

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

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## NOTICE MEETING

#### BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT (BEACON) SCIENCE ADVISORY COMMITTEE (SAC) ANNUAL MEETING SESSIONS

#### January 19, 2021 and January 29, 2021

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

### DATES: TUESDAY JANUARY 19, 2021; FRIDAY JANUARY 29, 2021 TIME: 11:00 AM TO 1:00 PM PLACE: TELECONFERENCE (see details below)

The agenda of business to be conducted is below.

## MARC BEYELER, EXECUTIVE DIRECTOR BEACON and EXECUTIVE STAFF TO THE BEACON SAC Dates: January 19, 2021 and January 29, 2021

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, the December 3, 2020 State Public Health Officer's Regional Stay At Home Order, and the December 6, 2020 State Public Health Officer's Supplement to the Regional Stay At Home Order 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 Science Advisory Committee meetings will temporarily no longer provide in-person participation.

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

1. You may observe the live meeting of the Board of Directors via Zoom Meeting;

January 19th 11:00 am to 1:00 pm

https://us02web.zoom.us/j/82904666732?pwd=V0hPZ0RadzhpS0k5W W9LYWRCQzFNUT09

Meeting ID: 829 0466 6732 Passcode: 203761



#### January 29th 11:00 am to 1:00 pm

https://us02web.zoom.us/j/88903023543?pwd=ZnlkZkdmNVJxdXJaS ktZemhIYWNGdz09

Meeting ID: 889 0302 3543 Passcode: 505606

- 2. You may call in to listen live to the Science Advisory Committee Meeting Sessions by dialing January 19<sup>th</sup> +16699006833,,82904666732#,,,,\*203761# US (San Jose) January 29<sup>th</sup> +16699006833,,88903023543#,,,,\*505606# US (San Jose)
- 3. If you wish to make a general public comment or to comment on a specific agenda item, the following methods are available:
  - a. Distribution to the Science Advisory Committee. Submit comments via email to <u>Staff@Beacon.ca.gov</u> prior to 5:00 p.m. on January 18, 2021, or through mail to BEACON Attn: Science Advisory Committee at 501 Poli Street, Ventura, Ca 93001 to be received no later than 5:00 p.m. on Monday, January 18, 2021. 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 <u>Staff@Beacon.ca.gov</u> prior to 5:00 p.m. on Monday, January 18, 2021 prior to the Board meeting. <u>Please indicate if you would like to make a general public comment, a comment on a specific agenda item, or both</u>. 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 Executive Director. If you wish to make a comment during the agenda item for public comment, 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 Executive Director 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.

#### **BEACON Science Advisory Committee (SAC) MEETING AGENDA**

SAC Meeting Session 1 Tuesday, January 19, 2021 11:00 am-1:00 pm

- 1. Administrative Items
  - A. Call to Order and Roll Call Dr. Patsch, SAC Co-Chair
  - B. Meeting Organization and Meeting Rules (Brown Act)- Mr. Beyeler
  - C. SAC Organization- Mr. Beyeler
  - D. SAC Member Introductions- Dr. Patsch
- 2. Purposes and Activities of SAC and Review of Science Action Plan
- 3. Review of BEACON Strategic Planning Science Goals and Objectives
- 4. Presentation and Discussion of Potential Science Priorities and Activities
- 5. Session Wrap-Up Summary
- 6. Adjournment to January 29, 2021

SAC Meeting Session 2 Friday, January 29, 2021 11:00 am-1:00 pm

- 1. Administrative Items
  - a. Call to Order and Roll Call- Dr. George, SAC Co-Chair
  - b. Consideration and Approval of Minutes of the BEACON SAC Meetings held on January 19, 2021.-Dr. George
  - c. Adopt a meeting schedule-Dr. George
- 2. Review of Session 1
- 3. Review of Decision Framework for Including and Evaluating Priorities
- 4. Discussion and Evaluation of Priorities and Activities
- 5. Discussion of Manager's Workshop
- 6. Discussion of Next Steps
- 7. Adjournment

#### 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.

SAC Meeting Item 1C



## BYLAWS FOR SCIENCE ADVISORY COMMITTEE

(Adopted by the BEACON Board, September 18, 2020)

#### 1.0 FUNCTION

The Science Advisory Committee (SAC) is a standing advisory committee, which provides professional technical science advice and recommendations to the policy making Board of Directors of the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) on issues related to:

- Reviewing relevant data collection and scientific research initiatives of importance to beaches within BEACON's jurisdiction;
- Discussing, evaluating, and prioritizing of data collection and scientific investigations of most relevance to BEACON's mission and that BEACON could support;
- Identifying of science support resources;
- Developing ways to better integrate science into BEACON's policy and decisionmaking;
- 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.

#### 2.0 REPRESENTATION & TERM

The Chair of the BEACON Board of Directors shall have the authority to appoint Co-Chairs and committee members with confirmation of the appointments made by the Board of Directors. (Bylaws, Art. IV.A.) Membership of SAC shall consist of twelve (12) members that are experienced scientific personnel encompassing physical, ecological, and social science disciplines focused on coastal and ocean topics from academic, public, and private organizations. SAC members shall have specific knowledge and expertise in the following scientific and technical areas, including:

- Geomorphology;
- Hydrology;
- Geology;
- Biology;
- Beach Ecology;
- Oceanography;
- Coastal Engineering;
- Coastal Economics;
- Coastal and Ocean Law and Policy;

- Social Ecology;
- Political Science; and
- Sociology.

Each designated SAC member shall serve for a two-year term, or if applicable, at the will and pleasure of their appointing authority. SAC members may re-appointed to additional terms without limitation.

BEACON consultant staff shall provide support for SAC including scheduling of meeting locations, preparing and distributing agendas and meeting materials, and taking meeting minutes.

#### 3.0 <u>VOTING</u>

Each voting member shall be entitled to one vote. (Bylaws, Art. IV § D.) Only voting members or their alternates who are present at the meeting may make a motion, second a motion, or vote upon a motion under consideration by SAC. A motion shall pass if approved by a simple majority of the members present at the meeting unless otherwise required.

Ex-officio members may not vote. (Bylaws, Art. IV § D.) Ex-officio members may not make a motion, second a motion or vote upon any motion under consideration by SAC.

BEACON Executive or consultant staff may present recommended board actions to SAC to receive the committee's professional advice and input. SAC may recommend approval of BEACON Executive or consultant staff recommendations or may formulate and approve its own recommendations and shall not be bound by those presented by BEACON Executive or consultant staff. BEACON Executive or consultant staff shall report to the BEACON Board of Directors on recommendations adopted by SAC.

#### 4.0 <u>QUORUM</u>

All decisions by a committee shall be by simple majority of the quorum (5 of 8 members). (Bylaws, Art. V, § 1.) A quorum shall be two-thirds of the committee members (8 of 12 members). A quorum shall be required for the conduct of any business of the SAC. (Bylaws, Art. V, § 1.) No business shall be conducted by a committee without a quorum. (Bylaws, Art. V, § 1.)

#### 5.0 OFFICERS

Officers of SAC shall include two Co-Chairs. After the initial term, SAC members may elect officers by a majority vote of a simple majority of the quorum (5 of 8 members).

#### 6.0 REPRESENTATION AT BEACON BOARD MEETINGS

Either Co-Chair will attend Board meetings to represent the SAC as may be needed to facilitate Board discussion on issues germane to SAC's advisory role.

#### 7.0 <u>MEETINGS</u>

Meetings of SAC shall be held at least once annually. In addition, once a year the SAC shall participate in a workshop with member agency department managers (public works and planning) to discuss scientific, and related management and policy, issues of importance to BEACON's mission. At the discretion of either Co-Chairs, meetings may be rescheduled or cancelled. At the request of either Co-Chair additional meetings may be scheduled.

Meetings shall be conducted in compliance with the Ralph M. Brown Act as amended. (Gov. Code §§ 54950 *et seq.*)

#### 8.0 BYLAW ADOPTION AND AMENDMENTS

A two-thirds majority of the BEACON Board of Directors shall be required to adopt these bylaws and any amendments to these bylaws. SAC may recommend bylaw amendments to the BEACON Board of Directors.

#### SAC Meeting Item 1D



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Website: http://www.beacon.ca.gov Co-Chair Dr. Kiersten Patsch Associate Professor, Environmental Studies and Resource Management, California State University, Channel Islands kiki.patsch@csuci.edu

BEACON Science Advisory Committee (SAC) Membership 2020

Co-Chair Dr. Douglas George Vice President, California Shore & Beach Preservation Association <u>douglasgeorge.phd@gmail.com</u>

Mr. Robert Battalio Senior Engineer, Environmental Science Associates (ESA) BBattalio@esassoc.com

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Dr. Sean Vitousek Research Oceanographer, Pacific Coastal and Marine Science Center, United States Geological Survey svitousek@usgs.gov

#### DRAFT BEACON Science Action Plan January 2021

#### **Introduction and Background**

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 federal United States Geological Survey (USGS). Based on these past science support efforts, BEACON developed innovative beach nourishment, sediment disposal, and coastal resources restoration policies and projects.

Currently, several different data collection and research efforts focused on coastal sediment processes, costal and ocean physical and ecological systems, and increasingly climate adaptation needs are being undertaken by partner organizations which could help inform BEACON's activities going forward.

BEACON staff and board members need to better understand current data collection and research efforts and to better understand how these science initiatives can support BEACON policy and decision-making and the links and pathways from science to decision-making, 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.

#### **BEACON Science Strategy Development**

In November 2019, the BEACON Board of Directors instructed BEACON staff to undertake two major steps in developing and implementing expanded science support for BEACON's policies and decision-making, including convening a group of scientists and technical specialists with experience in or knowledge of the Santa Barbara Littoral Cell (SBLC), and examining options for establishing more formal relationships with interested scientists and science organization and agencies.

Between November 2019 and March 2020, BEACON staff established connections with a group of interested and experienced science personnel, and working with a science consultant, Dr. Douglas George, made plans for consulting with this group through the planning and organization of a one-day roundtable workshop focused on how best to bring the most current science into BEACON policy development, program and project decision-making.

With the onset of the COVID-19 pandemic in California, plans were revised to undertake a series of remote activities to seek the input of the science personnel, including an introductory webinar, an internet survey, and a series of telephonic interviews, all of which has conducted between March and July of 2020. Specifically, these efforts were an opportunity to:

- **4** to identify gaps and voids in current research;
- 4 to identify on-going data collection, monitoring and research needs; and
- to examine how integrated physical and social science initiatives can support decision-making, and needed links and pathways from science to policy development and decision-making.

Between May and September 2020, BEACON executive and consultant staff developed an initial draft Science Action Plan, based on the input from the various scientific and technical experts consulted during the process of input, outlining a series of coordinated and integrated activities that can inform BEACON policy, decision-making, programs and projects in the next three to five years. From July through November 2020 BEACON executive staff developed bylaws for a Science Advisory Committee (SAC), successfully developed a Cooperative Agreement with California Sea Grant to assist BEACON in managing the SAC, and successfully recruited Co-Chairs and an initial group of members of the SAC. At its November meeting, the BEACON Board approved the membership of the SAC.

#### **BEACON Science Action Plan Priority Elements**

This draft Action Plan document and the priority elements listed below will serve as the basis for further specifying specific science support activities BEACON staff will be recommending the SAC and the BEACON Board of Directors support in the next three to five years to support its policies, programs, and projects.

#### 1. Prepare Science Action Plan

Scientists consulted by BEACON supported the development of BEACON Science Action Plan to identify science priority topics and issues and to identify short and longer term activities that address priority topics and issues. This memo identifies initial Science Action Plan elements to be further developed as part of the refining BEACON's strategic planning goals and objectives and the activities of a Science Advisory Committee (see below).

#### 2. Establish Science Advisory Committee

Among scientists consulted by BEACON there was widespread support for establishing a science support group for BEACON, and many of the personnel interviewed volunteered to serve on such an advisory panel. (Attachment 1: Science Advisory Committee) The Science Advisory Committee will assist in implementing 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. BEACON executive and consultant staff proposed the initial formation of the BEACON SAC in the fall of 2020 with initial activities starting at the beginning of 2021. In the first two years of the SAC, BEACON staff proposed two meetings of SAC. The first one involving the SAC members only and will be focused on a review of relevant data collection and scientific research initiatives of importance to BEACON. The second meeting would involve SAC members 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. The initial steps included: 1) recruiting and confirming the SAC leadership (July-September 2020); 2) finalizing the SAC purposes and bylaws (July-November 2020); and 3) recruiting the

2020); 2) finalizing the SAC purposes and bylaws (July-November 2020); and 3) recruiting the initial members of the SAC (September-November 2020). The BEACON Board of Directors has formally approved the SAC Bylaws (September 2020) and the initial SAC membership (November 2020).

#### 3. Include Science Goals in BEACON Strategic Plan

Scientists consulted by BEACON supported the 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. BEACON staff have drafted initial Strategic Planning goals and objectives, including Science Support Goals and Objectives. The initial Science Support Goals and Objectives included convening a group of informed scientists to identify the most relevant science data and collection and research to BEACON and evaluating the formation of a BEACON science advisory committee (see above #2). The BEACON Strategic Planning Goals and Objectives were presented to the BEACON Board of Directors at the November 2020 BEACON Board meeting for initial review. The Board of Directors requested that the SAC review the Science Support Goals and Objectives. The SAC members will review these at the January 2021 SAC meeting. The revised Strategic Planning Goals and Objectives, including any revisions to the Science Support Goals and Objectives will be presented to the BEACON Board of Directors at the March 2021 Board meeting for final review and approval.

4. Integrate Current Climate Science into BEACON Policy Documents and Project Decisions

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 (BEACON, 2016; King, McGregor & Whittet, 2016). 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 Coastal Regional Sediment Management Plan (CRSMP) was adopted by BEACON in 2009. The recent studies and reports should guide BEACON's effort to incorporate climate change and sea level rise (SLR) considerations into a SLR update to the CRSMP. 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 Coastal Sediment Management Workgroup (CSMW).

The California Coastal Sediment Master Plan (2006, 2009, 2012, 2020) details plans to increase efficiency "by managing sediment demand and excess on a regional basis." BEACON is the most cost-effective agency to address regional sea level rise adaptation policy planning spanning our two counties and six coastal cities and the 140+ miles of the Santa Barbara Littoral Cell. BEACON's proposed efforts will complement local government efforts to address sea level rise impacts and ensure a consistent approach to protecting our shared coastline and beaches.

Six of the eight local government members of BEACON have completed climate and sea level rise vulnerability and adaptation reports. All of these reports identify regional level strategies that should be analyzed and evaluated for further development and/or implementation. A comprehensive cross-walk view of all of the proposed regional-level actions is being completed by BEACON staff. BEACON staff is undertaking an identification and evaluation of these regional level strategies and actions that can help BEACON use the results of the analysis to prepare a Regional SLR Adaptation Strategy and prepare an update to its Coastal Regional Sediment Management Plan (CRSMP).

- 5. Expand Multidisciplinary Sciences and Regional Monitoring
  - a. Expand Ecological Science Activities

Less ecological research has been conducted in the past twenty years within the BEACON coast than physical science. BEACON's sediment management efforts have relied on physical science initiatives addressing regional sediment source, transport and fate mechanisms. Going forward, BEACON's sediment management and climate change adaptation programs and activities should rely on up-to-date ecological research focused on coastal and marine ecosystems, habitats and species, particularly shoreline and marine environments including sensitive beach and intertidal areas (Myers, et al. 2019).

b. Expand Economic and Social Science Generation

Over the past twenty years, BEACON has incorporated available economic data into its program and project development, supporting the collection and assessment economic baseline information. These data remain incomplete, however, and BEACON needs to support expanded social science data collection and analysis to support its sediment management and climate adaptation efforts (King and McGregor, 2013; King, et. al., 2018).

c. Support Continued and Expanded Regional Monitoring Program Implementing BEACON's programs and projects are supported by continuing regional monitoring, including USGS's shoreline profiling and its programs would be enhanced by an expanded regional monitoring program incorporating ecological baseline data and information.

6. 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 approaches emphasize the development of multiple benefit projects that address both environmental and social benefits. Increasing efforts within the BEACON coast are being directed to interdisciplinary analysis but gaps and voids remain (Myers, et al., 2019). Through the SAC activities and objectives in Item 5, BEACON will have the requisite information to intentionally encourage interdisciplinary science for improved decision-making.

7. Modeling and Prototyping

BEACON needs to continue to support and expand modeling and prototyping efforts of partners that can help provide insight to innovative Regional Sediment Management and SLR Adaptation solutions. BEACON has supported efforts to model regional climate and SLR impacts on coastal resources and supported modeling efforts aimed at better understanding sediment transport and fate dynamics on a littoral cell basis. BEACON should support updating and refining regional down-scaling of climate, weather, and extreme events models that address coastal watershed and coastal ocean conditions affecting both sediment management and coastal adaptation. Further BEACON should support refinement and advancement in sediment transport and fate models to better understand environmental and ecological impacts to coastal natural resources, including sandy beaches and nearshore marine environments.

BEACON has been a long-time supporter of proof of concept demonstration projects, involving living shoreline treatment projects, and innovative coastal resource restoration projects, including an integrated beach and dune restoration and so-called 'managed retreat' project. BEACON should continue to support innovative prototyping efforts, including sand retention structures, such as 'green' groins in order to establish the type and extent of impacts on the functioning of natural environments and experiments with alternative features to support design of best environmental alternatives.

#### 8. Expand Governance and Management Science Support

BEACON should expand its focus on governance and management science in order to broaden and improve its effectiveness in multi-agency and interdisciplinary coordination, capacity building, and program implementation. Examining the connections between science and policy in an effort to improve them, will require BEACON to bring to bear an examination and evaluation of governance and management science techniques and methods. Identifying and evaluating adaptation pathways will also require a focus on governance and management typologies and evaluation methods, including the use of sophisticated analytical tools, such as logic models and different types of evaluation methods, including a range of different normative and formative evaluation techniques.

#### 9. Develop Funding Plan for Science Initiatives

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. Developing a Science Support Funding Plan will allow BEACON to identify and evaluate a range of funding options and to develop a funding feasibility matrix highlighting the best funding opportunities for BEACON to pursue either on its own or in partnership with others.

SAC Meeting Item 3



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# BEACON Strategic Planning Goals, Objectives and Work Plan Actions 2021-2026

## Draft November 2020 Revised Draft January 2021

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.<sup>1</sup>

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

<sup>&</sup>lt;sup>1</sup> 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 renourishment 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.

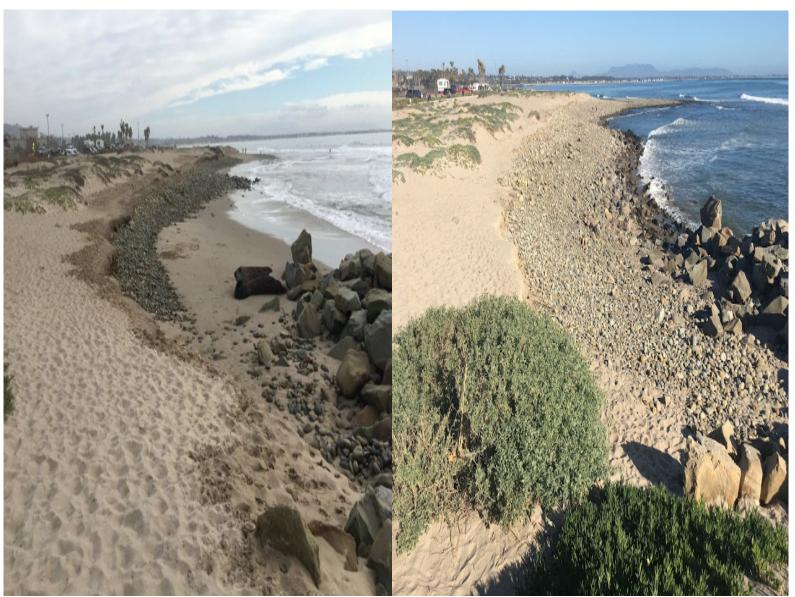
# Objective 3.3 Complete the final engineering and implementation of the Surfers Point Living Shoreline and Managed Retreat Demonstration Project

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.

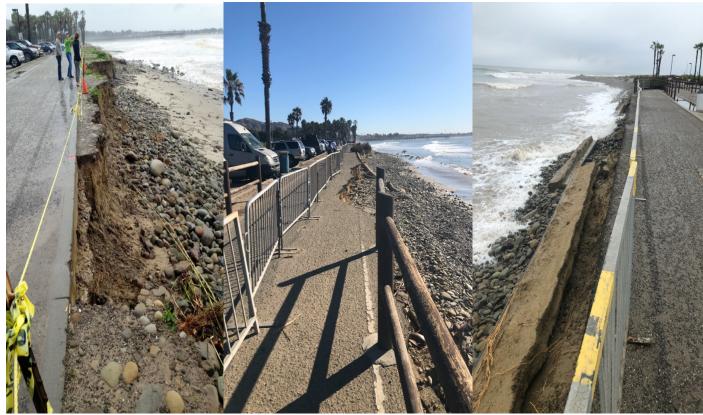
Actions: complete OPC funding final engineering grant project; complete final development plan; seek implementation grant funding



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

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## 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

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

Italics: Work Program priority years 1-2