

Survey of Coastal States Planning Strategies and Resource Needs for Sea Level Rise/Lake Level Change

CSO Climate Change Work Group

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Survey Background

- **Survey was conducted by the CSO Climate Change Workgroup.**
- **The purpose of this survey was to obtain up to date information from the coastal states, commonwealths, islands and territories on:**
 - ✓ **Status of climate change adaptation planning**
 - ✓ **Priority information needs**
 - ✓ **Anticipated resource needs**
- **Focuses on sea level rise/lake level change adaptation.**
- **The results of this survey will be used to help inform members of congress, federal agencies, and others about the status, anticipated costs, and needs of the coastal states, commonwealths, and territories who will have to address the impacts of climate change at the local and community level.**



Survey Design and Participation

- **29 close ended survey questions consisting of multiple choice, categorical, and Likert scale questions.**
- **Additional open ended option for comments on each question to allow added clarification, caveats, and other information to be added by respondents.**
- **Sent to 34 states, commonwealths, territories, that participate in CSO.**
- **27 States (79%) fully participated, and 30 (88%) completed at least a significant portion of the survey.**
- **Some states had more than one survey submission, which were then either asked to consolidate and resubmit as a “State” response, or had their responses averaged.**



Survey Responses

Does your state, commonwealth or territory, currently have an adaptation plan for sea-level rise or lake level change?

- **84% of the participating states and territories DO NOT HAVE a SLR plan completed, but 80% plan to develop one.**
- **Only three states have currently adopted or are beginning to formalize a “SLR plan”¹.**
- **Comments from States indicate very minimal federal involvement in the SLR Planning at the local level.**

¹ Note that “SLR Plan” was assumed to be done if respondent said it existed. There is no standard criteria or detailed description of content, so it may or may not represent a comprehensive statewide plan.



Staffing Resource, Duration & Costs

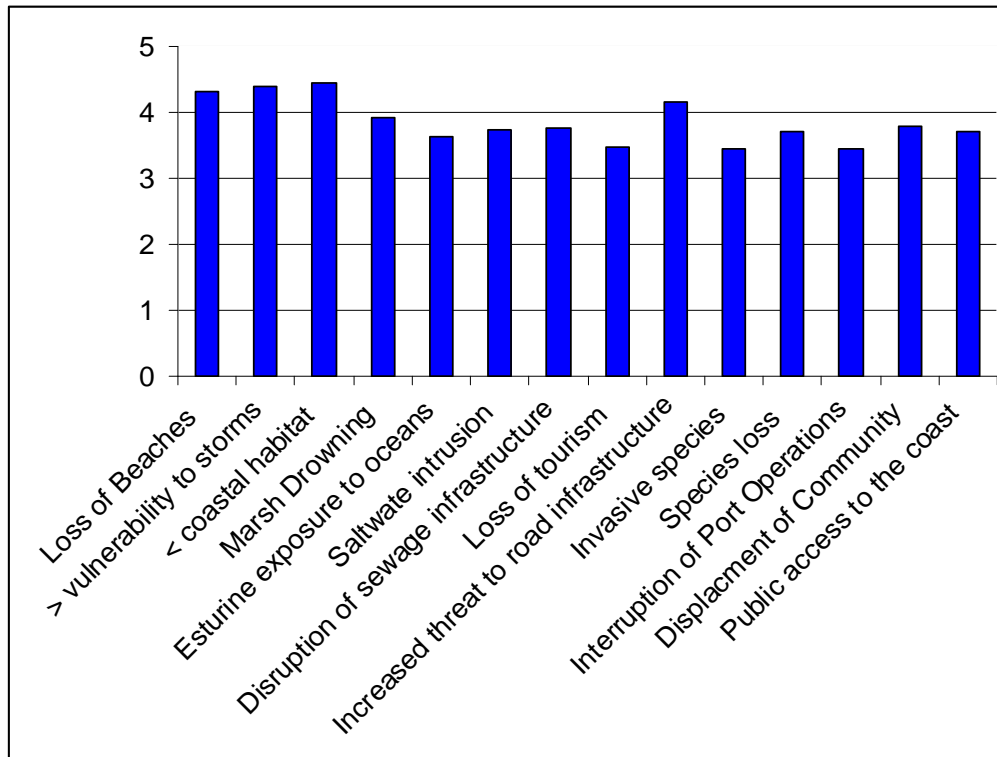
- **80% of coastal States that participated believe that 1 to 2 years or longer are required to develop a SLR Adaptation Plan.**
- **87% expect a need of one or more FTEs, and 61% expect a need of 2 or more FTEs.**
- **63% of the States feel that data collection and analysis for use in a SLR would come at a cost greater than \$400,000/year**

Cost	States	Percent
Less than \$ 50K	2	10.53%
\$ 50-100K	2	10.53%
\$ 100 - 200K	0	0.00%
\$ 200 - 300K	3	15.79%
More than 400K	12	63.16%



Ranking of Anticipated SLR Threats

- *No individual hot issue, all important at current technical and scientific knowledge levels of States.*
- On 1-5 scale, averages in high 3's and mid 4's. States commented on the difficulty in ranking these due to a **LACK OF VULNERABILITY STUDIES.**



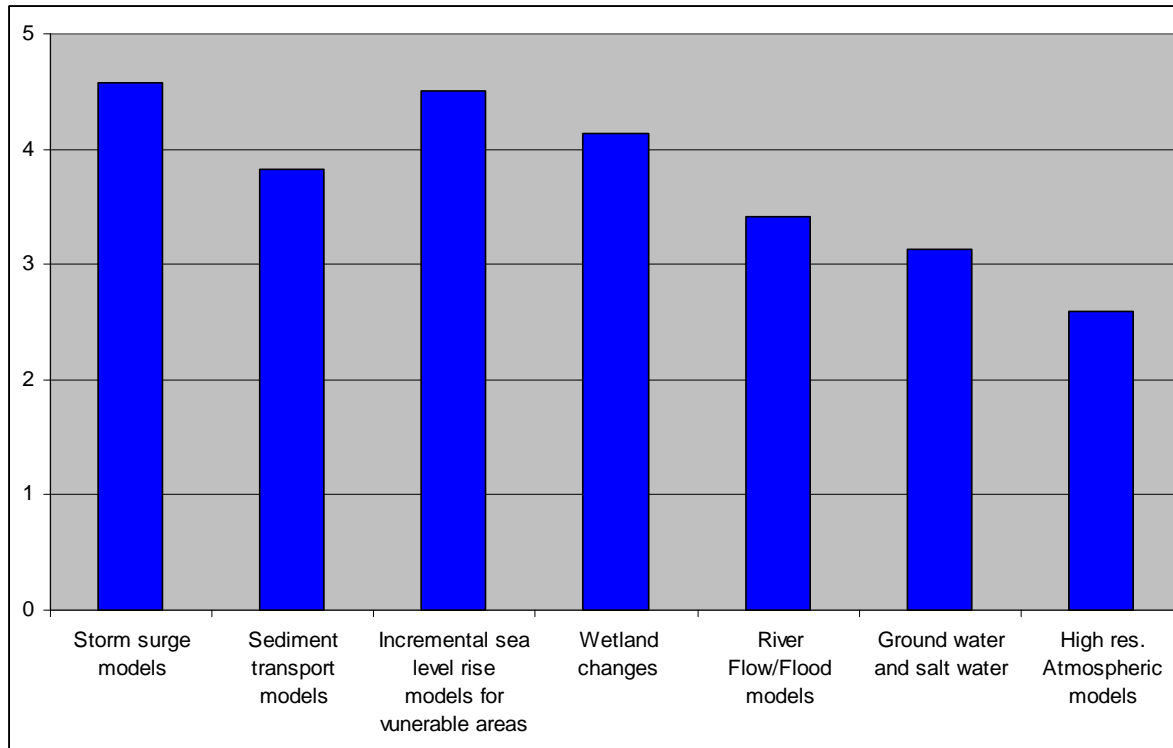
Importance of Elevation Data

- **Participating States and Territories responded that the most important data type (ranked 4.73 out of 5) that would aid in the development of a SLR plan, was detailed topographic data, or LiDAR.**
- **Shallow water bathymetry was also very important (ranked 3.86 out of 5).**
- **Comments focused on importance and lack of availability.**
- **43% feel that the cost of this elevation data would range from \$1 M to \$3 M plus.**
- **29% feel they do not know what it will cost.**



Importance of Models for SLR Planning

- **Storm Surge, Incremental SLR/Vulnerability, Wetland Changes the most important.**
- **61% responded “Don’t Know”** when asked to estimate cost of modeling.



Importance of Socioeconomic Data

- **Most agree that vulnerable populations and the possible economic loss (revenue) due to sea level rise are very important data sets for SLR Planning.**
- **Comments surround the idea that socioeconomic data is important to encourage State and Local government to become engaged in a SLR adaptation plan.**
- **67% do not know how much it would cost to acquire socioeconomic data.**



Implementation Costs?

- **48% of the participating States do not know how much it will cost to implement a SLR plan for each of the next five years.**
- **Even some states with a plan, could not estimate implementation costs.**

Cost	States	Percent
Less than 100K	1	4.00%
\$ 100-250K	1	4.00%
\$ 250-500K	1	4.00%
\$ 500-1 million	2	8.00%
\$ 1-2 million	2	8.00%
\$ 2-5 million	2	8.00%
> \$ 5 million	4	16.00%
Don't Know	12	48.00%

Key Results of Survey

- **80% of States responding are planning to develop a SLR plan in the near future, 12% already have a plan, and only 8% do not intend to develop a plan at this time.**
- **A key prerequisite to this planning is high resolution elevation data and modeling.**
- **States still have large gaps in their knowledge of costs for SLR related data, planning, and implementation.**



Key Results of Survey (Cont.)

- **Gap in capacity of State programs can be alleviated with Federal Financial and Technical Assistance if we can coordinate our efforts.**
- **Based on survey comments, Federal agencies appear to be only minor players in State SLR planning efforts.**
- **Prevalence of “Don’t Know” response throughout survey indicates that we must plan for both those who can articulate their needs and those who have limited capacity/experience.**

