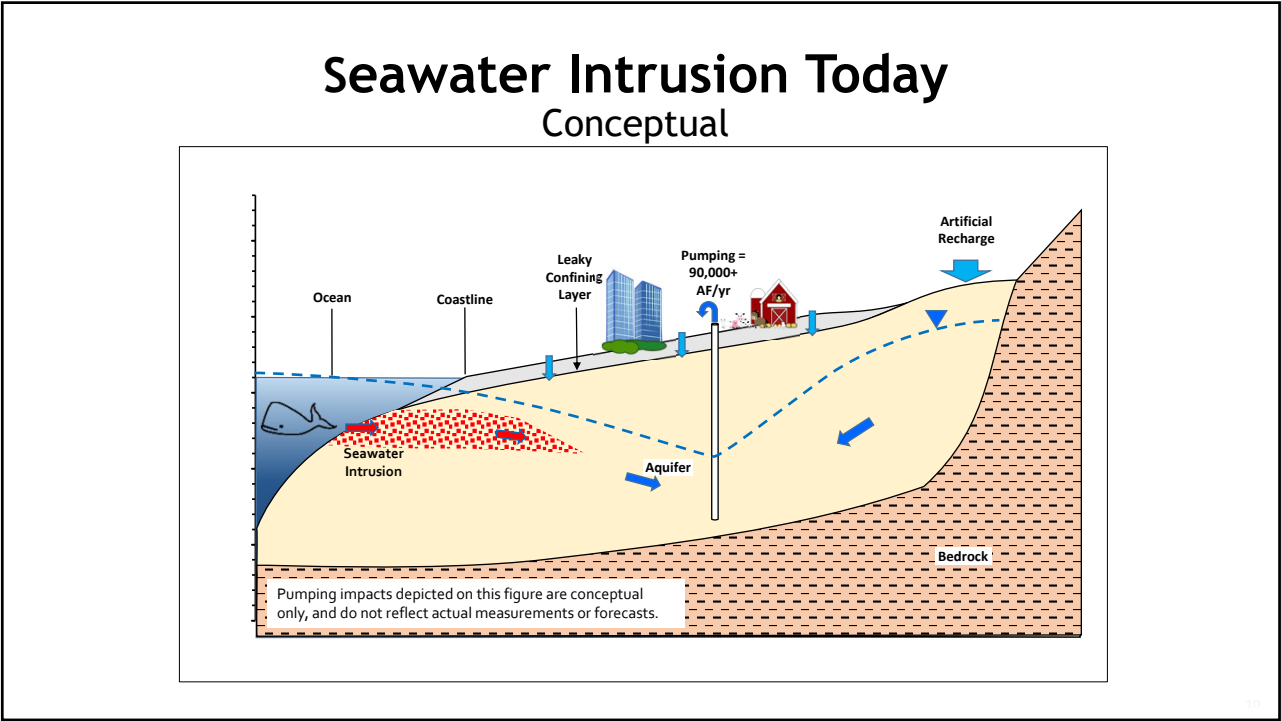
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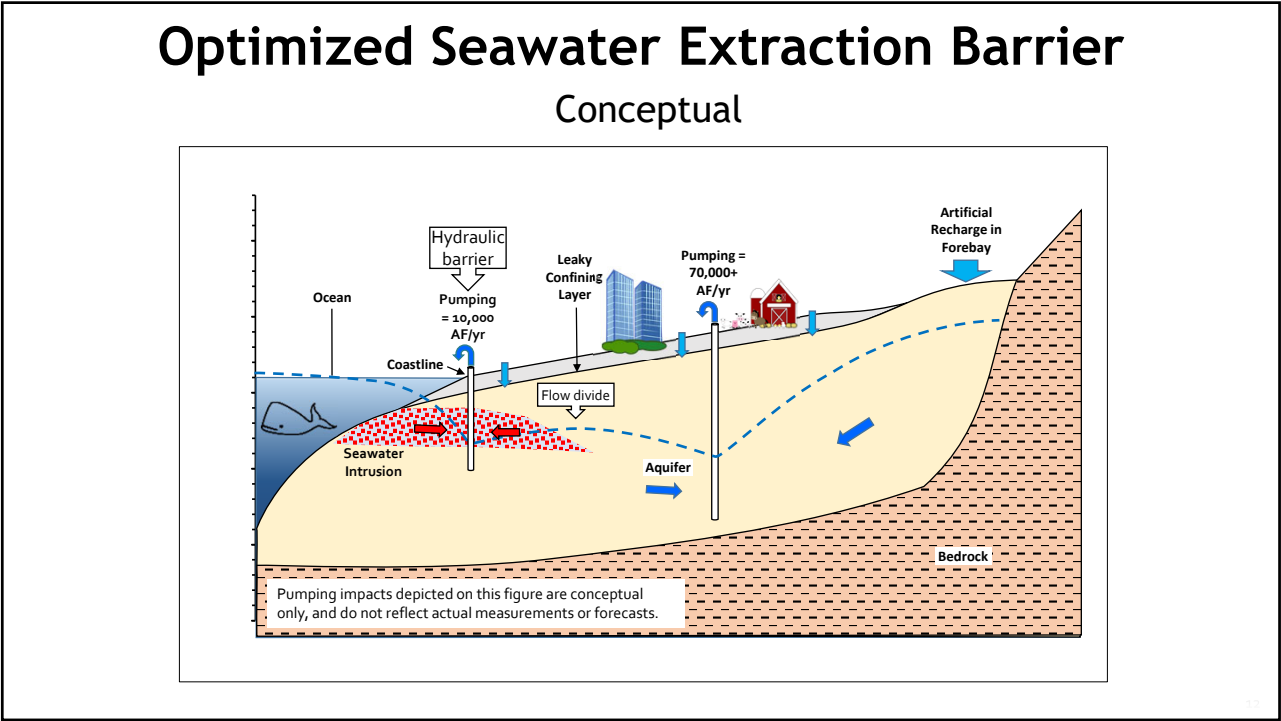
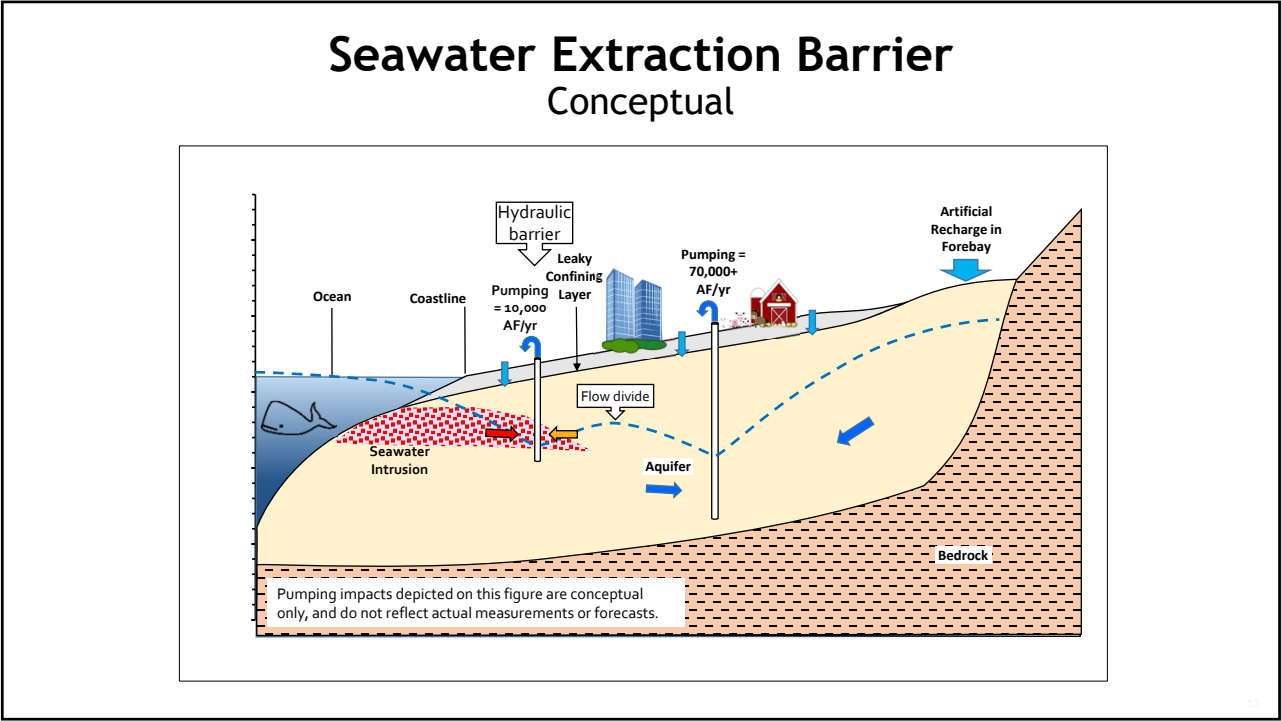
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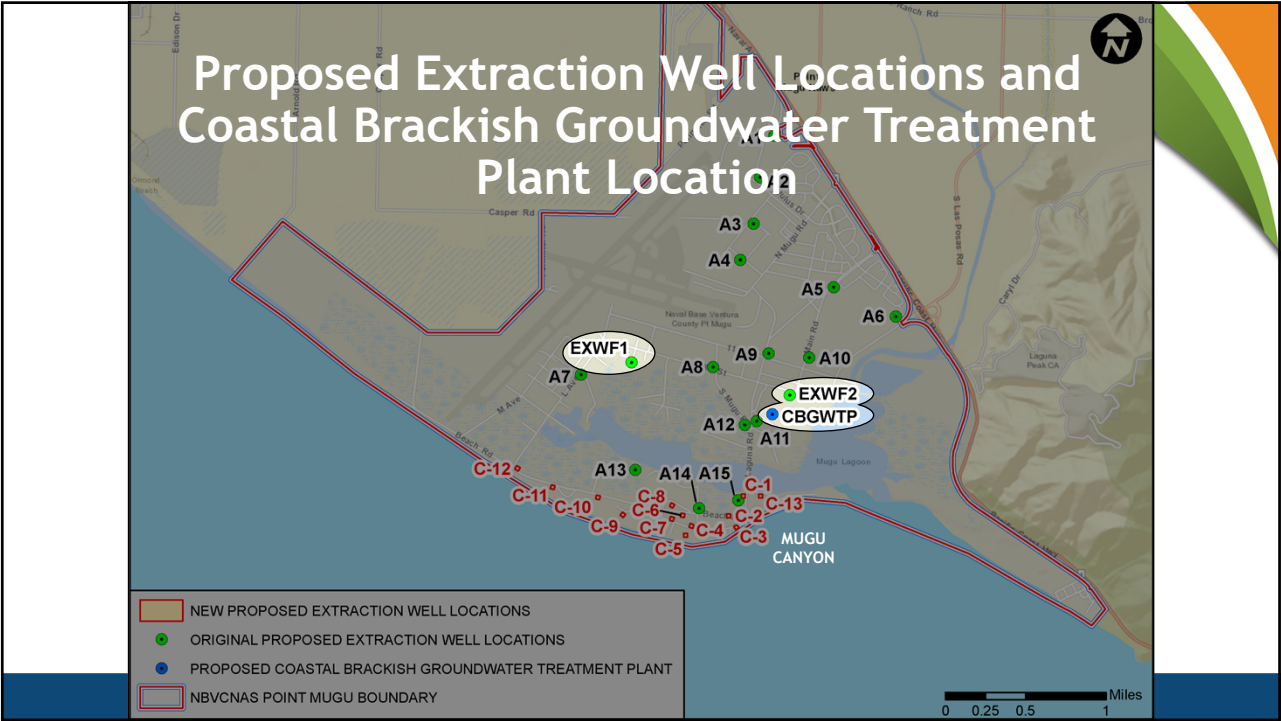


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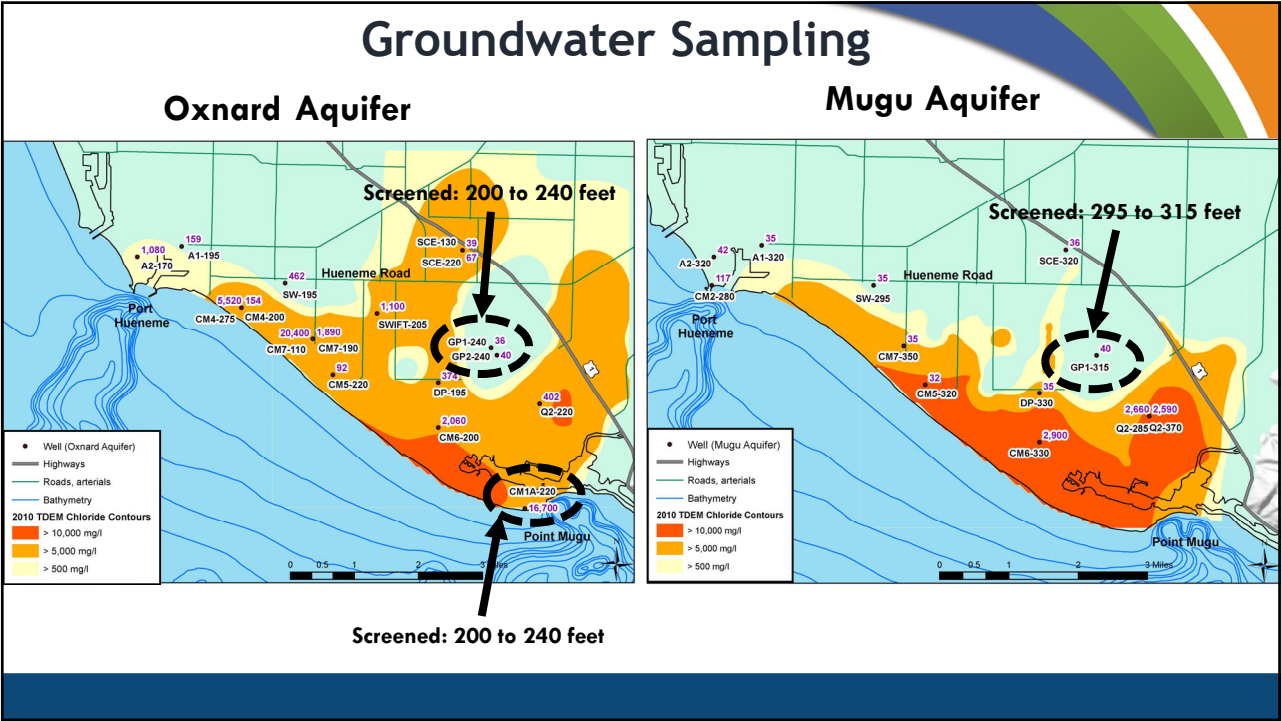
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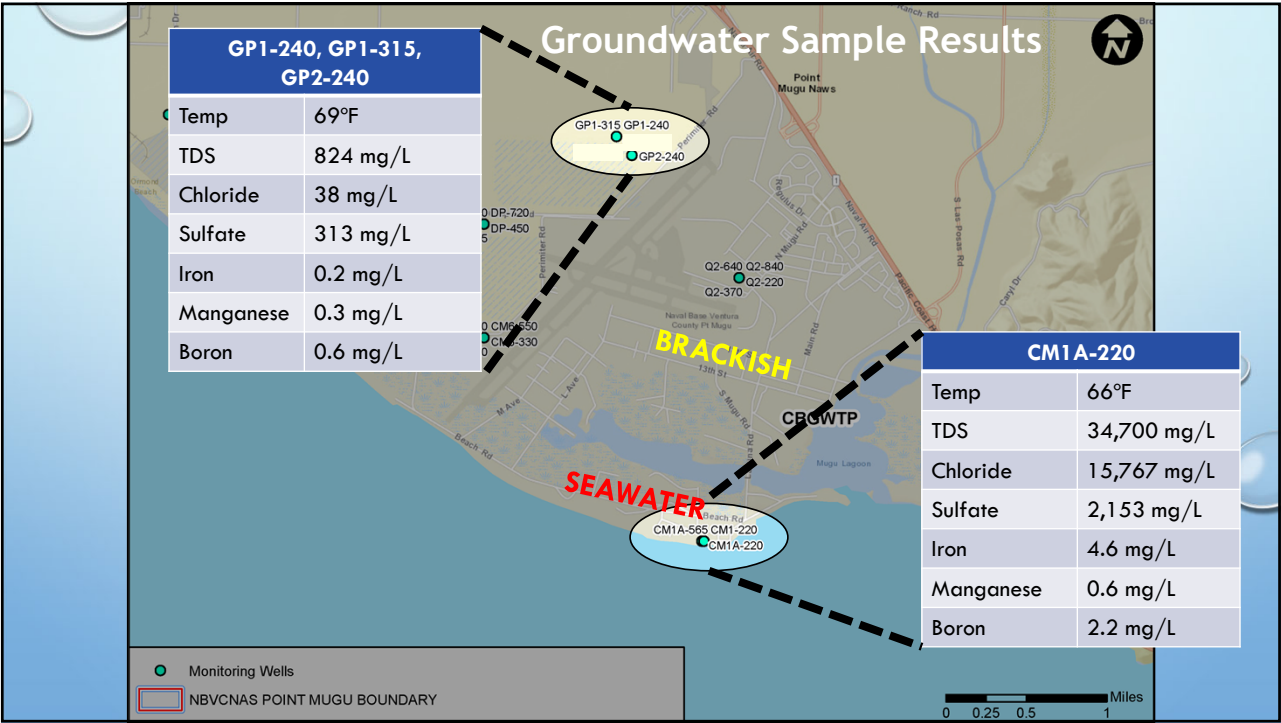
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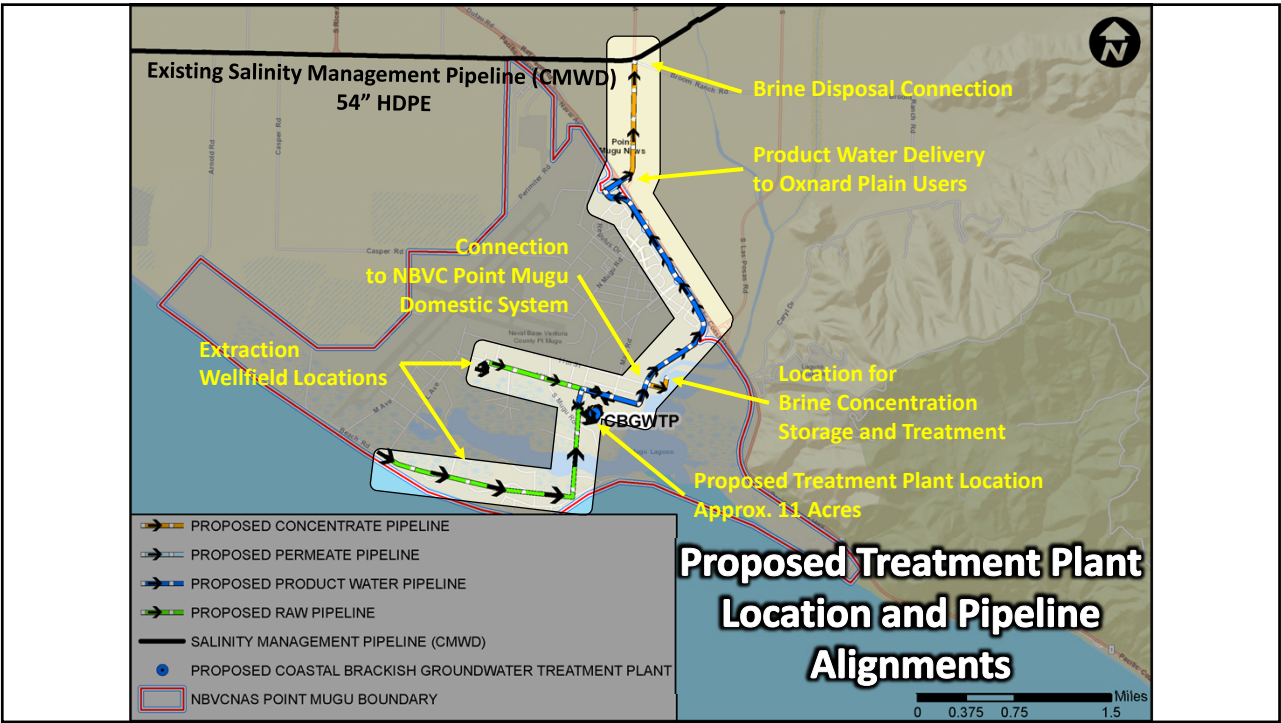
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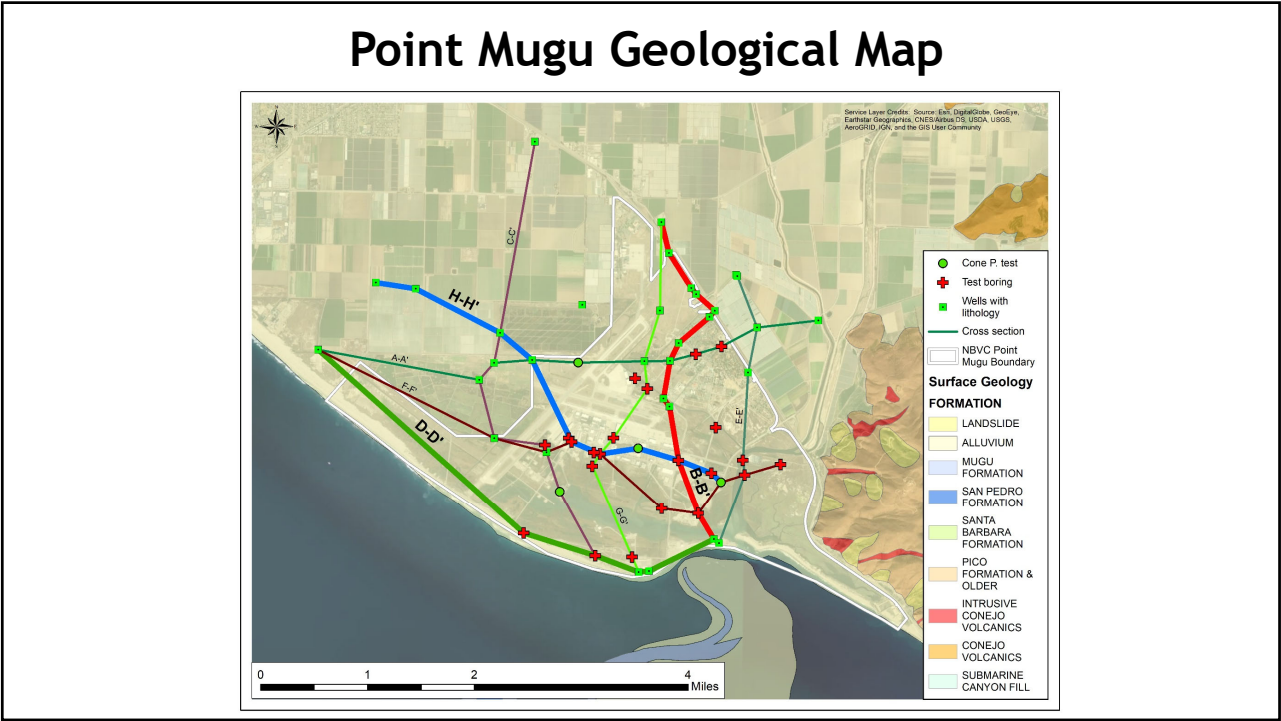
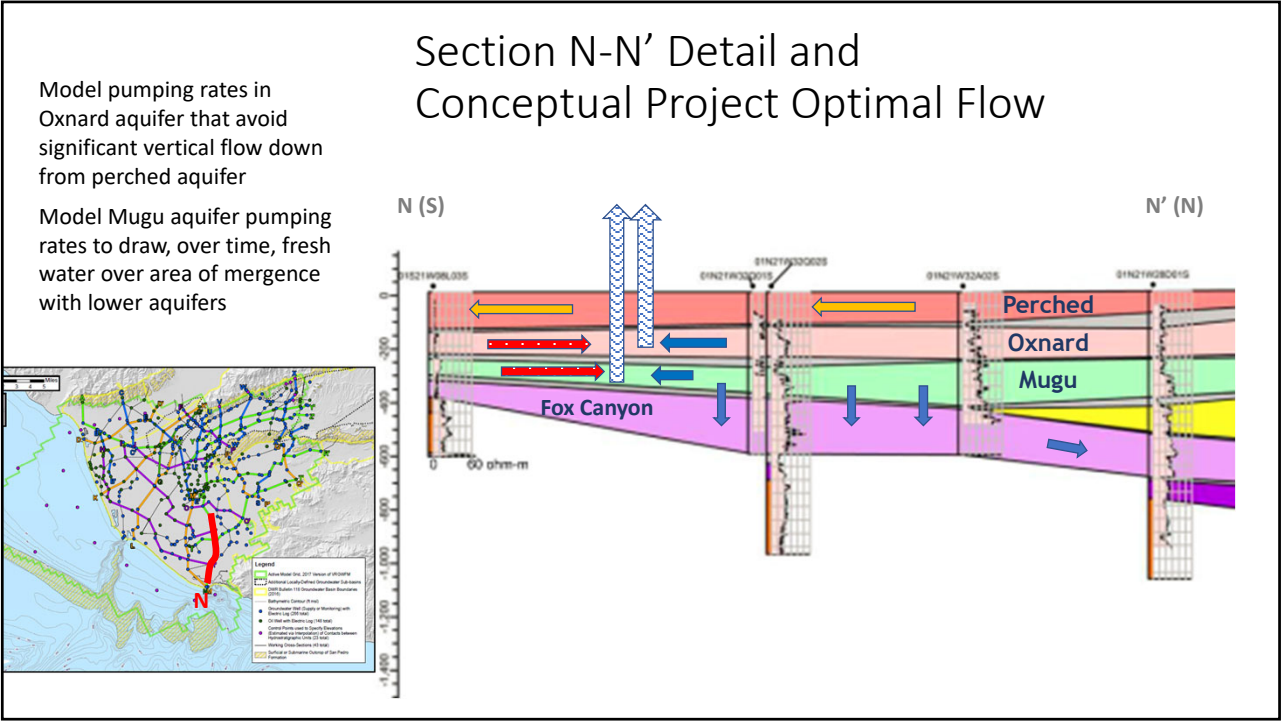
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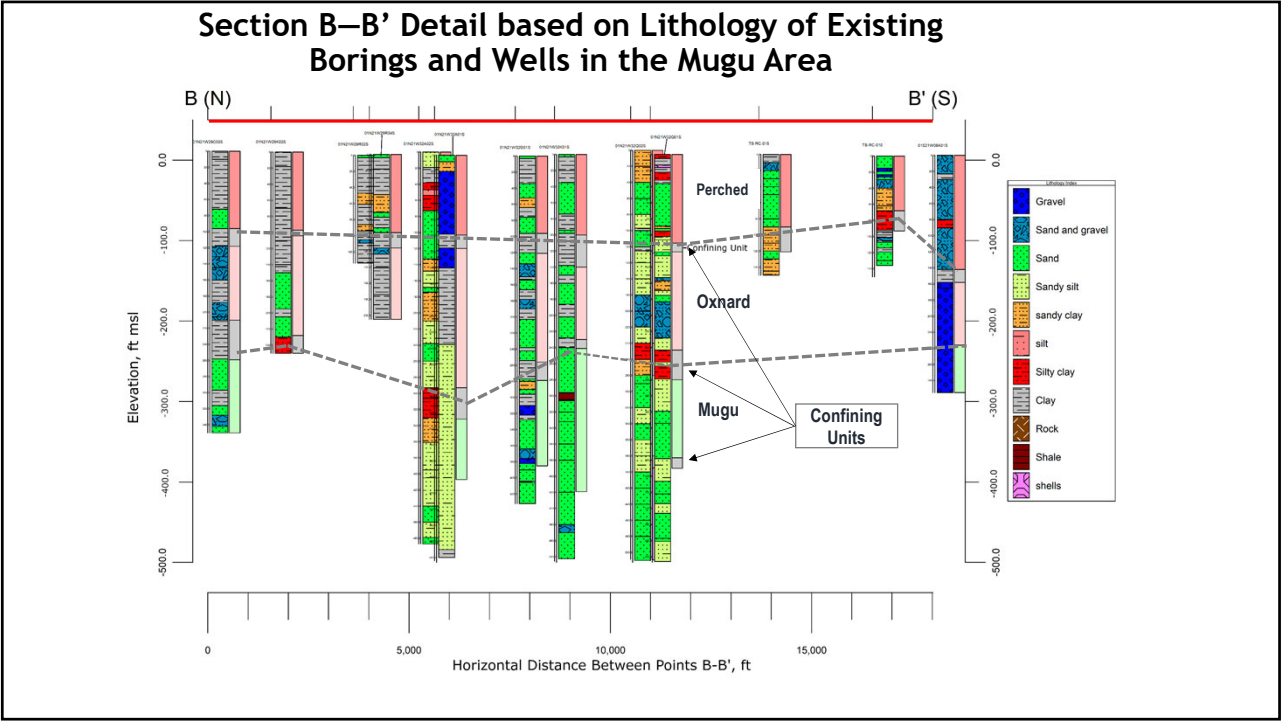


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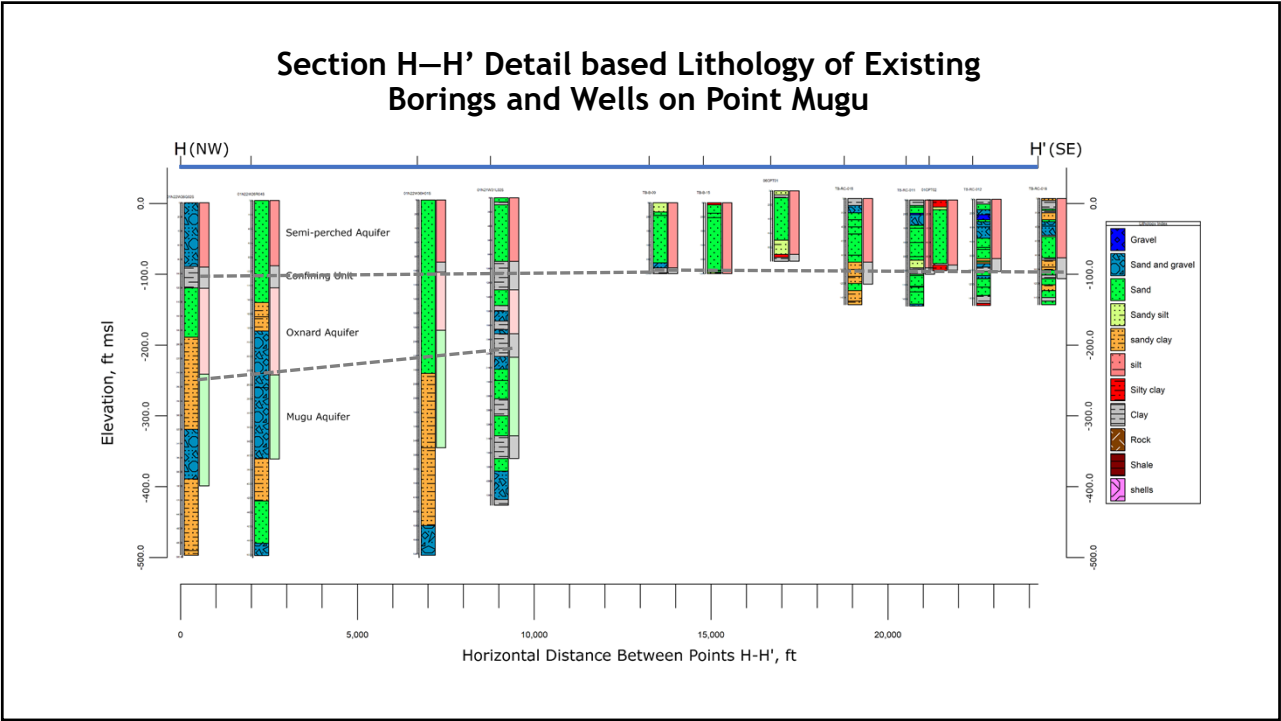


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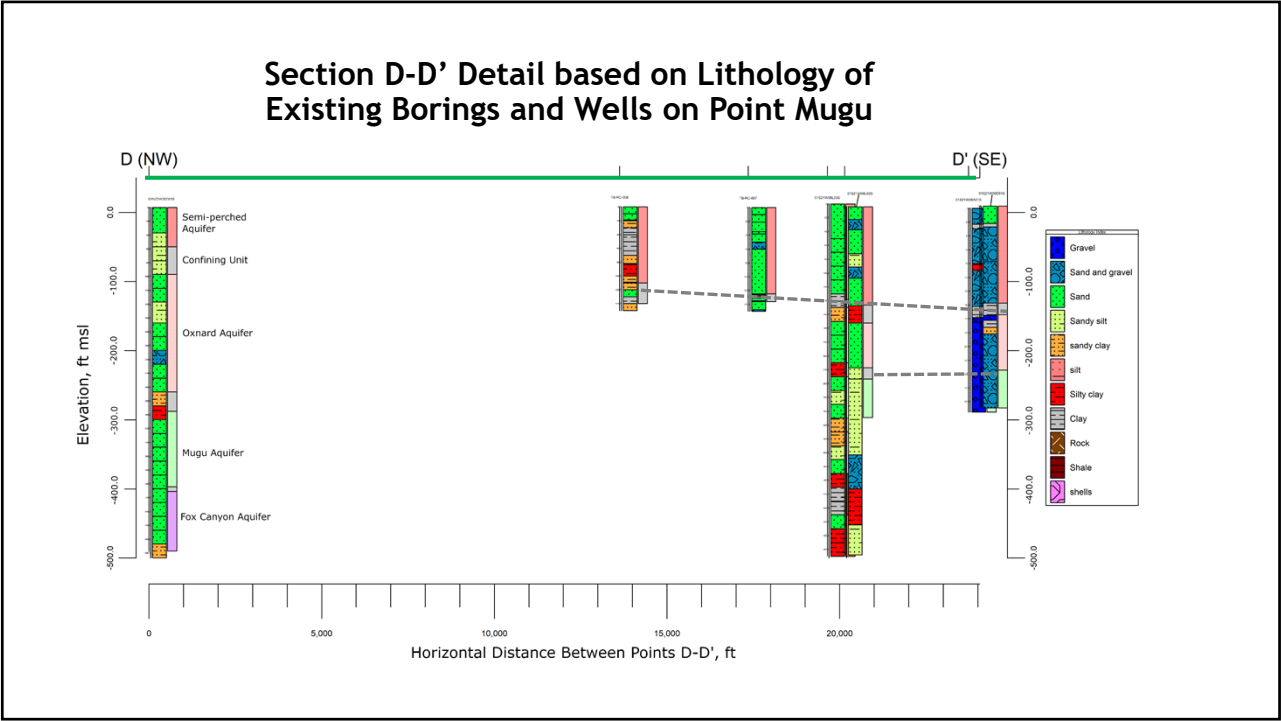




21



22



23

DWR Funding and Regulators Engagement

- ◆ DWR Prop 1 Round 1 Planning Grant Funding Support
- ◆ Technical Advisory Committee (TAC) meeting # 1 in September 2020
 - ❑ SWRCB
 - ❑ RWQCB, DDW
 - ❑ FCGMA
 - ❑ NBVC

The right side of the slide features five logos. From top to bottom: 1. PROP 1 logo with the text "GOVERNOR GAVIN NEWSOM WATER BOND 2014" and "SUSTAINABLE FUTURE THROUGH INVESTMENT". 2. California Water Boards logo with the text "CALIFORNIA Water Boards STATE WATER RESOURCES CONTROL BOARD REGIONAL WATER QUALITY CONTROL BOARD". 3. United Water Conservation District logo. 4. San Nicolas Island logo with the text "SAN NICOLAS ISLAND" and "EST. 1982". 5. A circular logo for the Fox Canyon Groundwater Management Agency with the text "FOX CANYON GROUNDWATER MANAGEMENT AGENCY" and "EST. 1982".

24

U.S. Navy's Role and Project Support



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25



Naval Base Ventura County Overview



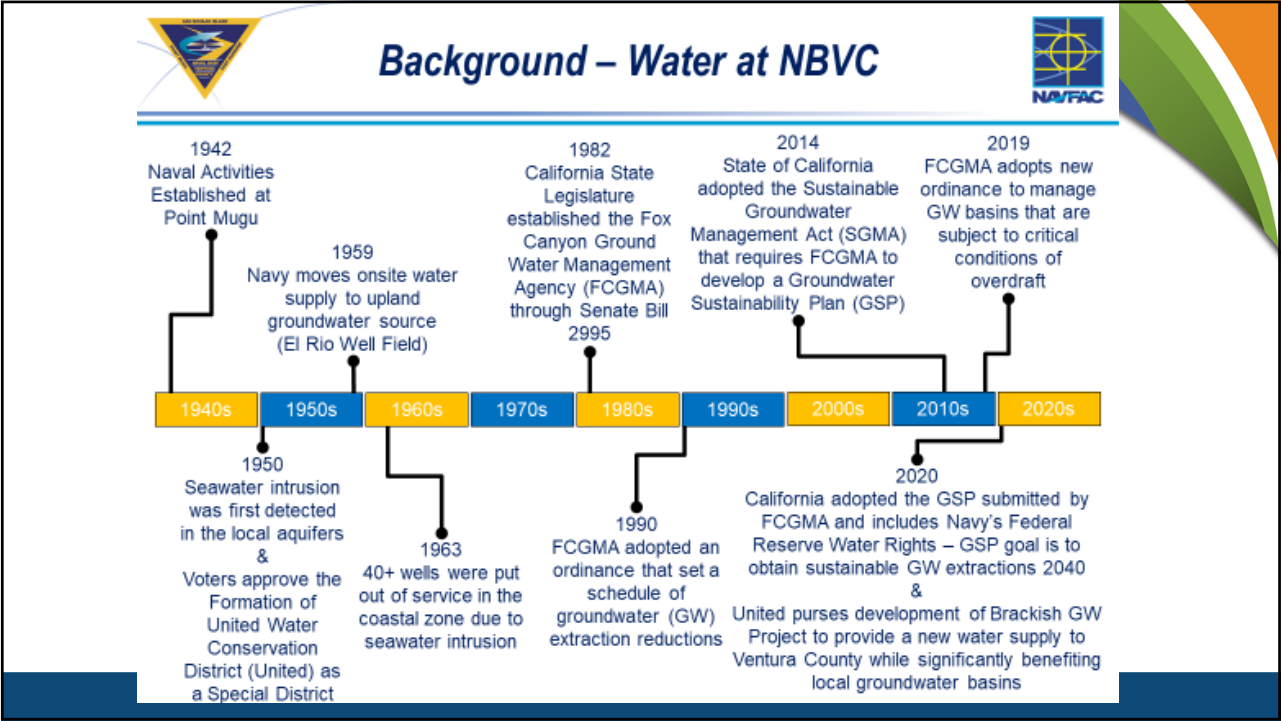
- **Purpose and Coordination**

- Purpose: Obtain Navy approvals to move forward with support of United's Brackish Water Treatment Plant project at Point Mugu, NBVC
- Decision Level: REGCOM
- Navy Coordination: CNRSW, Real Estate, Legal, FEC SW Ops, & NBVC PWD
- Project supports compliance with CA Sustainable Groundwater Management Act
- Enables long-term water resilience without Military Construction (MilCon) funding (saves the tax payers time and money)
- Minimal risk to Navy – Owned, Operated, and Maintained by United

- **Project Overview (Navy)**

- Completion of the Coastal Brackish Groundwater Prop 1 study yields support by the regulatory agencies where the science and engineering appears feasible
 - Full permitting and agency approvals will still be needed
- If Prop 1 yields regulatory support, the Navy considers a long-term real estate agreement to complete the project
- Long-term water source for both NBVC Point Mugu and Port Hueneme

26



27



28

NEXT STEPS

- ◆ Continue Groundwater Sampling
- ◆ Plan for new and deeper borings along the coast to develop geological characterization and verify continuity of confining units.
- ◆ Continue Groundwater Modeling to determine feasibility of the project through numerical modeling
- ◆ Schedule Technical Advisory Committee (TAC) Meeting # 2
- ◆ Finalize the Extraction Well Locations
- ◆ Start Programmatic Environmental Permitting Process
- ◆ Continue Public Outreach

29

Benefits and Challenges

Benefits

- ◆ Reliable Local Supply, Regional Resilience
- ◆ Sustainable Solution to Seawater Intrusion Problem
- ◆ Long-term Protection of Groundwater Basins
- ◆ Diverse Regional Water Supply Portfolio
- ◆ Contribution to Sustainable Yield of Oxnard and Pleasant Valley Basins (Largest Water Supply Project)
- ◆ Production of Water with Superior Quality
- ◆ Potential for Yield Increase


Challenges

- ◆ Environmental Permitting Compliance - CEQA/ NEPA
- ◆ Future Water Quality Regulations and New MCLs
- ◆ CAPEX and OPEX - TBD as project advances
- ◆ Supply and Demand Balance
- ◆ Product Water/ Finished Water Quality
- ◆ Product Water Distribution System - TBD
- ◆ Brine Concentrate Management - minimal liquid discharge

30

Questions

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CONSERVATION DISTRICT