

# **Diamond Head to Pearl Harbor Regional Sediment Management Plan**

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# D2P Regional Sediment Management Plan

- Study Area
- Regulatory and Coordination Activities
- Conclusions from Technical Studies
- Potential RSM Projects



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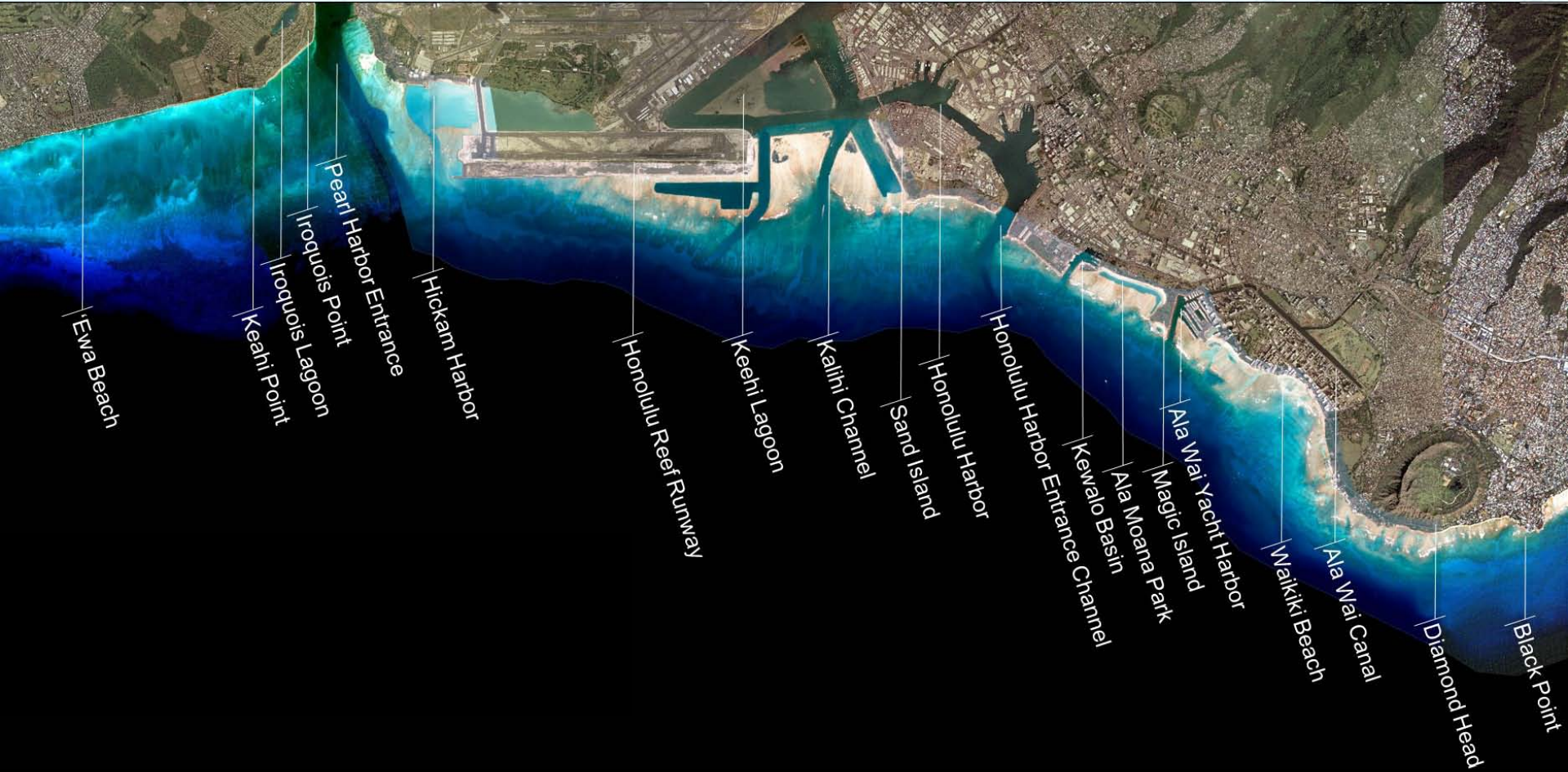
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# Study Area



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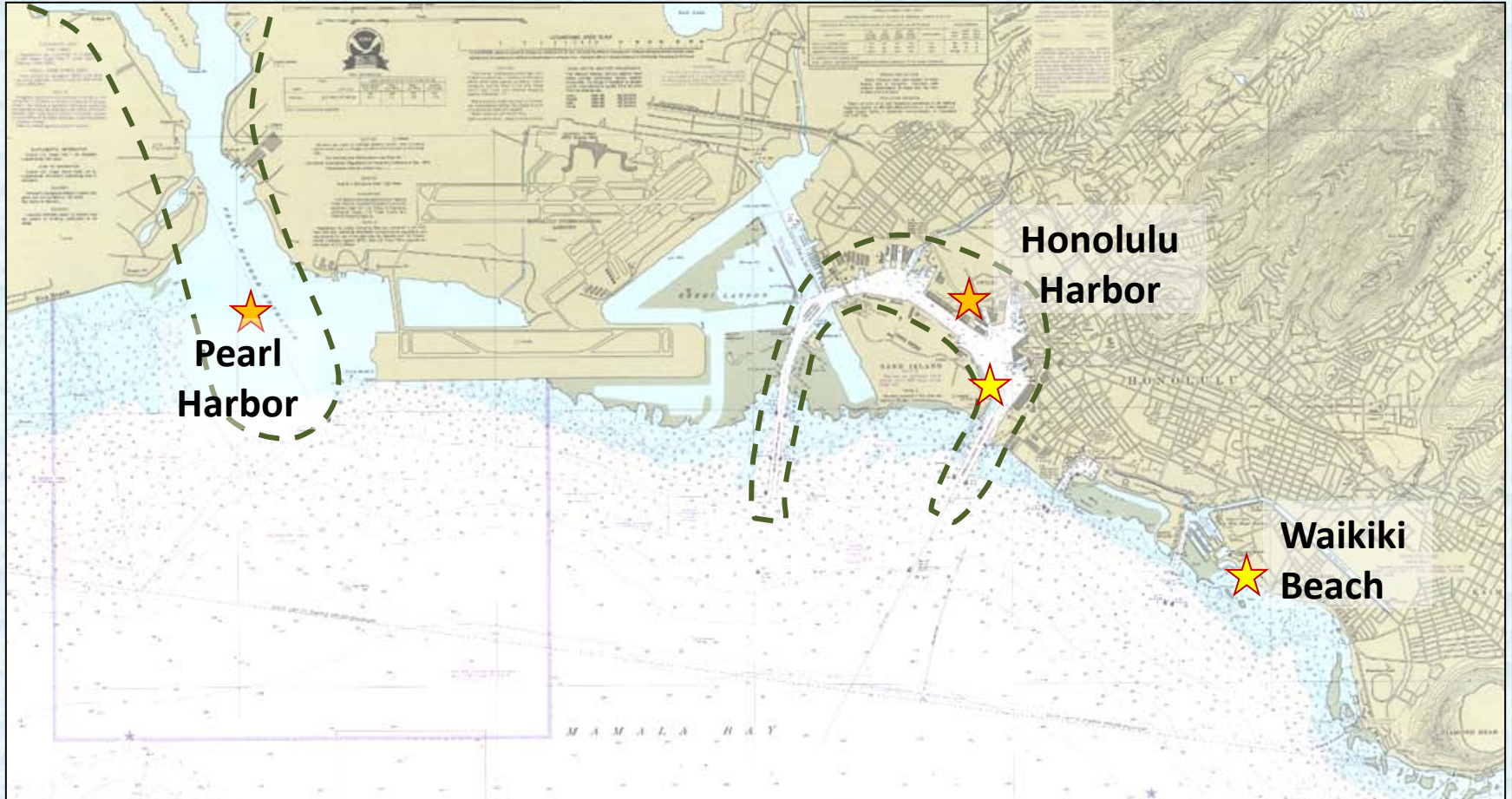
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# Existing Federal Projects



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# Regulatory and Coordination Activities



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# Regulatory and Coordination Activities

- **Agencies Regulating Beach Nourishment**

- Department of Land and Natural Resources: Work seaward of the certified shoreline
- City & County of Honolulu: Work landward of the certified shoreline
- US Army Corps of Engineers: River & Harbor Act, Clean Water Act
- US Navy: Nearshore waters within the Pearl Harbor Defensive Area



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# Regulatory and Coordination Activities

- **Multiple Regulatory Agencies - Continued**
  - State Department of Health
  - State Historic Preservation Office
  - Office of Hawaiian Affairs
  - U.S. Fish and Wildlife Service
  - National Marine Fisheries Service
- **Inter-Agency Coordination is Critical to Efficient Permitting**



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# Regulatory and Coordination Activities

- **2005: DLNR and USACE issued a State Programmatic General Permit (SPGP)**
  - Streamlined small scale beach nourishment (< 10,000 cy) in the State of Hawai'i
- **Consolidated permits within DLNR**
  - Department of the Army, SPGP
  - State Dept of Health Section 401 Water Quality Certification
  - State CZM Federal Consistency Review
  - DLNR Conservation District Use Permit



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# Regulatory and Coordination Activities

- **Limitations of SPGP**
  - State Dept of Health Section 401 Water Quality Certification component has lapsed
  - City & County of Honolulu outside process
- **Goal is to Streamline Environmental Permitting Process**



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# Regulatory and Coordination Issues

- **Local Coordination at Sub-Regional Scale**
  - Waikiki Beach: De facto coordination between hotel industry, State Tourism Authority
  - Iroquois Point: Ford Housing LLC pursuing beach nourishment along 4,200 feet of shoreline
- **Beach Management Efforts in Other Areas?**
  - Diamond Head
  - Iroquois Point to Ewa Beach



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# Technical Study Results



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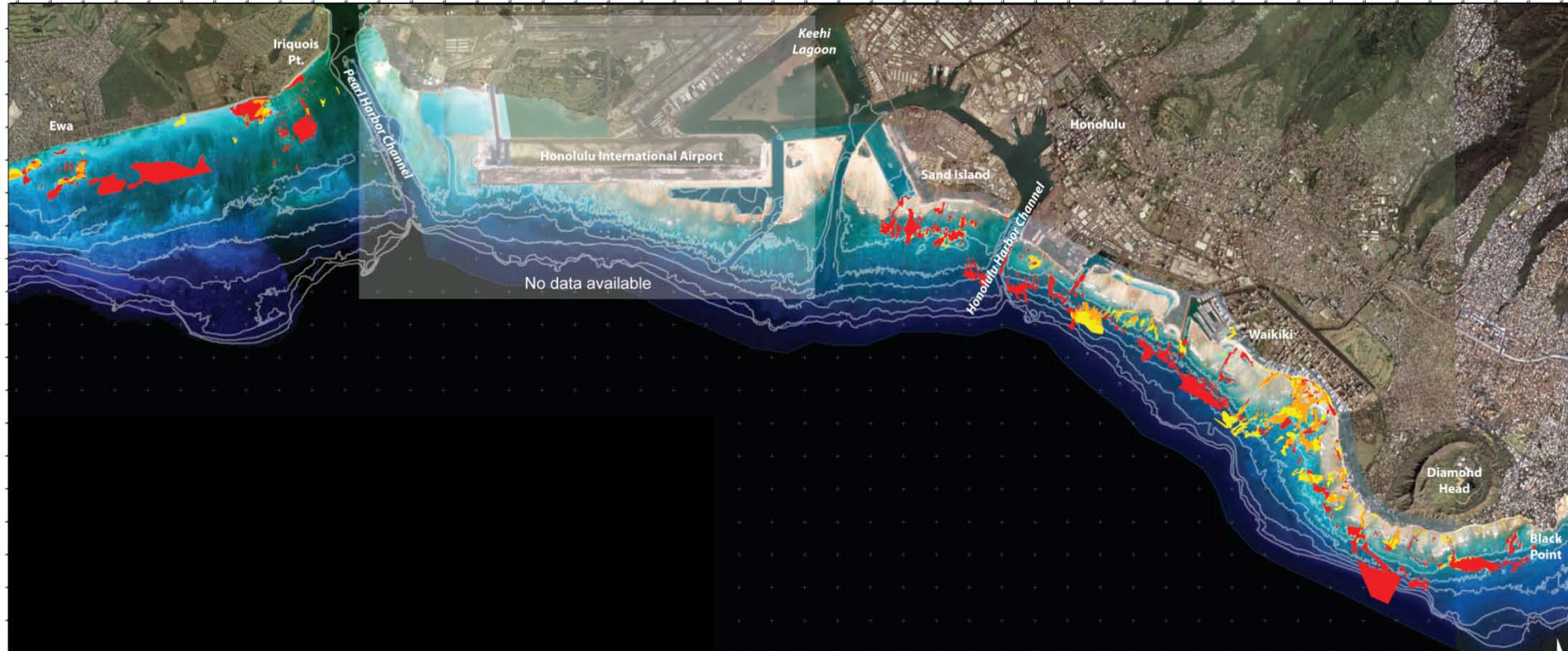
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# Technical Study Result - 1

- Offshore sand sources are present



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# Technical Study Result - 2

- Sediment transport rates are low



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# Technical Conclusions

- **Beach Nourishment may be Viable**
- **Stream Mouth Management is Not a Major Issue**
- **Dune Protection is Not a Major Issue**
- **Potential RSM Projects Identified**



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# Potential Regional Sediment Management Projects



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# Potential RSM Projects

- **Honolulu Harbor Potential RSM Project**
- **Waikiki Beach Potential RSM Project**
- **Pearl Harbor Potential RSM Project**



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# Honolulu Harbor Potential RSM Project

- Limited Quantity Sediment in Harbor
- Limited RSM Opportunities



# Waikiki Beach

## Potential RSM Project

- **Coordinate efforts to maintain the beaches**
  - Federal, State, City and County of Honolulu, private property owners
- **Potential activities based on funding**
  - Geophysical offshore sand source investigations
  - Sediment budget refinement
  - Ongoing RSM workshops
  - Facilitate Fort DeRussy sand backpassing



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# Waikiki Beach

## Potential RSM Project

### Facilitate Fort DeRussy Sand Backpassing



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# Pearl Harbor

## Potential RSM Project

- Ongoing Erosion at the Iroquois Point Housing area
- Investigate opportunities for sand backpassing
- Investigate Beneficial Use of Dredge Material



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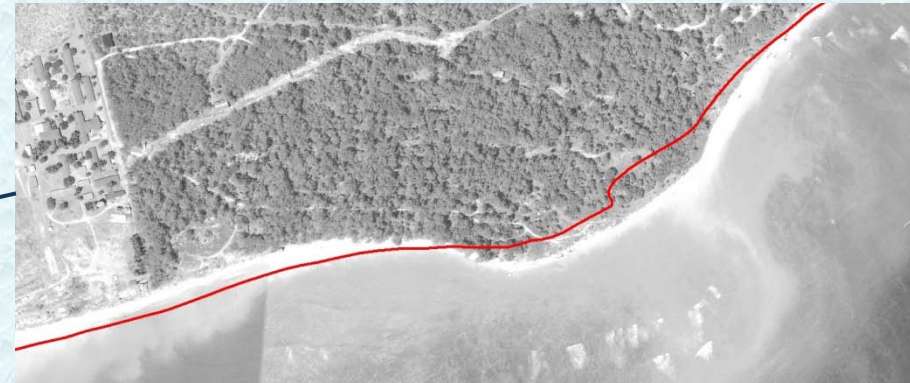
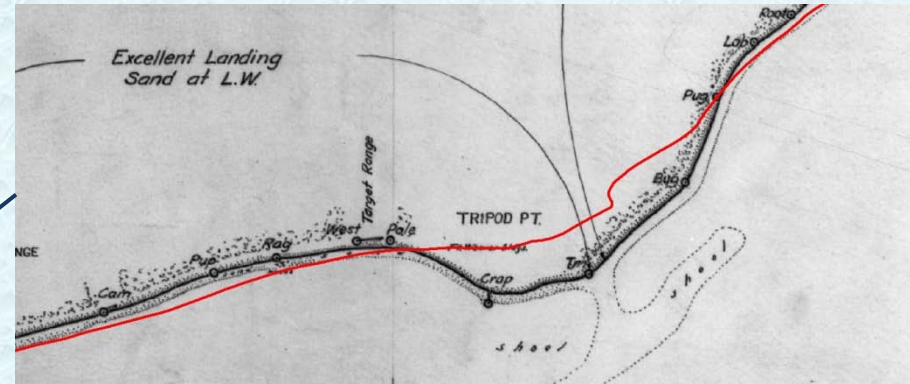
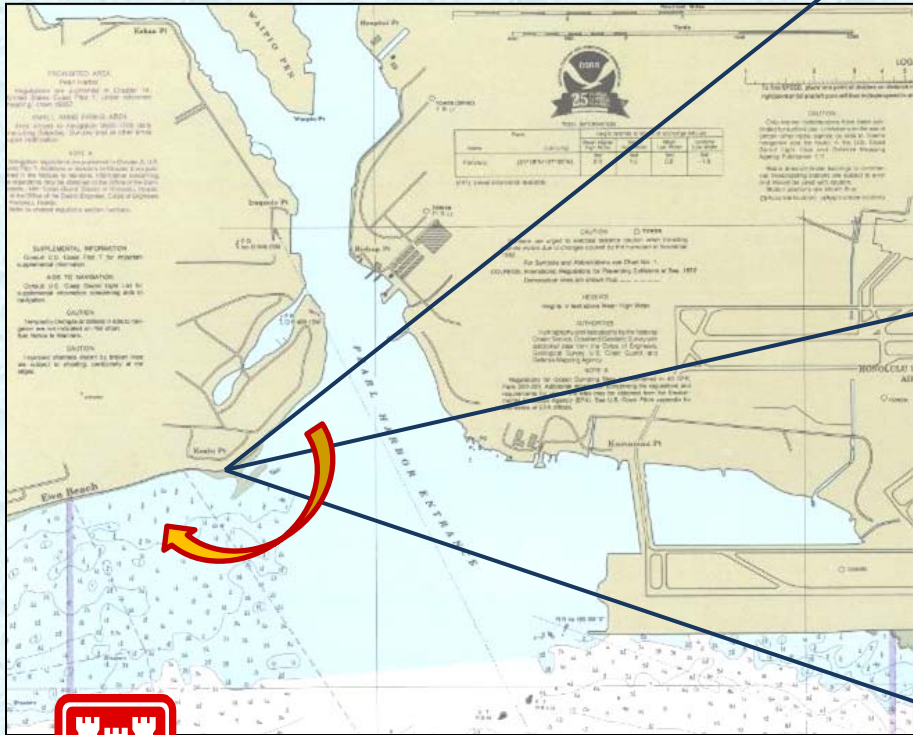
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# Pearl Harbor Potential RSM Project

- Keahi Point:  
1925, 1950, 2005

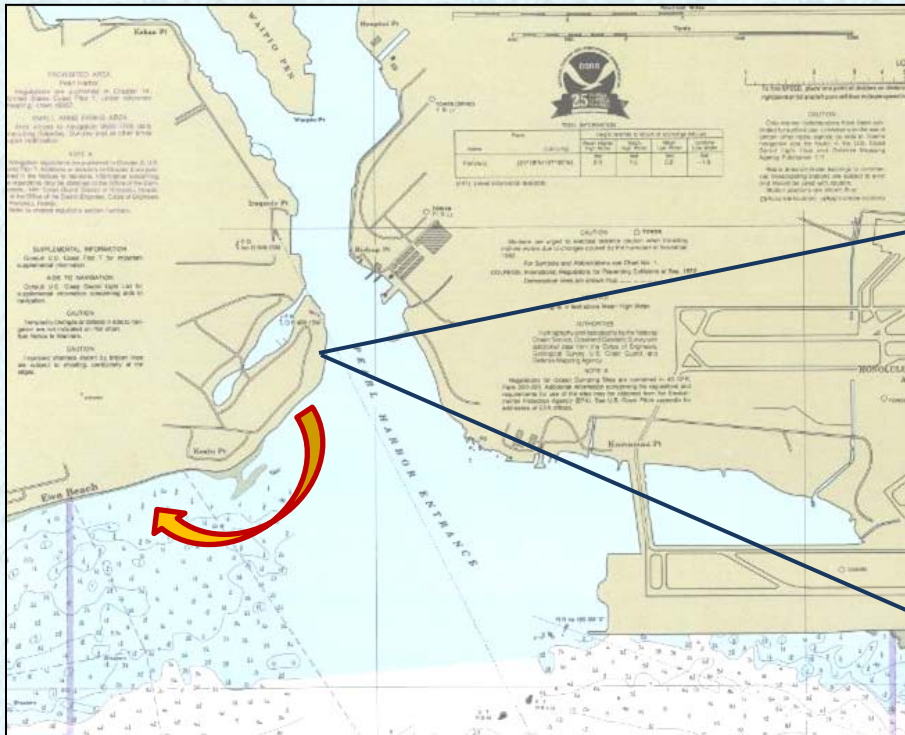


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# Pearl Harbor Potential RSM Project

- Iroquois Lagoon: 1950, 2005



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# Potential RSM Projects - Summary

- **Honolulu Harbor**

- Limited RSM Opportunities

- **Waikiki Beach**

- Seek offshore sand source
- Investigate and facilitate Fort DeRussy sand backpassing
- Coordinate ongoing improvements

- **Pearl Harbor**

- Investigate and facilitate Keahi Point sand backpassing
- Investigate Beneficial Use of Dredge Material



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