

DOCKETED

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Project Title:	SB 605 Wave and Tidal Energy - Phase 2
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Cal Poly Pier: A Wave Energy and Marine Tech Hub



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California SB 605 Wave and Tidal Energy
Sept 30, 2026

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Cal Poly Center for Coastal Marine Sciences

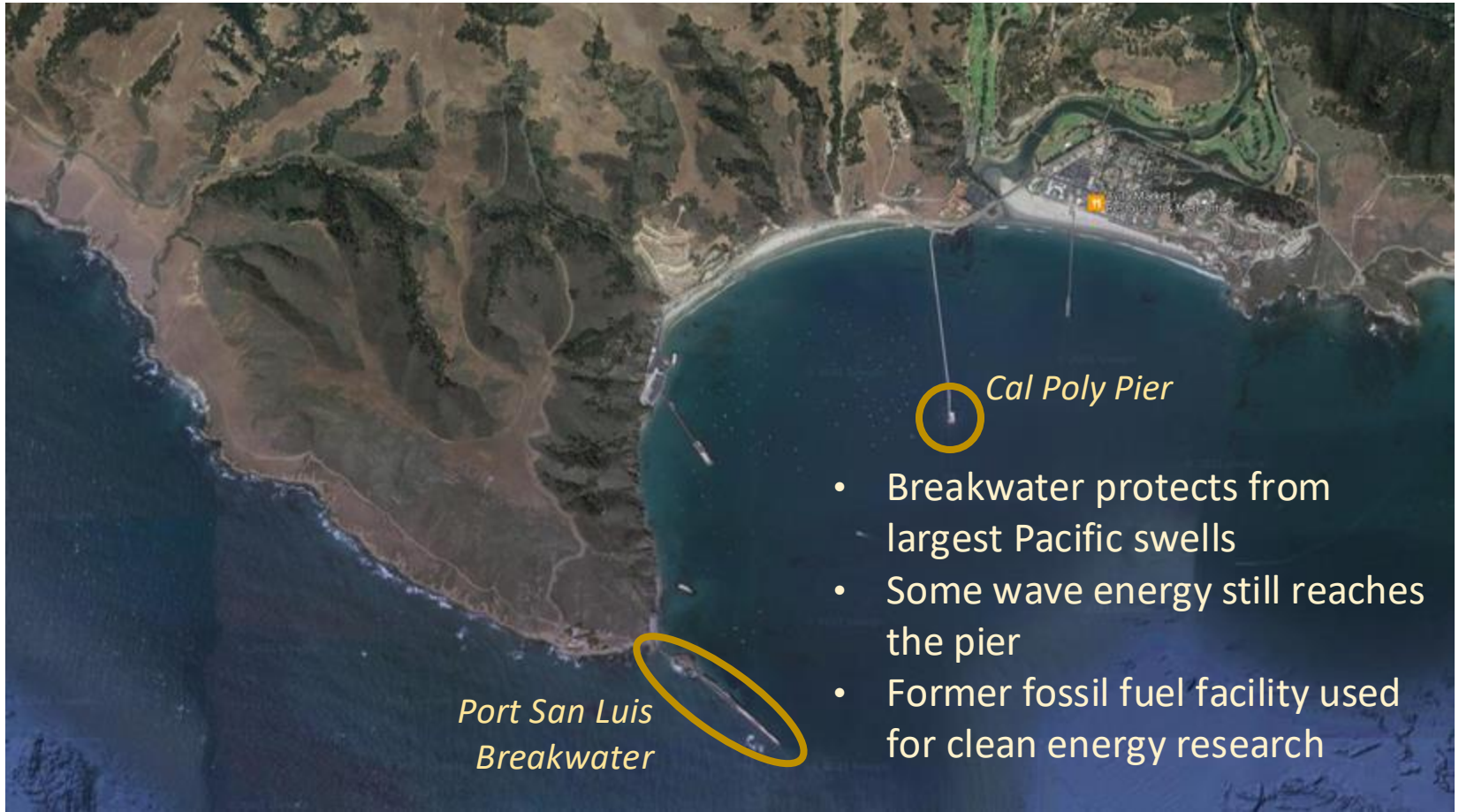
- Focus: marine research, teaching, outreach, and public education
- Over 40 Faculty/ Staff from all Colleges at Cal Poly (e.g., biology, oceanography, engineering, economics, computer science, agriculture, planning, public policy, etc.)
- >150 undergraduate >20 graduate students working directly with faculty
- Cal Poly Pier hosts 1000 students for classes, 1000 student-visits for research annually



Cal Poly Pier



- .1 km long
- .40 ft depth
- .Secured facility
- .Small, well-equipped shop
- .Classroom/lab/meeting space
- .2-ton jib crane; two 500 lb davits



- Breakwater protects from largest Pacific swells
- Some wave energy still reaches the pier
- Former fossil fuel facility used for clean energy research





Cal Poly Pier as Marine Tech Hub

Recently accepted to Dept of Energy TEAMER network
(*Testing, Expertise and Access for Marine Energy Research*)



Will allow us/partners to seek funding for wave energy R&D

- First deployment last week!
(Waverider wave measurement buoy)
- Currently planning for 1st wave buoy deployment in Nov



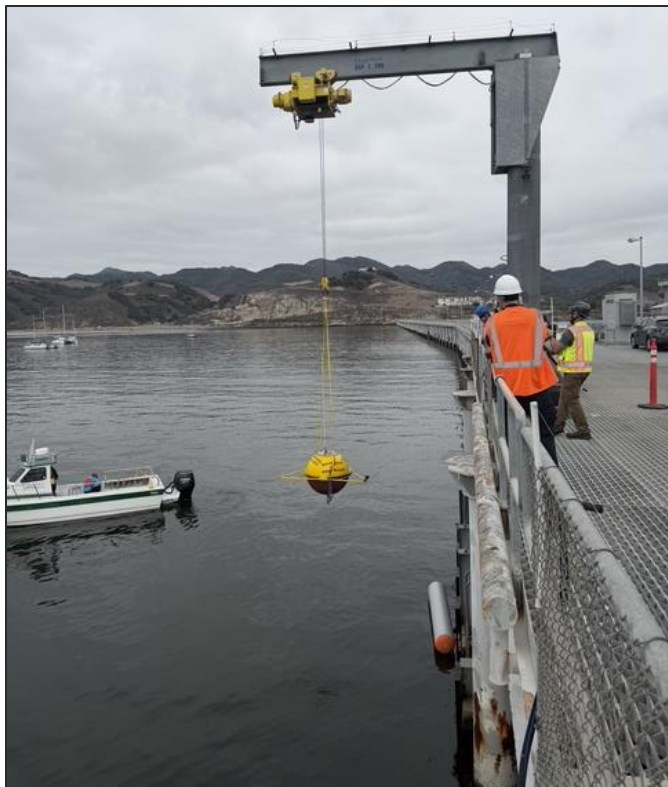
Permitting Process

Agency	Permit	Jurisdiction
Port San Luis Harbor District	Land Use	Lead Agency
	California Env. Quality Act (CEQA)	Lead Agency/State
Regional Water Quality Control Board	Discharge permit	State
	401 Water Quality Certification	State
State Lands Commission	Application for Use of State Lands	State
CA Coastal Commission	Coastal Development Permit	State
California Department of Fish and Wildlife	Incidental Take Permit	State
ACOE	Nationwide Permit 5	Federal
NOAA/USFWS	ESA and EFH Consultation	Federal
US DOE (NEPA)	Env. Impact Statement (EIS) or Env. Assessment (EA) or Categorical Exclusion Determination (CX)	Federal

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ACOE	Nationwide Permit 5	Federal
NOAA/USFWS	ESA and EFH Consultation	Federal
US DOE (NEPA)	Categorical Exclusion (CX) GRANTED	Federal

Waverider Buoy!



AVILA BEACH NEARSHORE, CA - 285

Observed Data

14 minutes ago

Significant Wave Height 0.50 m / 1.64 ft

Peak Period 13.33 s

Peak Direction 196°

Temperature 18.6 °C / 65.5 °F

Sep 25, 19:26 UTC

Station Details

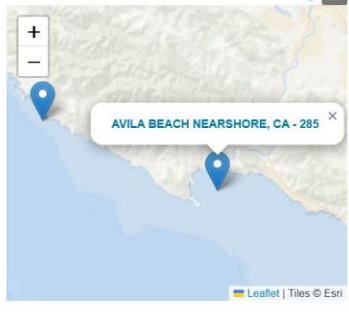
Latitude: 35.16396 N

Longitude: -120.73756 E

Depth: 15 m / 49 ft

[Previous Deployments](#)

NDBC (WMO Identifier): 46286

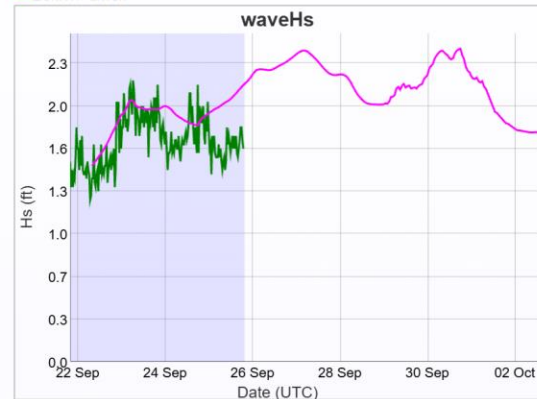


Date:

Observed

ECMWF-driven

Hs Tp Dp SST

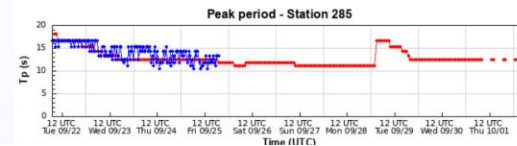
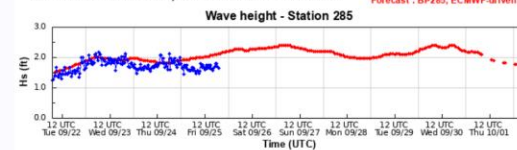


Autoscale

Avila Beach Nearshore, CA Conditions + Forecast

Observations: CDRP buoy 285

Forecast: BP285, ECMWF-driven





Potential Projects

Stable, low-cost, logistically simple platform for deployment and testing:

- Marine energy systems and AUVs
- Marine sensor/monitoring systems
- Devices using ocean cooling
- Co-location of offshore renewables & aquaculture
- Other projects requiring accessible offshore platform
- *All will advance marine energy as an option*

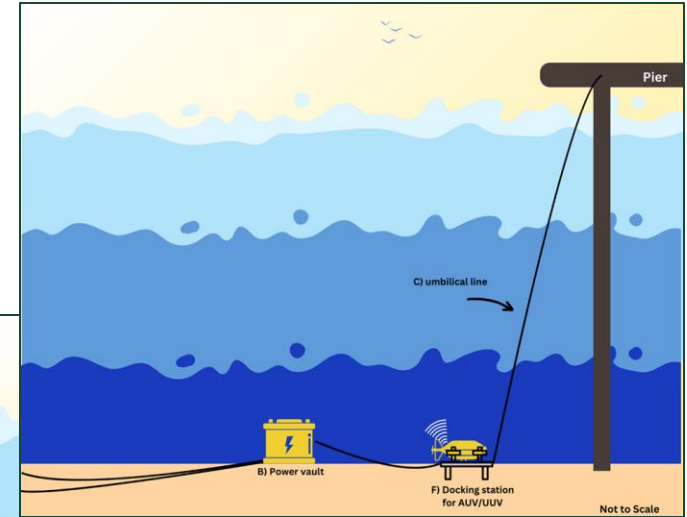
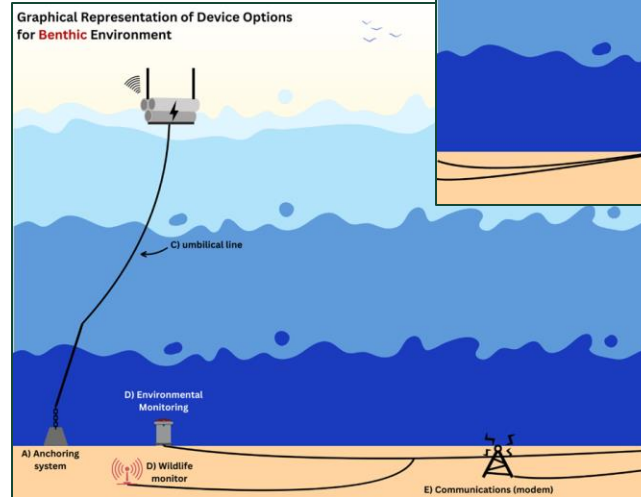


Benthic Activities

- Anchoring Systems
- Power Vaults
- Seafloor Linear Infrastructure

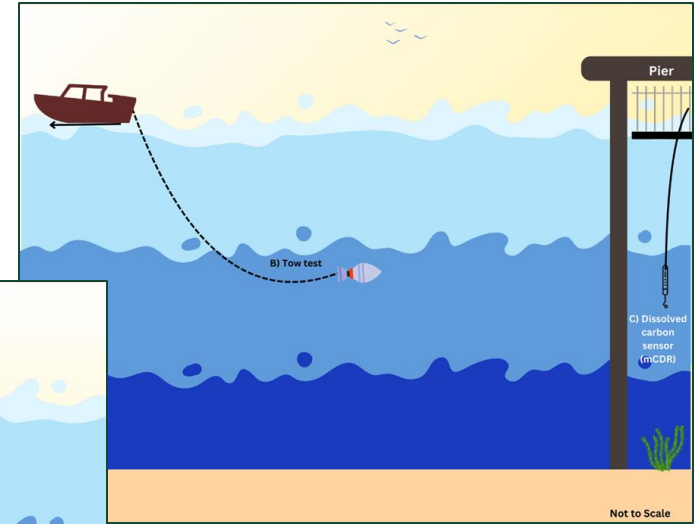
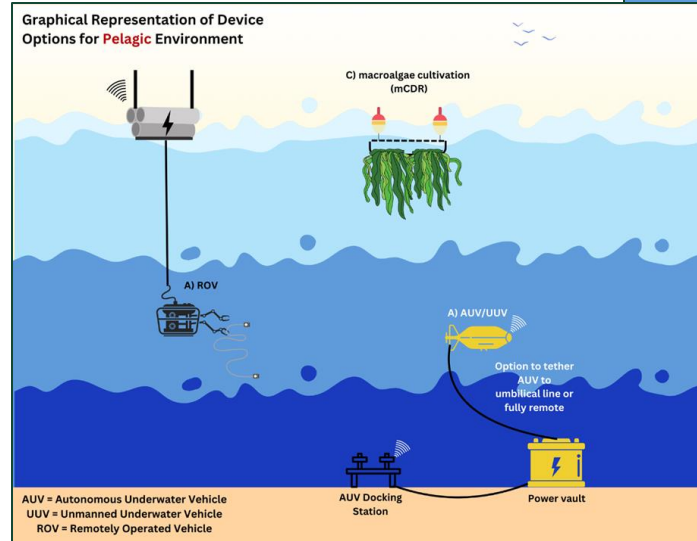
Payloads for:

- Environmental Monitoring
- Communications
- AUV Docking Stations



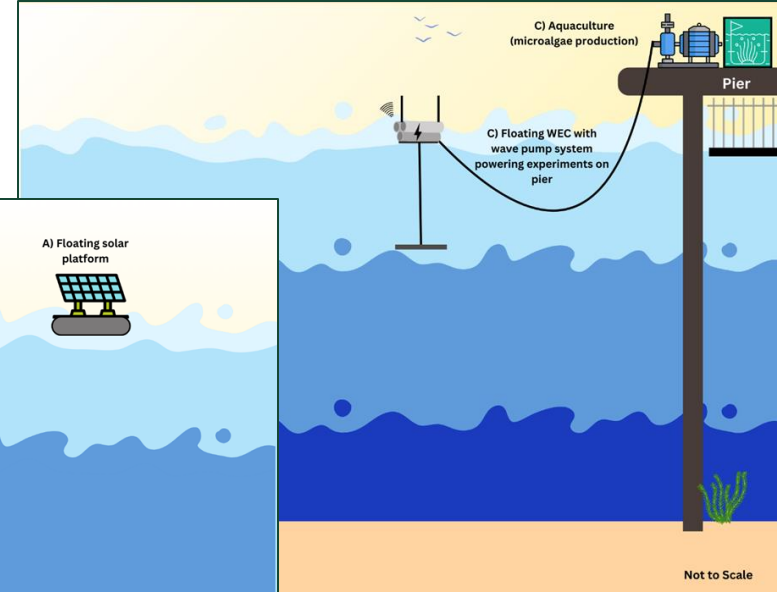
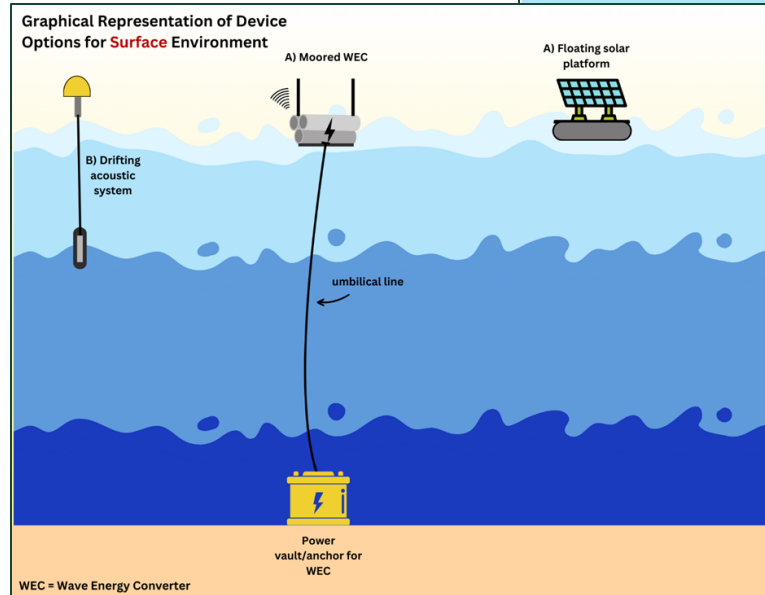
Pelagic Activities

- Underwater Vehicles
- Tow tests
- Marine Carbon Dioxide Removal (mCDR)



Surface Activities

- Floating and Moored Energy Generators
- Environmental Monitoring
- Water Intake/Outflow for Pier-based Activities



Next Steps

- Continue projects in progress; add more
- Better understand needs of users and developers

Lessons Learned

- Process is slow and complex
- Permitting often biggest unknown and hurdle

Future needs

- Streamline/simplify permitting processes!



Thank you!

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Center for Coastal
Marine Sciences



Email us!

Detailed Specifications

Area available

- Total deck space: 90 feet x 150 feet (13,500 square feet total)
- 2,000 square foot, 2-story main building (classroom, conference room, shop, storage)
- 1,700 square foot Flowing Seawater Facility (indoor and outdoor aquaria support)
- 160 square foot Scientific Diving support container (compressor and fill station)
- Two 80 square foot storage container
- 450 square foot lower landing platform located +3 feet above mean high water. Supports vessel loading operations, equipment deployments and dive ladder.



Roadway (single lane)

- American Association of State Highway Transportation Officials HS-20 rated (8,000 lbs. per front axle, 32,000 lbs. per rear axle 40,000 lbs. max per vehicle)

Flowing Seawater System

- Continuous ~80 gallons/minute flow rate. Both Filtered Seawater (5–10-micron filtration pass) and Raw Seawater are supplied via overhead supply piping.

Other Capacity

- Jib Crane. 2-ton load rated with motorized trolley and boom (west side of platform)
- Davits. Two 500 lb. capacity pier deck mounted (east and south sides of platform)

Permitting

- Regional Water Quality Control Board Discharge permit. Allows discharge of flow through seawater in San Luis Obispo Bay. Limited to discharge of food and nitrogenous waste associated with animal husbandry practices.
- All additional permitting requirements are independent of Cal Poly, are specific to discrete operations and the responsibility of individual project leads to obtain and maintain.



Port San Luis Breakwater