Update Report

Period 2/1/2013 - 1/31/2014

Project R/COCC/SS-3 - Successful Adaptation Identifying Effective Process and Outcome Characteristics and Practice-Relevant Metrics

STUDENTS SUPPORTED

No Students Reported This Period

CONFERENCES / PRESENTATIONS

Moser SC (2014) Panel discussion on lessons learned and future directions of the National Climate Assessment; included selected project findings during panel presentation on evaluating adaptation effectiveness. Panel discussion at the National Center for Science Education (NCSE) Annual Conference – Building Climate Solutions, Washington, D.C., January 29, 2014., public/profession presentation, 30 attendees, 2014-01-29 Moser SC. Successful adaptation to climate change linking science and policy in a rapidly

Moser SC. Successful adaptation to climate change linking science and policy in a rapidly changing world. Webinar presentation for the American Society for Adaptation Professionals (ASAP),, public/profession presentation, 80 attendees, 2014-01-16

Moser SC (2013) Successful adaptation to climate change ideals and practical challenges. Invited talk at the Sustainability Solutions Series, Arizona State University, Phoenix, AZ, October 31, 2013., public/profession presentation, 60 attendees, 2013-10-31

Moser SC. Successful adaptation to climate change. Webinar presentation for the California Climate Action Team, October 24, 2013., public/profession presentation, 50 attendees, 2013-10-24

Snover AK (2013) Successful adaptation to coastal climate change insights from science and practice. Oral presentation at the Fourth Annual Pacific Northwest Climate Science Conference, Portland, OR, September 5, 2013., public/profession presentation, 300 attendees, 2013-09-05

Moser SC (2013) Successful adaptation how would we know? Presentation at the Transatlantic Dialog on Adaptation, Hamburg, Germany, April 18, 2013., public/profession presentation, 35 attendees, 2013-04-18

Snover AK (2013) Successful adaptation to climate change in the coastal context of Washington State. Oral presentation at the Inaugural National Adaptation Forum, Denver, CO, April 4, 2013., public/profession presentation, 60 attendees, 2013-04-04 Adams S (2013) Successful adaptation to coastal climate change Oregon's context and practitioners' perspectives. Oral presentation at the Inaugural National Adaptation Forum, Denver, CO, April 4, 2013., public/profession presentation, 60 attendees, 2013-04-04 Moser SC (2013) Framing adaptation success scientific perspectives. Oral presentation at the Inaugural National Adaptation Forum, Denver, CO, April 4, 2013., public/profession presentation, 60 attendees, 2013-04-04

Moser SC (2013) Perspectives and experiences with successful adaptation from coastal California. Oral presentation at the Inaugural National Adaptation Forum, Denver, CO, April 4, 2013., public/profession presentation, 60 attendees, 2013-04-04

Moser SC. Our once and future coast rising to the challenge of successfully adapting to

climate change. Presentation at the University of New Hampshire, Durham, NH, March 26, 2013., public/profession presentation, 50 attendees, 2013-03-26

Moser SC. Threats, vulnerabilities, tough choices.... oh my! Research and action for adaptation success. Presentation at the Human Dimensions and Ocean Health in a Changing Climate Symposium, University of Southern California, Los Angeles, CA, March 12, 2013., public/profession presentation, 100 attendees, 2013-03-12

Moser SC (2013) Defining adaptation success views from science and coastal management. Oral presentations at the American Association for the Advancement of Science Annual Meeting, Boston, Massachusetts, February 16, 2013, public/profession presentation, 25 attendees, 2013-02-16

Capstone Workshop Successful Adaptation to Climate Change in the Coastal Context. The project's capstone workshop brought together a selected subset of scientists and practitioners from the project's first four workshops, along with some key individuals who were unable to attend earlier workshops, to build bridges between what were relatively abstract or generic desirable principles and outcomes developed in the science workshop and the more practice-oriented frameworks and measures of success required or desirable for decision-making developed in the three practitioner workshops., SG-sponsored, 27 attendees, 2013-07-23 Successful Adaptation in the Coastal Sector Oregon Practitioners Workshop. Identical in purpose and design with the March Washington practitioners workshop reported here., SG-sponsored, 14 attendees, 2013-03-22

Successful Adaptation in the Coastal Sector Washington Practitioners Workshop. As part of the project, we hosted a by-invitation-only workshop for 25 federal, state, tribal, and local climate adaptation practitioners and coastal management professionals in Washington State. The workshop provided an opportunity to explore the question of what constitutes successful adaptation through a series of presentations, discussions, and activities designed to stimulate conversation among workshop participants., SG-sponsored, 25 attendees, 2013-03-20

ADDITIONAL METRICS

| K-12 Students Reached not relevant to project | 0 | Acres of degraded ecosystems restored as a result of Sea Grant activities not relevant to project Resource Managers who use Ecosystem- | 0 |
|------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------|---|
| Curricula Developed not relevant to project | 0 | Based Approaches to Management | 0 |
| | | HACCP - Number of people with new | |
| Volunteer Hours The project used eight volunteers (7graduate students + 1 profession staff member) for three workshops held during | 120 | 1 1 | 0 |

the reporting period. The volunteers took notes for the Washington (3 Univ. of WA volunteers), Oregon (2 Oregon State Univ. volunteers), and capstone (3 Stanford Univ. volunteers) workshops.

Cumulative Clean

Marina Program - certifications

PATENTS AND ECONOMIC BENEFITS

| Descriptio n | | Patent s | Economi c Benefit (\$) | Businesse s Created | Businesse s Retained | Jobs Create d | Jobs Retaine d |
|--------------|-------------------------------------|----------|------------------------|------------------------|-------------------------|---------------------|----------------------|
| None | Actual (2/1/2013 - 1/31/2014) | 0 | 0 | 0 | 0 | 0 | 0 |
| | Anticipate d (2/1/2014 - 1/31/2015) | 0 | 0 | 0 | 0 | 0 | 0 |

TOOLS, TECH, AND INFORMATION SERVICES

No Tools, Tech, or Information Services Reported This Period

HAZARD RESILIENCE IN COASTAL COMMUNITIES

| HAZAND N | ESILIENCE IN C | COMMUNITIE | 10 | |
|--------------|----------------|-----------------------|-------------|-------------------|
| | | | Number | |
| | | | of | |
| | | | resiliency | Was community |
| | | | trainings / | hazard resiliency |
| | | | technical | improved (e.g., |
| Name of | | | assistance | via changes in |
| coastal | | | services | zoning |
| community | County | | provided | ordinances)? |
| No trainings | | Actual (2/1/2013 - | 0 | Yes |
| provided as | | 1/31/2014) | | |
| part of this | | Anticipated (2/1/2014 | 0 | |
| project. | | - 1/31/2015) | | |

ADDITIONAL MEASURES

| Safe and sustainable seafood | |
|--------------------------------------------|----------------------------------------|
| Number of stakeholders modifying practices | Number of fishers using new techniques |

Actual (2/1/2013 - 1/31/2014) 0
Anticipated (2/1/2014 - 1/31/2015) 0
Not relevant to this project
Sustainable Coastal Development
Actual (2/1/2013 - 1/31/2014) 0
Anticipated (2/1/2014 - 1/31/2015) 0
Not directly relevant to this project (project workshops may ultimately inform coastal decision making in this way but that is not an objective of this project).

Actual (2/1/2013 - 1/31/2014) 0 Anticipated (2/1/2014 - 1/31/2015) 0 Not relevant to this project Coastal Ecosystems Actual (2/1/2013 - 1/31/2014) 0 Anticipated (2/1/2014 - 1/31/2015) 0

Not relevant to this project

PARTNERS

Partner Name Center for Ocean Solutions

Partner Name Institute for Sustainable Communities

Partner Name Oregon Sea Grant

Partner Name Oregon State University (OSU)

Partner Name Stanford University

Partner Name University of Southern California Sea Grant (USC)

IMPACTS AND ACCOMPLISHMENTS

Title Washington Sea Grant research works with leading West Coast climate change practitioners to define successful adaptation

Type accomplishment

Description Relevance Coastal areas are likely to be disproportionately affected by climate change as temperatures and sea level rise, precipitation patterns change, and storms become increasingly severe. As communities try to prepare for a changing climate, resource managers and planners ask What are the goals of adaptation? What would successful adaptation to climate change look like? How do we know if we're making progress? Response With support from the West Coast Sea Grant programs, this project brings together leading scientists and adaptation practitioners to develop insight into what successful adaptation to climate change means in the various physical, ecological, socioeconomic, institutional and cultural contexts that characterize coastal communities. The project will also suggest ways that communities can measure their progress toward adaptation, both in the near term and as the climate continues to change. Researchers have synthesized current thinking on adaptation success from the published literature (peerreviewed scientific journals and agency reports and guidebooks) and led workshops with scientists and practitioners, examining successful adaptation principles, outcomes, and processes. Results The workshops successfully connected West Coast coastal practitioners engaged in adaptation and began a conversation on what constitutes success that will

continue through the project.

Recap West Coast Sea Grant-funded researchers entrain leading scientists and West Coast adaptation practitioners in developing guidelines and potential metrics for measuring successful adaptation to climate change in coastal communities.

Comments Primary Focus Area COCC (SCD) Secondary Focus Area COCC (HRCC) State Goals Improve capacity to manage ocean and coastal ecosystems and resources for societal benefit under changing climatic and demographic conditions (SCD, Efficiency). Improve understanding of coastal hazards and environmental change and develop tools and approaches for observation, prediction, planning and adaptation (HRCC, Capacity).

Related Partners Center for Ocean Solutions, Oregon Sea Grant, Institute for Sustainable Communities, Oregon State University (OSU), Stanford University,

PUBLICATIONS

Title We are developing a proposed special issue of Global Environmental Change on successful adaptation. The seven articles in this special issue will present the results of our Project in a comprehensive way to an audience of scholars with expertise on and interest in the topic. The articles are currently in preparation by Project team members.

Type Paper, Abstract, or Power Point (not peer-reviewed; see RR for peer-reviewed papers) presented at a conference, symposia, workho Publication Year 2015 Uploaded File none URL none

Abstract n/a

Citation n/a

Copyright Restrictions + Other Notes

Journal Title none

OTHER DOCUMENTS

No Documents Reported This Period

LEVERAGED FUNDS

No Leveraged Funds Reported This Period

UPDATE NARRATIVE

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UPDATE (PROGRESS) REPORT NARRATIVE

Project: R/COCC/SS-3 - Successful Adaptation: Identifying Effective Process and Outcome Characteristics and Practice-Relevant Metrics

Year 2 project milestones were mostly met, but we decided to request a no cost extension to allow the team more time to analyze our data and publish our findings in a special issue of *Global Environmental Change*. The original end date was January 31, 2014, and the new end date is December 31, 2014.

Tri-state project team meetings:

During the performance period, the project team met via phone at least monthly and in-person four times: for project meetings in conjunction with each of the project workshops (Seattle and Newport in March 2013 and Stanford in July 2013) and in Portland in January 2014 to discuss plans for a special issue of Global Environmental Change (see below).

Washington practitioner workshop and interviews:

Building on the first practitioner workshop held in California in January 2013, we ran a similar workshop in Washington State on March 20, 2013 in Seattle involving 25 federal, state, tribal, and local climate adaptation practitioners and coastal management professionals. As with the California workshop, the workshop was carried out with an objective of grounding abstract conceptualizations of adaptation success in a rich and detailed discussion of effective adaptation processes, pathways and outcomes in specific adaptation contexts. The workshop provided a means for participants to learn from each other about ongoing adaptation efforts across the state. Through a mixture of activities – including presentations, large- and small-group discussions, world café rotations – participants examined what has worked in adaptation in Washington to-date and what can be learned from these and other examples, including key elements of success (in terms of both process and outcomes), horizontal transferability, and need for vertical integration across scales of governance. The workshop was preceded by short phone interviews with each participant to learn about existing adaptation efforts, successes and challenges, as well as participant's existing conceptualization of adaptation success, in order to successfully frame the workshop to meet participants' interests, needs, and experience. Short videos of individual participants commenting on their perceptions of adaptation success were taken and will be used in developing outreach materials for disseminating the output of the project. Participating organizations included the cities of Olympia and Seattle; Port of Bellingham; Grays, Snohomish, King, and Clallam Counties; Washington Departments of Ecology, Fish and Wildlife, Natural Resources, and Transportation; Washington State Office of the Insurance Commissioner; Washington State Emergency Management Division; Puget Sound Partnership; Quinault Indian Nation; Swinomish Indian Tribal Community; FEMA; North Pacific Landscape Conservation Cooperative; and The Nature Conservancy.

Oregon practitioner workshop and interviews:

The Oregon practitioner workshop, held in Newport March 21-22, 2013, was designed and carried out with the same objectives as the previous ones in California (January 2013) and Washington (March 2013) (see objectives above). The fourteen invited participants included representatives from the South Slough NERR, Oregon Partnership for Disaster Resilience, Oregon Department of Transportation, OSU Extension, Oregon Climate Change Research Institute, Oregon Shores Conservation Coalition, Tillamook

County Board of Commissioners, Oregon Department of Land Conservation and Development, EcoAdapt, Ecola Architects, The Nature Conservancy, and Clatsop Country Planning Department.

Capstone workshop with scientists and practitioners:

We led a capstone workshop at Stanford on July 22-23, 2013 that brought together a selected subset of scientists and practitioners from the first four workshops, along with some key individuals who were unable to attend earlier workshops, to build bridges between what were relatively abstract or generic desirable principles and outcomes developed in the science workshop and the more practice-oriented frameworks and measures of success required or desirable for decision-making developed in the three practitioner workshops. The 27 participants (along with the project team) enthusiastically engaged in two days of diverse and highly interactive activities. They included the Directors of California and Washington Sea Grant, the Assistant Director of Oregon Sea Grant, and representatives from the City of Seattle Office of Sustainability and Environment; Snohomish County (WA) Department of Emergency Management; Clallam County (WA) and Tillamook County (OR) Boards of Commissioners; Marin County (CA) Planning Department: Oregon Department of Transportation: Oregon Department of Land Conservation and Development; Oregon Partnership for Disaster Resilience; California Coastal Commission; California Indian Water Commission; Washington Department of Fish and Wildlife; Washington Department of Ecology; Puget Sound Partnership; Environmental Science Associates; World Resources Institute; Inter-Tribal Sinkyone Wilderness Council; the Cahto Tribe of Laytonville (CA); Center for Ocean Solutions, Stanford University; San Diego Foundation; Local Government Commission; Joint Policy Committee; FEMA; NOAA Coastal Services Center; and the Department of Political Science, University of Colorado. A keynote address was delivered via video by Debra Roberts, founder and head of the Environmental Planning and Climate Protection Department of eThekwini Municipality, Durban, South Africa. As in each of the preceding workshops, short videos of individual participants commenting on their perceptions of adaptation success were taken that will be used in developing outreach materials for disseminating the output of the project.

P/Vodcasts and project website:

To bring the findings and discussion to a broader community of managers and practitioners, project syntheses are being produced for regional and national Sea Grant, state, and NOAA publications (Sea Grant report, e-Currents, Coastal Services Magazine, Coastal Connections Newsletter, CA Coast & Ocean), a variety of listservs such as CalCoast and the Climate Impacts Group's CIGnal, the RISA network distribution list, other state and national professional venues, and far-reaching websites such as climate.gov, CAKE, and/or climateadapatation.net. A website domain name was purchased by the project team (www.successfuladaptation.org) on which all outputs from the project will be posted (papers, presentations, summaries, case studies, and edited videos of project participants speaking to the issue of adaptation success. Communication and outreach specialist Joe Cone (OR Sea Grant), who is an expert in using a variety of media (including Communicating Climate Change podcasts, blogs.oregonstate.edu/communicatingclimatechange), is working with us to develop the videos. Target audiences are local and state-level coastal managers and practitioners, their stakeholders, and the interested public.

Papers in Prep

We have are developing a proposed special issue of Global Environmental Change on successful

adaptation. The seven articles in this special issue will present the results of our Project in a comprehensive way to an audience of scholars with expertise on and interest in the topic. The articles are currently in preparation by Project team members, and include the following:

Successful Adaptation: Introduction to Special Issue (with contributions from practitioners from the three states)

(in prep for submission to Global Environmental Change)

Successful Adaptation: Literature Review and Conceptual Framework (in prep for submission to *Global Environmental Change*)

Successful Adaptation: Perspectives from Scientists (in prep for submission to *Global Environmental Change*)

Successful Adaptation in Oregon (in prep for submission to *Global Environmental Change*)

Successful Adaptation in California (in prep for submission to *Global Environmental Change*)

Successful Adaptation in Washington (in prep for submission to *Global Environmental Change*)

Successful Adaptation on the West Coast and Beyond: Synthesis (in prep for submission to *Global Environmental Change*)