



July 16, 2018

Delivered via email

To: Glen O'Grady
Planning Commission
City of Encinitas
505 South Vulcan Ave
Encinitas, CA 92024

Re: Beacon's Beach Stair Access and Parking Lot - Agenda Item 8A

Dear Mr. O'Grady,

The Surfrider Foundation San Diego County Chapter recognizes beaches as a public resource held in the public trust. Beaches provide affordable recreational access available to everyone. As human activities and development in coastal areas increase, preservation of these areas becomes more important. Surfrider Foundation is an organization representing 250,000 surfers and beach-goers worldwide that value the protection and enjoyment of oceans, waves and beaches. For more than twenty years, the San Diego Chapter has reviewed and commented on shoreline management projects and policy in San Diego County. We appreciate the opportunity to provide comments to the city of Encinitas about these important issues.

Specifically, we have been providing comments on the Beacon's Bluff Stabilization for a quite some time, including providing comments on the original 2003 proposal to build a seawall, issuing a Policy Statement in July 2014 to reflect our priorities, attending various meetings with city staff and Councilmembers, submitting a letter concerning the Bluff Stabilization Preferred Alternative in March 2017, and receiving presentations from consultants in 2015 and 2017.

The erosion issues at Beacon's Beach present a delicate balance for our organization, weighing the need to protect public access as well as preserving coastal resources. We believe the current proposal by the city, to reconfigure the parking lot away from the bluff's edge, construct a new beach access stairway, and continue to maintain the existing switchback trail as long as feasible, is the best compromise in this difficult situation. The proposed project will allow for less permanent fortifications such as stabilization of the top bluff and maintenance of the bottom portion with additional sand. The loss of 11-12 parking spots will not be popular, but neither would losing the very beach we are trying to protect.

We appreciate the city's proactive stance since mid 2017 to come up with a plan that complies with the Park's General Plan and the Coastal Act. The current plan will minimize alteration of the bluff and confine the alteration to a 50 ft wide southern segment. We appreciate the city



collaborating with Surfrider Foundation San Diego County and other stakeholders to come up with an acceptable solution.

The San Diego Chapter has provided information on this project on its website and public updates as has the city and the Mayor, making a genuine effort to inform the public regarding the status of this project. Several articles appeared in the Coast News as well.

Unfortunately there is currently a local perception that the plans have been developed without local input. That said, time does appear to be of the essence now, as we don't want to end up in an emergency situation where the bluff has collapsed and destroyed part of the parking lot and switchback trail but there are no stairs to afford public access to this popular beach. We sympathize with local residents who hate to lose a more 'natural' beach access and have it replaced with a hard structure. We are currently faced with a difficult scenario, given the massive coastal development right up to the bluff's edge and the rising seas due to sea level rise. The coast is eroding, and we must come up with the best solutions that ensure public beach access and public safety.

This issue at Beacons is not new, and the threat of loss of beach access due to bluff collapse is very real. Over 35 years ago, landslides at Beacons destroyed both southern and northern beach access points at Leucadia State Beach, which included Beacon's. The current switchback trail is imminently in danger of collapse. Per the Leucadia State Beach General Plan at page 15 <http://www.parks.ca.gov/pages/21299/files/653.pdf>

Recent Landslide

During November and December 1982, high tides, strong winds, and the associated wave energy triggered a large landslide at the southern access to the state beach. The landslide movement was triggered by wave undercutting, which caused the concrete stairway to break and drop. The landslide continues to be active. Failures will continue until the entire slope readjusts itself to a gentler gradient. This area may remain unstable for several years. The northern stairway was damaged in April 1983.

Analysis of aerial photos shows this area to be historically active. The landslide was observed during an 1897 topographic survey performed by the railroad. It had been inactive until November 1982.

Policy: No new stairways shall be constructed at Leucadia State Beach accesses until a geological evaluation determines that the landslides are stable. Until safe access is provided, pedestrian access shall be discouraged at this location to minimize the public safety hazard, and to prevent future accelerated erosion caused by foot traffic.

The Leucadia State Beach General Plan also prohibits armor on the bluff. See page 14.



Bluff Fortification

Most of the cliff faces and clifftops adjacent to the state beach are privately owned. The clifftops are heavily developed with single-family dwellings, with lots extending down the bluffs to the unit boundary at the toe of the cliffs. The cliffs are being undercut at their bases by wave action and are being eroded by surface runoff. The cliffs will eventually retreat and in the process destroy the clifftop structures. Cliff failure may occur as a large-scale landslide as a result of inland irrigation and exposure to direct sea wave attack, or the failure may occur as very slow surface erosion and not result in any loss of structures for 50 years. Clifftop owners are attempting to slow the process of seacliff retreat by planting vegetation on the slopes and by fortifying the bluffs with retaining walls or gunite. Such actions are very expensive, are not permanent solutions, and destroy the scenic qualities of the bluffs.

Policy: The state-owned cliff faces at Leucadia State Beach shall not be fortified with retaining walls. Seacliff retreat is recognized as a natural process that cannot be permanently stopped. Erosion control should be limited to mitigating the detrimental effects of increased runoff from the clifftops and to planting native vegetation on the cliff faces. Seawalls shall not be constructed at the state beach.

Therefore, we support the city's efforts to move forward with the permitting for the staircase and its decision to abandon the seawall and other similar structures at Beacons, with the exception of the removable buttress to stabilize the planned southern stairway.

We also believe relocating the parking spots away from the bluff's edge has become a public safety issue - the geotechnical reports state that the factor of safety is unacceptable. Speaking with locals about this issue, we have made the following analogy: The bluff and switchback trail are similar to a tower of Jenga blocks. The block tower can remain standing even if many of the supporting blocks have been removed. However, the Jenga tower is so unstable all it needs is a very small disturbance in order to topple the entire thing. With the bluff underneath the parking lot having a Factor of Safety of near 1, the Jenga Tower is teetering.

Some of the local opposition to the proposed staircase has been focused around the use of concrete (rather than wood) and that the profile of the stairs doesn't closely follow the natural bluff face. After meeting with some representatives of the concerned locals, we were open to evaluating these options. However, after further discussion with city staff and analysis of the plans, it appears that the current proposal will have the least visual and bluff impact. The proposal to place the staircase at the southern end of Beacons is the right choice to make, as this is the most stable portion of the bluff. Use of concrete rather than wood also appears to be the smart choice. A precast reinforced concrete stairway as per the 50% design plans will have less visual and physical impact than a wood stairway. This is because the concrete they use with metal reinforcement has stronger material properties than if wood were used. This means that there will be roughly half the number of supports needed. Therefore there is less



bluff drilling with less impact to the natural bluffs, and the width of the stair stringer is narrower meaning less visual impact. An additional benefit of using precast concrete is that it allows for faster construction so that the construction time is shortened and there is less risk of losing access were a collapse to occur. Our own research comparing the relative strengths of wood vs concrete stairs confirms the engineering perspective on strength and construction timeline.

The current proposal will also accommodate the lifeguards' request to have a station integrated into the second to last landing of the stairs, much like the Rockpile or TableTops stairs in Solana Beach. This would get the lifeguard tower off the beach and provide more beach space as well as a better lifeguard vantage point. The proposed shower and water fountain would be at the bottom of the stairs so there would be no runoff impact.

We do support local requests that the existing switchback trail be maintained as long as possible, and any resolution concerning construction of the new stairs should include a provision that the trail be maintained. Closing the trail would require a Coastal Permit as it is closing a beach access. If the time came to close the trail because the only option for trail maintenance would require a seawall or other bluff alteration (inconsistent with the Park General Plan or Coastal Act) a permit to close the trail would be submitted at that time.

To summarize, we support the city's plans to relocate and reconfigure the parking lot, construct a beach access stairway, and maintain the existing switchback trail at Beacons. We appreciate the city's willingness to work with us and change plans from their originally proposed seawall to to protect the parking lot.

Sincerely,

Jim Jaffee & Kristin Brinner
Co-chairs, Beach Preservation Committee
San Diego Chapter of the Surfrider Foundation

Julia Chunn-Heer
Policy Manager
San Diego Chapter of the Surfrider Foundation