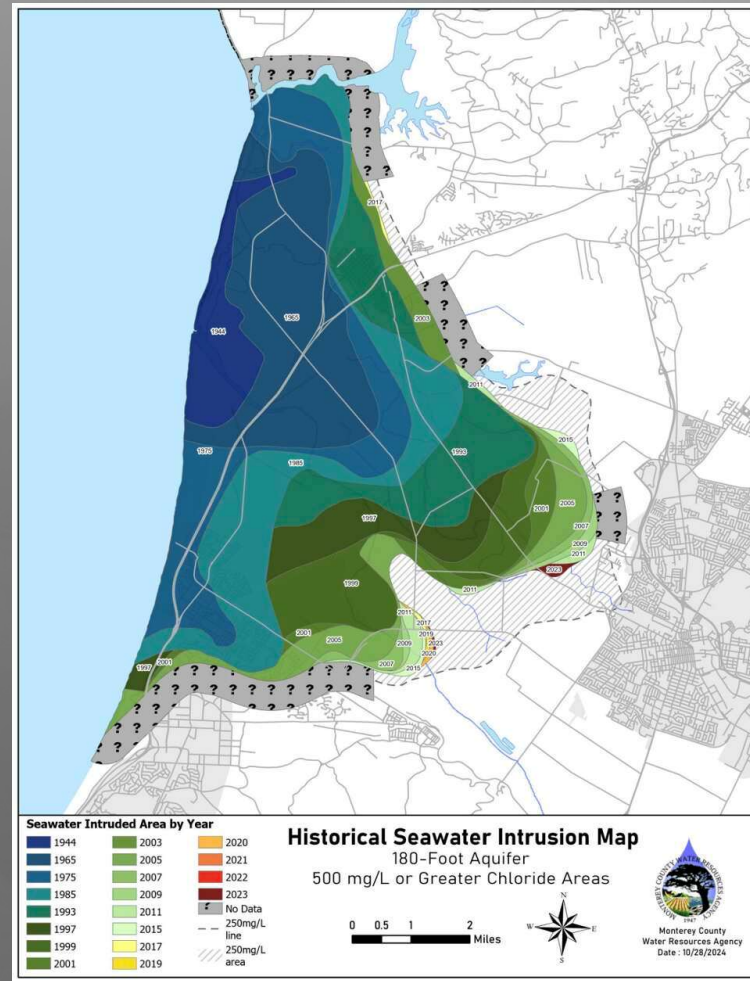


OCEANWELL PROJECT CONCEPT

Salinas Valley Basin GSA
Advisory Committee
August 20, 2026

Tim Quinn
OceanWell Water
tquinn@oceanwellwater.com





Timothy Quinn

Water Policy Strategist

Nearly 50 Years in California Water Policy and Politics

1975-1985

Rand Corporation & UCLA

1985-2007

Deputy GM | MWD

2007-2018

Executive Director | ACWA

2019-2020

Landreth Visiting Fellow | Stanford

2022-Present

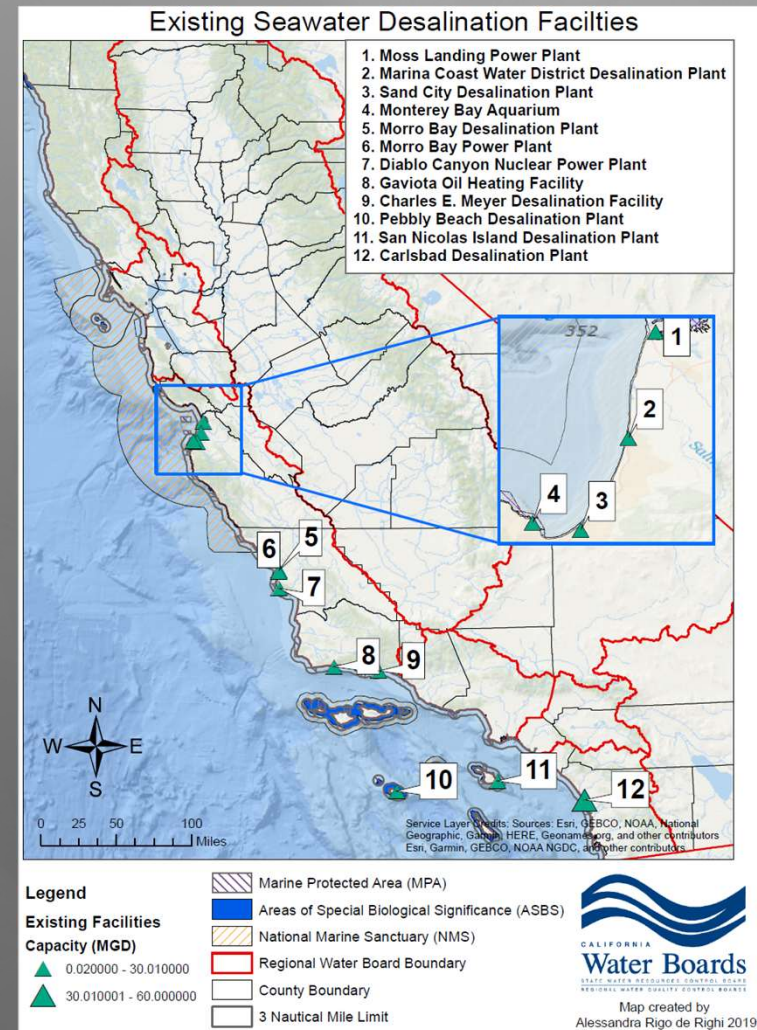
OceanWell

Overview

The Technology
Business Model
Application to SVBGSA
Preliminary Risk Assessment
How Can We Pay for This?

Ocean Desalination in California

- ❖ Seawater Desalination is not new
- ❖ At Least 12 plants in operation
- ❖ Four plants in the Monterey Area
- ❖ All plants use traditional onshore desalination technology
- ❖ The plants tend to be small and specialized
- ❖ Large onshore desalination plants are highly controversial



A Case in Point

Huntington Beach Desalination

- **Energy Use**
- **Climate** Impacts
- **Need & Cost**
- **Environmental** Impacts
 - ✓ Marine Life Mortality
 - ✓ Brine Disposal
 - ✓ Chemical Use
- **Coastal** Footprint

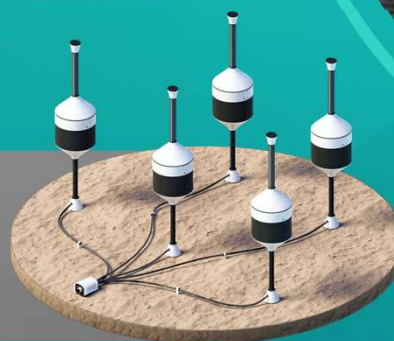


What if We Changed the Location of the Reverse Osmosis Process?

- **Concept of Natural Pressure** to Reduce Energy Costs
- **Locate Where There** is Less Organic Life
- **Leave the Salts** and Sea Life in the Ocean

Subsea Reverse Osmosis (SRO)

Locate RO Facilities at Depth





Deep Sea Water Farm

Natural Hydrostatic Pressure

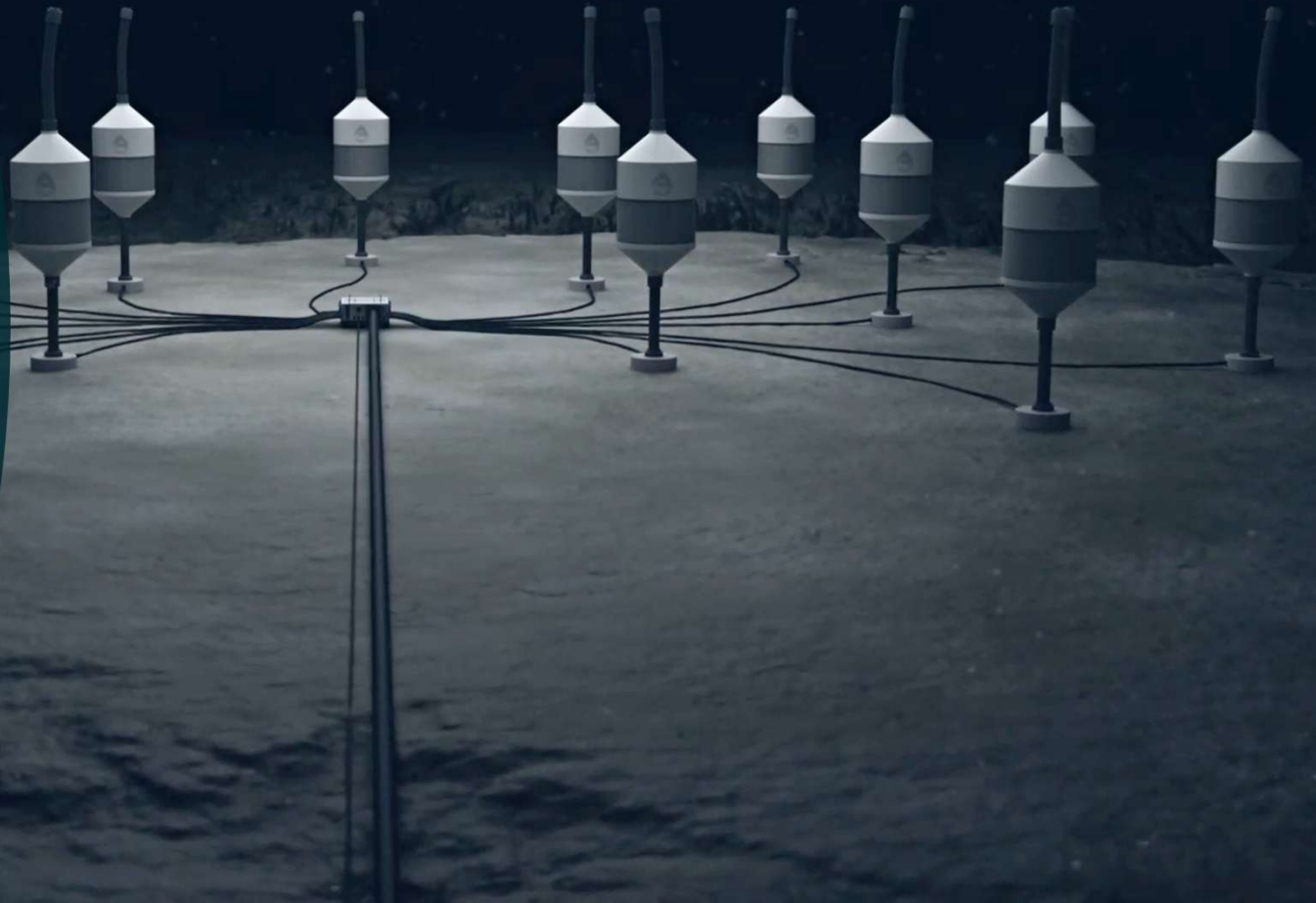
1500' Deep - Free Energy Removes Salt
Purchased Energy Sends Only Fresh
Water to Shore
Net Energy Savings 40%

Less Organic Life

No sunlight, no photosynthesis
Minimal Sea Life Mortality
Mild Brine
No Chemicals or solid waste

More Water

Scalable Tech - Start Small, Grow
Large
Pod Life - 30 years
Self Cleaning
4-Year Maintenance Periods



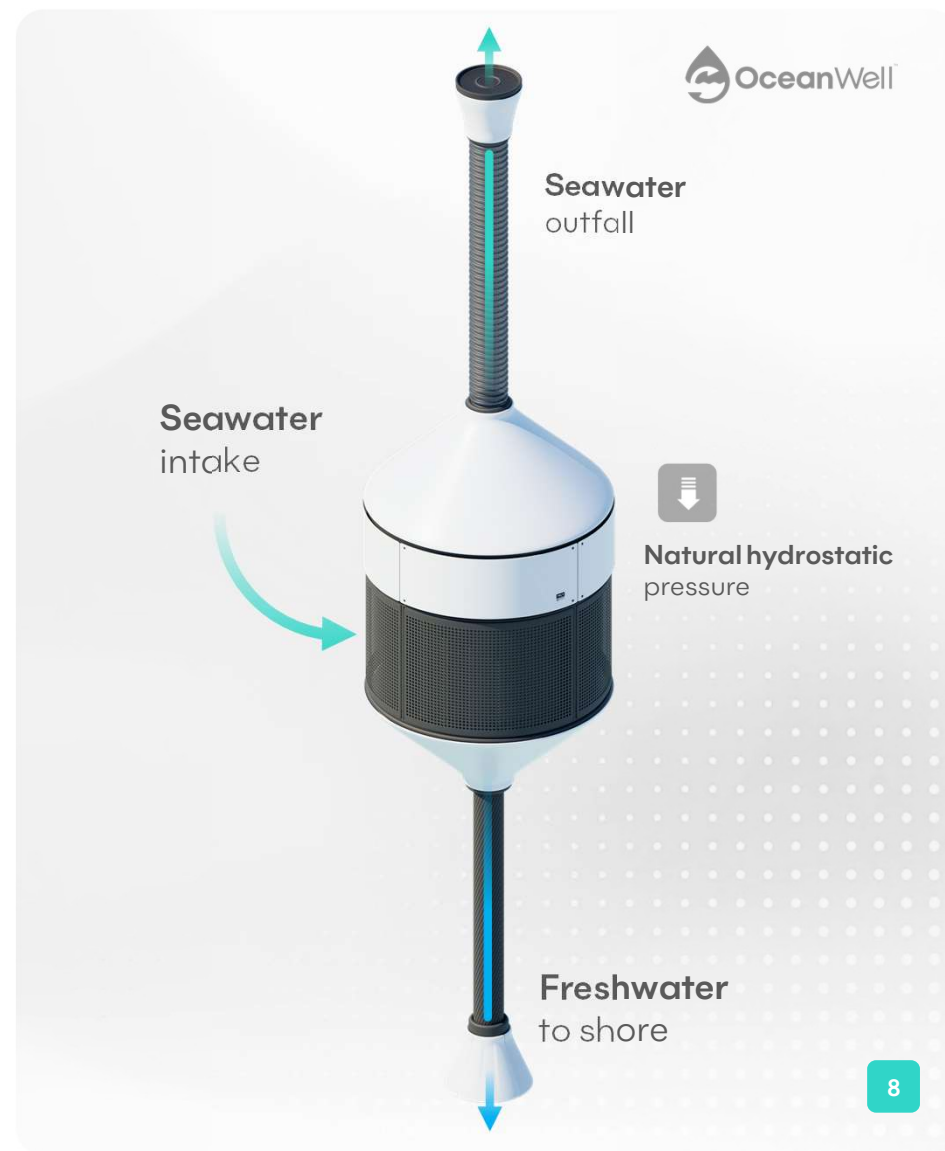
OceanWell Technology

PODS

- **Capacity** 1 MGD
- **LifeSafe** System
- **Size** - 8 X 10 meters
- **Single Point** Anchor
- **Mild** Brine
- **Elevated** Outfall
- **30 meters** apart
- **Footprint** – 0.22 acre/pod

Water Farm

- **Collection** of Pods
- **Manifolded** to pipeline
- **Modular** – Add Pods as Needed
- **Scale** Unlimited
- **Smaller** Onshore Footprint



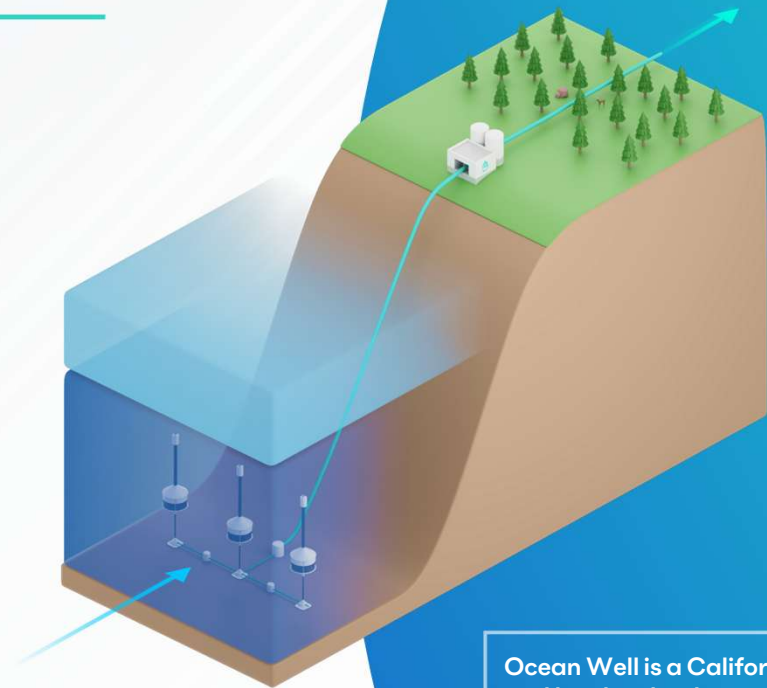


Why OceanWell?

Location, Location, Location

OceanWell/SRO Benefits

- Drought-proof, climate-proof, high-quality water
- Lower costs
 - ✓ Can be produced at scale
 - ✓ 40% energy savings means lower operating costs
 - ✓ Dramatically lower capital costs
- Environmentally benign
 - ✓ Little or no marine mortality
 - ✓ No brine outfall
 - ✓ No chemicals or solid waste
 - ✓ Smaller onshore footprint
- Highly experienced team



Ocean Well is a California born and bred technology, specifically designed to address every environmental concern raised around desalination.



The Oceanwell Team

85+ years in water, engineering, and innovation

Pilot and Demonstration Projects Roadmap



Roadmap navigated by a Public-Private-Partnership with the Las Virgenes MWD



Initially Only One Partner

- October 2023 Public Private Partnership
- "Line of Sight" agreement to Commercial Readiness
- **10 MGD** Water Farm
- Too Small . . .
- We needed more partners . . .



Today, the Off-Taker is a Coalition of **SWP-Dependent Areas**



Direct Delivery Agencies

Las Virgenes MWD

Calleguas MWD

Los Angeles DWP

LA County District 29

West Basin MWD

Exchange Agencies

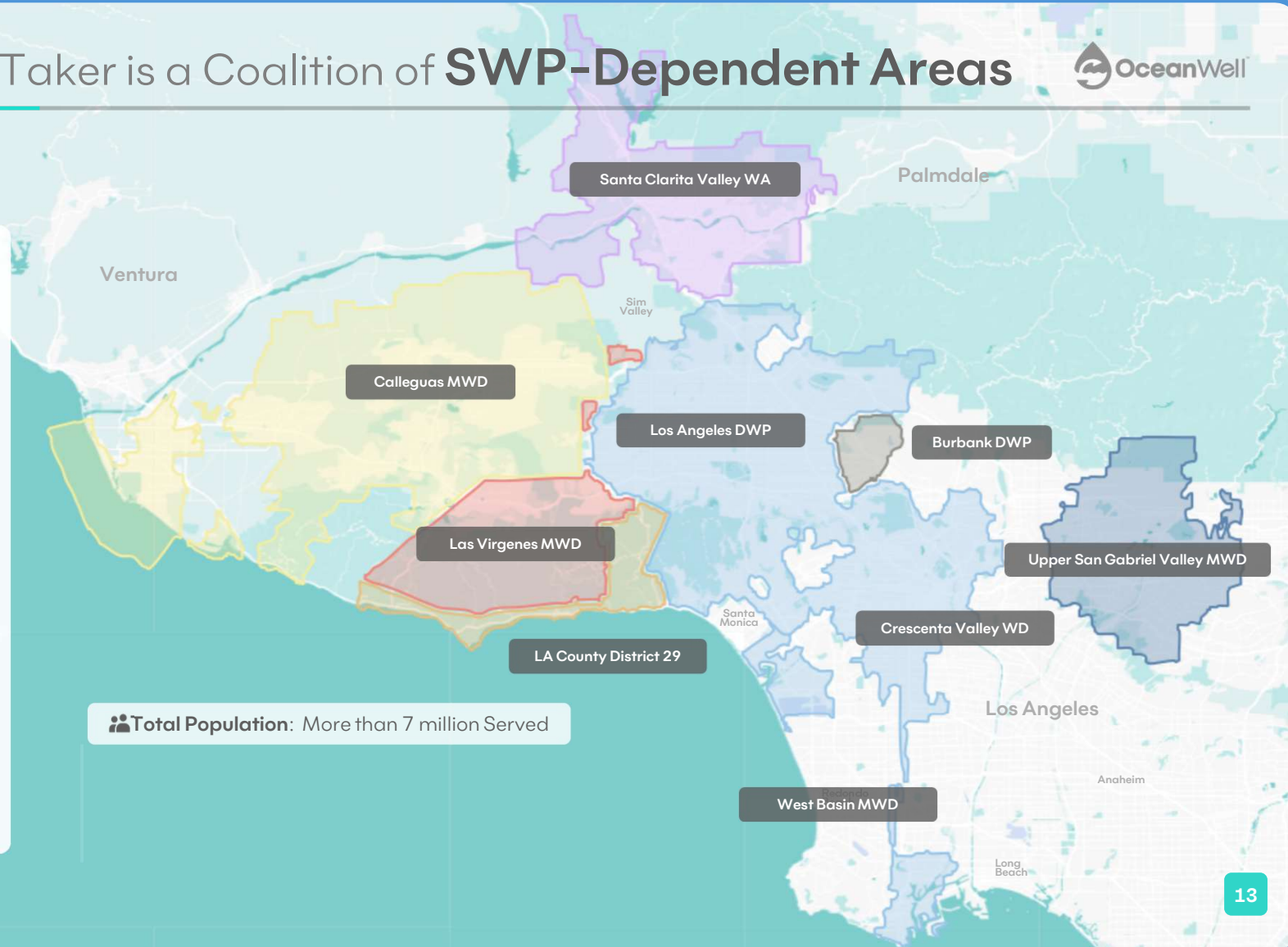
Burbank DWP

Crescenta Valley WD

Upper San Gabriel Valley MWD

Santa Clarita Valley Water Agency

Total Capacity: Up to 60 MGD

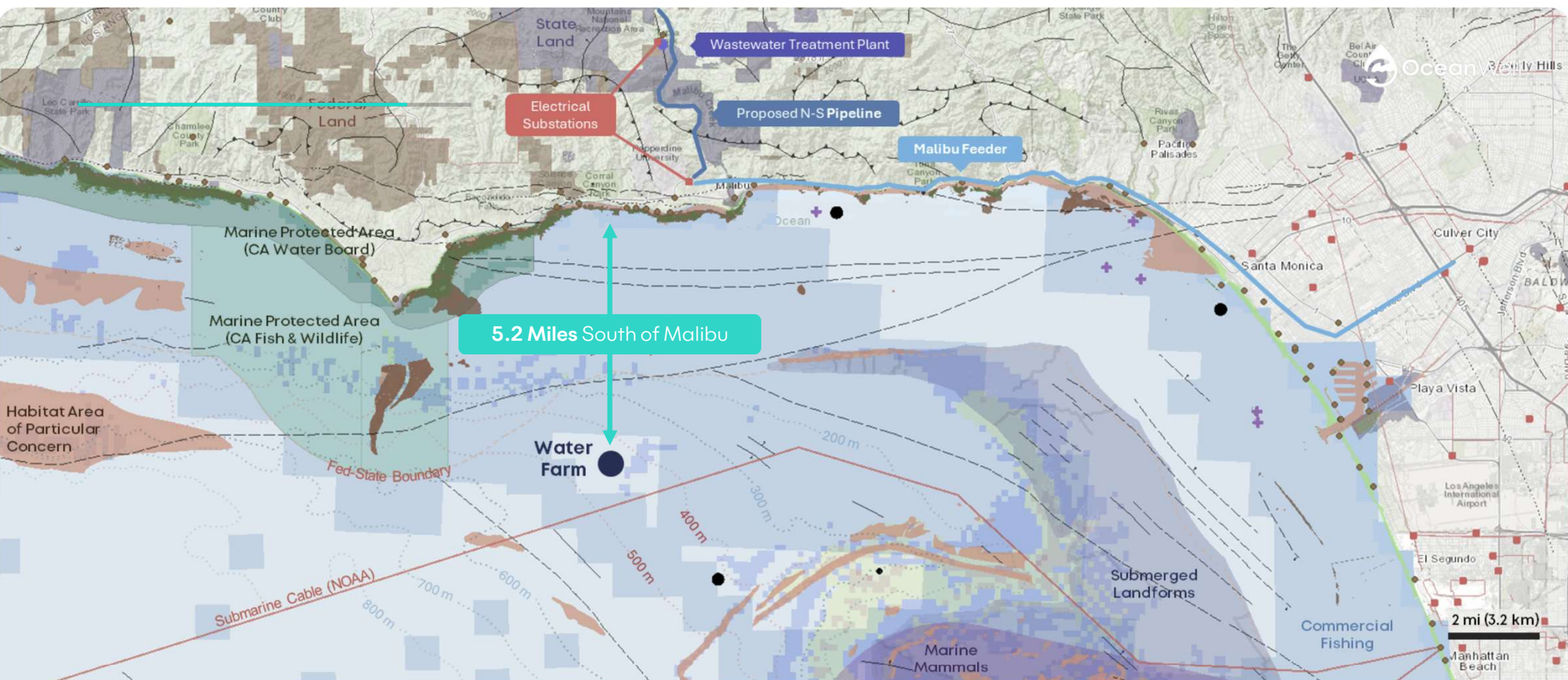




Subsea Infrastructure

- Water Farm
- Subsea Pipelines
- Shore Crossings



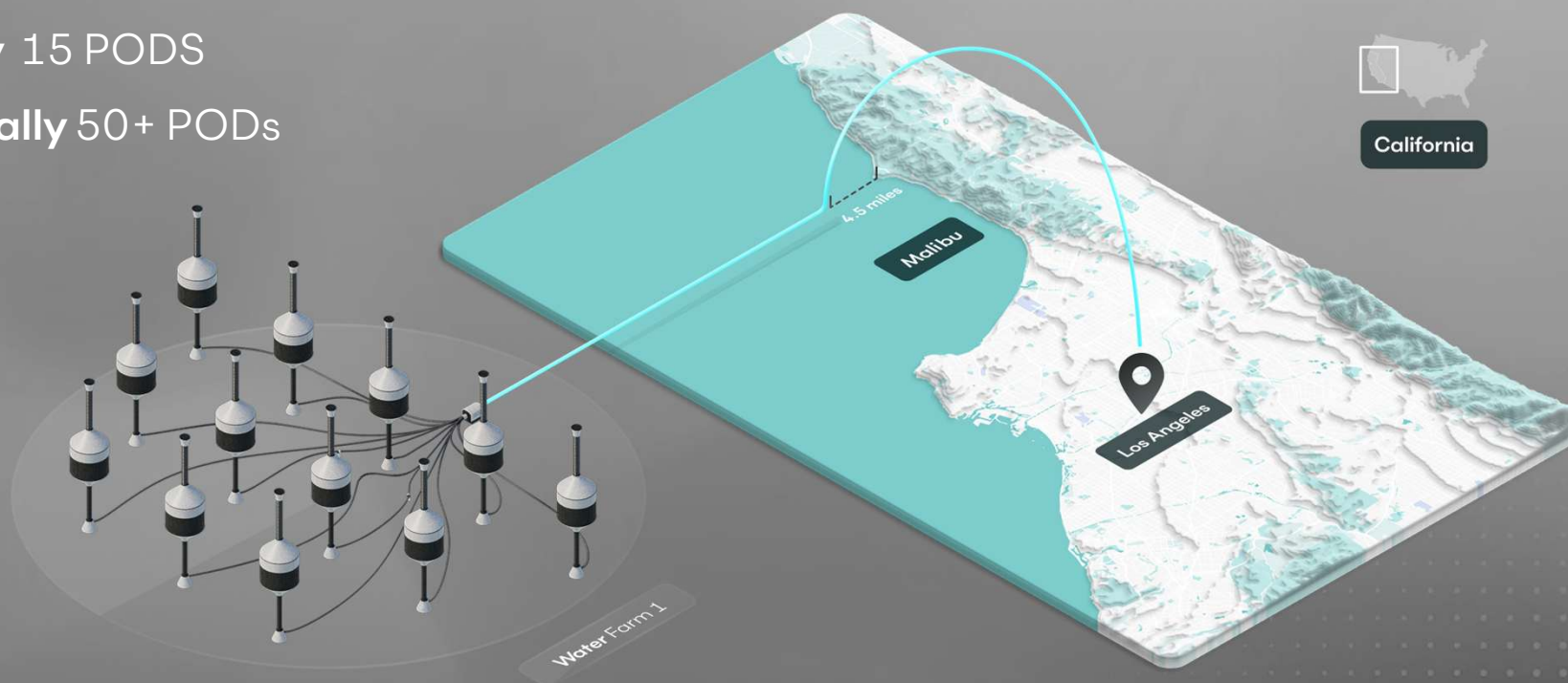


Water Farm #1

- Suitability of Deep Coral Habitat
- Hard Bottom
- Kelp
- Coastal Wetlands
- Coastal Access Points
- Artificial Reefs
- Earthquake Epicenter
- Quaternary Faults

Water Farm 1

- Initially 15 PODS
- Eventually 50+ PODs



Subsea Pipelines

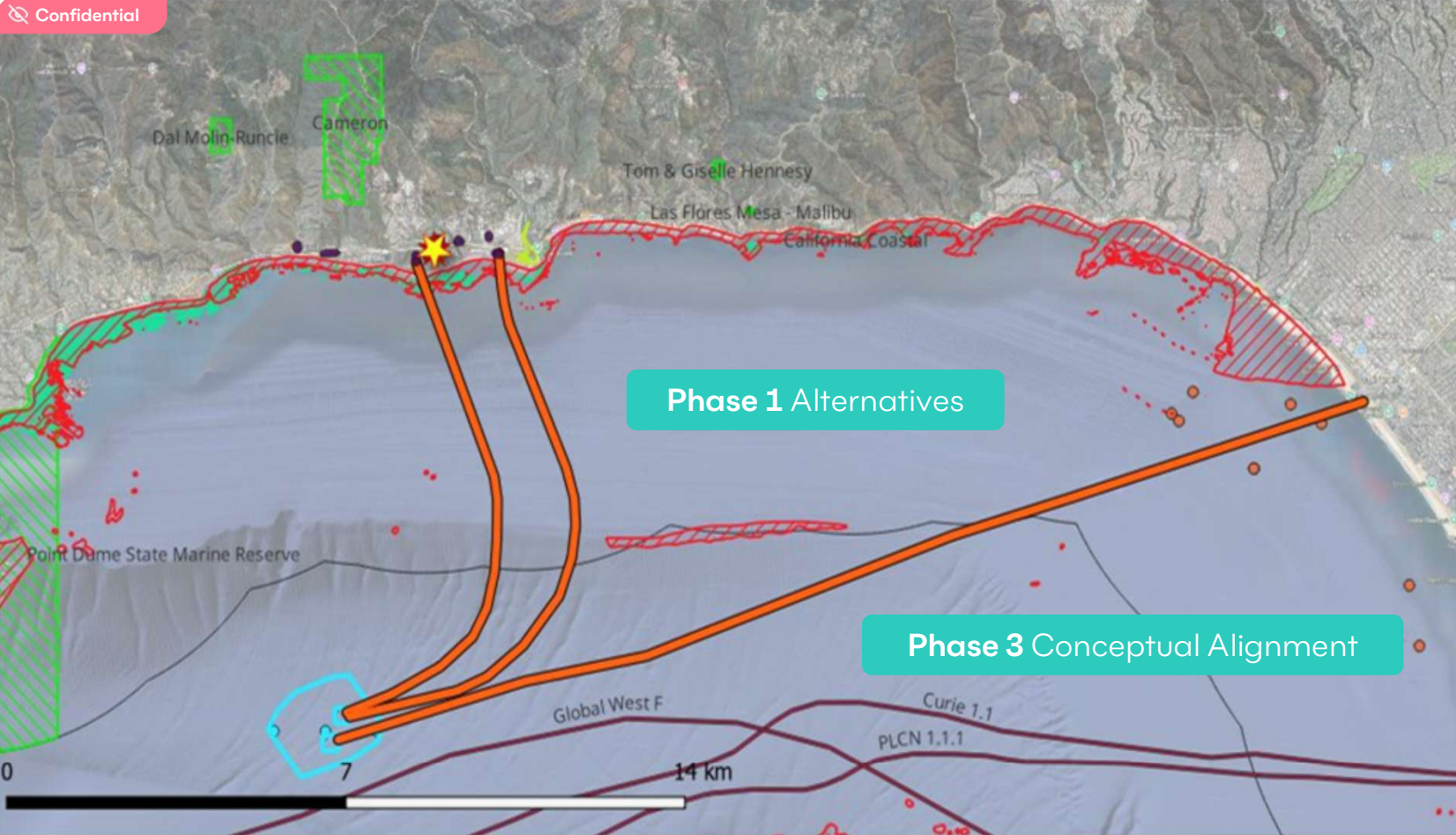
Phase 1

- About **7 Miles** to Connect WF1 with Shore Crossing 1
- 60", Capacity 60 MGD

Phase 3

- About **14 Miles** to Deliver Water at scale to MWD Central Pool
- Capacity TBD Based on Demands in New Markets





- OceanWell
 - Malibu Pumpphouse
 - Malibu Landfall Options 2025 0721
 - 0 - 0
 - Pipeline Routes 3717
 - Water Farm Survey Area
- Environment
 - HAPC_Santa_Monica
 - Estuaries
 - Kelp Canopy
 - Rocky Reefs
 - WDPA
- Hazards
 - WreckObstruction.gpkg
- Infrastructure
 - SubmarineCable.gpkg
 - In Service
- Federal State Waters
 - California
 - Federal
- ArcGIS Terrain



Shore Crossings

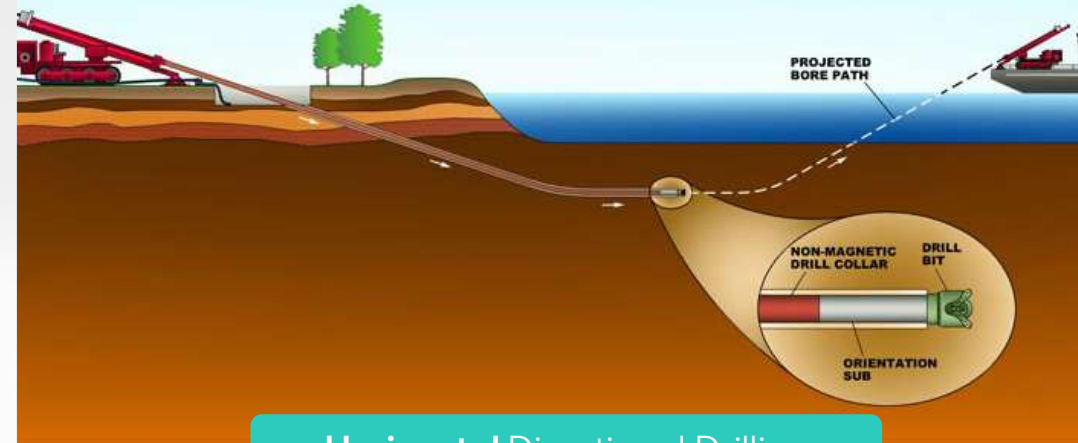
Phase 1

- Location Near Malibu

Phase 3

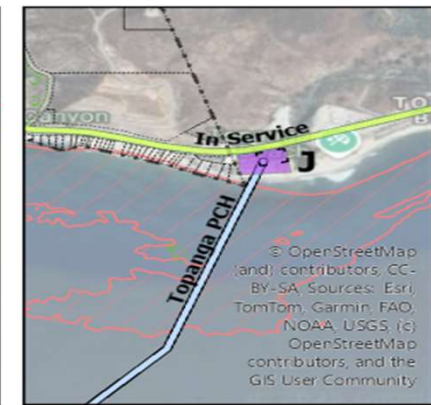
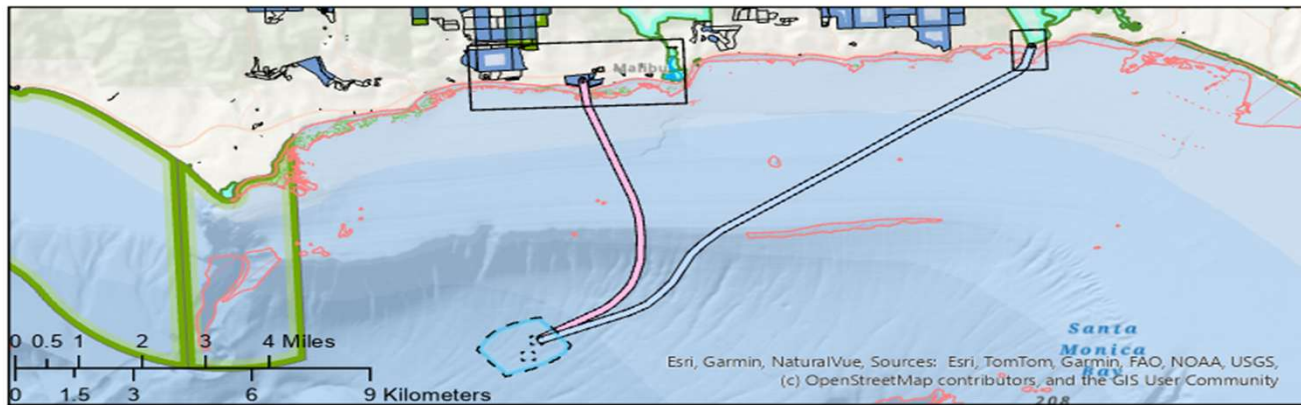
- Location TBD

SHORE APPROACH: PILOT HOLE DRILLING

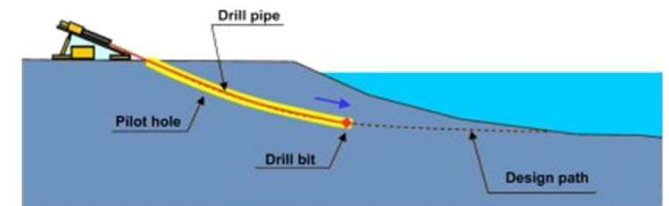
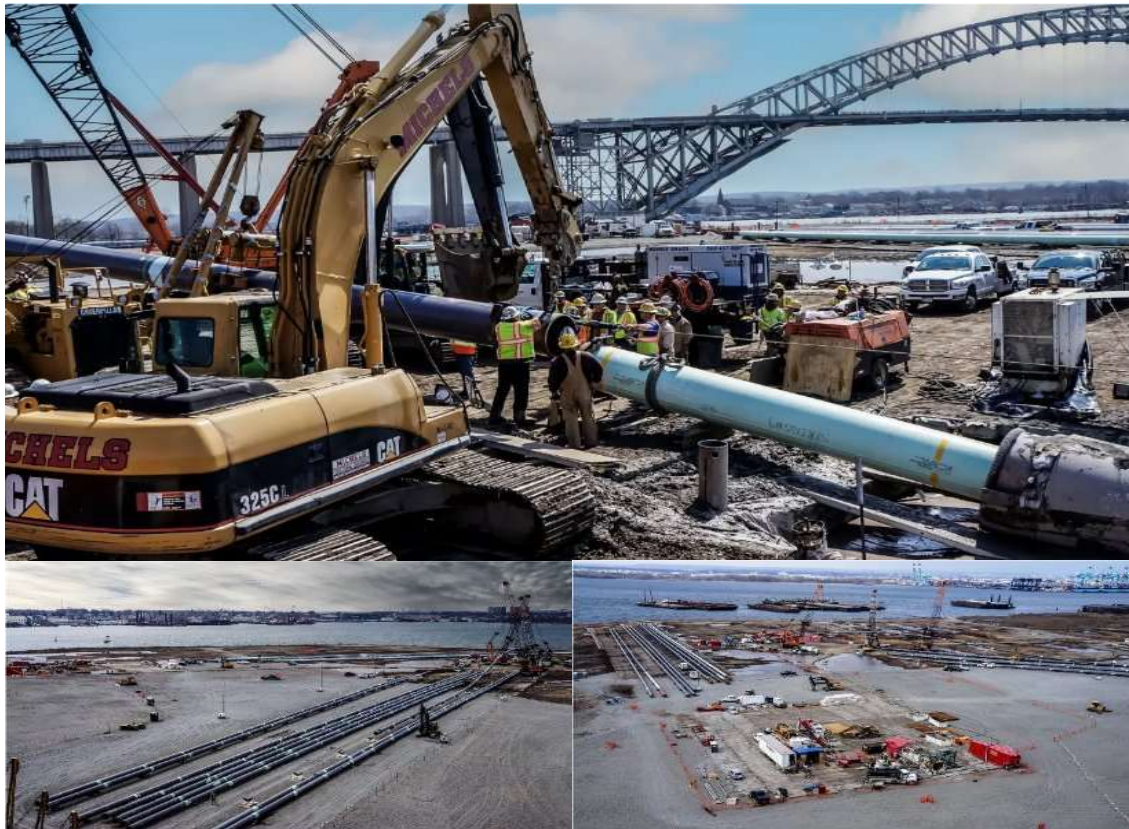


Horizontal Directional Drilling

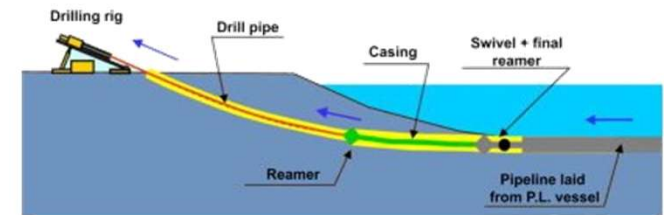




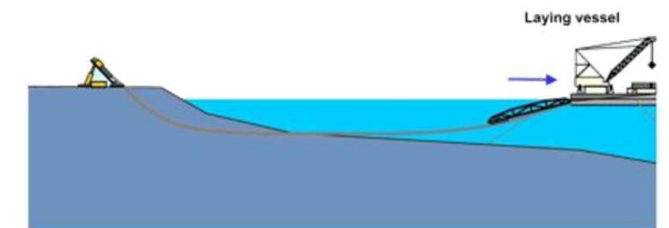
Malibu Shore Crossing and Landfall Alternatives



Step 1



Step 2



Step 3

⚙ Horizontal Directional Drill (HDD) space requirements

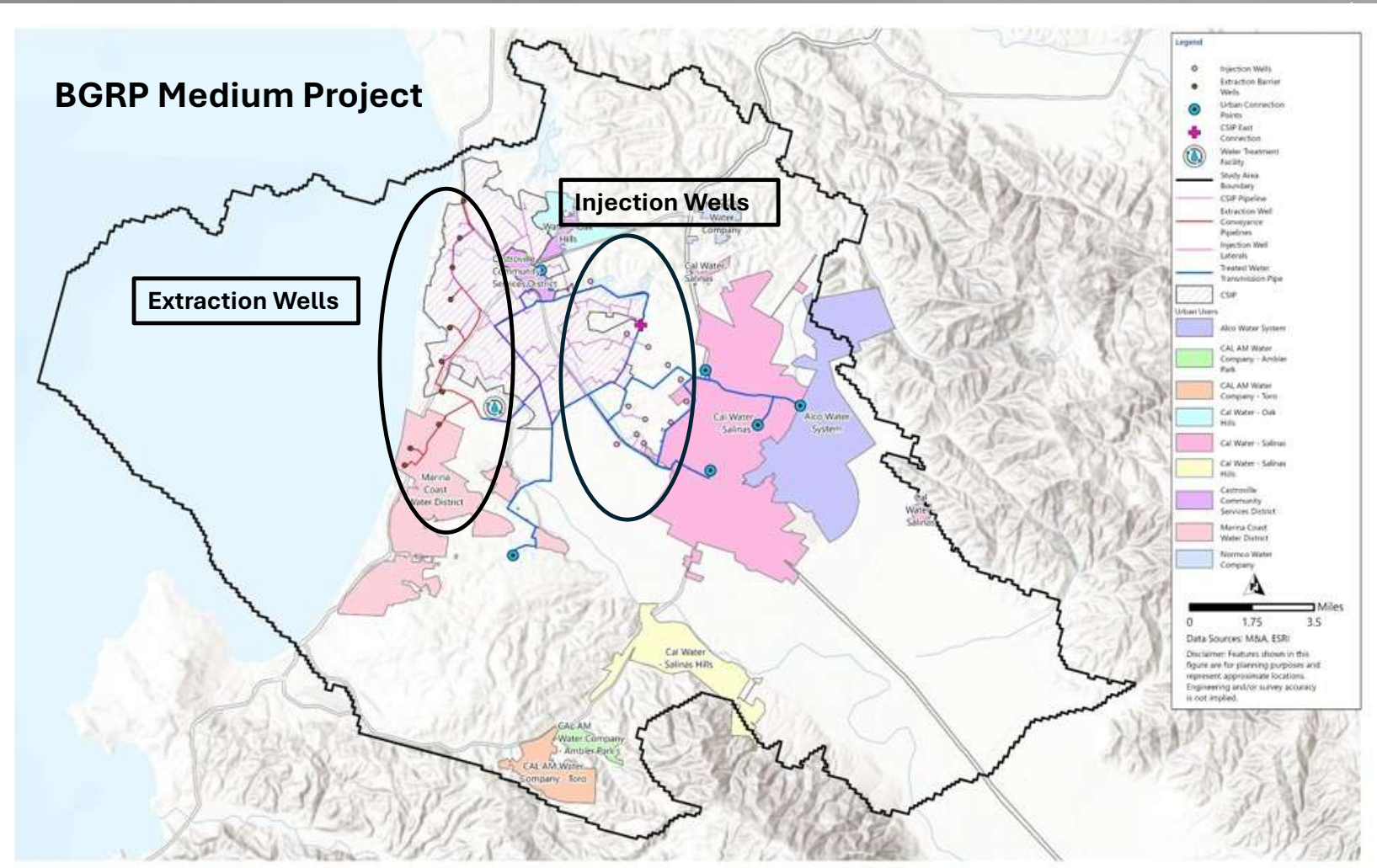
What is all this going to cost??

Short Answer: We don't know yet.

Longer Answer:

- ✓ **Range: \$2,000-\$3,000/AF**
Delivered to shore
- ✓ **Unit Cost will be site specific**
- ✓ **Major cost drivers:**
 - ☐ **Site Bathymetry**
 - ☐ **Energy**
 - ☐ **Membrane life at depth**
 - ☐ **Intervention costs**
 - ☐ **Tariffs**





Salinas Valley Water Farm Project



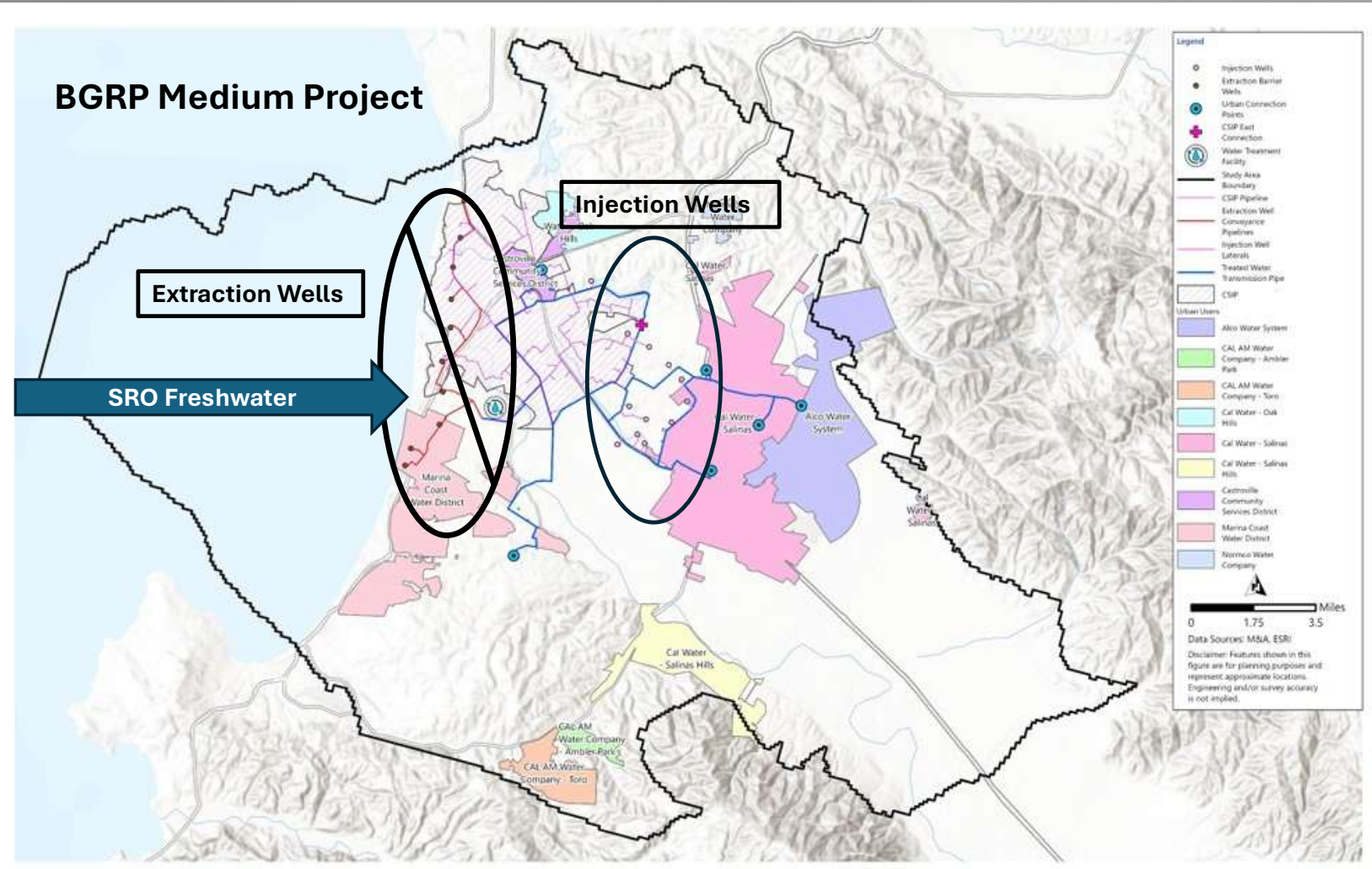
Water Farm



Subsea Pipeline



HDD Shore Crossing



Major Risk Factors

1) Obtaining Permits in Monterey Bay

Risk Reduction Strategy:

- ❖ Desk Stop Study
- ❖ Permit Feasibility Study
- ❖ Emphasize SRO Environmental Design
- ❖ Educate re Importance of success

2) Making Sure the Client can Pay for it

Risk Reduction Strategy

- ❖ Project Efficiency
- ❖ External Funding
- ❖ Keeping growers/others informed



Sources of Regional, State, & Federal Funds

Grants

- ❖ WaterSMART (Federal)
 - Desalination Construction Projects
 - Title XVI Water Reclamation & Reuse
 - Cooperative Watershed Management Program
- ❖ Proposition 13 (State)
 - Planning funds for Groundwater Recharge Facilities
- ❖ Proposition 4 (State)
 - Limited Construction Funds Available

Loans

- ❖ Water Infrastructure Finance Innovation Act (WIFIA, Federal)
- ❖ Seawater Intrusion Control Loan Program (State)
- ❖ IBank Infrastructure State Revolving Fund (State)

Regional

- ❖ Monterey County Urban Residents and Agriculture Benefit from Groundwater Sustainability



US Capitol



CA Capitol

Is it time for a Water Bond?

2014 – Proposition 1

- ❖ \$7.12 billion
- ❖ Passed by 67%-33%

2028 – Proposition X

- ❖ The 2030s will be the SGMA implementation decade
- ❖ Broad support for funds to assist SGMA implementation
- ❖ Early polling is encouraging



Maybe it is time for a Water Bond!

2014 - Governor Brown Signs Proposition 1

Questions and Discussion

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www.oceanwellwater.com