



A California Joint Powers Agency

Member Agencies

Fred Shaw
City of Carpinteria

Kyle Richards
City of Goleta

Carmen Ramirez
City of Oxnard

Steven Gama
City of Port Hueneme

Christy Weir, Vice-Chair
City of San Buenaventura

Eric Friedman
City of Santa Barbara

Gregg Hart, Chair
Das Williams
County of Santa Barbara

Steve Bennett
John Zaragoza
County of Ventura

Executive Director
Marc Beyeler

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Santa Barbara, CA 93101

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501 Poli St.
P.O. Box 99
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Email:
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Website:
<http://www.beacon.ca.gov>

NOTICE MEETING

**BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND
NOURISHMENT (BEACON)**

November 20, 2020

NOTICE IS HEREBY GIVEN of a **MEETING** of the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON). The date, time, and place of the meeting shall be as follows:

DATE: Friday, November 20, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE (see details below)

The agenda of business to be conducted is below.

Gregg Hart, Chairperson

BEACON

Date: November 20, 2020

Per guidance of California Department of Public Health and the California Governor's Stay at Home Executive Order N-33-20 issued on March 19, 2020 to protect the health and well-being of all Californians and to establish consistency across the state in order to slow the spread of COVID-19, BEACON will no longer provide in-person participation.

The following alternative methods of participation are available to the public:

Note: ZOOM details to be updated for November Meeting

1. You may observe the live meeting of the Board of Directors via Zoom Meeting; <https://us02web.zoom.us/j/89708117551>

Meeting ID: 897 0811 7551
For audio – dial:16699006833
Code: 89708117551

2. You may call in to listen live to the Board of Directors meeting by dialing 16699006833 with code 89708117551

3. If you wish to make a general public comment or to comment on a specific agenda, the following methods are available:

a. Distribution to the Board. Submit comments via email to Staff@Beacon.ca.gov prior to 5:00 p.m. on November 19, 2020, or through mail to BEACON at 501 Poli Street, Ventura, Ca 93001 to be received no later than 5:00 p.m. on Thursday,



November 19, 2020. Your comment will be placed into the record and distributed appropriately.

- b. Read into the record at the meeting. Submit comments of 250 words, or less, via email to Staff@Beacon.ca.gov prior to 5:00 p.m. on Thursday, November 19, 2020 prior to the Board meeting. Please indicate if you would like to make a general public comment, a comment on a specific agenda item, or both. Please state in your email, or mail, if you would like the comment "read into the record." Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations. Comments timely received on an agenda item will be placed into the record and distributed accordingly.**

- c. By Zoom. Log onto Zoom as described above. The meeting will be controlled by the BEACON Chair, Mr. Gregg Hart. If you wish to make a comment during the meeting, please raise your hand using the Zoom instructions on your computer. By using the typed messaging capability of Zoom you should also indicate to the Chair which Agenda Item you wish to speak on or if you wish to make a general comment that is not specific to an Agenda Item. BEACON Staff will make every effort to call you during the indicated item so that you may comment.**

In compliance with the Americans with Disabilities Act, individuals needing special accommodations to participate in the meeting should contact BEACON at least three working days prior to the meeting.

MEETING AGENDA

- 1. Administrative Items**
 - A. Call to Order, Roll Call and Introductions – Gregg Hart**
 - B. Approval of Agenda and Filing of Certificate of Agenda Posting**
 - C. Consideration and Approval of Minutes of the BEACON Meetings held on September 18 2020.**

 - 2. Public Comment and Other Matters not on the Agenda**

 - 3. Presentation –**
 - A. Ventura County Presentation on Sea-Level Rise Adaptation Plan**
 - Recommended Actions:**
 - i. Receive a presentation from the Ventura County on the County’s Sea-Level Rise Adaptation Plan.
-
- 4. Projects – Projects Update**
 - A. Mondo’s Cove Beach Access Stairway**
 - Recommended Actions:**
 - i. Receive a presentation on status of the Mondo’s Cove Beach Access Stairway Project.



5. BEACON Organization and Program

A. Board Member Reports

Directors are invited to provide reports and updates on items of interest in their County or City.

B1. BEACON Science Advisory Committee (SAC)

Recommended Actions:

- i. Confirm appointment of Co-Chairs and Members of the Science Advisory Committee.

B2. BEACON Strategic Planning Goals and Objectives

Recommended Actions:

- i. Receive, review, and provide input, as needed, on the Draft Strategic Planning Goals and Objectives 2020-2025 (Exhibit 1); and
- ii. Direct staff to return with Final Strategic Planning Goals and Objectives; and
- iii. The actions described herein are not a “project” under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378.

B3. BEACON Legislative Program Priorities

Recommended Actions:

- i. Receive a Staff Report on BEACON Legislative Program Priorities (Exhibit 1) and provide input, as needed; and
- ii. Direct staff to return with legislative action items for 2021.

B4. BEACON Board Meeting Schedule for 2021

Recommended Actions:

- i. Review and Adopt a Board Meeting Schedule for 2021.

C1. Auditor-Controller Budget Actions and Financial Reports

Recommended Actions:

- i. Receive and file the Fiscal Year 2020-2021 Unadjusted Budget-to-Actual report for the year-to-date period ending October 31, 2020 (Exhibit I).
- ii. Authorize the Auditor-Controller’s Office to make the budgetary adjustment as follows (requires 6/10th vote):

INCREASE	Other Professional and Specialized Services	\$ 5,000
DECREASE	Contingency	\$ 5,000



6. Executive Director's Report and Communications

The Executive Director will report on activities and achievements of BEACON, upcoming events of interest to the Board of Directors and the public, and general status of BEACON major projects.

Reports on activities and achievements:

Status of Funding and Grants

NFWF Grant for CRSMP and SLR Adaptation

WCB Grant for Mondo's Cove Beach Construction Documents and Implementation

OPC Prop 68 Coastal Resilience Grant

CFFC Funding Conference

ASBPA

Government Affairs Committee

Local Funding Guide (Attached)

National Summit-BEACON Presentation

Shore & Beach

Regional Sediment Management Article (Attached)

Regional Climate and SLR Planning

4C-Central Coast Climate Collaborative

Santa Barbara Regional Climate Collaborative:

SLR Subcommittee

Upcoming January 15, 2021 Meeting Agenda:

- a. BEACON Regional SLR Adaptation Policies Report-Member Agency Presentation
- b. Review and Adoption of BEACON Strategic Planning Goals and Objectives
- c. Election of BEACON Chair and Vice-Chair
- d. Projects Updates

Adjourn to next regular meeting, January 15, 2021 at 9:00 AM in Carpinteria City Hall, 5775 Carpinteria Ave, Carpinteria, CA. 93013 (unless otherwise notified).

Late Distribution of Materials

Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the City Clerk to all or a majority of the members of the BEACON Board less than 72 hours prior to that meeting are available for inspection in the City Clerk Office, at 5775 Carpinteria Ave, Carpinteria, CA. 93013 and on the Internet at: BEACON.CA.GOV.

Any written ex-parte communication subject to disclosure by members of the BEACON Board may be published online as an attachment to the corresponding item.



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 1B

To: BEACON Board of Directors
From: Executive Director
Date: November 11, 2020
Subject: Approval of Agenda and Filing of Certificate of Agenda Posting

RECOMMENDED ACTIONS:

Approve and File.



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 1C

To: BEACON Board of Directors
From: Executive Director
Date: November 11, 2020

Subject: Consideration and Approval of Minutes of the BEACON
Meeting held on September 18, 2020

RECOMMENDED ACTIONS:

Approve and File.

BEACON BOARD OF DIRECTORS' MEETING MINUTES

DATE: Friday, September 18, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE

Item	1	Call to Order, Roll Call, and Introductions – Chair, Gregg Hart.
Minutes/ Actions:		Directors Present: <ul style="list-style-type: none"> • Gregg Hart (County of Santa Barbara) • Das Williams (County of Santa Barbara) • Steve Bennett (County of Ventura) • John Zaragoza (County of Ventura) • Christy Weir (City of Ventura) • Eric Friedman (City of Santa Barbara) • Fred Shaw (City of Carpinteria) • Kyle Richards (City of Goleta) • Carmen Ramirez (City of Oxnard) • Steve Gama, (City of Port Hueneme)
Item	1B	Approval of Agenda and Filing of Certificate of Agenda Posting Action: Approve and file.
Minutes/ Actions:		The Agenda was unanimously approved by the Board. Moved by Shaw / Second by Weir.
Item	1C	Consideration and Approval of Minutes of the BEACON Meetings held on September 18, 2020. Action: Approve and file.
Minutes/ Actions:		The Board unanimously approved the minutes as posted. Moved by Ramirez/Second Zaragoza.
Item	2	Public Comment and Other Matters not on the Agenda Receive public comments.
Minutes/ Actions:		None.

BEACON BOARD OF DIRECTORS' MEETING MINUTES

DATE: Friday, September 18, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE

Item	3A	<p>Report on Regional Climate and Sea Level Rise Adaptation and City of Santa Barbara Presentation on Draft Sea-Level Rise Adaptation.</p> <p>Recommended Actions:</p> <ol style="list-style-type: none"> i. Receive a presentation from BEACON Staff on Regional Sea Level Rise (SLR) Adaptation needs and opportunities. ii. Direct BEACON Staff to develop a Regional Adaptation Policies report; and iii. Receive a presentation from the City of Santa Barbara and provide comments on the City’s Draft Sea-Level Rise Adaptation Plan. iv. Approve and authorize the Chair to execute a comment letter on the City of v. Santa Barbara’s Draft Sea-Level Rise Adaptation Plan regarding several potential region-level partnership opportunities (Exhibit 1); and vi. Determine the above actions are not a “Project” under the California Environmental Quality Act (CEQA) pursuant to CEQA guideline 15378(b)(5) because they are an administrative activity that will not result in direct or indirect physical changes in the environment.
Minutes/ Actions:		<p>The Executive Director indicated that in January 2020 he reported that presentations to the Board would be forth coming on SLR adaptation plans prepared by member agencies. This presentation this morning is the first one from the City of Santa Barbara. The recommended actions also request the Board to direct staff to prepare a Regional Adaptation Policies Plan that is aligned with the adaptation policies from each member agency, and execute a comment letter on the City of Santa Barbara’s adaptation plan.</p> <p>The City of Santa Barbara SLR Adaptation Plan was presented to the BEACON Board by City of SB Project Planner, Melissa Hetrick.</p> <ul style="list-style-type: none"> • Director Cristy Weir indicated that a development in the City of Ventura has bounced around with regards to SLR compliance requirements dictated by the City. Melissa Hetrick indicated that the new coastal plan process dictated by the Coastal Commission requires detailed designs relative to SLR projections. • Director Eric Friedman thanked Melissa for the presentation. Eric indicated that a lot of work went into the City’s SLR Adaptation Plan and he hoped it would inform other jurisdictions. He also indicated that BEACON is ahead of the game as a regional coastal agency. • Director Carmen Ramirez indicated that we need to implement a regional SLR plans. Carmen expressed concerns regarding SLR projections and FEMA insurance requirements and about equity issues. • Director Fred Shaw asked that the City of SB presentation be posted on the BEACON Website. • Director Steve Gama thanked Melissa and indicated that that the presentation was a great introduction to the topic of adaptation planning. Steve also endorsed the need for BEACON to prepare a Regional SLR Adaptation Plan that would take inputs from the member agencies individual plans. Steve also supports continuation of shoreline monitoring in order to track coastal changes within the BEACON jurisdiction. <p>The Recommended Actions were unanimously approved by the Board. Moved by Weir / Second by Friedman.</p>

BEACON BOARD OF DIRECTORS' MEETING MINUTES

DATE: Friday, September 18, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE

Item	4A	<p>Santa Barbara Debris Basin Grant Project.</p> <p>Recommended Actions:</p> <ol style="list-style-type: none"> i. Receive a presentation on status of the Santa Barbara Debris Basin Grant Project. ii. Approve, ratify, and authorize the Executive Director to execute Amendment No. 1 to the Grant Agreement with the Ocean Protection Council (OPC) for the Santa Barbara County Debris Basin Removal Project to extend the term through March 30, 2023 and to re-define the scope of the project without a change in the grant amount of \$539,000 (Attachment 1); iii. Approve and authorize the Executive Director to execute a Cooperative Agreement with Santa Barbara County for the Santa Barbara County Debris Modification Project, similar to the attached, to provide environmental, design and construction services for an amount not to exceed \$539,000 with a period of performance from October 1, 2020 to March 30, 2023, upon concurrence of legal counsel (Attachment 2).
Minutes/ Actions:		<p>Program Manager Gerald Comati provided a status report on the Santa Barbara County Debris Basin Project. Gerald reported that an OPC grant had been approved in 2017 to help fund the removal of two debris basins (Rattle Snake and San Ysidro) thereby removing obstacles to the natural sediment transport to the coast. Following the debris flow of January 2018, SB County could no longer support removal of the two debris basins. Consequently, BEACON, working with The SB County Flood Control District, requested a scope and schedule change to the OPC grant. The Change included the modification of two existing debris basins (San Ysidro and Cold Springs) and pushing out the delivery schedule from 2018 to 2022. The modifications would maintain the function of the debris basins in terms of retaining large debris, but also allow the flow of sediment downstream to the beach. OPC approved the grant amendment in early 2020.</p> <p>Gerald indicated that SB County Flood Control was in the process of preparing environmental approvals and designs for the two basin modification projects.</p> <p>The Recommended Actions were unanimously approved by the Board. Moved by Weir / Second by Richards.</p>

Item	5A	BEACON Organization and Program - Board Members Reports.
Minutes/ Actions:		<ul style="list-style-type: none"> • Director Kyle Richards indicated that the City of Goleta had received an award for local governments efforts to reduce GHG and save energy. Kyle also indicated that the City does not have a SLR Adaptation Plan currently. • Director Carmen Ramirez reported that the City of Oxnard approved a SLR Adaptation Strategy back in 2018. Carmen also reported that the City had recently reached a deal with the Mandalay Power Plant to replace existing technology with battery-based technology. • Director Fred Shaw indicated that City of Carpinteria beaches were successfully closed on Labor Day and that the City will hold a virtual Avocado Festival this year. • Director Christy Weir thanked BEACON in general for its public awareness. • Director Gregg Hart reported that he was focused on promoting BEACON to all agencies. • Director Steve Gama Director gave a shout out to “REACH”, a non-profit organization in support of Recreation, Education, Arts, Culture in Hueneme. Steve also indicated that the bi-annual dredging cycle is coming up and that the City will want to coordinate with BEACON staff on helping secure maximum USACOE funding.

BEACON BOARD OF DIRECTORS' MEETING MINUTES

DATE: Friday, September 18, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE

Item	5B1	<p>BEACON Organization – BEACON Science Strategy</p> <p>Recommended Actions:</p> <ol style="list-style-type: none"> i. Receive a Staff Report on Science Support Actions. ii. Request the Chair to convene a Science Advisory Committee, appoint the initial Co-Chairs and committee members for a term of 2 years; and thereafter, that the Board confirm the appointments made by the Chair. iii. Approve and adopt the Bylaws for the Science Advisory Committee (Exhibit 1). iv. Provide notice of cancellation for the agreement with Dr. Doug George for science support services making termination effective October 30, 2020 in accordance Section VI of the agreement; and v. Approve and authorize the Executive Director to execute a Cooperative Agreement with the University of California-California Sea Grant in an amount not to exceed \$15,000.00, similar to the attached, to assist BEACON executive staff in coordinating the activities of the Science Advisory Committee with a period of performance from October 30, 2020 through June 30, 2021, upon concurrence of legal counsel (Exhibit 2).
Minutes/ Actions:		<p>Executive Director Marc Beyeler reported that staff have been working to develop a BEACON Science Strategy and supporting implementation actions. At this time, BEACON staff is recommending the Board authorize the Chair to convene a Science Advisory Committee, appoint the initial Co-Chairs and committee members for a term of 2 years; and thereafter, that the Board confirm the appointments made by the Chair. In addition, to conform to BEACON's own by-laws, staff is further recommending the Board adopt a set of by-laws for the Science Advisory Committee (Exhibit 1). Marc further explained that in order to support BEACON Executive Staff in the implementation of the Science Advisory Committee, staff is recommending that the Board approve a cooperative agreement with the University of California-California Sea Grant to receive support services for the Science Advisory Committee (Exhibit 2). Originally, Dr. Douglas George was to provide BEACON Executive staff with support for the Science Advisory Committee. However, Dr. George has taken a position with the NOAA and cannot devote the amount of time to supporting BEACON Executive Staff as intended. BEACON staff have identified the Science staff of the California Sea Grant to support BEACON efforts. The California Sea Grant has proposed that Mr. Nick Sadrpour, the Science Integration Program Coordinator, provide staff support to BEACON. BEACON Executive Staff has worked with Mr. Sadrpour on the California Sediment Management Workgroup for the past three years and collaborated with him on various sediment management activities. Mr. Sadrpour has been assigned to work on additional projects for California Sea Grant in Ventura and Santa Barbara counties working under personnel at the University of California, Santa Barbara. BEACON has a long history of working with the Staff of California Sea Grant located at the Scripps Institution of Oceanography (SIO) at the University of California.</p> <p>Staff are proposing the initial formation of the group in the fall of 2020 and initial activities as early as the beginning of 2021. In the first two years of the group, staff are proposing two annual meetings. The first one involves the science advisors only and is focused on a review of relevant data collection and scientific research initiatives of importance to the BEACON Coast. The second meeting would involve the science advisors and local and regional agency managers, where there would be an exchange of information between the scientists and the managers focused on discussing, evaluating, and prioritizing data collection and scientific investigations of most relevance to BEACON's mission.</p> <p>BOARD ACTIONS: The Board approved unanimously the Recommended Actions. Moved by Shaw /Second by Richards.</p>

BEACON BOARD OF DIRECTORS' MEETING MINUTES

DATE: Friday, September 18, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE

Item	5B2	<p>BEACON Purchasing Policy. Recommended Actions: i. Approve and adopt a BEACON Purchasing Policy (Exhibit 1); and ii. Adopt Resolution 2020-1 designating the Executive Director to act as BEACON's Purchasing Officer in accordance with the BEACON Purchasing Policy. (Exhibit 2).</p>
Minutes/ Actions:	<p>Executive Director Marc Beyeler explained that previously BEACON has not had a formal purchasing policy and that in order to allow the smooth function of the organization one is required. The policy gives the Executive Director expenditure authority for smaller services agreements.</p> <p>BOARD ACTIONS: The Board approved unanimously the Recommended Actions. Moved by Shaw / Second by Ramirez.</p>	

Item	5B3	<p>Appointment of BEACON Special Projects Staff Recommended Actions: i. Receive a Staff Report on Special Projects Staff; and ii. Adopt Resolution 2020-2 appointing Brian Brennan as Special Projects Volunteer Staff for a period up to June 30, 2021 (Exhibit 1).</p>
Minutes/ Actions:	<p>Executive Director Marc Beyeler explained that as of May 2020, Brian Brennan served as BEACON's Executive Director and was involved in several important ongoing BEACON projects. Upon his retirement, he continues to assist BEACON executive staff on a select number of BEACON projects. He possesses unique knowledge and understanding of the projects and has extensive experience working with project partners that is invaluable. In order to continue BEACON implementation actions, BEACON staff require the assistance of Mr. Brennan. Without a formal appointment, however, Mr. Brennan does not have full access to BEACON project documents and internal communications. Consequently, it is the desire of the BEACON Executive Director to continue Mr. Brennan's involvement in certain BEACON projects to assist BEACON staff on essential project tasks for a period until June 30, 2021 and that the BEACON Board appoint Mr. Brennan as a Special Projects Volunteer Staff.</p> <p>BOARD ACTIONS: The Board approved unanimously the Recommended Actions. Moved by Ramirez /Second by Shaw.</p>	

BEACON BOARD OF DIRECTORS' MEETING MINUTES

DATE: Friday, September 18, 2020

TIME: 9:00 AM

PLACE: TELECONFERENCE

Item	6	Executive Director's Report and Communications
Minutes/ Actions:		<p>Executive Director Marc Beyeler provided the following executive report:</p> <ol style="list-style-type: none">a. BEACON has a number of active grant funded projects that it is involved in currently such as the OPC grants for the Surfers Point Project and the SB County Debris Basin Project. Further grant applications will be submitted moving forward as opportunities arise.b. The first SLR Adaptation Plan presentation was heard today from the City of Santa Barbara. At the November Board Meeting the County of Ventura will present its SLR Adaptation Plan.c. At the November BEACON Board Meeting Staff will be presenting draft Strategic Planning Goals and Objectives for consideration by the Board.d. Also, at the November Board Meeting, staff will present draft BEACON Legislative Priorities for consideration.e. Staff will begin preparation of a Sediment Management White Paper and participate with the City of Port Hueneme to ensure appropriate level of Fed and State Dollars for the biannual dredging. <ul style="list-style-type: none">• Director Gregg Hart indicated he is interested in the Legislative Priorities. If Supervisor Bennett is successful in getting elected to the State Assembly, he will be able to assist in these priorities.• Director Carmen Ramirez also endorsed the resurrection of BEACON legislative priorities. Carmen also expressed concern with the drop in agency revenues and wondered how budget cuts may affect essential services during the continuing COVID pandemic.

Adjourn to next regular meeting November 20, 2020 at 9:00 AM by Teleconference or Video Conference.

Meeting Minutes by Gerald Comati, Program Manager, BEACON.



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 2

To: BEACON Board of Directors
From: Executive Director
Date: November 11, 2020

Subject: Public Comment and Other Matters not on the Agenda

RECOMMENDED ACTIONS:

Receive Public Comments.



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 3A

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020

Subject: Ventura County Presentation on Sea-Level Rise Adaptation Plan

RECOMMENDED ACTIONS:

- i. Receive a presentation from the Ventura County on the County's Sea-Level Rise Adaptation Plan.

DISCUSSION:

Staff from Ventura County will make a presentation to the Board on Ventura County's Sea-Level Rise Adaptation Plan.



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 4A

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020

Subject: Mondo's Cove Beach Access Stairway

RECOMMENDED ACTIONS:

- i. Receive a presentation on status of the Mondo's Cove Beach Access Stairway Project.

DISCUSSION:

A presentation on the design of the Mondo's Cove Beach Access Stairway project will be made by the lead design consultant on the project, Jensen Design and Survey, Inc.



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 5A

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020
Subject: Board Member Reports



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 5B1

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020

Subject: BEACON Science Advisory Committee (SAC)

RECOMMENDED ACTION:

- i. **Confirm appointment of Co-Chairs and Members of the Science Advisory Committee**

DISCUSSION:

To support BEACON Executive Staff in implementation of the Science Advisory Committee, staff is recommending that the Board confirm the appointments made by the Chair, consistent with BEACON Bylaws.

Below are names of the appointed members made by the Chair.

Co-Chair Dr. Kirsten Patsch
Associate Professor, Environmental Studies and Resource Management,
California State University, Channel Islands

Co-Chair Dr. Douglas George
Vice President, California Shore & Beach Preservation Association

Mr. Robert Battalio
Senior Engineer, Environmental Science Associates (ESA)

Dr. Jenifer E. Dugan
Associate Research Biologist, Marine Science Institute
Deputy Director, Coastal Marine Institute

Dr. Lesley Ewing
Senior Coastal Engineer, California Coastal Commission

Dr. Kristen Goodrich
Coastal Training Program Coordinator, Tijuana River National Estuarine
Research Reserve



Meeting Date: November 20, 2020
Agenda Item: 5B1

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Oceanographer, Pacific Coastal and Marine Science Center, United States Geological
Survey

Dr. Philip King
Professor, Department of Economics, San Francisco State University

Dr. Charles Lester
Marine and Coastal Policy Center, Marine Science Institute, UCSB

Dr. Dan Reineman
Assistant Professor, Environmental Sciences and Resource Management, California State
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Dr. Sean Vitousek
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A California Joint Powers Agency

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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 5B2

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020

Subject: BEACON Strategic Planning Goals and Objectives

RECOMMENDED ACTIONS:

- i. **Receive, review, and provide input, as needed, on the Draft Strategic Planning Goals and Objectives 2020-2025 (Exhibit 1); and;**
- ii. **Direct staff to return with Final Strategic Planning Goals and Objectives; and**
- iii. **The actions described herein are not a “project” under the California Environmental Quality Act (CEQA) pursuant to CEQA Guideline Section 15378.**

DISCUSSION:

Staff is recommending the BEACON Board consider multi-year Strategic Planning Goals and Objectives. Staff has prepared draft five-year strategic planning goals and objectives for board consideration. Considering multi-year strategic planning goals will ensure that any multi-year budget and financial planning will be able to be reviewed against a set of goals and objectives that the Board has reviewed and discussed.

Adopting Strategic Planning Goals and Objectives will also allow the Board to better understand progress to its goals and objectives and will allow the Board to be better able to evaluate the performance and the accomplishments of its executive and consultant staff and be best positioned to evaluate the integration of new initiatives into programs and projects.

Developing Strategic Planning goals has been a priority of BEACON since the adoption of the Coastal Regional Sediment Management Plan (CRSMP) in 2009. At its January and July 2010 meetings, the BEACON Board discussed and subsequently approved creation of a Board Subcommittee to review a Draft Strategic Plan for implementing the CRSMP. At its January 2011 Board meeting, the Board approved additional actions to support development of Strategic Plan “project prioritizations.” At its March 2011 Board meeting, the Board received a



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presentation by Noble Consultants on the SRCMP Strategic Plan, however the Board did not consider any approval of the project prioritizations.

Significant time and conditions have changed since 2011 and it is appropriate to revisit project and program priorities at this time. In 2014, BEACON staff prepared strategic action priorities, but the Board did not review nor approve these action plan items.

Staff is recommending the Board review five-year Strategic Planning goals (Exhibit 1) to frame BEACON priority projects and programs for the period 2020-2025 in order to inform organizational, financial, and budget planning for BEACON as part of its transition planning. The draft document includes an Action Plan for implementation activities, focused on early actions (Years 1 and 2) and later actions (Years 3, 4, and 5).

Staff is seeking comments and suggestions from the Board and any interested stakeholders for modifications, changes, or additions to the draft Strategic Plan Goals and Objectives.

Exhibit 1: Strategic Planning Goals and Objectives 2020-2025



DRAFT
Strategic Plan 2020-2025

BEACON

BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT

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BEACON Strategic Planning Goals, Objectives and Work Plan Actions
2020-2025

Draft November 2020

Background

BEACON's policies, projects, and programs seek to accomplish important complimentary goals and objectives. BEACON's Coastal Regional Sediment Management Plan (CRSMP, 2009) is intended to outline the ways and means to conserve and restore the valuable sediment resources along the Santa Barbara and Ventura Counties coastline.

BEACON's programs and projects seek to reduce shoreline erosion and coastal storm damages, protect sensitive environmental resources, increase natural sediment supply to the coast, preserve and enhance beaches, improve water quality along the shoreline, and optimize the beneficial use of material dredged from ports, harbors, and other opportunistic sediment sources.

However, BEACON has not adopted formal multi-year Strategic Planning Goals and Objectives in the past. At this point in its history, it is appropriate for BEACON to consider specific goals and objectives for the next several years as BEACON evolves and further develops its projects and programs.

BEACON staff have developed the draft Strategic Planning Goals, Objectives, and Work Plan Actions for consideration by the BEACON Board to guide its investments in staff and in project and program support for the next five years. In addition, BEACON staff have included draft statements addressing BEACON's Mission, its Vision, and its Operating Principles.

BEACON Mission, Vision, and Operating Principles

BEACON Mission

Provide venue for regional coordination of beach nourishment, coastal resources restoration, and protection of coastal water quality within Ventura and Santa Barbara counties to ensure that beaches are sustainably maintained and preserved, coastal shoreline resources are enhanced, coastal water quality protected, and coastal beach access provided.

BEACON Vision

The BEACON coast, its beaches, and its natural coastal resources are preserved, enhanced and sustainably managed in perpetuity through close coordination and collaboration among its member agencies, the public, and its community and private partners.

BEACON Operating Principles

Collaborative: Partnering with Others

Inclusive: Informing and Including all interested Stakeholders

Science-based: Utilizing the Best Available Science to Support Decisions

Transparent: Open Communication of Intentions and Plans

Accountable: Documenting and Measuring Outcomes

Goals, Objectives and Actions

Goal 1 Promote Beach Preservation and the Beneficial Use of Sediment

The most significant source of natural sediment supply to the BEACON Coast is that delivered by the numerous creeks, streams, and rivers that discharge within the BEACON region. The Ventura River and Santa Clara River are the most dominant sources, but the sediment budget is also critically dependent upon the lesser known and smaller streams that drain the southern face of the Santa Ynez Mountains watershed. Unfortunately, many of the creeks and rivers contain debris basin and other barriers that obstruct the natural transportation of sediment. As a result, a large portion of the natural sediment never reaches the BEACON coast. Opportunities to remove or mitigate these obstructions is a priority of the Plan.

Sand supply in the Santa Barbara Littoral Cell is affected by numerous manmade coastal improvements, mainly a series of public harbors, including Santa Barbara, Ventura, Channel Islands, and Port Hueneme. Harbor development has interrupted natural sand littoral transport at important locations, including both Santa Barbara Harbor and at Port Hueneme. BEACON has supported local and regional efforts to provide for regular dredging and bypass initiatives to supply sand needed to retain East Beach in Santa Barbara and Hueneme Beach in the City of Port Hueneme. A major goal of Regional Sediment Management and BEACON's Coastal Regional Sediment Management Plan is the beneficial use of sediment.

Objective 1.1 Preservation and restoration of natural sources of sediment delivery

The creation of appropriate sediment preservation policy is intended to prevent further degradation of the coastal sediment system and hopefully provide the opportunity to allow for recovery and enhancement where possible.

Objective 1.1.1 Collaborate with local watershed agencies to maintain natural sediment delivery.

Complete implementation of the Santa Barbara Debris Basin project with Santa Barbara County Flood Control and investigate development of similar project with Ventura County Flood Control District.

Action: Complete Ocean Protection Council (OPC) funded debris basin grant project (Years 1-2)

Objective 1.1.2 Support the removal of Matilija Dam.

Assist and support project partners in securing remainder of final planning funding and in securing funding for project implementation.

Action: Support Requests for Funding for Final Planning and Project Implementation (Years 1-5)

Objective 1.2 Beneficial Reuse of Sand trapped at harbors to Replenish Regional Beaches

Sand bypass and dredging projects have been a regular part of sand replenish projects along the South Coast at both Santa Barbara and Channel Islands/Hueneme Beach for the past several decades. Actively support local efforts to maintain sand re-supply at local beaches and provide lobbying and coordination support to ensure adequate dredging and bypass efforts to maintain local beaches. Given the potential impact that each harbor could have on the cost if sand were not regularly bypassed around them, it is important to preserve the existing practice and seek opportunities whereby the trapped sand may be placed on nearby beaches to maximize benefits. Support Plans to Reuse sand trapped by harbors from Santa Barbara to Pt Hueneme.

Action: Establish a regional long-term program of sand re-use.

Objective 1.2.1 Channel Island Harbor Sand Trap Bypass

West Hueneme Beach is critically dependent upon sand re-nourishment from Channel Islands Harbor bypassing. This activity would ensure an adequate level of the bypassed sand to maintain a desirable beach width.

Action: Work with County of Ventura, Channel Islands Harbor, Oxnard Port District, Federal Representatives, and City of Pt. Hueneme to ensure federal authorization fulfilled bi-annually to nourish Pt. Hueneme beach.

- A1 Assist in organizing and conducting annual sand summit with partners to review progress to goals
- A2 Assist local lobbying efforts to secure full project funding for Channel Islands dredging for Pt. Hueneme beach nourishment.

Objective 1.2.2 Port of Hueneme Dredging and Hueneme Beach Nourishment

Support opportunistic program of beach nourishment using dredged sand from the Port of Hueneme.

Objective 1.3 Beneficial use of inland sediment and sand sources

Develop a new program to allow for real-time deposition of inland sediment and sand to supplement existing coastal sediment resources. In 2005, BEACON established the South Central Coastal Beach Enhancement Program (SCCBEP) which successfully secured permits for the placement of sand for nourishment purposes at five selected beach locations. However, the program was only utilized on two occasions and when the permits expired in 2010, they were not renewed. This task is intended to review the performance history of the historic SCCBEP opportunistic sand program and create a new version with a modified scope as appropriate to support smaller scale projects and increase its utilization within the region.

Actions:

- A1 Develop Scope of Work and Funding for Opportunistic Sediment Management Program (OSMP). (Years 1-2)
- A2 Undertake necessary project evaluation and assessment of opportunistic sand management program (OSMP). (Year 3)
- A3 Complete Permitting and Approvals for OSMP Regional Permits. (Year 4)
- A4 Undertake sediment deposition projects. (Years 5-10)

Goal 2 Expand use of Best Available Science in BEACON's Programs and Policies

In the past twenty years, BEACON has supported several science support efforts, including data collection and various research efforts involving partner organizations, such as the United States Geological Service (USGS). Based on these efforts, BEACON developed innovative beach nourishment, sediment disposal, and coastal resources restoration policies and projects. Currently, several data collection and research efforts are underway by partner organizations focused on coastal sediment processes, coastal and ocean physical and ecological systems, and climate adaptation needs, which could inform future BEACON activities. Increasing the level of understanding of BEACON staff and board members about these efforts will improve policy and decision-making about pressing issues, including climate adaptation and climate resilience. In addition, it is important for BEACON to understand how BEACON can better support and utilize this data and information. While local jurisdictions have completed climate adaptation plans that suggest strategies to address regional adaptation

actions, BEACON is developing a work plan for such a regional adaptation strategy. Therefore, further integration of best available science into BEACON’s activities and programs and the inclusion of science goals into BEACON strategic planning goals and objectives is needed.

Objective 2.1 Establish Science Advisory Committee (SAC)

A Science Advisory Committee would assist in implement enhanced science assistance as part the BEACON Strategic Plan, including: identifying science support resources; developing ways to better integrate science into its policy and decision-making; identifying data collection and scientific research initiatives that could benefit BEACON programs and policies, and that BEACON should support; collaborating with academic and agency partners on new science initiatives; providing up-to-date science data and research results to regional and local program managers; and where needed and appropriate, providing scientific advice on new BEACON projects or identifying scientific expertise to be consulted on project evaluations.

Actions:

- A1 Board Approve Formation of SAC and SAC Bylaws; (Year 1)
- A2 Chair Appoints initial Co-Chairs and SAC Members and Board Confirm; (Year 1)
- A3 SAC Holds Initial Annual Meeting and Manager Workshop (Years 1-2)

Objective 2.2 Integrate Current Climate Science into BEACON program documents, policies and projects

Climate change and sea level rise represent the most serious threat to successful sediment management and coastal adaptation within the BEACON coast. BEACON must integrate up-to-date climate science into its policies, programs, and projects. Considerable new science and policy guidance addressing climate and sea level rise impacts on coastal erosion and storm damage has been developed since the original regional plan was adopted by BEACON in 2009. The completed studies and reports should guide BEACON’s effort to incorporate climate change and sea level rise considerations into a SLR update to the CRSMP.¹

Objective 2.2.1 Develop updated regional plan to address impacts of climate and sea level rise on local sandy beaches

¹ National Academy of Sciences (2012); CA Coastal Commission (2013, 2015); Ocean Protection Council (2013; 2018; 2020); CA Governor Executive Order (2015).

Currently BEACON's coastal regional sediment management plan (CRSMP) does not include the best available science regarding climate change and does not contain complete preservation strategies to address sea level rise threats to its sandy and coble beaches. BEACON is planning to work with cooperating science and technical agencies, including US Geological Survey staff, and is proposing to coordinate closely with the CA CSMW.

Action: Update CRSMP to incorporate best available science and adaptation policies to address the impacts of climate change and sea level rise to BEACON south coast recreational beaches.

Objective 2.2.2 Develop Regional Climate Adaptation Strategy

Action: Compile Inventory of Regional Adaptation Actions; Prepare Draft Regional Adaptation Policies Report

Objective 2.3 Strengthen Regional Monitoring Program

Long range planning and management of the shoreline requires accurate data and continuing monitoring of the key shoreline and watershed processes. This task would establish a long-term agreement whereby the USGS would formally partner with BEACON to monitor sediment delivery to the coast, how it moves alongshore, and short term and long-term trends so that planning decisions can be made.

Action:

Formalize the ongoing relationship with USGS to continue long-term monitoring of the shoreline and sediment delivery processes.

Objective 2.4 Promote Interdisciplinary Science Efforts

BEACON's programs and projects have to address combined social and ecological systems (SES) if they are to be successful. Regional Sediment Management (RSM) approaches emphasize the development of multiple benefit projects that address both environmental and social benefits. Interdisciplinary studies are growing within the BEACON coast and BEACON could play a catalyst role to further expand those efforts. Through the SAC activities, BEACON will have the requisite information to intentionally encourage interdisciplinary science for improved decision-making.

Action: Support SAC activities that generate interdisciplinary work

Goal 3 Demonstrate Effectiveness of innovative Techniques to Retain Sand and Sediment on Beaches

Demonstrate and implement new and innovative sand retention technologies that are more compatible with the Santa Barbara and Ventura Counties shoreline setting and provide multi-purpose benefits of beach preservation, biological enhancement, and increased recreation opportunities. Preservation of beaches and beach re-nourishment will require sand retention solutions in order to effectively and economically achieve the goal of beach stability and enhancement. However, traditional approaches to beach stabilization are less acceptable to the permitting agencies and stakeholders.

Objective 3.1 Seek funding to study innovative planning and technical approaches

Secure grant funding to study new and innovative planning and technical approaches that will address multiple objectives, comply with the concerns of the permitting agencies, provide environmentally sensitive project designs, and be accepted by stakeholders.

Objective 3.2 Identify, analyze, and develop innovative sand retention projects

Identify and develop alternative multi-purpose sand retention solutions to find feasible ways to retain, preserve, or enhance beaches.

Objective 3.3 Complete the final engineering and implementation of the Surfers Point Living Shoreline and Managed Retreat Demonstration Project

The Surfers Point Living Shoreline Project (Surfers Point Project) provides an innovative means to return the encroached shoreline to a more natural beach state by using buried cobble, which occurs naturally in the area, covered with sand dunes. The project is a model demonstration project that will help show ‘proof of concept’ for both living shoreline treatments and managed retreat. The intent is to use unique shoreline stabilization methods which will help to preserve and restore the beach, mitigate for past land use encroachment practices. Project components include, removal of all existing parking and bike path improvements seaward of Shoreline Dr., shorten the length of Shoreline Dr. by 1,200 feet, protect the beach with natural buried cobble stone, create sand dunes over the buried cobble, relocate and rebuild the State-Owned Omer Rains beach front bike path, and construct Fairgrounds parking lot improvements drainage/water quality improvements on the north side of Shoreline Dr.

Actions: complete OPC funding final engineering grant project; complete final development plan; seek implementation grant funding



Surfers Point Phase 1 Cobble, sand beach and dunes 'Living Shoreline' and new bike path moved out of hazard zone



Phase 1 Cobble, sand beach and dunes post 2015 El Nino Storm impact with 'room to move'



Phase 2 Surfer's Point Project Area: Continued Beach Erosion and Bike path damage from 2017-2019

Objective 3.3 Oil Piers Demonstration Reef Project

The goal of the project is a submerged reef system is to stabilize future beach nourishment efforts through wave rotation and energy dissipation. The proposed structure will be constructed of sand-filled geotextile containers. The offshore submerged reef will reduce wave heights at the shoreline during high wave events, while still allowing sediment to bypass alongshore between the structure and the beach, and will provide a sediment retention mechanism for Oil Piers beach. The prototype was designed to also provide multipurpose recreational surfing benefits and potential habitat enhancement.

Action: Update the feasibility of using a multipurpose offshore reef sand retention demonstration project.

Goal 4 Support Expanded Coastal and Marine Resources Restoration

An important goal of BEACON is to maintain, enhance, and restore coastal resources. BEACON has committed staff and technical support to projects which seek to restore coastal habitats and resources at different locations along the BEACON Coast, and will continue to pursue projects that seek to achieve this goal.

Objective 4.1 Support Natural Infrastructure Demonstration Projects

Objective 4.4.1 Goleta Kelp Demonstration Project

Since 2014 BEACON has supported the Goleta Kelp Demonstration Project. BEACON seeks to continue its sponsorship of this project and to evaluate the effectiveness of the project in order to determine if the project should be expanded.

Action: Document Project Success Metrics and Evaluate Feasibility of Project Expansion

Objective 4.4.2 Dunes Demonstration Model Project

BEACON seeks develop one or more Dune Restoration Demonstration Projects at different locations along the BEACON Coast in order to evaluate a range of suitable locations for beach and dune restoration.

Action: Identify and Secure Project Funding

Goal 5 Maintain and enhance coastal water quality as part of beach restoration

An important goal of BEACON is to maintain and enhance coastal water quality. BEACON seeks to further develop project designs and implementation protocols that address maintaining and enhancing coastal water quality.

Objective 5.1 Integrate coastal water quality objectives into multi-purpose beach restoration and preservation projects

BEACON's legislative authority seeks to balance and integrate beach erosion and nourishment goals with protecting and enhancing coastal water quality. BEACON needs to better understand the coastal water impacts from its beach restoration projects and develop project guidelines and protocols integrating these complimentary values.

Action: Support development of specific project protocols addressing coastal water quality criteria in project design and implementation.

Goal 6 Support Coastal Access and Recreation

Objective 6.1 Surfers Point Project

BEACON has long supported the Surfers Point Managed Retreat and Living Shoreline Project (Project). The City and the Fairgrounds have agreed to cooperate on the completion of the Surfers Point Project through a Memorandum of Understanding (MOU). Phase 1 was constructed in 2011-2012. The completed portion of the larger project, Phase 1, has become a national model of a multiple benefit living shoreline and managed retreat adaptation project. The City has been actively planning for Phase 2 since 2016-17, and is currently completing final design of Phase 2 of the Project, supported by a grant from the Ocean Protection Council (OPC) administered by BEACON. Final design will be completed in 2020 and the next step involving securing funding to construct Phase 2 starting in 2021.

Actions:

A1- Secure Funding

A2 Complete Phase 2 Construction

Objective 6.2 Mondo's Cove Beach Access

In 2014, BEACON and the California Coastal Commission signed a Memorandum of Agreement (MOA), establishing a Shoreline Sand Supply and Public Access Fund, including a payment of \$60,000 in mitigation funds for public access as a result of the issuance of Coastal Development Permit (CDP) #4-07-154. Mondo's Cove beach was identified by BEACON staff, working in cooperation with staff of the Coastal Commission, as a priority location for the use of the monies. Mondo's Cove is among the most popular and heavily visited beaches along the Ventura coastline with a large supply of parking located across from the beach. Mondo's provides beach and ocean access and water sports opportunities for visitors of all ages and all abilities and skills.

In 2019 the BEACON Board approved use of the monies for final planning, design and engineering for a beach access stairway at Mondo's Cove. The final engineering will be completed in 2020 and working with local stakeholders a final design selected and approved. Following final design and engineering, BEACON staff will coordinate project approvals and project implementation funding.

Actions:

A1-Complete Engineering, Select Final Design

A2-Secure Project Approval and Funding and Install Beach Stairway



Mondo's Cove Beach: Very Popular Ventura County Beach Destination



Currently No Safe Public Access to Beach

Objective 6.3 Ensure coastal access and recreation is maximized in BEACON projects

The BEACON beach nourishment goal is driven in large part on the desire of local citizens and local member agencies to preserve area beaches for public access and recreation. It is paramount that BEACON beach nourishment and enhancement projects be designed and implemented to preserve the use of beach areas for public access and coastal recreation.



Carpinteria City Beach During Beach Nourishment and After Beach Nourishment: 2019

Goal 7 Improve Long-term Planning, Governance, and Finance

BEACON effectiveness will depend on deepening its planning, governance and funding. BEACON should continuously examine its program and funding priorities. BEACON should adopt Strategic Planning Goals and Objectives and periodically review same and revise as necessary. BEACON should periodically examine its governance structure to ensure the most effective regional coordination, collaboration, and successful outcomes. Collaboration with state and federal agencies will remain as the most viable means to fund sediment management and beach preservation and enhancement programs. However, these partnerships will continue to require local cost sharing in order to move forward. Therefore, BEACON will need to continue the collaboration with external partners and participate in state and federal program initiatives. At the same time BEACON will need to develop and maintain sustainable local funding necessary to produce the required state and federal matching funds.

Objective 7.1 Develop Strategic Planning Goals and Objectives

BEACON has never adopted Strategic Planning Goals and Objectives. As BEACON develops its complementary program goals and employs executive staff it needs to better define its priorities for utilizing its staff and fiscal resources. Adopting a set of measurable and feasible goals and objectives will allow the BEACON Board to better evaluate progress and be better able to make changes and adjustments to its programs and personnel assignments.

Objective 7.2 Strengthen Governance Partnerships

Increase participation in the California Coastal Sediment Management Workgroup, the California Shore and Beach Preservation Association, California Marine Affairs and Navigation Council, and the American Shore and Beach Preservation Association in order to strengthen BEACON's effectiveness.

Objective 7.3 Develop Sustainable Local Funding

Federal and state funding programs require a local cost sharing match. BEACON staff should analyze a range of local revenues sources that are politically feasible and economically sustainable that could be utilized as local matching funds. In addition, Funding to support science research from state and federal sources is inadequate to meet current needs. BEACON needs to support the development of increased funding for science research initiatives important to the successful implementation of BEACON's programs and projects.

BEACON Strategic Planning Outcomes and Success Metrics

Outcomes

- Increase Awareness of Role and Contributions of BEACON
- Increase Political Support for BEACON
- Provide project implementation and funding assistance to local member agencies projects
- Maintain and Increase Partnership Funding
- Provide Timely and Useful Information to Member Agencies
- Compete project planning, feasibility, design and engineering, and secure approval and funding for implementation projects

Success Metrics

Participating in Partnerships:

- CSMW-Strategic Planning
- ASBPA-Government Affairs, Local Funding
- 4C-Central Coast Climate Collaborative
- Santa Barbara Co Regional Collaborative-SLR Subcommittee
- Regional Sand Summit-So. Ventura County/Hueneme Coast

Developing and Competing Plan and Projects:

- Feasibility Analyses
- Funding Assistance
- Implementation

Fiscal Health:

- Retain Healthy Reserve Funding
- Secure Annual Budget Revenues-Collections
- Successfully Manage Reimbursements
- Making Grant Requests
- Success in Raising Funds

Work Plan Actions 2020-2025

SP Work Plan Actions	1-2 years	3-5 years	Continuous
Goal 1 Promote Beach Rest/Beneficial Use of Sediment			
Obj. 1.1 Restoration Natural Sand Supply			X
<i>Obj. 1.1.1 Complete SB Debris Basin Project</i>	X		
<i>Obj. 1.1.2 Support Matilija Dam Project</i>		X	
Obj. 1.2 Support Harbor Sand By-pass Dredging			X
<i>Obj. 1.2.1 CI Sand Bypassing</i>	X		X
<i>Obj. 1.2.2 Port of Hueneme Sand Dredging</i>	X		X
<i>Obj. 1.3 Opportunistic Sand-Regional Permit</i>	<i>A1; A2</i>	<i>A3; A4</i>	
Obj. 1.4 Support Harbor Sand By-pass Dredging			X
Goal 2 Expand Science Support to BEACON			
<i>Obj. 2.1 Create Science Advisory Committee</i>	<i>A1; A2; A3</i>		
<i>Obj. 2.2 Integrate Climate/SLR Science in BEACON Policies</i>	X		
<i>Obj. 2.2.1 Complete SLR Update to CRSMP</i>	X		
<i>Obj. 2.2.2 Complete Regional SLR Adaptation Strategy</i>	X		
Obj. 2.3 Continue and Expand Regional Shoreline Monitoring			X
Obj. 2.4 Promote Interdisciplinary Science Research Efforts			X
Goal 3 Develop Innovative Sand Retention Projects			
<i>Obj. 3.1 Seek funds to study innovative approaches</i>	X		
Obj. 3.2 Identify and develop innovative demo projects			X
<i>Obj. 3.3 Surfers Point Project-Complete Final Engineering</i>	X		
Obj. 3.4 Oil Piers Reef Project-Update Feasibility Analysis		X	
Goal 4 Support Expanded Coastal and Marine Restoration			
Obj. 4.1 Support Natural Infrastructure Demo Projects			X
<i>Obj. 4.4.1 Expand Goleta Bay Kelp Demo Project</i>	X		
Goal 5 Maintain and Enhance Coastal Water Quality			
Obj. 5.1 Integrate Water Quality Criteria in Projects			X
Goal 6 Support Coastal Access and Recreation			
<i>Obj. 6.1 Support Completion of Surfers Point Project</i>	<i>A1</i>	<i>A2</i>	
<i>Obj. 6.2 Complete Mondo's Cove Beach Access Project</i>	<i>A1</i>	<i>A2</i>	
Goal 7 Improve Planning, Governance and Funding			
<i>Obj. 7.1 Develop Strategic Planning Goals and Objectives</i>	X		
<i>Obj. 7.2 Strengthen Governance Partnerships</i>	<i>A1</i>	<i>A2</i>	X
Obj. 7.3 Develop Expanded Local Funding			X
	14	8	12

Italics: Work Program priority years 1-2



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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 5B3

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020

Subject: BEACON Legislative Program Priorities

RECOMMENDED ACTIONS:

- i. Receive Staff Report on Legislative Program Priorities (Exhibit 1) and provide input, as needed; and**
- ii. Direct staff to return with legislative action items for 2021.**

DISCUSSION:

BEACON is being tasked with many responsibilities for project and program development essential to sustainable and resilience regional sediment management, coastal protection and enhancement, and regional climate and sea-level adaptation planning and implementation. Over the course of the past several years, BEACON has sought funding to implement its programs and projects from a range of state sources, successfully securing limited funding to implement its programs and projects.

However, BEACON has been unsuccessful in securing adequate planning and implementation funding to update its Coastal Regional Sediment Management Plan (CRSMP), to update its Opportunistic Sediment Enhancement Program, to implement new innovative demonstration coastal resource enhancement and restoration projects, or to secure funding for regional sea-level rise adaptation.

In the past decade, federal funding for BEACON projects has not been available and federal funding for member agency sediment management activities have been constrained. Importantly, funding for dredging at Channel Islands Harbor to provide beach nourishment of Pt. Hueneme Beach has not been adequate to provide the full complement of sand and sediment of 2.4 cubic yards bi-annually.

BEACON has continued to coordinate with its member agencies, including Ventura County, Channel Island Harbor staff and the staff of the City of Pt. Hueneme to inform our federal and state representatives of the need for a



Meeting Date: November 20, 2020
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continuing commitment of funding to meet regional sediment management needs.

In addition, BEACON has worked with federal and state agencies represented on the California Coastal Sediment Management Workgroup (CSMW) to develop programmatic funding to support regional sediment management efforts in the eleven coastal regions, but without success to date. At the present time, BEACON needs to analyze a variety of legislative options and develop specific legislative budget and funding proposals that can cut through existing bureaucratic, agency, and funding limitations.

BEACON's regional sediment management and climate adaptation efforts are absolutely essential to successfully address the regional impacts of climate changes and sea-level rise in Santa Barbara and Ventura Counties through developing innovative natural infrastructure and resources conservation, enhancement, and restoration projects consistent with state priorities for coastal climate adaptation. BEACON's regional programs support significant statewide and federal interests and BEACON staff will continue our coordinated efforts with state and federal agency representatives.

There are several potential legislative initiatives that BEACON should examine to increase the opportunities for expanded funding to BEACON to support its projects and programs, including line-item designations in existing state General Obligation Bond Acts (e.g., Prop 1 and Prop 68), funding from specialized sources (California Cap and Trade Program), or inclusion in planned state bond acts (e.g., Resilience Bond Act proposed for state ballot in March 2022) (Exhibit 1).

BEACON staff will undertake several actions in the coming year to address state and federal legislative and funding needs. BEACON staff will continue to be an active member of the CA Sediment Management Workgroup. BEACON will continue to serve of the American Shore and Beach Preservation Association (ASBPA) Government Affairs Committee.

BEACON executive staff will be further developing legislative actions and bring funding and program initiatives back to the BEACON Board during the coming year.

Exhibit 1: BEACON Legislative Program Priorities

Exhibit 1.

BEACON Legislative Program Priorities

Goals: Develop Support and Funding for BEACON Priorities, Raise BEACON Profile with State and Federal Agencies, Coordinate with Partners on Program and Funding Development

Federal Lobbying

American Shore and Beach Preservation Association (ASBPA) Government Affairs Committee
Joint Statement with Coastal States Organization on Regional Sediment Management

Ventura County-Channel Islands Harbor United States Army Corps of Engineers (ACOE) Appropriations
Managed by Ventura County and coordinated with Federal Representatives: Congresswoman Brownley and Congressman Carbajal

Water Resources Development Act (WRDA) 2020
Programmatic and funding priority to Regional Sediment Management at Conference level in Congress

FEMA BRIC Funding

State Legislation

Funding:

CA Coastal Sediment Management Workgroup (CSMW)
Regional Sediment Management Programmatic Funding for 11 Regional Sediment Management Planning Initiatives to take plans to the next step, such as BEACON preparing a Climate and Sea Level Rise (SLR) Update to the Coastal Regional Sediment Management Plan (CRSMP) (adopted 2009) and out-of-date with regard to SLR.

Beach Restoration Fund
CA Department of Parks and Recreation (CA DPR), Division of Boating and Harbors

Member Requests-Governor's Budget
Program into Governor's Budget-General Obligation (GO) Bond Acts-Competitive Grants (State Coastal Conservancy, Office of Planning and Research, CA DPR)

New GO Bond Proposal 2022
Specifics are to be developed in 2021 for March 2022

Work with Legislative representatives to Include in Bond Act a Regional Sediment Management Program, with BEACON named to receive funding

Program and Policy:

Possible program and policy initiatives BEACON could recommend to legislative sponsors are outlined below.

1. A Study of Climate Adaptation and Regional Sediment Management (RSM)
Seek to have the State Legislature direct BEACON to prepare a study of the role of regional sediment management in Climate Adaptation implementation on behalf of CSMW including an analysis of the costs of implementing RSM in climate adaption and options for sustainable funding for Regional Sediment Management in climate adaption
2. A Study of Governance Innovations in Regional Climate Adaptation
Seek to have the State Legislature direct BEACON to prepare a study of Governance Innovations in Regional Climate Adaptation that may further investigated for implementation in climate adaption.
3. An Analysis of 'Green' Sand Retention Structure Options and Pilot Projects for Regional Sediment Management
Seek to have the State Legislature direct BEACON to analyze 'Green Groins,' and other 'natural infrastructure-type sand retention experimental demonstration structures as possible options for implementation as part of coastal RSM to support resilient coastal climate and SLR Adaptation



A California Joint Powers Agency

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Kyle Richards
City of Goleta

Carmen Ramirez
City of Oxnard

Steven Gama
City of Port Hueneme

Christy Weir, Vice-Chair
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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 5B4

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020

Subject: BEACON Board Meeting Schedule for 2021

RECOMMENDED ACTION:

- i. **Review and Adopt a Board Meeting Schedule for 2021**

DISCUSSION:

The BEACON Board adopts a meeting schedule for the coming calendar year at the last meeting of each year. BEACON staff is recommending the Board review and consider adopting a Board meeting schedule as indicated below:

January Board Meeting	January 15, 2021*
March Board Meeting	March 19, 2021
May Board Meeting	May 21, 2021
July Board Meeting	July 16, 2021
September Board Meeting	September 17, 2021
November Board Meeting	November 19, 2021

*Friday of the Martin Luther King Holiday weekend



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STAFF REPORT

Meeting Date: November 20, 2020

Agenda Item: 5C1

To: BEACON Board of Directors
From: Ventura County Auditor-Controller's Office
Date: November 12, 2020

Subject: Auditor-Controller Budget Actions and Financial Reports

RECOMMENDED ACTION:

- i. **Receive and file the Fiscal Year 2020-2021 Unadjusted Budget-to-Actual report for the year-to-date period ending October 31, 2020 (Exhibit I).**
- ii. **Authorize the Auditor-Controller's Office to make the budgetary adjustment as follows (requires 6/10th vote):**

INCREASE Other Professional and Specialized Services	\$ 5,000
DECREASE Contingency	\$ 5,000

DISCUSSION:

Recommendation i:

Receive and file report from Ventura County Auditor-Controller's Office on the Unadjusted Budget-to-Actual for Fiscal Year 2020-2021 for the period ending October 31, 2020 (Exhibit I).

Recommendation ii:

The following budgetary adjustment is being recommended:

- To increase Other Professional and Specialized Services by \$5,000 to accommodate for BEACON to utilize the services of an independent contractor to provide technical assistance for Federal grant applications and grant management.
- To decrease Contingency by \$5,000 to transfer appropriations to Other Professional and Specialized Services.

BEACON FUND O025
YEAR TO DATE UNADJUSTED BUDGET TO ACTUAL FY 2020-21
FOR THE MONTH ENDING OCTOBER 31, 2020

Unit	Account Number	Title	BUDGET			ACTUAL YTD			
			Adopted Budget	Budget Mod	Revised Budget	Actual	Encumbered	Total Revenue/Obligation	Variance
UNASSIGNED FUND BALANCE									
		Appropriation of Fund Balance	5,643	-	5,643	206,624.11		206,624.11	200,981.11
	5950	Unassigned Fund Balance	5,643	-	5,643	206,624.11		206,624.11	200,981.11
REVENUE									
5665	8911	Investment Income - (Interest Earnings)	4,000	-	4,000	(0.01)		(0.01)	(4,000.01)
5665	9371	Other Governmental Agencies - (Member Dues)	299,960	-	299,960	253,050.00		253,050.00	(46,910.00)
5665	9252	State Other - OPC Grant (Debris Basis Modification)	14,000	-	14,000	-		-	(14,000.00)
5665	9252	State Other - OPC Grant (Surfer's Point Project)	218,320	-	218,320	(79,483.98)		(79,483.98)	(297,803.98)
5665	9252	Coastal Commission Mitigation Fees (Mondo's Cove Stairway Project)	37,075	-	37,075	(1,667.50)		(1,667.50)	(38,742.50)
		Total Revenue	573,355	-	573,355	171,898.51		171,898.51	(401,456.49)
		TOTAL SOURCES	578,998	-	578,998	378,522.62		378,522.62	(200,475.38)
EXPENDITURES									
5665	2072	Insurance	3,500	-	3,500	3,741.79	-	3,741.79	(241.79)
5665	2131	Memberships and Dues (American Shore & Beach Preservation Assoc.)	2,000	-	2,000	-	-	-	2,000.00
5665	2159	Miscellaneous Expenses (Communication and Outreach)	5,000	-	5,000	-	-	-	5,000.00
5665	2159	Miscellaneous Expenses (CRSMP Update/SCCBEP)	20,000	-	20,000	-	-	-	20,000.00
5665	2183	Engineering and Technical Surveys (Science Support Services)	15,000	-	15,000	-	-	-	15,000.00
5665	2183	Engineering and Technical Surveys (Dr.Douglas George)	15,000	-	15,000	3,818.07	11,181.93	15,000.00	-
5665	2183	Engineering and Technical Surveys (Program Management - COM3)	43,500	-	43,500	14,840.00	28,660.00	43,500.00	-
5665	2183	Engineering and Technical Surveys (Geographic Information Systems)	3,000	-	3,000	-	-	-	3,000.00
5665	2185	Attorney Services (County of Santa Barbara)	12,000	-	12,000	-	-	-	12,000.00
5665	2199	Other Professional & Specialized Services (Executive Director)	134,900	-	134,900	34,400.00	100,500.00	134,900.00	-
5665	2199	Other Professional & Specialized Services (Jensen Design & Survey)	36,898	-	36,898	22,136.25	14,761.25	36,897.50	0.50
5665	2199	Other Professional & Specialized Services (Accounting Svcs-VC ACO)	15,000	-	15,000	-	-	-	15,000.00
5665	2199	Other Professional & Specialized Services (Biennial Audit Services)	10,380	-	10,380	-	10,380.00	10,380.00	-
5665	2199	Other Professional & Specialized Services (Pam Baumgardner)	2,000	-	2,000	-	2,000.00	2,000.00	-
5665	2273	Education, Conferences, and Seminars (Registration Fees)	1,000	-	1,000	121.10	-	121.10	878.90
5665	2292	Travel Expense (Mileage, Travel & Conf.)	2,500	-	2,500	-	-	-	2,500.00
		Total Overhead Expenditures	321,678	-	321,678	79,057.21	167,483.18	246,540.39	75,137.61
		Grant Funded Expenditures							
		OPC - Debris Basins Removal:							
5665	2183	Admin+ Management & Best Practices Manual (Tasks 1, 8 & 9) - COM3	6,000	-	6,000	-	6,000.00	6,000.00	-
5665	2183	Planning, Engineering, Construction, CM, Monitoring & Restoration - (Tasks 2, 3, 4, 5, 6 & 7) - SB County Flood Control District	8,000	-	8,000	-	-	-	8,000.00
		Total Grants - OPC - Debris Basins Removal:	14,000	-	14,000	-	6,000.00	6,000.00	8,000.00
		Grants - OPC - Surfer's Point Project:							
5665	2183	Engineering and Technical Surveys - OPC Grant - Surfer's Point Project - City of Ventura	218,320	-	218,320	54,886.29	-	54,886.29	163,433.71
		Total Grants - OPC - Surfer's Point Project:	218,320	-	218,320	54,886.29	-	54,886.29	163,433.71
		Total Grant Funded Expenditures	232,320	-	232,320	54,886.29	6,000.00	60,886.29	171,433.71
5665	6101	Contingency	25,000	-	25,000	-	-	-	25,000.00
		TOTAL EXPENDITURES	578,998	-	578,998	133,943.50	173,483.18	307,426.68	271,571.32
		Ending Unassigned Fund Balance							
									244,579.12

Note: Amounts with "()" in the ACTUAL column reflect FY20 accruals in excess of actual expenditures and revenue to date.

BEACON - FUND O030 - BEACON Sand Supply and Public Access

Unadjusted Balance, as of October 31, 2020: 32,866.99



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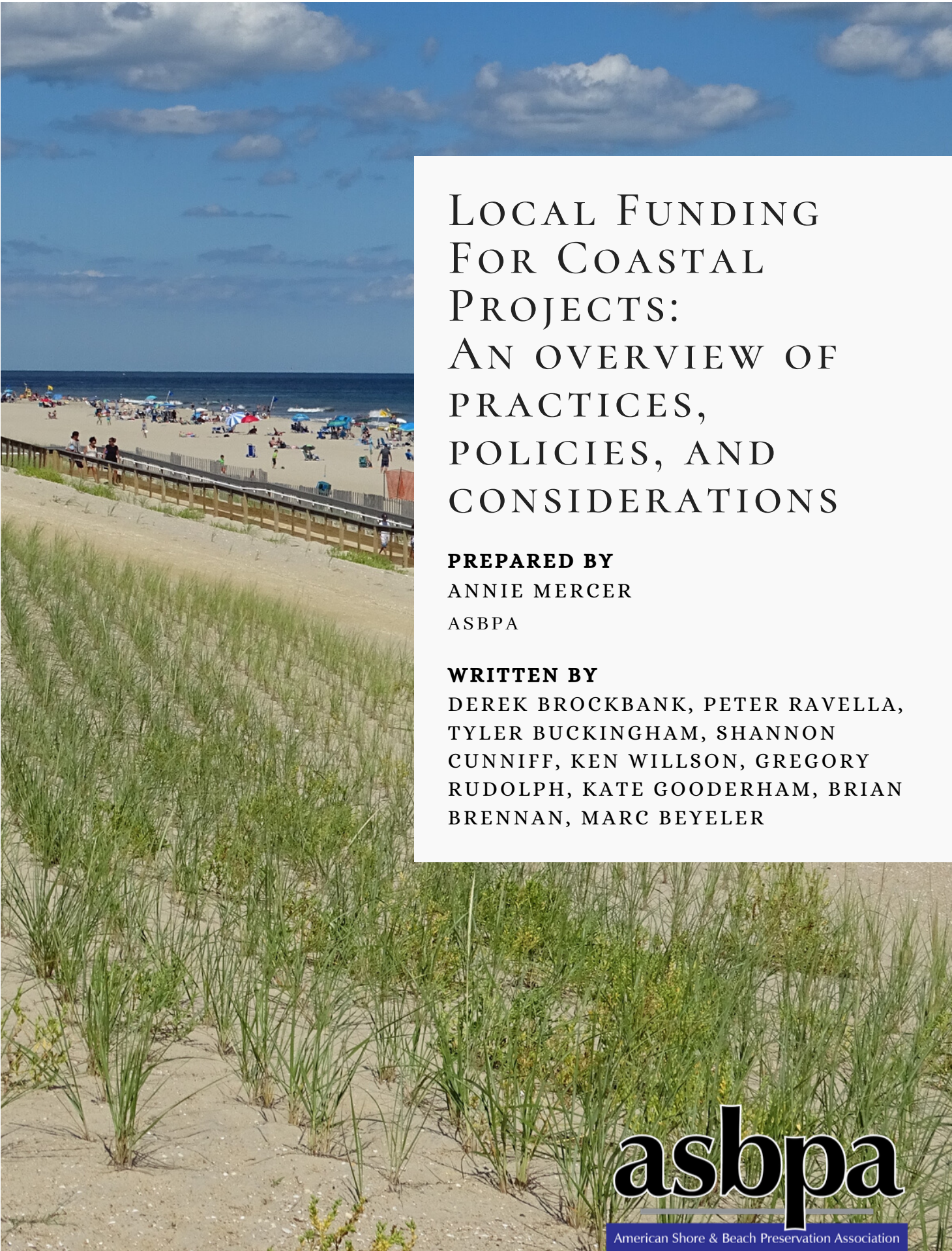
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STAFF REPORT

Meeting Date: November 20, 2020
Agenda Item: 6

To: BEACON Board of Directors
From: Executive Director
Date: November 12, 2020
Subject: Executive Director's Report and Communications



LOCAL FUNDING FOR COASTAL PROJECTS: AN OVERVIEW OF PRACTICES, POLICIES, AND CONSIDERATIONS

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asbpa

American Shore & Beach Preservation Association

Advocating for healthy coastlines

LOCAL FUNDING FOR COASTAL PROJECTS: AN OVERVIEW OF PRACTICES, POLICIES, AND CONSIDERATIONS

The goal of this paper is to help coastal managers and elected officials think about how to fund beach renourishment and coastal restoration projects. The paper briefly reviews the evolution of funding policies, introduces funding considerations based on project characteristics, and outlines funding tools or mechanisms to consider.

THE CONTEXT FOR LOCAL FUNDING

Coastal communities have been restoring beaches for nearly a century. In 1923, the first major U.S. beach nourishment occurred in Coney Island, NY. Over 2.5 million cubic yards of sand was placed on the southern shores of Brooklyn and was held in place by a series of coastal structures, for the astonishingly low cost of \$282,275. (1) Adjusted for inflation, this amounts to just \$1.64 per cubic yard of sand.

In the decades since, coastal science and engineering have greatly advanced. We better understand the drawbacks and benefits of coastal structures, we know more about the movement of sand, and we have a much greater appreciation for how dredging and sand placement impact coastal ecology. Beach nourishment projects have increased in cost due to stronger environmental protections, prioritizing safe working conditions, improved project specifications, and increased distance to sand sites.



Jones Beach State Park during the Jones Beach Air Show on 28 May 2006. Image provided courtesy of New York State Office of Parks, Recreation and Historic Preservation.

FUNDING RESPONSIBILITY

Several factors contribute to wide variations in the cost of beach restoration projects including regional geology, local erosion rates, shoreline condition, project size, regulatory compliance requirements, and even the time of year the project is done. In general, sand placement projects today range in the \$8 to \$20 per cubic yard. (2) In areas where sand resources are scarce or elevated environmental concerns exist, projects can cost as much as \$40 to \$50 per cubic yard. Federal beach nourishment projects attempt to plan for a 50-year project life – the amount of time beach will function at the risk reduction

capacity it was designed for; this will include periodic re-nourishments over the project life. Non-federal projects may plan for shorter project life, such as 30 years, and the lifetime cost must take into account the rising price of future renourishment projects.

Who pays for beach projects varies almost as much as the cost. Some projects have been paid for entirely by the federal government, others have been paid for by a single landowner. Most projects use multiple sources of funding; and, except for a few rare cases, the local community seeking to build the project is responsible for part of the cost.

Federally authorized shore protection projects are usually funded with up to 65% federal funds and 35% from the local cost share sponsor. (3) These projects come at a deep discount to the local community, but the community is then reliant on federal funds being regularly appropriated-- which is never guaranteed. The federal authorization process can also take years, even decades, and projects need to meet certain economic justifications based on the risk reduction they provide.

Some states – notably New Jersey, Florida, and Texas – have created dedicated state funds to support beach restoration projects which can help offset the costs paid by local governments. Several other states are in the process of developing these dedicated funding streams. State funding can be as fickle as federal funding, with many states having rules requiring balanced budgets and beach funding can dry up in bad economic years or as political priorities change.

There is no right or wrong way to fund beach restoration projects, what works for one community might not for another. Where one community seeks full autonomy over a project, another might prefer less control in exchange for drawing funding support from multiple partners.

Any local government wanting to restore their beach should have a clear understanding of what their goals are and engage local stakeholders to better understand the community's values and commitment to beach management. Engaging with stakeholders and understanding the nature of the community will also help guide what funding streams should be used to pay for the local portion of the project cost.



Funding sources and costs vary by state due to the diverse nature of beaches in the United States. Gulf Shores, Alabama; Easton Beach, Rhode Island, and Pacifica, California beaches highlight the different project spaces officials may be working with.

LOCAL FUNDING CONSIDERATIONS

Successful shoreline management funding strategies must be as persistent as the waves. Shoreline management is not a one-time fix, but on-going long-term commitment; therefore, a successful funding strategy must be equally long-range and predictable.

Typically, a community funding strategy includes some form of new tax revenue. Of course, raising tax revenues attracts a great deal of public attention and can be highly political, especially when done for beach or shoreline management. Understanding “community characteristics” will help establish what type of funding strategy – or new tax revenue – will be seen as fair and equitable by the local community.

COMMUNITY CHARACTERISTICS

Before a single public meeting occurs, before the first funding idea begins to take shape, a great deal can be learned about a shoreline community likely to influence and sometimes determine the success or failure of a funding strategy.

Demographics

- Average age, especially percentage of residents on a retirement income
- Overall income levels
- Percentage of owner-occupied structures
- Percentage of vacation homes
- Prevalence of short-term rental properties (e.g. Airbnb or VRBO)
- Presence of government-owned land (parks, pen space, etc.)
- The nature, quality and availability of public access

Population

- Off-season vs. on-season population
- Percentage of registered voters in jurisdiction

Land Use Patterns

- Commercial versus residential properties
- Type of residential shoreline development such as single family, multi-family, high-rise condominium, etc.
- Types of commercial properties especially type, nature and density of hotel or overnight accommodations, prevalence of local “mom and pop” businesses national or regional chains



Huntington Beach, California

Existing Local and State Tax Rates and Structure

- Ad valorem tax rates
- Special district tax rates
- Hotel, accommodation or occupancy tax rates and allowed uses of revenues
- Value of shorefront, near-shore, and “off-beach” properties in the project area
- Percentage value of shore area property in relation to the overall city or county property values
- History state and local investment in shoreline management and source of funds
- Parking or other beach access fees

Shoreline Use Patterns

- Seasonality of use (peak and off-peak season)
- Shoreline user groups, local vs. out-of-towners
- Day trippers versus over-night visitors
- Local users versus out-of-county and out-of-state users
- Location the shoreline project -- mainland or a barrier island
- Type of shoreline user community (“spring break” users, retired or family users, recreational users such as surfers, surf fishermen, boaters, etc.)

Understanding these characteristics will likely impact the nature of the funding strategy and, if properly understood, can help avoid delays and public opposition to the funding plan. At a minimum, understanding these characteristics can help planners anticipate the nature of the discussion to come and balance diverse interests along the shoreline.

An example: Imagine a densely developed sandy beach shoreline separated from the mainland on a barrier island and characterized by high-rise condos and hotels along the water and, off the beach, a mixture of single-family homes, small locally-owned hotels and businesses (restaurants, t-shirt shops and the like), modest-sized owner-occupied duplexes, and several low-rise condos or apartment complexes. Assume the beach has a typical summer peak season where the population rises from 5,000 in the off-season to 55,000 at the peak of summer. Further assume the beach is reasonably accessible to the public but most beach-goers are hotel or overnight guests.



Miami Beach, Florida

These “community characteristics” will impact the nature of the funding discussion to come and are predictive of likely tensions or fault lines that will arise. The balance between beachfront commercial contributors versus off-beach residential owners would certainly be a focus of the funding discussion. Local residents would likely push to shift costs and taxes to hotel owners along the beach. How local hotel or occupancy taxes are collected and used would also be a significant factor impacting the discussion. The degree of public access available to off-beach residents and their relative economic prosperity are also likely to be powerful factors in the discussion. Debate about the relative financial contribution between the largely commercial beachfront properties and the more residential off-beach owners would certainly be expected.

The community characteristics will not dictate the outcome of a funding strategy but ignoring these factors in the project funding discussion risks embarking a funding path likely to fail. Of course, other factors are equally important such as the political willingness to act or the level of outside funding available.

REGIONAL CHARACTERISTICS

“Regional sediment management” is a phrase capturing the notion that shorelines are typically geomorphologically and hydrologically continuous and cannot be truly managed in bits and pieces or on the basis of “political” jurisdictional boundaries. Looking beyond a project boundary to a broader, more expansive view of the shoreline will prove useful in engineering design and financial planning.

This means examining whether similar shoreline management efforts may be occurring outside the local municipality or county charged with developing a project-specific funding strategy. Economies of scale or project cost-savings may be possible if similar projects within a region are planned and/or executed together. The less money you need spend on a project, the less money you need to raise!

This means examining whether similar shoreline management efforts may be occurring outside the local municipality or county charged with developing a project-specific funding strategy. Economies of scale or project cost-savings may be possible if similar projects within a region are planned and/or executed together. The less money you need spend on a project, the less money you need to raise!

In some states, like Florida, the state contribution to a local beach nourishment project can increase if adjoining local governments act in concert. In addition, cooperative local governments can take advantage of potential cost savings if they plan, execute, and share the cost of:

- Sand or Sediment Search Investigations
- Shoreline Surveys
- Environmental Permitting
- Numerical Modeling
- Mobilization Costs



Dredge project at Palm Beach, Florida

Shoreline surveys can also be expensive and are always required whether the project is on a beach or a bay shoreline. Expanding the surveys to cover regional areas -- and sharing costs among multiple jurisdictions -- can be advantageous. Logistical considerations such as scope, schedule, and access to results can be coordinated with sufficient foresight. Similarly, permitting and modeling have efficiencies of scale – it’s cheaper to develop permits and model results for one big project than for two smaller projects.

Whether you are renourishing a beach or “building” a marsh or oyster reef, the project will require material such as sand, marsh sediments, or perhaps oyster shell or rock for breakwater construction or mitigation reefs. Expensive sand search investigations are often required and can run into the millions of dollars per project. By working together to address shoreline problems, adjoining jurisdictions may be able to substantially reduce the cost to both jurisdictions. Similar savings can often be found when locating supplies of oyster shell or material for breakwaters or reefs.

Finally, once the project is permitted and the bids are let, the opportunities to coordinate contractors and share mobilization costs can sometimes be realized. On a beach nourishment project mobilizations costs regularly exceed \$2 million and can reach \$5 million or more. (4) If adjoining communities coordinate the timing of their “separate” projects and share the same dredging contractor, substantial savings can occur at a minimum by proportionally sharing the mobilization cost of a dredge. While this level of coordination and planning among independent political jurisdictions can be difficult, the potential costs saving can make it worth the trouble.

LOCAL, STATE, AND FEDERAL FUNDING PARTNERSHIPS



Caminada: Winner of the 2019 Best Restored Beach

National Fish and Wildlife Foundation (NFWF), a private foundation, offers hundreds of millions of dollars in grants annually through its Gulf Environment Benefit Fund and National Coastal Resilience Fund to rebuild and restore coastal habitat, including beach, dune and wetlands systems. Each program has its own requirements, including who can submit the grant application, what the habitat and wildlife expectations are, what percentage of the project a grant will fund, and on-going monitoring requirements. NFWF helped fund a 2019 ASBPA awarded Best Restored Beach and Best Restored Shore. Many other regional or community foundations also provide funding for abitat restoration. Increasingly beach and dune system restoration is eligible for funding provided the project has demonstrable value as habitat. (5)

Few shorelines projects are funded by a single source of revenue. Federal shore protection projects are typically funded by the United States Army Corps of Engineers (USACE) paying 65% of the project design and construction cost and the local sponsor (usually a city or county) responsible for the remaining 35%, which in turn may come from multiple sources. Shoreline management costs are typically shared between state and local governments in the absence of federal funding; however, cost can also be shared between adjoining counties and municipalities. Some states offer grant programs to assist in covering the local cost share. Other potential funding partners can be ports, navigation districts, inlet management districts, and other “special” districts depending on the state and local law.

Private sector funding partners may also be involved. Grants, donations, or direct funding from a specific private interest can help fund projects, but these are often one-time

contributions and cannot be relied on for ongoing management. Partnering with companies or universities interested in implementing test sites can help reduce costs. Private or non-profit interest groups at the local and state level may also be cost share partners. Reaching out to surf organizations or gardening committees about supplying funds or labor for smaller vegetation projects or sand fence installations can reduce project costs and increase the investment of the community in continuing the project over several years. Successful and durable funding strategies are typically made up of public and private partnerships. Funding strategies developed with wide public involvement are likely to be better understood and supported in the community.

Stakeholders will typically insist they know who is paying for the project, how the contributions are identified and collected, and the relative weight of the financial burden among the affected parties – federal, state, local and property owners. In the end, the funding strategy must be perceived as “fair” if it is to succeed.

LOCAL FUNDING TOOLS AND PRACTICES

SPECIAL TAXING DISTRICTS

Many communities use variations of “special taxing districts” to generate revenue based on who benefits from a project.

A special taxing or service district is a geographic region established by law in order to raise tax revenue. Typically, the revenues collected through the tax are used to pay for public improvements specifically benefiting the land owners and residents within the district. This tool is often used by local governments to help pay for beach nourishment projects. In Florida, this type of district is called a Municipal Service Benefit Unit or MSBUs.

The government entity establishing the special taxing or service district for a beach nourishment project will determine which properties directly benefit from a beach (or coastal) project. Those property owners will be assessed a fee or pay a higher ad valorem rate than those located outside of the district. At times, multiple service districts may be setup with incremental increases in the tax based on the proximity of properties to the beach. For example, a community may setup one special taxing or service district to include all ocean-front properties within the project area, while a second district could be setup to include all properties within ¼ mile from the beach; potentially even a third district could be set up for landowners with ‘tertiary’ benefits, such as properties behind a certain highway or another geographical feature. Benefit district laws vary state to state but it is the flexibility of this financing tool in defining and allocating benefits which makes it so useful.

A special taxing district can be set up to generate revenue for future projects or for paying off debt on past or current project. When the tax is established for future projects the rates are set, with an estimated – but not exactly known – annual revenue. For example, in the case of an ad valorem-

based benefit district, a beach front parcel might pay 0.2% of assessed value (i.e., \$0.20 for every \$100 of assessed property value) and secondary district might pay 0.05% of assessed value. In these cases, the annual total revenue generated by the special benefit tax will vary with changing property values.

When the revenue must be exact, such as paying off debt, the amount of revenue from primary and secondary district should be set, but the actual percentage will vary annually based on a calculation of how much revenue needs to be raised. For example, a primary district might need to provide \$2 million and the secondary district \$500,000 every year. In this case, the actual percentage of assessed value will be based on what the total assessed value is for the district and the amount the district needs to generate. This type of system can be effective in providing the exact right amount of funding, but total assessed value will need to be regularly re-assessed to ensure taxing equity.

In Florida, this particular problem of unpredictable revenues does not arise when a Municipal Services Benefit Unit is established because the property owners are assessed a flat annual fee rather than an ad valorem tax.

EROSION CONTROL DISTRICTS

Erosion Control Districts are taxing districts specifically set up to address coastal erosion and will have specific taxes and beach management plans.

Like all special tax districts, erosion districts are established under specific state and local laws. These laws can include restrictions on how the district can levy and collect taxes, specify uses of collected revenues, or set a cap on the tax rate to be imposed on a property within a district (known as the “millage cap”). Erosion districts are either established as “dependent” or “independent,” a characteristic defining whether the district is under the control of the local county commission or city council (i.e. dependent”) or operates with its own governing board (i.e. “independent”).

Dependent erosion districts are established by the overarching authority responsible for maintaining the beach, and actions within them must be approved by county commissions. For example, in Florida, county governments are designated as the beach and shore preservation authority within their county, and they are authorized to develop districts within the county to address specific local beach erosion issues. (6) These districts can be within one county, or cross county boundaries if both counties agree. The taxes within a district must be spent on erosion control project in that district.

Independent erosion districts are established without specific authority from counties or other higher government entities. In Florida, the Captiva Erosion Prevention District (CEPD) was created prior to the state-wide authority establishing county-dependent erosion control district. It is the only independent erosion control district still operating in the state. The CEPD has the right to tax for general purposes and to make special assessments based on the benefits each property derives. Although there are no other independent erosion districts in Florida, the legal authority to create a

new independent district remains in place. To exercise this authority, the independent district would have to assert and establish the county is no longer the shore and beach preservation authority. Most counties would not want to give up this authority unless the county was close to reaching its millage cap, in which case it may be more willing to give up some authority. Before considering the creation of independent erosion control district, research should be done to see whether the state allows independent taxing districts.

GEOLOGIC HAZARD ABATEMENT DISTRICT

A Geologic Hazard Abatement District (GHAD, also referred to a Geologic Hazard Assessment District) is a taxing district, which may have an independent government agency administering it, to address multiple geological threats.

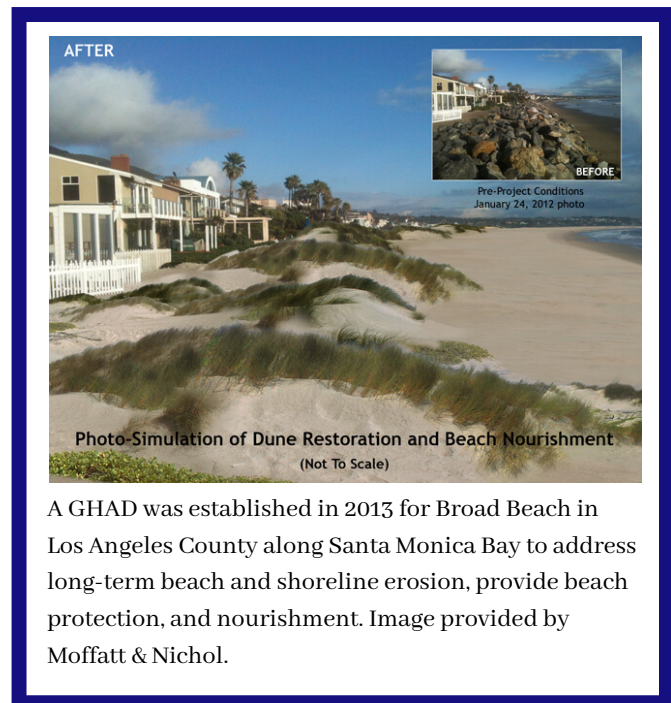
GHADs are created to finance projects to prevent, mitigate, and reduce risk of earthquakes, coastal erosion, landslides, and other geologic natural hazards. These have typically been used on the Pacific Coast, but the concept of a hazard abatement district could apply to other hazards such as coastal storms, flooding, etc.

A GHAD is established as a political sub-unit capable of raising revenue similar to a special taxing district; but the geographic boundaries are based on vulnerability to a hazard. A GHAD is able to issue municipal bonds, and repay those bond through an annual charge to every parcel within district. The specific rate for each parcel can vary based on risk and benefit, as established in the formation of the GHAD. Unlike a special taxing district, a GHAD is an agency which can approve and contract work in addition to raising revenue.

Depending on how it was set up, a GHAD has the ability to respond rapidly to emergency situations (for example, it could take action on mitigating an emerging erosion hot-spot without needing approval of all landowners in the GHAD). It can also be locally autonomous – exempt from local permitting requirements – it can own and acquire land and exist for either a set amount of time or in perpetuity.

INLET MANAGEMENT DISTRICTS

Inlet management districts are taxing districts established for the construction and maintenance of inlets not federally maintained.



Functionally similar to other special taxing districts, inlet management districts have the power to levy taxes and typically have a governing body controlling funds to maintain the inlet. Since inlets are the source of sand for down-drift beaches and can be filled by sand eroded from up-drift beaches, these districts will often maintain adjoining beaches either as mandated by their charter or simply as means of managing sand able to clog the inlet. Sand management techniques employed by inlet management districts can include back-passing, by-passing, stockpiling sand for future needs, and providing free or low-cost dredged sand to nearby beaches.



Sebastian Inlet Tax District was established by a Special Act of the Florida Legislature in 1919, to maintain the inlet between Brevard and Indian River counties. Sebastian Inlet has 42-acre depression within the inlet system known as a “sand trap” accumulating approximately 200,000 cubic yards of sand every 4-5 years. Per the state’s Beach Management Act, the Sebastian Inlet District is mandated to bypass sand onto downdrift beaches. A 2019 project dredged 153,000 cubic yards of sand from the inlet’s sand trap and navigation channel, placing approximately 113,000 cubic yards of sand on a one and a half mile stretch of downdrift beach and stockpiling 40,000 cubic yards of sand for future emergency beach fill and dune repair. (7) Image provided by Sebastian Inlet District.

INLAND NAVIGATION DISTRICTS

Inland navigation districts are taxing districts established to develop and fund long-range plans for maintenance of inland waterways, such as the intracoastal waterway, and for disposal of dredge material.

Inland navigation district are the same as inlet navigation districts, but their waterways do not necessarily provide access to open water and therefore are often not adjacent to beaches. While they typically will not provide funding for beach restoration, if they are located close to a coastal project, these districts can be a resource for free or low-cost sand and sediment. They may also fund back-bay projects as means of keeping sediment out of the navigation channel.

Most of the above taxing revenue tools were based on property value derived from having a restored coast or renourished beach. The following revenue tools are based on use, often called consumption taxes or user fees.

SALES, EXCISE, AND USE TAXES

Sales, excise, and use taxes are based on goods purchased or services rendered.

Most states impose, sales taxes are taxes on a commodity or service applied at the time of sale. Often an excise tax is imposed on a particular type of good and the revenues are dedicated to a specific purpose; for example, gas taxes are imposed on fuel sales and revenues spent on highway improvements, or sales tax on fishing and boating equipment is often collected and dedicated to fishery conservation. “Use taxes” are a type of value-based tax collected not when the item is purchased but when the item or service is used in the state. For example, some states require a one-time tax to register a car or a boat in the state if it was purchased in another state.

Sales and use taxes at the state level can be identified for specific purposes, and ballot initiatives across the country have successfully raised states’ sales and excise taxes by fractions of a percent to be used for conservation. (8) However, this has yet to be successfully implemented state-wide exclusively for coastal restoration projects.

Sales and use taxes can also be imposed by counties and local jurisdictions on top of the state tax. Sales, excise, and use taxes can also be combined with the concept of special taxing district, where goods and services in a specific district might have specific rates. For example, a beach front restaurant might be required to have a 1% higher tax rate than a restaurant off the water. Sales, excise and use taxes must pass voter approval but are a consistent source of revenue for project funding.

Florida has an additional transient rental tax at the county level of 5% on hotels, motels, apartments, mobile home parks, and more which remit funds directly to the local county. A percentage of these funds are solely used for beaches and their management.

TOURISM/BED/OCCUPANCY TAXES

The most commonly implemented sales tax used for beach restoration is a tourism or bed tax.

For many coastal communities, tourism is a major industry and a “bed tax” or “occupancy tax” generates revenue from visitors typically coming from outside the community. These occupancy or bed taxes are imposed on short-term overnight accommodations in addition to the local sales tax. A community must obtain authority to levy such a tax through state legislation. Often the authorizing legislation will place limitations on how the revenue generated can be spent. Typically, a portion of the revenues collected must be used on tourism related services such as beach nourishment.

USER FEES

User fees can take many forms but are based on direct use of the beach or coastal resource.

User fees cover a broad array of revenue generation through fees imposed on one-time, multi-use, or permanent use of a resource. Some of the most basic fees are for simply accessing or using the beach or coastal resource:



- Parking fees – a small fee for every time you park your car near the beach.
- Beach “tags” – tags allowing cars to be parked at the beach; charges can vary for local residents and visitors.



- Entrance fees – a fee based on number of people entering the beach.
- Use permits – for anything which could be outside of standard use: weddings, firepits, commercial photography, etc.

Other fees are generated by leasing the resource, particularly to commercial vendors or concessionaires:

- Leasing – food stands, beach chair & umbrella stands, surf lessons, etc.
- Hosting – sporting events, from volleyball to soccer to cheerleading.

As with any other source of revenue, different communities will have different opinions on which of these are acceptable.

WHO CAN USE THESE TOOLS?

Taxes and fees are often thought of in the context of an existing political sub-unit – a city, a county, a state – but as the above examples illustrate, generating revenue can come from more than just a standard government taxing structure. Revenue tools can focus on an area smaller than a municipality (such as an inlet management district), or cross municipal or county lines. Revenue streams can even encompass multiple counties or parishes who join together to address regional coastal issues.

Crossing or including multiple political subunits adds complexity to the development of the funding tool, since the method of revenue generation has to be legal in each political subunit and has to be approved in each subunit. However, generating revenue across municipal or county lines allows more stakeholders to contribute to a solution which spreads the costs more broadly. Regionality also adds to the perception of “fairness” where every stakeholder is contributing at some level. Regional revenue generation can also ensure a project has a broad regionally based solution, often improving the long-term results of the project and its cost effectiveness.

In 2016, nine counties in the San Francisco Bay region proposed a \$12 “parcel tax” (an annual tax on every individual property/parcel) to fund shoreline projects which would protect and restore the bay. This is estimated to raise \$500 million over 20 years. The ballot measure passed with an overwhelming 70% support. (9)

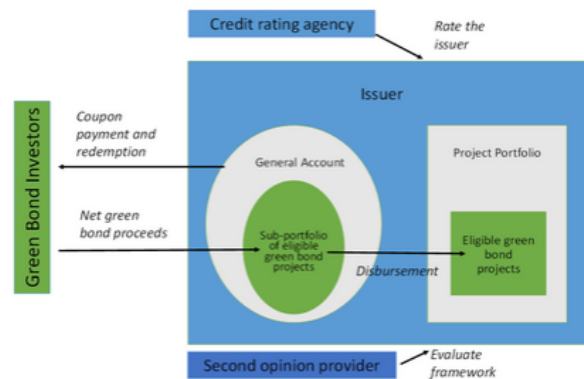
EMERGING FUNDING TOOLS

New financial options for funding projects are being implemented as project prices increase. Local governments who have identified sources of revenue from previously listed tools can consider bonds and insurance options to diversify their funding strategy. A bond is a debt instrument which allows towns to raise large-scale upfront financing for projects with known revenue streams. In its simplest version, a bond issuer raises a fixed amount of capital, repaying the capital (principal) and accrued interest (coupon) over a set period of time. The issuer will need to generate sufficient cash flows to repay interest and capital.

GREEN BONDS

Green bonds are a subset of conventional bonds. Their unique characteristic is the specification for the proceeds to be invested in projects generating environmental benefits.

Projects funded by green bonds must have clearly sustainable environmental benefits falling into one of the following broad categories: renewable energy, energy efficiency, sustainable waste management, sustainable land use, biodiversity conservation, clean transport, sustainable water management and climate change adaptation. (10)



Source: DIE (2016) Green Bond Illustration

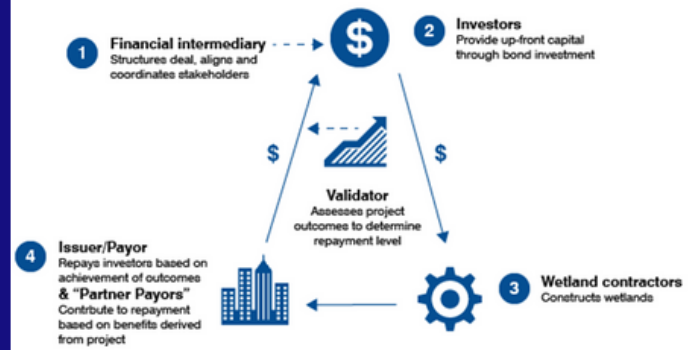
Ultimately it is the decision of the issuer to label a bond as green because certification is voluntary; however, some green bonds will undergo third-party verification/certification to be labelled as ‘green’ to establish proceeds are funding projects generating environmental benefits.

ENVIRONMENTAL IMPACT BONDS

Environmental Impact Bonds (EIBs) are a pay-for-success debt financing mechanism, designed to reward superior outcomes and provide a means to involve local asset owners in aspects of funding the transaction.

EIBs are a way to expand resources for coastal projects by bringing government and the private sector together in partnership to realize mutual goals. EIBs are akin to a traditional proceeds-based bond with a fixed interest rate, both are designed to be commercially viable and provide capital for government to undertake projects without waiting for revenue to be available. Bond repayment levels depend on the level of successful achievement of desired environmental benefits. This is accomplished through a “performance payment” triggered by meeting a pre-determined threshold measured by an independent evaluator. The performance payment rewards achievement of a superior environmental or social result and is provided by one or more asset owners benefiting from the project’s earlier implementation.

EIBs have been implemented for diverse activities from green infrastructure to bike paths. To expand use of EIBs, the Coalition for Private Investment in Conservation issued a blueprint demonstrating how, with minor adjustments, an EIB could be readily applied to implement transactions financing coastal resilience. Natural infrastructure projects such as barrier island restoration, beach nourishment and dune building efforts which have the objective of restoring habitats while simultaneously reducing flood damages could use EIBs. (11)

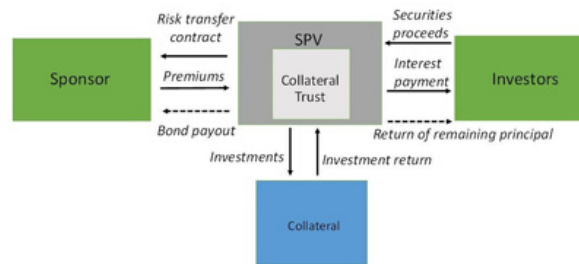


Environmental Impact Bond Illustration

The EIB's focus on rewarding superior performance helps governmental entities and asset owners have greater confidence they are paying for meaningful results. Another advantage of EIBs is they help build quantified evidence of the benefits of coastal restoration which is important for building and maintaining broad public support for investing in coastal natural infrastructure.

CATASTROPHE BONDS

Catastrophe bonds, or 'cat bonds', are financial instruments designed to help states, cities or other owners of large assets manage the financial risks associated with potentially devastating natural disasters and have been used by private and public sectors sponsors around the globe.



Source: RE:Focus (2015) Catastrophe Bond Illustration

Cat bonds are a tool to transfer some disaster risk to capital markets at attractive prices. These bonds are fixed income security paying periodic coupons to the investor during the life of the bond and insuring the sponsor of the bond against a pre-defined set of natural disasters. If a covered event occurs during the bond's life, the sponsoring entity retains the bond principal to fund emergency relief and reconstruction work. These bonds pay investors higher interest rates/coupons than other traditional bond alternatives to compensate for the risk of the issuer not having to repay the principal in the event of a major catastrophe. Cat bonds can be used as an alternative to standard insurance coverage for less frequent, but more catastrophic disasters. (12)

Cat bonds can be designed to trigger a payment from any disaster -- hurricanes, floods, etc. Generally, a threshold is established based on loss-and-damage triggers. Payment is based on the total insured or total economic losses experienced by a single firm (indemnity) or an industry (indexed). However, cat bond payments can be based on parametric triggers -- predetermined, independent indicators, such as wind speed or storm surge height measured at specific locations. Locally funded beach nourishment projects are often eligible for FEMA Category G funding for parks and public recreation areas in the event of federally declared disaster, so cat bonds may not be necessary, or could be used to supplement FEMA funds in the event of disaster.

PARAMETRIC INSURANCE

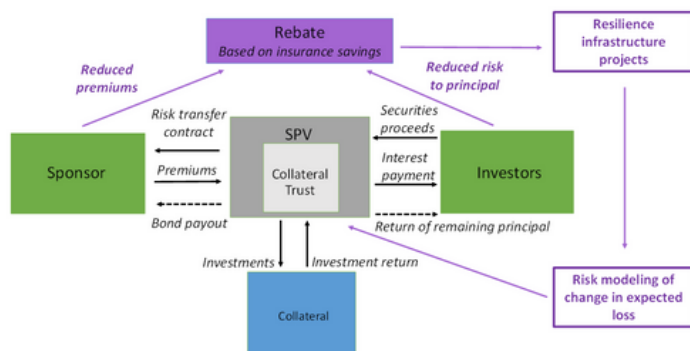
A parametric insurance policy compensates the buyer based on measurable physical characteristics of storm being met or exceeded.

Parametric insurance is a solution to short-term liquidity needs of communities and states in the aftermath of natural disasters. Therefore, payments are made based on readily attained data (predefined sustained wind speed or flood height) rather than being based on an assessment of damages which can take days to months after a storm event to capture. The payment can be used for any purpose, including emergency response costs, replacing lost tax revenue; and therefore, could be used for funding a shoreline project. Alabama was the first state to seek parametric insurance coverage for hurricane damages. Different cities or regions can also join together to pool specific risks into a single, more diversified risk portfolio and lower the insurance policy premium cost.

RESILIENCE BONDS

Resilience Bonds could become a new catastrophe bond-like product which provides funding for project-based risk reduction solutions.

The new idea, resilience bonds, was conceived by partnership between Re:Focus, Rockefeller Foundation, Swiss Re, Goldman Sachs, and Risk Management Solutions. A resilience bond differs from a catastrophe bond by incorporating an agreed rebate mechanism used to support building resilience projects. (13)



Fundamental to the idea is the ability to monetize both the physical and financial risk reductions associated with investments in flood damage reduction systems. The idea is implementing risk reduction measures lowers expected losses for investors and generates insurance savings. The risk to investors would be defined by independent risk modeling firms using catastrophe models evaluating

Source: RE:Focus (2015)

the chances of a trigger event occurring and how these probabilities change with the implementation of resilience projects.

For example, consider a beach nourishment project. Assume the benefits from this project to the local government sponsor have been effectively measured. What the restored wider beach would do is drive down the cost of catastrophic insurance over time because there would be a lower likelihood of damaging flooding. This is manifest in the resilience bond as reduced premiums. This translates to investors being less likely to lose their money due to a lower probability of an impact triggering a payment from the bond. The reduced risks and reduced premium are captured as a rebate which can be circled back to finance the restoration project. Given the complexities of resilience bonds of this nature none yet have been transacted.

SUMMARY

Funding a beach or coastal project which can run in the tens or even hundreds of millions of dollars over a project's lifetime can feel daunting. Still, a healthy coastline is an essential part of a coastal community – it reduces a community's risk from storms and coastal hazards; it's often an ecologically important area and; as a driver of tourism and recreation, it can underpin the community's economy. Developing funding mechanisms to successfully raise revenue over the course of decades to manage and maintain a coastline is essential for any coastal community faced with shoreline erosion. Funding mechanisms need to account for community characteristics, local stakeholders' visions and expectations for their coastline, and must be widely perceived as equitable among coastal constituencies.

Federal, state and/or private sources of funding will likely be part of most coastal projects budget plans, and working across political boundaries to develop regional coastal solutions can keep project costs down. At some level, local funding will be critical to any coastal project. Local communities will need to raise funds through bonds, fees, and taxes- with financial instruments used to leverage funds and/or insure projects.

The various special taxing districts, sales and use taxes, and bonds described in this report are not an exhaustive list of options available to officials for funding coastal projects. Tools listed in this paper are meant to help officials get a basic understanding of some options available at the local level when beginning the funding process. There is no set formula for using the proposed tools and there is no "right answer." What works for one community, might fail for another. People love their beaches and coastlines, so with solid community outreach, the right set of revenue generating tools, and dogged persistence, any community can fund their coastal projects.

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Toward improved coastal sediment management through coordination in California

By

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ABSTRACT

Sediment is an essential component of contemporary coastal and marine management in California. For decades, multiple coastal sediment management organizations have facilitated and coordinated regional sediment management (RSM) as an approach, and more recently, are increasingly focused on the state's sea level rise adaptation efforts. From the perspective of representatives and members of some of these organizations, this paper describes challenges of RSM in the areas of organizational capacity and coordination. It also characterizes ways in which organizations are taking leadership and action in overcoming these constraints to fulfill their commitment to improved coastal sediment management.

The 1,800-km coastline of California is extremely diverse, ranging from steep coastal cliffs, marine terraces, dune systems, coastal plains to coastal lagoons, and sandy beaches (George *et al.* 2015). The coastline is composed of different types of beaches and geological features: approximately 28.4% is pocket beach, 32.3% is sandy beach, and 39.3% is rocky shoreline (Scholar and Griggs 1997). An additional 650 km inside San Francisco Bay consists of wetlands, sandy beaches, and tidal mudflats. Superimposed on these natural shorelines and habitats are the millions of people and supporting infrastructure that generate \$45.8 billion annually for California's Gross Domestic Product (GDP); tourism and recreation associated with California's ocean and coast alone is estimated to be \$23.8 billion annually (National Oceanic and Atmospheric Administration 2016).

In California, the science of sea level rise and climate change has been broadly examined through numerous studies funded by the state, including most recently the Fourth Climate Change Assessment in 2018 (State of California 2018). Key findings regarding sea

level rise anticipate a radically different coastline for the state. For example, by 2050 at least 30 cm (12 in) of sea level rise is projected, with the rate accelerating in the latter half of the 21st century. Elevated sea levels already occur during high astronomical tides (often called "King" tides) and/or El Niño Southern Oscillation events; the impacts of these events will be greater with global sea level rise and large storms. Frequent flooding, also called nuisance flooding, will give way to permanent inundation of flatter coastal zones along with increased erosion of cliffs, bluffs, dunes, and beaches (Tebaldi *et al.* 2012; Sweet and Park 2014; Vitousek *et al.* 2017). As a result of these changes, it is no surprise that communities, infrastructure, and habitats at low elevations and/or closest to the ocean are the most vulnerable to higher sea levels. The 2018 update to *Safeguarding California* consolidated risks with estimates of damages throughout coastal California (California Natural Resources Agency 2018). Fortunately, for more than two decades, California has been preparing climate change adaptation and resilience plans for sea level rise and coastal change under the mantle of sediment manage-

KEYWORDS: Sediment, regional sediment management, organizations, coordination, collaboration.

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ment. This effort was borne out of the recognition that manipulations of the state's watersheds were bearing negative consequences on the coast.

The supply of gravel, sand, and mud that characterize the types of sediment in coastal California comes primarily from rivers, with cliff erosion as a secondary source (Slagel and Griggs 2008; Milliman and Farnsworth 2011). The Sacramento and San Joaquin Rivers, which drain 40% of the landmass of California, empty into San Francisco Bay. Slagel and Griggs (2008) estimated that approximately 10,000,000 m³/yr of sand and gravel would be delivered by the 21 major river systems of the state (excluding the Sacramento-San Joaquin) if it were not for the 66 dams that impound 2,300,000 m³/yr of sediment. The impoundment does not affect the state's coastline uniformly: Perg *et al.* (2003) found a 50:50 ratio of fluvial vs. terrace contribution in Santa Cruz, and Young and Ashford (2006) found 67% of littoral sediment originated from sea cliffs in the San Diego area. It is important to note that comparable values for gravel and fine-grained sediment have yet to be compiled statewide (George *et al.* 2015).

Disruptions of sediment supply and direct manipulations of the shoreline (e.g. seawalls, groins, or jetties) have resulted in widespread beach erosion along Cali-

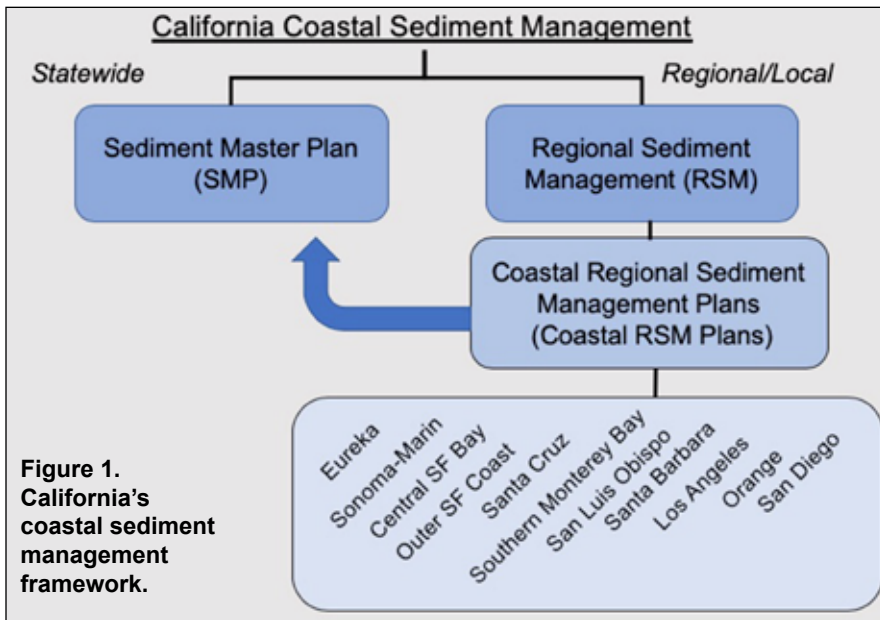


Figure 1.
California's
coastal sediment
management
framework.

fornia. Some notable exceptions include where sediment imbalances cause infilling of coastal lagoons and large-scale beach nourishment projects from the 1920s to the 1990s (American Shore and Beach Preservation Association National Beach Nourishment Database). Awareness of the threats to habitats, public access and recreation, and critical infrastructure has increased steadily within California's resource management and regulatory agencies and prompted organizations to explore more sustainable solutions, including beneficial use (Ulibarri *et al.* 2020).

REGIONAL SEDIMENT MANAGEMENT (RSM)

For the past 20 years, coastal sediment management in California and much of the U.S. has been organized around the goals and objectives of Regional Sediment Management (RSM) (Figure 1), a management and implementation approach that emphasizes regional level solutions to sediment imbalances and seeks to treat sediment as a beneficial resource. RSM incorporates many common policies and programs, but importantly, seeks to address unique physical, environmental, ecological, and socioeconomic “place-based” conditions in each region. RSM serves as the foundation of the state's efforts focused on coastal resources with 11 completed Coastal Regional Sediment Management Plans (hereafter, Coastal RSM Plans) (Table 1) covering most of the coastline and central San Francisco Bay (Figure 2). Each of the 11 coastal regions have developed “regional blueprints” to guide planning and implementa-

tion. These 11 Coastal RSM Plans are key components of the California Coastal Sediment Master Plan (SMP) (Figure 1). The SMP is intended to provide a 10-year road map and series of support tools for project and regional level planning and implementation. In addition to including all of the state's Coastal RSM Plans, the SMP highlights the dozens of special reports, projects, outreach, and other “RSM Support Tools” for coastal California (California Coastal Sediment Management Workgroup 2009, 2012, 2020).

The U.S. Army Corps of Engineers (USACE) and California Natural Resources Agency (CNRA) (through the California Ocean Protection Council [OPC]), co-chair the California Coastal Sediment Management Workgroup (CSMW), a collaborative entity representing the federal and state agencies that coordinate to lead the state's SMP and underlying Coastal RSM Plans. CSMW facilitates work with local and regional agencies responsible for project planning and implementation. The authors of this paper represent or are members of one or more of the organizations — CSMW, Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), and the California Shore and Beach Preservation Association (CSBPA) (Table 2)—involved with RSM and provide practical examples of, and perspectives on, what organizations are doing to work more strategically, and better, across membership.

Planning for RSM has been completed through the 11 Coastal RSM Plans (Table 1) but implementation has been slow and

uneven. Several interrelated constraints have emerged to hinder full program implementation, including governance and funding limitations, and complicated, time-consuming, and expensive¹ multi-agency planning and implementation requirements. Coordination among the various levels of government, and between permitting and approving agencies and project sponsors, has been inconsistent. As a result, project funding and financing has faced serious shortfalls and limitations with local and regional agencies finding it difficult to increase capacity to meet the numerous challenges.

State and federal agencies with the appropriate purview need to consider how to most effectively advance collaborative planning with regional and local efforts and to devote adequate funding to meet the objectives² outlined in the OPC's *Strategic Plan to Protect California's Coast and Ocean* (2020). This would address “California's coastal sediment management needs” through “using the RSM paradigm” (California Coastal Sediment Workgroup 2020, p. ES-1) or “philosophy” (US Army Corps of Engineers 2018a, p.1). For successful implementation of RSM through the Coastal RSM Plans at regional scales, we consider these constraints and offer suggestions in the following sections for building new capabilities and structural linkages to strengthen the approach.

THE CHALLENGES OF RSM

Coastal sediment management in California — using RSM as the approach for developing and implementing Coastal RSM Plans along the coast (Table 3) — faces several significant challenges going forward, including: lack of adequate and reliable long-term funding for planning and implementation; the need to broaden communication about sediment management and to expand technical transfer of best practices and lessons learned; multiple regulatory constraints to beneficial use of sediments; balancing the management of benefits and goals of ecosystems, recreation, and infrastructure protection; integrating climate and sea level rise impacts into sediment management planning and project design; and adapting implementation measures to address

1) Example costs for RSM actions in the San Diego Coastal RSM Plan range \$15 million-\$37 million/year (San Diego Association of Governments 2009).

2) OPC 2020-2025 Strategic Plan Objective 1.1; Objective 1.3; Objective 2.3; Objective 3.1.

shifting conditions and coastal hazards. Coordination and essential governance conditions are required in order to support successful planning and implementation efforts.

Despite these challenges, RSM has been used as a practical and science-based approach to coastal sediment management for more than two decades (Department of Boating and Waterways and State Coastal Conservancy 2002; California Coastal Sediment Workgroup 2012; U.S. Army Corps of Engineers 2018b). The 11 Coastal RSM Plans were developed to address sediment management at the littoral cell scale, emphasizing the potential use of sediments for multiple beneficial uses, including beach nourishment and restoring natural sediment pathways. Scaled up, these plans build the core structure of the SMP, representing California's collective efforts.

After more than a decade of planning, coastal sediment management activities need to move towards implementation. While state and federal funding and regional action resulted in the development of Coastal RSM Plans, support for implementation of those plans is lacking. We see the key elements of successful implementation as both intra-organizational capacity building and inter-organizational coordination. This will also require a strategy for garnering consistent funding and essential science support that addresses climate change and sea level rise and considers multi-benefit approaches in planning. The challenges of applying RSM at project, watershed, city, county, and littoral cell levels are considerable; coordinating the organizations and partnerships and building opportunities for a successful sediment management regime is a key to developing the capacity to address them.

Capacity

Organizations focused on coastal management at various scales (e.g. local, regional, and state), have had to evolve along with advances in technology, intensified urban development, and the increasing challenge of balancing ongoing maintenance and operations while simultaneously preparing coastal communities for sea level rise. As a result, local jurisdictions, professional groups, and state level organizations have had to address more than they may have envisioned in their portfolios. Coastal professionals adapt

Table 1.

The 11 Coastal RSM Plans completed in California from 2008-2019 (California Coastal Sediment Management Workgroup 2020).

Coastal RSM Plan	Lead agency	Year completed
Southern Monterey Bay Littoral Cell	Association of Monterey Bay Area Governments	2008
Santa Barbara Littoral Cell	BEACON	2009
San Diego County	SANDAG	2009
Orange County	County of Orange Parks Dept.	2013
Santa Cruz Littoral Cell	USACE	2015
San Luis Obispo County	San Luis Obispo Council of Governments	2016
Eureka Littoral Cell	Humboldt Bay Harbor Recreation and Conservation District	2017
San Francisco Central Bay	Bay Conservation and Development Commission	2017
Los Angeles County	Los Angeles County Beaches and Harbors	2017
Marin and Sonoma County	Greater Farallones National Marine Sanctuary	2018
San Francisco Open Coast Littoral Cell	USACE	2019

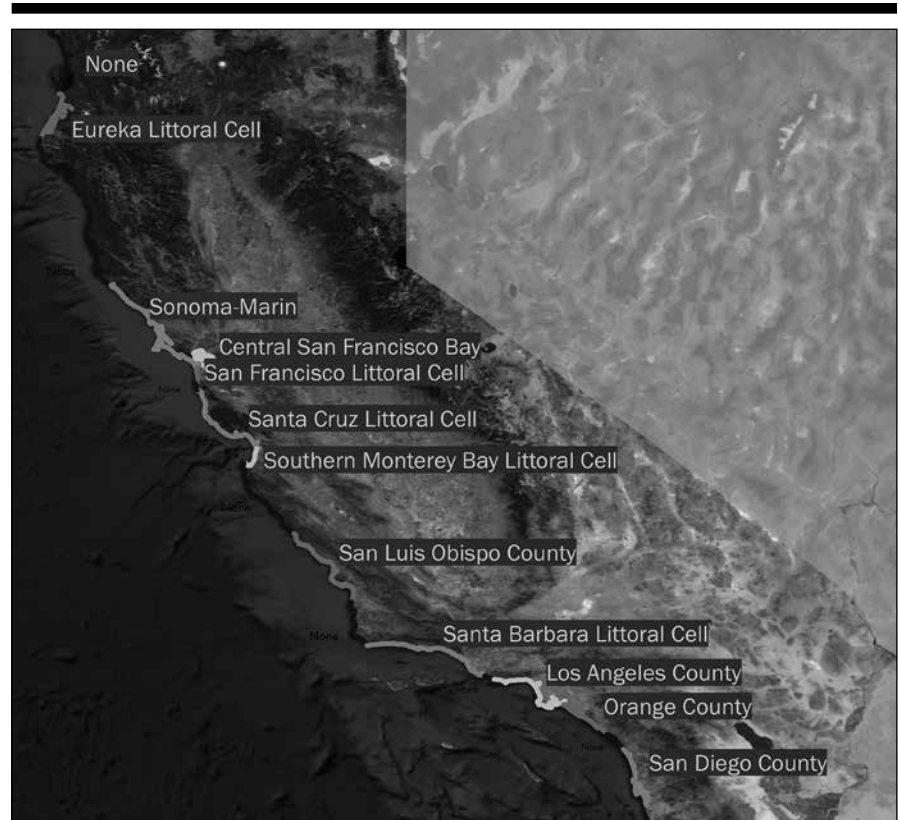


Figure 2. Eleven Coastal RSM Plans in California (image provided by J. Dingler, USACE).

by learning on the job to respond to an evolving understanding of the risks that climate change poses to the California coast, including sea level rise (Moser *et al.* 2018).

In surveys of coastal managers in California this trend is noticeable: In 2011, coastal managers reflected that water quality and excess sedimentation were their primary concerns; in 2016 primary

Table 2.
Selected organizations involved in RSM in California.

Organization	Establishment	Purpose/mission	Membership
California Coastal Sediment Management Workgroup (CSMW)	<ul style="list-style-type: none"> Established in 1999, co-chaired by USACE and the CNRA. CNRA's co-chair role facilitated by OPC, an agency within the office of the Secretary of Natural Resources charged with convening all state agencies on ocean and coastal policy issues. 	<ul style="list-style-type: none"> Facilitate regional approaches to protecting, enhancing, and restoring California's coastal beaches and watersheds through federal, state, and local cooperative efforts. Key mission to develop and implement State SMP and coordinate development of RSMs. 	<ul style="list-style-type: none"> Collaborative working group of federal, state, regional, and local organizations tasked with identifying and solving issues related to coastal sediment management. Aimed at better coordination among multiple jurisdictions addressing sediment management in coastal areas, CSMW membership was designed to be broad and inclusive, balancing top-down agency perspectives with bottom-up local representation.
California Shore and Beach Preservation Association (CSBPA)	<ul style="list-style-type: none"> California chapter of the ASBPA. ASBPA was founded in 1926. Board of directors represents various interests, led by president and vice presidents from the northern and southern parts of the state. 	<ul style="list-style-type: none"> Fosters dialogue and encourages cooperation on shore, beach and wetland issues in California. Helps practitioners and public understand coastal issues and supports actions to restore, preserve, and enhance state's shoreline and to promote stewardship by the public and government at all levels. With ASBPA, advocates for programs, projects, funding, and regulatory policy focused on environmentally responsible and cost-effective shoreline management. 	<ul style="list-style-type: none"> Diverse professionals in coastal science, including academic organizations, governmental agencies at the state and federal level, public and private interest groups, and consultants working on coastal problems. Represents a wide range of interests, including coastal processes research, beach nourishment and preservation, shoreline change, and monitoring and mitigation initiatives.
Beach Erosion Authority for Clean Oceans and Nourishment (BEACON)	<ul style="list-style-type: none"> Joint Powers Agency (JPA) established in 1986 to address coastal erosion, beach nourishment, and clean oceans within the central California coast from Point Conception to Point Mugu. State and federal grant funding and annual agency membership dues. 	<ul style="list-style-type: none"> Involved in an array of coastal studies and projects within its jurisdiction and works in close coordination with the parks, planning, and public works departments of member agencies. Coastal studies and project development contracted to other agencies or consultants. 	<ul style="list-style-type: none"> Member agencies include Santa Barbara and Ventura counties and coastal cities of Santa Barbara, Goleta, Carpinteria, Ventura, Oxnard, and Port Hueneme. Board is comprised of two supervisors from each county and one council person from each coastal city and staffed by a combination of specialist consultants and member agency professionals.

concerns had shifted to sea level change and coastal erosion. Similarly, in 2011, a major constraint was reported as “working on issues related to on sea level rise in addition to other responsibilities”; by 2016 “additional staffing devoted to sea level rise and coastal change issues” was reported. There is also a notable shift in information needs: while coastal professionals’ dominant information needs

focused on becoming more familiar with sea level rise-related risks in 2011, the greatest needs now are options for solutions and how to implement them. Formal training continued to be recognized in 2016 as extremely limited among respondents. The need for training persists (Finzi Hart *et al.* 2012; Moser *et al.* 2018).

Currently, coastal sediment management activities are funded either through

one-time funding from periodic grant solicitations using (principally) state general obligation bond act revenues or internal funding streams at federal agencies, such as USACE. This type of funding is typically limited to capital projects, and is generally not available for non-capital sediment management planning, data collection, research and design, or monitoring. The competitive nature of grant solicitations

Table 3.**Scope and scale of approaches and plans for coastal sediment management in California.**

Approach/Plan	Scope	Scale
Regional Sediment Management (RSM)	<ul style="list-style-type: none"> • Systematic approach emphasizing the regional scale, sediment imbalances, and beneficial use of sediment. • The process by which regions develop their Coastal RSM Plans 	<ul style="list-style-type: none"> • Implemented at the regional scale, often watershed or littoral cell, for coastal areas.
Coastal Regional Sediment Management Plans (Coastal RSM Plans)	<ul style="list-style-type: none"> • Essential components that make up the SMP • Between 2008 and 2019, 11 Coastal RSM Plans were completed (Table 1, Figure 2) • Form the core of the SMP approach to beneficial use and regional sediment management 	<ul style="list-style-type: none"> • Addresses specific portions of the coast, “using littoral cells as the minimum planning unit.” • Regional management entities utilize the plans for coordinated planning and decision-making • Designed to integrate local, regional, state, and federal agencies
California Coastal Sediment Master Plan (SMP)	<ul style="list-style-type: none"> • Developed by CSMW • Identifies several sediment issues requiring management, including “coastal erosion, environmental impacts, recreational opportunities, public access, dredging, wetlands and ports inundation, and sediment flow through coastal watersheds and along the coast.” 	<ul style="list-style-type: none"> • Encompasses California’s combined statewide approach to RSM for coastal resources using 11 Coastal RSM Plans as base. • Status reports in 2006, 2009, 2012 • Final plan forthcoming in 2020

does not allow for equitable distribution of funds across the state. This is further complicated by the intricacies of congressional funding of federal sediment management programs, for example within USACE. In a recent CSMW discussion of barriers and constraints to effective sediment management in California, participants identified two of the most important challenges as the lack of adequate state funding and support and the lack of funds to implement projects (California Coastal Sediment Management Workgroup 2019). Establishing a dedicated funding source for sediment management was recommended as one of the most important actions to advance state and local sediment management in California. While we acknowledge the significance of funding as a challenge, worthy of its own deep and detailed discussion, we choose to reflect on capacity as it relates to the ability to coordinate (Meinzen-Dick 2009).

Coordination

Capacity to work together, or coordinate, plays a crucial role in natural resource management, though it is not always abundant. Factors that affect coordination include physical and technical characteristics of the resource³; social and economic characteristics of the resource users⁴; and policy and governance factors⁵ (Meinzen-Dick 2009). For example, governance factors such

as jurisdictional boundaries along the coast are a major hurdle to implementing regional planning approaches, as much of the coast is a patchwork of land ownership and authority (e.g. city, county, state, federal) rarely managed by one entity. Cross jurisdictional memorandums of understanding and operating agreements can make this even more complex, when one entity (typically the state) owns the land while another entity (city or county) is responsible for maintenance and operation. These challenges are further complicated by other resource management, infrastructure, and public access demands, amplifying the need for improved coordination within and across organizations. Functional frameworks for convening representation of the myriad jurisdictional interests are needed for successful, coordinated, management.

In California, a number of organizations (highlighted in Table 2) are in place to develop, study, and/or implement

3) E.g. flow pattern (predictability of quantity over time and space); condition, technology, nature of resource, physical boundaries.

4) E.g. number of members, time horizon, extent or nature of interaction, skills and assets of leaders, power structure, users’ knowledge and demands, shared norms.

5) E.g. existing arrangements for discussion of resource problems, governance structures, decision-making arrangements, operational rules.

RSM, and may also provide technical assistance and other support tools. Some are statewide entities, others are strictly regional, while some are academic and professional associations and interest groups. Coordination of these organizations has been largely led by the CSMW with RSM planning undertaken by nearly a dozen regional initiatives involving local and regional organizations and agencies, such as BEACON, the San Francisco Bay Conservation and Development Commission (BCDC), and the San Diego Association of Governments (SANDAG). Interestingly, issues and barriers identified in the various plans remain principally the same, regardless of the organization. For example, the same goals and objectives identified in the Initial Report of the CSMW in 2000 were reaffirmed, with nearly identical language, in 2009 (California Coastal Sediment Management Workgroup 2000, 2009). In parallel, similar hurdles to implementation of Coastal RSM Plans are described by BEACON, BCDC, and SANDAG in the SMP (California Coastal Sediment Management Workgroup 2020).

Coordination is easier in principle than it is in practice, as documented in many fields (e.g. international aid, public health, emergency preparedness) as decision-making may be decentralized, incentives may vary, and organizations

have different mandates, goals, and needs (Bourguignon and Platteau 2015; Kim *et al.* 2019). As it relates to sediment management, Lillycrop *et al.* (2011) describe keys to a successful RSM approach as “the communication, coordination, and involvement of partners and stakeholders who have an interest in improving the management of sediments within the region.” These determinants may manifest via regional working groups (and through associated meetings, workshops, and subgroups that may focus on specific challenges). Though these groups may exist independently, there is often overlap in representation and membership and thus opportunity for partnership. While there are models of successful efforts towards coordination in California, they tend to be the exception rather than the rule.

ADDRESSING THE CAPACITY AND COORDINATION CHALLENGES OF RSM

Approaches outlined in 2000 and in 2009 served as the basis for the discussions in 2019 for a strategic path forward for CSMW. With the SMP nearing completion, developing a strategic plan began with assessing previous efforts in the context of coastal issues and projects today and reflecting on past goals, current shortfalls, and future needs. Discussions emphasized the need for a coordinated plan to implement the SMP and Coastal RSM Plans (California Coastal Sediment Management Workgroup 2019, 2020; California Ocean Protection Council 2020). These conversations sparked a vision for more collaboration, better communication amongst members and with other stakeholders, and illustrated the enthusiasm for continued partnership from members.

CSBPA, BEACON, and CSMW (Table 2) represent a subset of organizations⁶ that play a role in RSM and are examining opportunities for better coordination amongst themselves:

- **CSBPA**, an interest and advocacy group with representatives from local, state and federal government, academia and the private sector, offers another locus for multi-sectoral participation.

- **BEACON**, as an example, demonstrates how a regional organization can be structured to foster coordination among government members, practitioners, and interest groups, with the goal of applying current science to practical problems. BEACON’s membership includes two

coastal counties and six coastal cities spanning more than 250 km of the California coast incorporating the Santa Barbara Littoral Cell.

- **CSMW**, as a working group with representatives from federal, state, and local government agencies and academia, provides insight into the challenges faced working with agencies with often differing mandates.

In the spirit of coordination, other partnerships have oriented around specific RSM efforts, including Coastal RSM Plans. For example, a regional collaborative body called the North-Central California Coastal Sediment Coordination Committee led by the Greater Farallones National Marine Sanctuary (GFNMS) supports coastal resiliency through consensus-driven recommendations (National Oceanic and Atmospheric Administration 2019). This coordination body formed as an outgrowth of the four Coastal RSM Plans that were developed between 2012 and 2018⁷. Similarly, SANDAG has been the regional leader coordinating large-scale beach nourishments. SANDAG is a regional planning organization composed of 18 cities and county governments and serves as the forum for regional decision-making. The Shoreline Preservation Working Group advises SANDAG’s Regional Planning Committee on implementation of the Shoreline Preservation Strategy adopted in 1993, the 2009 Coastal RSM Plan, and San Diego Forward: The Regional Plan.

CSBPA is investigating ways to increase its visibility and voice to provide timely information on coastal and beach preservation issues in the context of climate-driven shoreline change. It is building capacity among members to enhance coordination with regulatory agencies at state and federal levels, developing recommendations for more efficient policy development and permitting, and liaising with national American Shore and Beach Preservation Association (ASBPA) on efforts to enhance funding for coastal projects such as beach nourishment and

living shoreline initiatives. In addition, current programs aimed at fostering public education through its support of K-12 science fairs and college/graduate school scholarships hold promise for recruiting a new generation of coastal practitioners. Building on current programs, CSBPA is exploring further engagement and outreach strategies from field trips, technical consultation, and advocacy to serving as a distribution/hub for scientific publications and technical reports. Through conferences in its “Headwaters to Oceans” series with partners such as the State Coastal Conservancy and its Southern California Wetlands Recovery Project, CSBPA has for decades provided a venue for information sharing and interdisciplinary understanding of the California coast. CSBPA provides Californians with linkages to other chapters in the national organization and to academic and nongovernmental organizations active in coastal science. Annual and biennial workshops and conferences have historically provided opportunities for coastal professionals to gather to explore issues and potential solutions in a multidisciplinary context; the need for this kind of exchange has never been greater.

In 2016-2017, BEACON assessed how it can best serve its member agencies and better address climate change and sea level rise as major drivers of change and threats to regional sediment management. The assessment identified BEACON’s importance as a regional agency and detailed a number of activities by which BEACON could expand and strengthen its role in RSM. These include: providing an amplified regional voice to state and federal government and serving as a regional forum for the policy education and outreach; championing the development of demonstration pilot projects (Beyeler 2012); soliciting and gaining funding for specific coastal projects (King and MacGregor 2013); and providing a forum for technical and scientific information and expertise (Beach Erosion Authority for Clean Oceans and Nourishment 2019). Currently BEACON is developing a set of strategic planning goals to guide its RSM efforts over the next five years, focused on incorporating the best available science into its implementation actions (Schooler *et al.* 2017; King *et al.* 2018).

CNRA, through the OPC, has an opportunity to play a major role in fostering implementation and engagement that

6) Refer to the CSMW website for a comprehensive list of organizations (https://dbw.parks.ca.gov/?page_id=29329)

7) The Pacific Ocean coastline from Sonoma County to San Mateo County spans more than 300 km bisected by the mouth of San Francisco Bay and is adjacent to GFNMS and the Monterey Bay National Marine Sanctuary. These four plans cover most of this region.

fits well within the goals of its 2020-2025 Strategic Plan. Since it currently provides CSMW leadership through its co-chair function, it would be a rational step forward to likewise provide resources for RSM implementation that fits within the scheme of its nearly completed SMP. OPC's capacity for leadership, partnership building, and technical assistance could be one of the keys to increased coordination of sediment management along California's 1,800-km coastline. Expanding membership to ensure that regional managers join CSMW and engage with USACE and CNRA more actively would help to keep RSM in the context of the statewide SMP. Once a more cogent structure is in place that better defines the roles that regional representation plays in the critical nexus between regional sediment management and the statewide SMP, it would benefit from identifying and prioritizing opportunities for progress in implementation and establishing benchmarks for making progress. BEACON is already a member of CSMW and provides a good model for proactive engagement; CSMW leadership should seek equivalent representation from the other regions.

In addition to increasing regional representation in its membership, CSMW could include additional organizations with statewide focus, such as CSBPA. CSBPA would amplify the work of CSMW through information exchange via conferences and other platforms to new audiences. Similarly, the continued involvement of California's two Sea Grant programs and NOAA's Coastal Training Program, in place to bridge science-to-management, would strengthen the relationship between CSMW members and the science community and support in identifying research and information gaps. Additionally, these partnerships could serve to enhance capacity and coordination activities through stakeholder convening, engagement, facilitation, communication, and evaluation.

Beneficial use of sediment and restoring the natural supply to the coast will continue to be seen as an "operating principle" of accomplishing RSM (US Army Corps of Engineers 2018a, p.2) and is identified at the state level in its inclusion of targets within the OPC Strategic Plan⁸ (California Ocean Protection Council 2020). RSM — arguably a critical element in a multi-phased approach to adapting to sea level

Acronyms

ASBPA — American Shore and Beach Preservation Association
BEACON — Beach Erosion Authority for Clean Oceans and Nourishment
CNRA — California Natural Resources Agency
Coastal RSM Plan — Coastal Regional Sediment Management Plans
CSBPA — California Shore and Beach Preservation Association
CSMW — California Coastal Sediment Management Workgroup
GFNMS — Greater Farallones National Marine Sanctuary
JPA — Joint Powers Authority
OPC — California Ocean Protection Council
RSM — Regional Sediment Management
SANDAG — San Diego Association of Governments
SMP — Sediment Master Plan
TMDL — Total Maximum Daily Load
USACE — U.S. Army Corps of Engineers

rise — will need to evolve to accommodate new information and coastal managers who are charged with implementation will need more training in their professional roles (i.e. increased capacity).

CONCLUSION

Collaboration among local, regional, state, and federal agencies will remain the most viable means to synergize interests in order to fund sediment management and beach preservation and enhancement programs in the foreseeable future. In order to achieve improved sediment management and successfully implement RSM, the various organizations in place at different levels of government and within civil society must better integrate and coordinate their efforts to, in turn, better address challenges to capacity. Increased coordination will help active organizations to leverage the others' assets and garner more support to further regional goals and those of California, which we hope can serve as a model for other areas in the coastal U.S. that are seeking similar approaches.

Arguably, the most important function of the CSMW was, and still is, the ability for agency representatives to meet regularly to understand the needs, issues, and resources available to each other, though increased resources and support from both state government and federal agencies is needed. Though the original framework for membership in the CSMW was well designed in principle, the CSMW would benefit by expanding engagement from a diverse set of stakeholders with representatives from regional collaborators. With implementation a local and regional responsibility, efforts by state and federal agencies on the CSMW can

8) OPC 2020-2025 Strategic Plan Target 1.3.1; Target 3.1.3; Target 3.1.6.

uniquely maintain a venue for and enable information sharing. Moreover, as conditions evolve, other interested stakeholder organizations that implement on-the-ground projects would be valuable additions to CSMW's membership.

Regional activities and plans need to be provided with greater organizational and program support if RSM implementation is to be achieved in California. As described above, through strategic planning discussions, CSMW members identified several needs that require greater support from the workgroup and its cooperating federal and state agencies, including continuing scientific and technical endeavors, pilot projects and regional monitoring, additional development of decision-support tools, and training and capacity-building for local and regional agency staff. While physical science can and must remain a core focus, there is a need for more integrated, interdisciplinary approaches⁹ that engage social science to better understand barriers to and opportunities for beneficial use of sediment, adaptation to sea level rise, and socio-political and -economic obstacles to RSM implementation. Additional assessments of members of sediment management organizations will further illuminate topics of interest and greatest needs.

The challenges to the California coast are formidable, with coastal resources

9) For example, the Sediment Resilient Infrastructure and Sustainable Environments (SedRISE) project at the University of California, Irvine convened an interdisciplinary team of researchers from the fields of engineering, social ecology, and biology and sediment management professionals from southern California to collaboratively advance understanding and models of human and natural influences on coastal sediment dynamics and develop tools useful for building resilience and sustainability through sediment management.

and way of life at risk. Amidst a future filled with uncertainty, California's coastal sediment professionals are envisioning new opportunities to capitalize on the last decade of preparing for the challenge with the Coastal RSM Plans. As CSBPA, BEACON, CSMW, and others seek to fulfill their missions and mandates, a greater recognition of the need to coordinate will be key to protect and enhance California's coast for future generations.

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