



San Diego
County Chapter

March 15, 2017

Delivered via email

To: Ed Deane
City of Encinitas Engineering Department
505 South Vulcan Ave
Encinitas, CA 92024

Re: Beacon's Bluff Stabilization Preferred Alternative

Dear Mr. Deane,

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.

We have been providing comments on the Beacon's Bluff Stabilization for a quite some time, including providing comments on the original proposal to build a seawall, issuing a Policy Statement in July 2014 to reflect our priorities, attending various meetings with city staff and Councilmembers, and receiving a presentation from consultants in July 2015.

The erosion issues at Beacon's Beach present a delicate balance for our organization as well, weighing the need to protect public access as well as preserving coastal resources. However, we feel the current preferred alternative will result in long-term harm to the beach.

Instead of an extensive alternatives analysis, the city has examined small variations of a similar plan. The current preferred alternative would in effect fix the back of the beach, and eventually will result in beach loss. The current preferred alternative also violates the Leucadia State Beach General Plan, in that it creates a *de facto* retaining wall which stops erosion. This far exceeds the limits outlined in the General Plan of mitigating the detrimental effects of increased runoff or the planting of vegetation. **"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."**

Alternative 4B cannot be selected based on its noncompliance with the General Plan. Additional analysis of substantially different alternatives must be analyzed; including stairs (as were present prior to 1983), parking lot reconfiguration, addressing the upper and lower portions of the bluff separately, as well as slope stabilization by receding to the stable angle of repose or an equivalent stability factor.

Additionally, an alternative to reconfigure the current parking lot, eliminating the need for armoring and complete alteration of the bluff, should be considered. An alternative including a parking lot reconfiguration may allow for less permanent fortifications such as stabilization of the top portion and maintenance of the bottom portion with additional sand. The loss of 8-10 parking spots will not be popular, but neither will be losing the very beach we are trying to protect.

How much public outreach has the city done? How well do the 100s of people who use that access point really understand what is proposed here? We know locals do not want to lose the zigzagging path, but they do not want to lose their already narrow beach either. Unfortunately, the stakeholder group for this project consisted of city and state parks staff only.

Not only would stairs be a more affordable solution, but also they could more easily be moved or adapted to changing conditions. For the projected cost of this project (\$3,200,000), the city could build a staircase and lifeguard towers multiple times. For example in Solana Beach, stairs were constructed including a lifeguard station for \$1,230,000, at less than half the proposed cost of the preferred alternative. See Staff Report from Solana Beach City Council December 10, 2014, **Del Mar Shores Beach Access Stairway Replacement Project Notice of Completion. (File 0400-10, 0730-20)**

http://solanabeach.granicus.com/MetaViewer.php?view_id=5&clip_id=1620&meta_id=175166

This table is an excerpt from page 3 of the report.

Table 1 – Construction Cost Accounting

Item Description	Company	Cost
Construction Contract	Blue Pacific	\$936,220.00
Change Order No. 1	Blue Pacific	29,886.33
Change Order No. 2	Blue Pacific	108,153.61
Change Order No. 3	Blue Pacific	96,754.52
Construction Support – stairway	Noble Consultants, Inc.	35,000.00
Construction Support – lifeguard building	Stephen Dalton Architects	4,000.00
Dedication plaque	San Diego Trophy	887.16
Additional pickets/fencing at DMS stairs	Undetermined	9,000.00
Windows	Undetermined	4,000.00
Shutters	Undetermined	3,000.00
Door locks for lifeguard building	Lee's Lock & Safe	575.00
Replace faded bluff warning signs	Traffic Supply, Inc.	390.96
Total Project Costs		\$1,230,067.58
Appropriated Funds		\$1,173,373.00
Funding Shortfall		\$54,494.58

The estimated costs from the staff report of the Encinitas City Council Meeting of March 8, 2016 Item 10D is shown. Clearly the stairs are likely a more cost effective solution.

	Item No.	Consideration	Weighting	Rankings of Alternatives				
				Alt. 2	Alt. 3	Alt. 4B	Alt. 5	Alt. 6
				Shoreline Protection with Buttress Fill	Soil Nailed Stabilization	Soil Rebuilding (1.75:1 Slope) with Erodible Toe	Soil Nailed Stabilization with Erodible Toe	Soil Nailed Stabilization of Upper Bluff
Estimated Costs				\$5,400,000	\$8,200,000	\$3,200,000	\$4,800,000	\$3,200,000

An additional cost not considered in the analysis is additional liability the city may incur by stating the project will stabilize the bluff. At the south end of the park a private residence is seaward of the blufftop. Is the City warranting stability for this residence? Previous case law would direct the City away from stabilizing the bluff. See *Schooler v. State of California*, 102 Cal. Rptr. 2d 343, 85 Cal. App. 4th 1004, 20 Cal. (Ct. App. 2000) <http://law.justia.com/cases/california/court-of-appeal/4th/85/1004.html>. *Schooler's* result is summarized in King v. County of Santa Barbara, Cal: Court of Appeal, 2nd Appellate Dist., 6th Div. 2007

“In that case, the court rejected a claim for damage to private property caused by bluff erosion on adjacent state-owned property. The court held that unsolicited pedestrian traffic on an unimproved bluff, adjacent to a public beach, was a natural condition as a matter of law for the purposes of the immunity provided by section 831.25 (government immunity for injuries caused by natural conditions of adjacent state-owned land). The court relied on cases construing section 831.2 and concluded: "The bluff erosion does not lose its natural character just because human activity is one of its contributing causes." (*Schooler*, at p. 1010.)”

Thus we are concerned with liability and additional armoring that may be required if any significant non-natural stabilization is pursued.

We are looking for truly adaptable solutions to this situation. Surfrider fears that if the erodible toe of this project is maintained in place per the proposed preferred alternative (as it erodes it will be filled back in) it will act as a “*de facto* seawall”. This is not permitted according to the State Parks General Plan.

We are gravely concerned about the loss of beach space on this already narrow stretch of coastline. The erodible toe is supposed to be 15 ft. deep at the top and 25 ft. deep at the base; that is substantial! The design life of this project is 30-75 years; what will the beach look like at that point?

The Wave Run-Up Study conducted by Moffat and Nichol only examines whether or not the erodible buttress or slope above will become threatened by Sea Level Rise (SLR).

“Maintaining a beach fronting the buttress toe will greatly reduce the amount of wave runup on the wall. Both the 25-foot and 70-foot wide beach berm scenarios are expected to reduce the wave runup to a level similar to the existing condition. The amount of sand needed to maintain beach berms of these widths is outside the scope of this study. **With sea level rise and without significant beach nourishment efforts, the buttress toe will be regularly exposed to wave action and runup.**”

This study does not detail projected beach widths under the various SLR scenarios. If the buttress toe is regularly exposed to wave action and runup as this quote states, then the beach in that scenario will almost certainly be lost. Furthermore, if there is difficulty today identifying sand to maintain the beach and landslide, how does the city expect to find enough sand to keep this substantial erodible toe covered for the most part?

Lastly, will the erodible toe really be removable? While it might be easy for engineers and consultants to say that it will be hypothetically feasible to remove it at the end of its design life; we are concerned at that point safety issues might preclude the structure from being removed. After years of holding a landslide back, how can someone in a backhoe remove the “soil cement” safely? Unfortunately far too often, we see “temporary” structures become permanent under constraints like these.

We look forward to a continued conversation with you about this important project.

Sincerely,

Kristin Brinner
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San Diego Chapter of the Surfrider Foundation

Jim Jaffee
Co-chair, Beach Preservation Committee
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