MEETING NOTICE
AND AGENDA

SHORELINE PRESERVATION WORKING GROUP

The Shoreline Preservation Working Group may take action on any item appearing on this agenda.

Thursday, September 3, 2015

11:30 a.m. to 1 p.m.

SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101

Staff Contacts: Sarah Pierce
(619) 699-7312
sarah.pierce@sandag.org

Keith Greer
(619) 699-7390
keith.greer@sandag.org

AGENDA HIGHLIGHTS

- SEA LEVEL RISE: VULNERABILITY, ADAPTATION, AND REGIONAL COLLABORATION

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Public comments regarding the agenda can be sent to SANDAG via comment@sandag.org. Please include the agenda item, your name, and your organization. Email comments should be received no later than 12 noon, two working days prior to the meeting. *Any handouts, presentations, or other materials from the public intended for distribution at the meeting should be received by the Clerk of the Working Group no later than 12 noon, two working days prior to the meeting.*

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SHORELINE PRESERVATION WORKING GROUP
Thursday, September 3, 2015

ITEM NO. RECOMMENDATION

1. WELCOME AND INTRODUCTIONS

2. PUBLIC COMMENTS/COMMUNICATIONS

Members of the public shall have the opportunity to address the Shoreline Preservation Working Group (Working Group) on any issue within the jurisdiction of SANDAG that is not on this agenda. Anyone desiring to speak shall reserve time by completing a “Request to Speak” form and giving it to the meeting coordinator prior to speaking. Public speakers should notify the meeting coordinator if they have a handout for distribution to working group members. Public speakers are limited to three minutes or less per person. Working Group members also may provide information and announcements under this agenda item.

+3. APPROVAL OF MEETING MINUTES

APPROVE

The Working Group is asked to review and approve the minutes from its June 4, 2015, meeting.

REPORTS

4. SEA LEVEL RISE: VULNERABILITY, ADAPTATION, AND REGIONAL COLLABORATION (Laura Engeman, San Diego Regional Climate Collaborative; Dr. Amber Pairis, San Diego Climate Science Alliance; Brian Holland, ICLEI )

INFORMATION

Predicted sea level rise will impact both our natural resources, such as our beaches, and infrastructure in the coastal zone. The SANDAG Coastal Regional Sediment Management Plan (Plan) acknowledges this concern and identifies data gaps that need to be addressed to implement the Plan and determine how best to adapt to sea level rise. Several proactive efforts are occurring throughout the region to promote coastal resilience to address potential sea level rise impacts. This panel discussion will highlight these collaborative sea level rise planning efforts within the county, the tools and resources being utilized to bring the latest sea level rise and climate projection science to these efforts, and funding secured to support sea level rise planning and regional coordination.

5. UPCOMING MEETINGS

INFORMATION

The next meeting of the Working Group is scheduled for Thursday, December 3, 2015, from 11:30 a.m. to 1 p.m. Tentative Topic: Living Shorelines- A Soft Solution for Sediment Retention

6. ADJOURNMENT

+ next to an agenda item indicates an attachment
The meeting of the Shoreline Preservation Working Group (Working Group) was called to order by Vice Chair Lorie Zapf (City of San Diego), Vice Chair of the Working Group, at 11:32 a.m.

1. WELCOME AND INTRODUCTIONS

The attendance sheet for the meeting is attached.

2. PUBLIC COMMENTS AND COMMUNICATIONS

There were no public comments.

3. APPROVAL OF MEETING MINUTES (APPROVE)

One error was found in the March 5, 2015, meeting minutes. Councilmember Lisa Shaffer (City of Encinitas) was incorrectly referred to as Mayor of the City of Encinitas. Councilmember Dwight Worden (City of Del Mar) confirmed that Supervisor Dave Roberts, County of San Diego, is the current Chair of the Working Group.

With the correction made, Councilmember Shaffer motioned to approve the March 5, 2015, meeting minutes and Councilmember Worden seconded the motion. The motion carried without opposition.

Action: Yes: Vice Chair Zapf, Councilmember Lorraine Wood (City of Carlsbad), Councilmember Worden, Councilmember Shaffer, Eileen Maher (San Diego Unified Port District), Walter Wilson (United States Navy). No: None. Abstain: None. Absent: City of Coronado, City of Imperial Beach, City of Oceanside, and City of Solana Beach, County of San Diego.

REPORTS

4. REGIONAL SHORELINE MONITORING PROGRAM ANNUAL REPORT (INFORMATION)

Greg Hearon (Coastal Frontiers Corporation) presented highlights of the 2014 Regional Shoreline Monitoring Program’s Annual Report. He gave a description of the locations, amount, and sources of sand used for the Regional Beach Sand Project in 2012 (RBSP II) and explained the changes witnessed since the 2012 replenishment and the initial Regional Beach Sand Project in 2001 (RBSP I). Analysis periods include short term, which is post-RBSP II from fall 2011 to present, long term, which
is post-RBSP I from fall 2000 to present, Pre-RBSP I conditions are from 1996-2000, and pre-RBSP II conditions are from 2007 to 2012.

The three littoral cells that have received beach replenishments are located between Oceanside and the United States/Mexico border, and include the Oceanside Littoral Cell, Mission Beach Littoral Cell, and Silver Strand Littoral Cell. Mr. Hearon gave an overview of nourishment in the San Diego region from 1994 to present for each littoral cell, and explained that some cells only receive sediment from RBSP fills, while others receive continued replenishment from sand opportunistic projects. During RBSP II, a total of 1.5 million cubic yards of sand dredged from offshore locations was placed on beaches throughout the Oceanside and Silver Strand Littoral Cells. The total amount of sand placed on beaches during RBSP II was 600,000 cubic yards less than in RBSP I, had a higher median grain size, and was placed on fewer beaches (12 receiver sites in 2001 compared to 8 receiver sites in 2012).

The monitoring program has been occurring since 1996 and consists of beach profiling surveys at 60 sites and aerial imagery of fill sites in the fall and spring of each year. Five coastal lagoons in San Diego County are monitored for closure and necessary maintenance, and beaches are monitored for changes in width and shoreline zone volume. RBSP II’s monitoring program was different from RBSP I in that RBSP II included a physical monitoring component to measure changes in sea bottom and sediment composition of offshore sand provider sites. A biological monitoring component was not included for RBSP II, as no significant adverse impacts to sea floor biology were documented during the RBSP I monitoring period. During the first two years of RBSP II, the Surfrider Foundation monitored surfing conditions at select receiver sites. The Surfrider Foundation’s final report and results can be found on their website at: https://sandiego.surfrider.org/surfrider-completes-2nd-annual-report-for-surf-monitoring-study.

Results from the Coastal Frontiers monitoring program have indicated that in the short term, initial gains of beach width at receiver sites in Year 1 were followed by beach width losses and volume stability in Year 2. As of fall 2014, beaches in the Oceanside and Silver Strand Littoral Cells are wider than pre-RBSP II conditions (replenishment of the Mission Beach Littoral Cell did not occur during RBSP II). Long term analysis shows that the beach width and shoreline zone volume in the Silver Strand Littoral Cell is less than pre-RBSP I conditions while the beach width and shoreline zone volume in the Mission Beach Littoral Cell is greater than pre-RBSP I conditions. Beach widths in the Oceanside Littoral Cell are equal to pre-RBSP I conditions, with a higher shoreline zone volume.

The Working Group discussed the vast amount of sediment loss in the Silver Strand Littoral Cell after each replenishment project, compared to the ability of Mission Beach to retain replenished sand. It was explained that moderate south swell induced wave environments help preserve the amount of sediment on beaches, while large amounts of wave activity cause sediment to move off of beaches. For instance, in 2005, a sediment rebound at Oceanside indicates that waves were conducive to the transport of sand on offshore bars to beaches.

For lagoons, Agua Hedionda and Batiquitos Lagoons continue to be open 100 percent of the time, consistent with pre-RBSP II conditions. San Elijo and San Dieguito Lagoons have been open more often than pre-RBSP II conditions. Los Peñasquitos Lagoon is the only lagoon that experiences increased closures and therefore increased dredging. It is possible that sand placed on Solana Beach during RBSP II is traveling south toward Los Peñasquitos Lagoon. Offshore borrow sites have
experienced negligible net changes to sea bottom, and sediment characteristics are comparable to pre-RBSP II conditions.

When asked if Mr. Hearon considered the RBSP fills successful, he explained that these replenishment activities are meant for maintenance, and are expected to need continued replenishing in the future. Natural methods of replenishment from river sedimentation and sea cliffs have been blocked by human development and the construction of dams, while natural events like El Niño, Sea Level Rise (SLR), and high wave activity provide increased risk for beach reduction.

The Working Group discussed the selection process of offshore borrow sites, options for prolonging the life of beach nourishment projects, and possible effects of El Niño. It was explained that even though beach width has decreased at certain beaches in the Oceanside Littoral Cell, the shoreline volume is fairly stable. This means that the sand is still there, it is just not on the beaches. An El Niño year could provide south swell and place sand from the shoreline zone back onto the beaches naturally. Increased rain could also facilitate the movement of material from coastal lagoons to surrounding beaches.

The Working Group discussed current and future funding sources for continued monitoring and the potential of an RBSP III. A cost benefit analysis was referenced, which found that the cost of beach replenishment compared to the economic benefit of beaches in the San Diego region results in a positive ratio. The positive cost benefit ratio and the potential of beach replenishment to help the region adapt to SLR are why SANDAG promotes this beach building strategy.

5. UPCOMING MEETINGS (INFORMATION)

The next meeting of the Working Group is scheduled for Thursday, September 3, 2015, from 11:30 a.m. to 1 p.m.

6. ADJOURNMENT

Vice Chair Zapf adjourned the meeting at 12:23 p.m.
## SHORELINE PRESERVATION WORKING GROUP
### MEETING ATTENDANCE FOR JUNE 4, 2015

<table>
<thead>
<tr>
<th>JURISDICTION/ORGANIZATION</th>
<th>NAME</th>
<th>ATTENDING</th>
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<tbody>
<tr>
<td>County of San Diego</td>
<td>Supervisor Dave Roberts, Chair</td>
<td>No</td>
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<tr>
<td>City of San Diego</td>
<td>Councilmember Lorie Zapf, Vice Chair (Primary)</td>
<td>Yes</td>
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<td></td>
<td>Council President Sheri Lightner (Alternate)</td>
<td>No</td>
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<tr>
<td>City of Carlsbad</td>
<td>Councilmember Lorraine Wood (Primary)</td>
<td>Yes</td>
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<td>City of Coronado</td>
<td>Councilmember Bill Sandke (Primary)</td>
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<td></td>
<td>Councilmember Richard Bailey (Alternate)</td>
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<tr>
<td>City of Del Mar</td>
<td>Councilmember Dwight Worden (Primary)</td>
<td>Yes</td>
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<tr>
<td>City of Encinitas</td>
<td>Councilmember Lisa Shaffer (Primary)</td>
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<td>Councilmember Tony Kranz (Alternate)</td>
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<td>City of Imperial Beach</td>
<td>Mayor Pro Tem Brian Bilbray (Primary)</td>
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<td></td>
<td>Councilmember Robert Patton (Alternate)</td>
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<td>City of Oceanside</td>
<td>Councilmember Esther Sanchez (Primary)</td>
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<td>Deputy Mayor Chuck Lowery (Alternate)</td>
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<td>City of Solana Beach</td>
<td>Councilmember Mike Nichols (Primary)</td>
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<td>Mayor Lesa Heebner (Alternate)</td>
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<td>San Diego Unified Port District</td>
<td>Commissioner Garry Bonelli (Primary)</td>
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<td>Eileen Maher (Alternate)</td>
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<tr>
<td>United States Navy</td>
<td>Mitchell Perdue (Primary)</td>
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<td>Walter Wilson (Alternate)</td>
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Meeting Start Time: 11:32 a.m.
Meeting Adjourned Time: 12:23 p.m.

ADVISORY MEMBERS LISTED BELOW (ATTENDANCE NOT COUNTED FOR QUORUM PURPOSES)

<table>
<thead>
<tr>
<th>Advisory Member</th>
<th>Name</th>
<th>Attendance</th>
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<tbody>
<tr>
<td>California Coastal Commission</td>
<td>Lee McEachern</td>
<td>No</td>
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<tr>
<td>National Marine Fisheries Service</td>
<td>Bryant Chesney</td>
<td>No</td>
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<tr>
<td>State Dept. of Boating &amp; Waterways</td>
<td>Steve Watanabe</td>
<td>No</td>
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<tr>
<td>State Dept. of Fish and Wildlife</td>
<td>Loni Adams</td>
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<tr>
<td>State Lands Commission</td>
<td>Jane Smith</td>
<td>No</td>
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<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Heather Schlosser</td>
<td>No</td>
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<tr>
<td>California Coastal Coalition</td>
<td>Steve Aceti</td>
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<tr>
<td>California Lobster and Trap Fisherman’s Association</td>
<td>August Felando</td>
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<tr>
<td>Coastal Environmental Rights Foundation</td>
<td>Marco Gonzalez</td>
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<tr>
<td>Scripps Institution of Oceanography</td>
<td>Michele Okihiro</td>
<td>No</td>
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<tr>
<td>Southern California Tribal Chairmen’s Association</td>
<td>Vacant</td>
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<tr>
<td>Surfrider Foundation</td>
<td>Julia Chunn-Heer</td>
<td>No</td>
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Other Attendees:

Alan Alcorn, Moffat & Nichol
Gabe Buhr, California Coastal Commission
Greg Hearon, Coastal Frontiers
Lawrence Honma, Merkel & Associates
Cindy Kinkade, AECOM
Leslea Meyerhoff, City of Solana Beach
Harold Meza, County of San Diego
Aindrea Sparks, Bike San Diego
Erik Steenblock, City of Encinitas
Eric Stevens, California Coastal Commission
Kasia Trojanowska, City of Carlsbad
Kathy Weldon, City of Encinitas

Katie Day, SANDAG
Keith Greer, SANDAG
Katie Levy, SANDAG
Rob Rundle, SANDAG