Our Coast–Our Future
Planning for Sea Level Rise and Storms in the San Francisco Bay Area

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Beyond Bathtub Workshop
December 19, 2012
3 Keys to Success

1. Pre-existing venue for information-sharing and idea incubation meant we could be nimble for funding

2. Sustained focus on end-user context and real-world situations

3. Being explicit about the limits of modeling and technology.
Key 1: BAECCC
From Idea to Proposal

- GFNMS needed downscaled SLR and storm scenario info for SLR planning
- USGS finishing CoSMoS testing in SoCal
- NOAA CPO funding announcement
- Our Coast, Our Future project conceived
- 2 years later, project expanded to Bay through NERRS
What got funded...

Goal
Create science-based, DST to help understand, visualize, and anticipate coastal climate change impacts to Bay Area communities and ecosystems.

Objectives
- Model vulnerabilities to SLR & storm hazards
- Assess user info needs
- Map vulnerabilities at appropriate scale for management action
- Develop web-based user interface to interpret data in context of management decisions

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Team Leads and Other Partners

Team Leads

Barnard, USGS
- 2 m res seamless DEM; storm and SLR scenarios using CoSMoS

Ballard/Fitzgibbon, PRBO
- Online decision support tools

Higgason, GFNMS
- Project management, stakeholder participation

Pasaros, Corvai
- Collaborative process

Other Partners

- Coastal Services Center
- SF Bay NERR
- National Park Service
- EBM Tools Network
Timing

**Outer Coast**
- **2010**: Project begins
- **2011**: Scoping workshops
- **2012**: Scenarios complete, DEM available & focus group
- **2013**: Focus groups, Outer coast final report
- **2014**: Project expands

**Bay**
- **2010**: Project expands
- **2011**: Convene committee, Bay kick off meeting
- **2012**: DEM available
- **2013**: Scenarios complete
- **2014**: Technical assistance, Final report & tool training
Key 2: End User Feedback

- Scoping workshops
- Presentations at regional and local meetings, workshops
- Advisory committee
- Focus group testing
End User Context

Existing Workflows

- Regulatory requirements (CEQA, NEPA, etc)
- Species protection plans
- Habitat restoration plans
- Municipal plans (General Plans, Climate Action Plans, Local Coastal Plans)
- Infrastructure maintenance plans (levees, roads, etc)
Benefits to Users

- Increase buy in from stakeholders through increased transparency
- Use best available science for decisions
- Complete assessments more quickly
- Bring planning process “in house”
- Realize cost savings
Key 3: Defining Tool Space

Assessment
- Conduct vulnerability study
- Complete risk assessment

Planning
- Develop adaptation plan
- Review and adopt plan

Implementation
- Implement plan
- Monitor, review, and update plan

Modified from Russell & Griggs, 2012
Barriers to Adaptation Planning

- No policy framework
- No political support
- No popular support
- Not enough science
- No funding for analysis
- No funding to implement
- Not enough information about impacts
- Not enough information about response strategies
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3 Keys Redux

1. Existing structure for manager – scientist interactions allow us to be nimble to pursue funding opportunities

2. Focused on developing a product that fits within the existing workflow and processes of our users

3. Clear understanding of our place in the adaptation process, and being explicit and transparent about what science can and can’t answer
Thank you!

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