

# Prospective RO Concentrate Treatment Studies

Medi Sinaki, PE

Recycled and Purified Water



**Valley Water**

Clean Water • Healthy Environment • Flood Protection

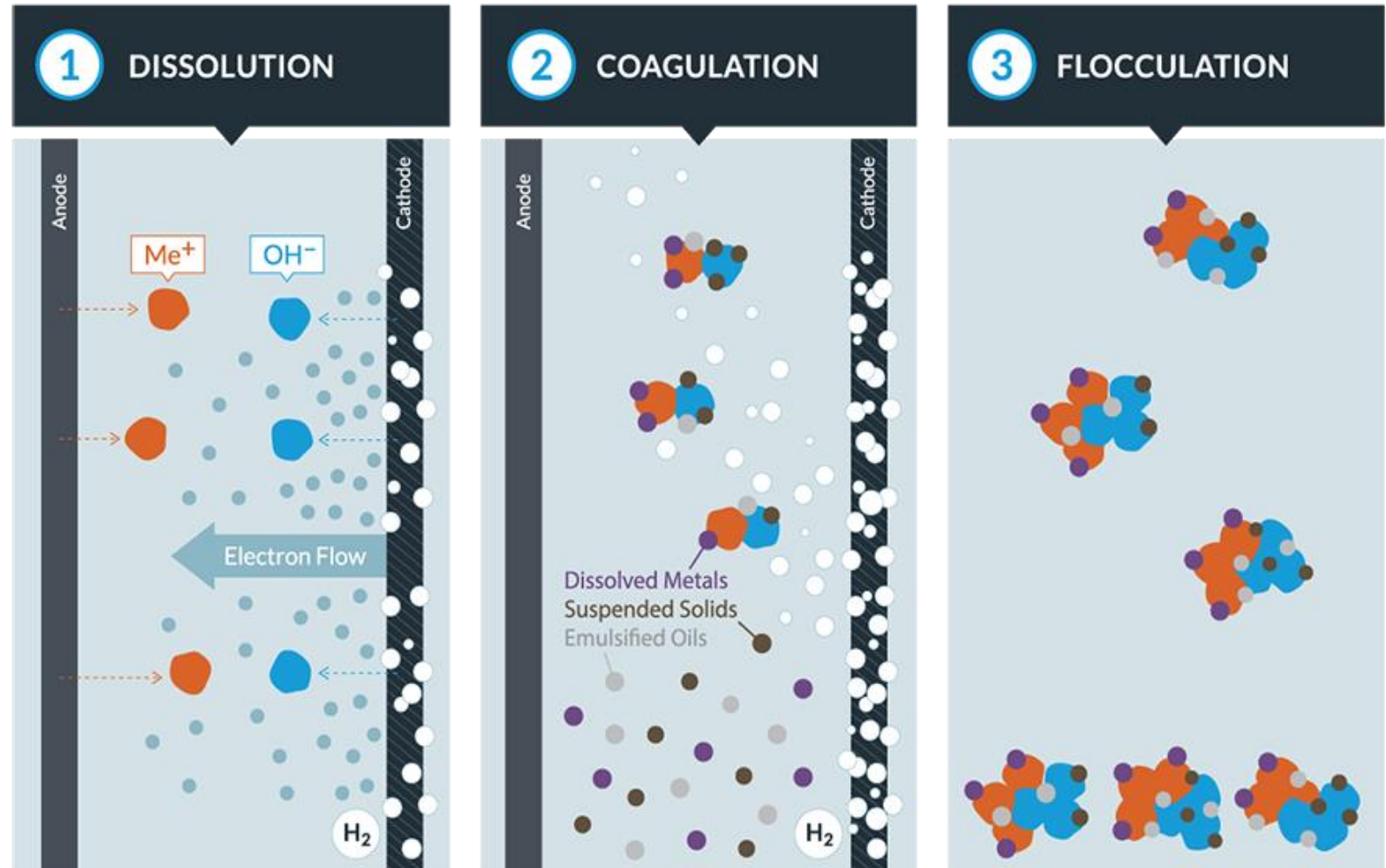
siliconvalley



ADVANCED WATER PURIFICATION CENTER

# Electrocoagulation

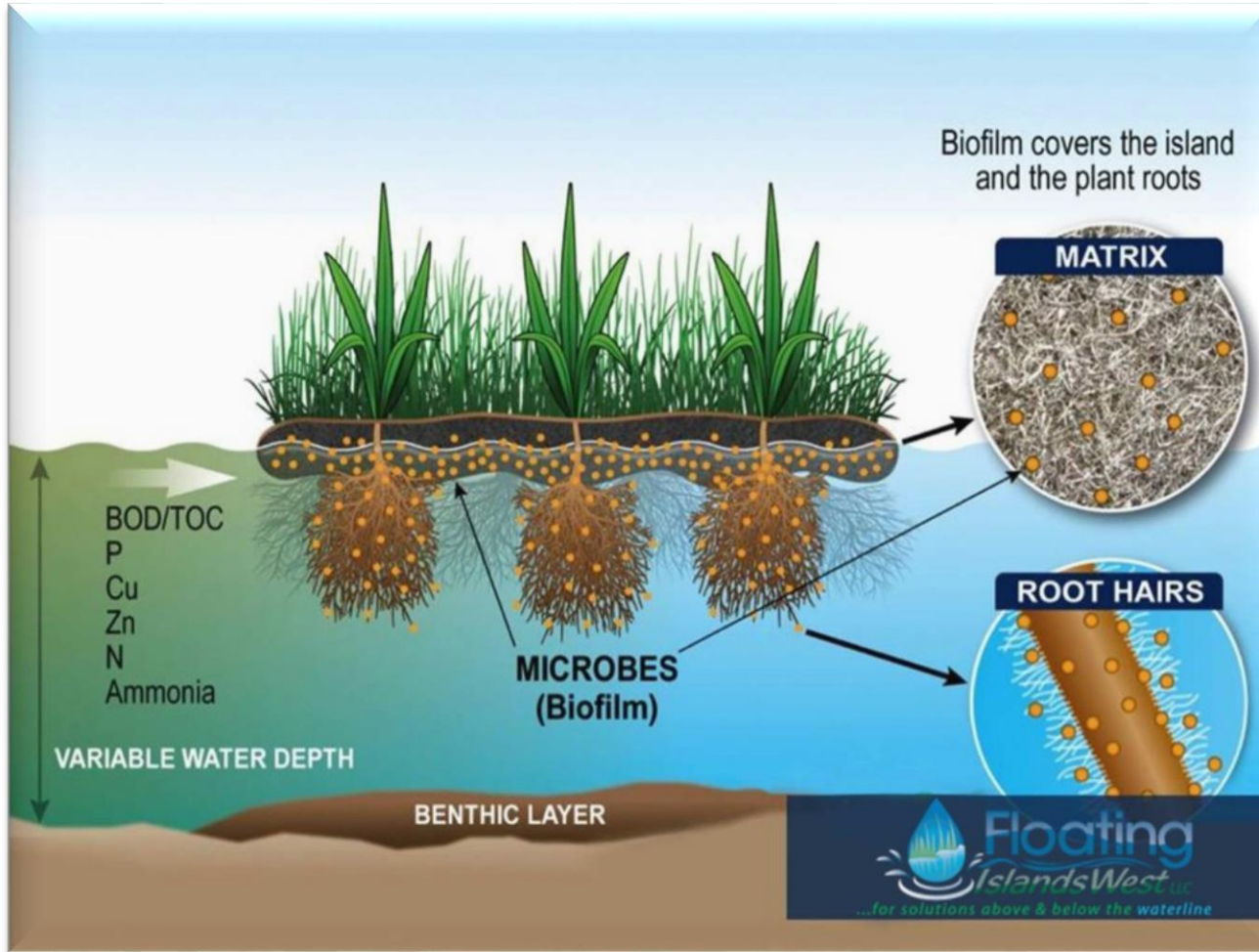
- Requires Filtration
- High energy use
- Little sludge
- Removes:
  - Metal ions
  - Hardness
  - Organic compounds
  - Nutrients



# Floating Treatment Wetlands



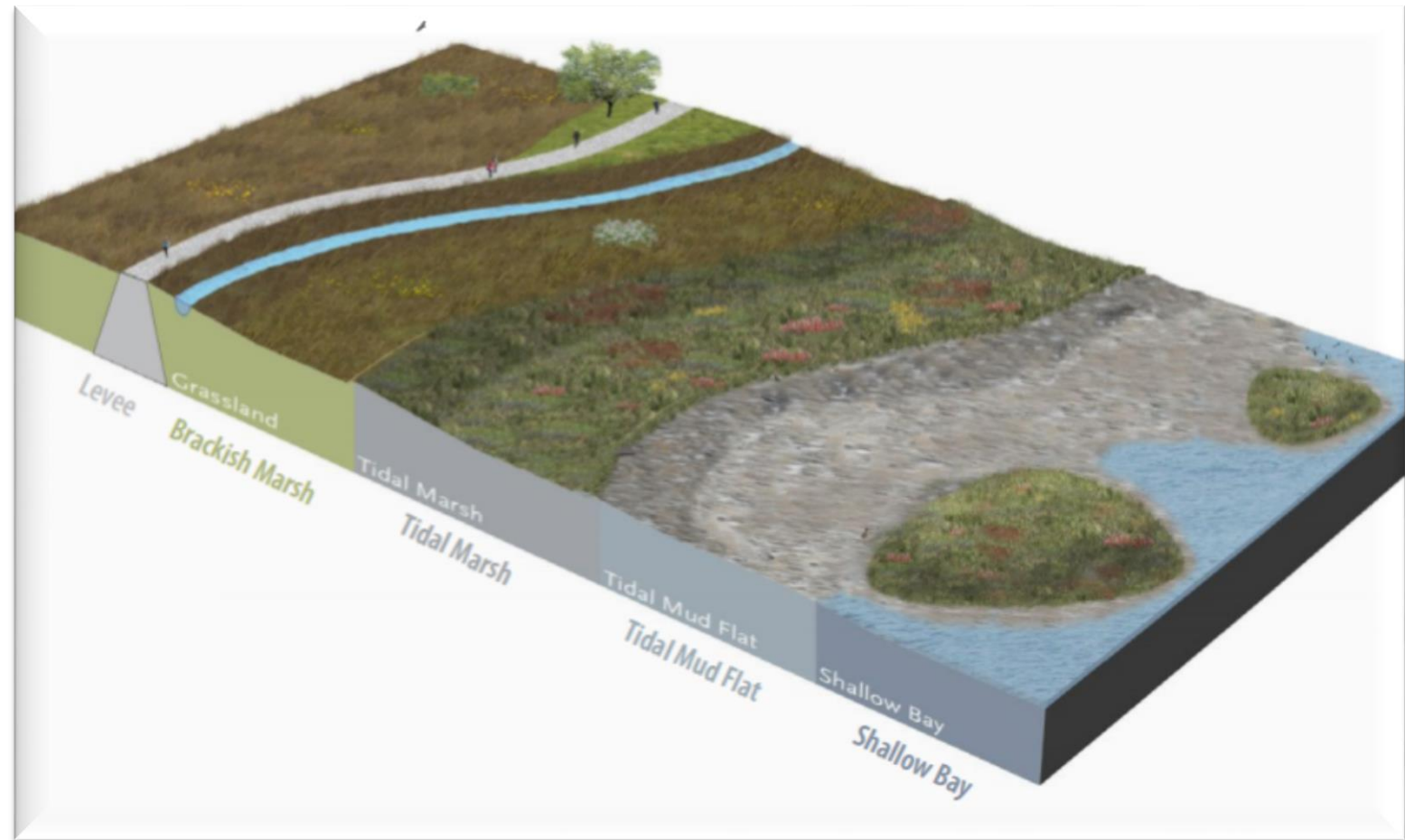
# Floating Treatment Wetlands



- Lower maintenance than traditional vegetated wetlands
- Works with deeper ponds
- Cost-effective treatment
- Requires piloting for removal rates of ROC constituents

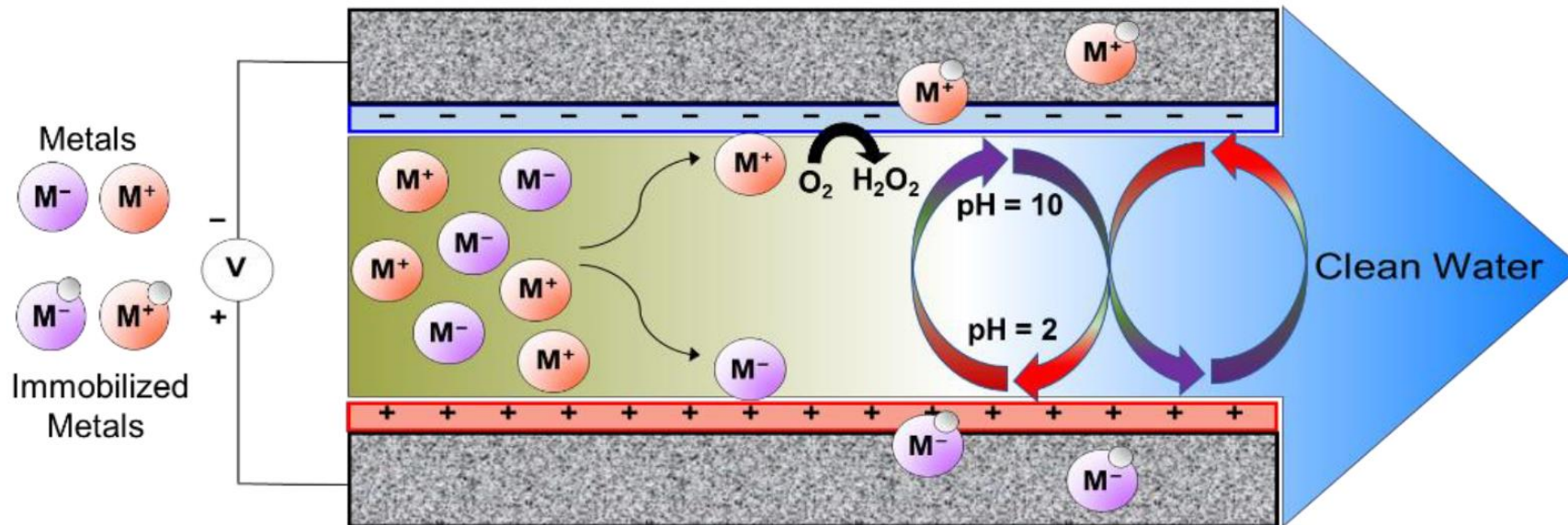
# Subsurface Flow Wetlands: Horizontal Levee

- Metals removal from RO concentrate?
- Exploring transport options to Oro Loma
- South Bay restoration efforts
- Shoreline Project



# Capacitive Coagulation

- PowerTech Water Inc -- CapCo™ technology
- Physical Adsorption, Capacitive Adsorption
- Electrochemical/Chemical Immobilization



# Thank You!

