

# DOER FY13 IPR

**Internal berms for decreasing wave energy, increasing sediment accretion, and accelerating channel formation in San Francisco Bay restoration projects: Are circular or linear berms more effective? Elizabeth Murray**

- **Problem**

- 90% of SF Bay tidal marshes converted to diked baylands over last 150 years
- Habitat losses and sea level rise are driving new emphasis on restoration
- Placement of all fill necessary to reach elevation prohibitively expensive
- Two methods for increasing accretion are employed in area, but relative effectiveness unknown

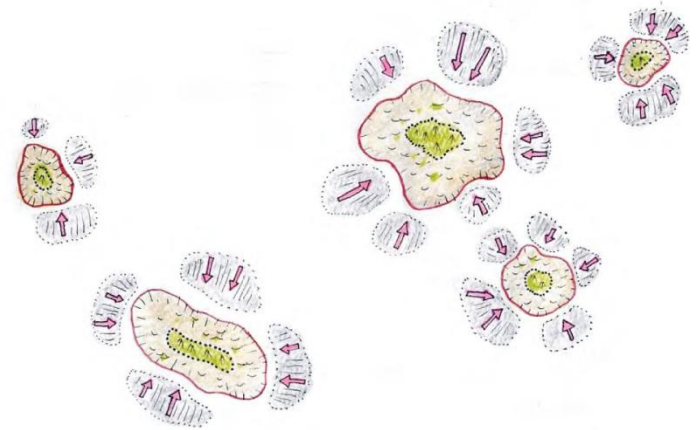
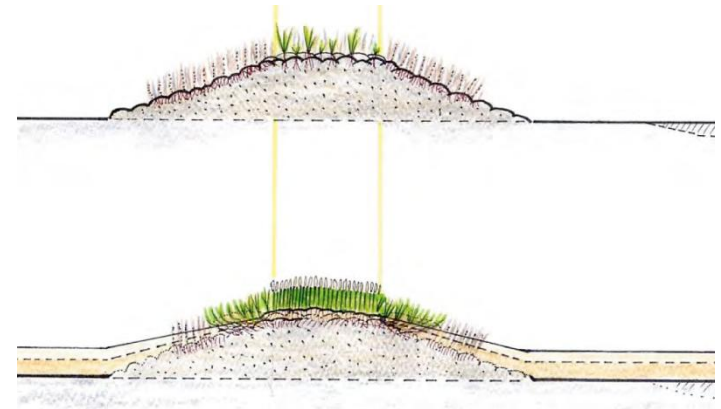


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## Are circular or linear berms more effective?

Elizabeth Murray

- Objective
  - Monitor two restoration sites being constructed in the north SF Bay – one using linear berms and the other using round mounds
  - Test the efficacy of the two techniques to decrease wave fetch and increase sediment accretion to marsh surface
  - Make restoration practice recommendations based on results



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## Are circular or linear berms more effective?

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- Project Funding by Year
  - FY13: 165K
  - FY14: 135K
  - FY15: 150K
- Major Project Deliverables
  - Interim Product: Document Literature Review by Q2FY14
  - Interim Product: Project Design Documentation by Q4FY14
  - Interim Product: Data Set by Q2FY15
  - Tech Report Draft by Q3FY15
  - Peer-Reviewed Tech Report by Q4FY15



### • Benefits to Navigation Program

- Scientific basis for more cost effective restoration
- Documented beneficial use of dredged material

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## Are circular or linear berms more effective?

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- FY13 Products (categories)
  - New Start – No products for FY 13

