



October 30, 2024

Delivered via Email

U.S. Army Corps of Engineers
Los Angeles District
Planning Division
Attn: Kym Lyons

Re: San Diego County Shoreline (Oceanside) Mitigation Study

Dear Kym Lyons,

Surfrider Foundation is a nonprofit environmental organization that engages a vast volunteer network of ocean users to protect our world's ocean, waves, and beaches for all people. Surfrider's San Diego County Chapter (Surfrider) represents thousands of ocean recreation users — from dedicated surfers to occasional beachgoers — as well as the coastal communities and economies that rely on them throughout the region. Thank you for the opportunity to provide comments on the San Diego County (Oceanside) Mitigation Study.

Surfrider is appreciative that this study has been relaunched after many years without funding or priority. However, we have concerns that neither of the two proposed alternatives will meet the study's stated objective, which is to mitigate for shoreline erosion and other impacts, resulting from the construction of Marine Corps Base Camp Pendleton Harbor, and furthermore, **to restore shorelines to the conditions that existed before the harbor was constructed in 1942.**

The two alternatives being considered are 1) beach nourishment, and 2) beach nourishment with groins. Surfrider rejects the groin alternative, because this approach would only result in further negative impacts to North County San Diego's shoreline (including the 6-mile study area from Camp Pendleton Harbor to Batiquitos Lagoon). The North Camp Pendleton Harbor Breakwater disrupts natural sand flow in the same way that a groin would, except to a larger degree due to its size. The effect of the breakwater (and Harbor complex overall) has been



massive sand buildup on beaches north of the breakwater, along with additional sand deflected offshore, robbing sand and exacerbating erosion to beaches to the south (Oceanside and the rest of San Diego's North County beaches). More groins, along with beach nourishment, may assist with sand retention on beaches north of each groin, but would invariably disrupt natural sand flow to the south in the exact same way that Camp Pendleton Harbor did. This solution will only lead to further downdrift erosion, along with potential calls for additional USACE mitigation. Groins will further alter the shoreline conditions that existed before the harbor was constructed before 1942, not restore them. This is indisputable.

While we generally support the first alternative (beach nourishment without groins), history shows that beach nourishment alone has not been sufficient to combat the erosion of Oceanside's beaches. By some estimates, over 20 million cubic yards of sand have been placed on Oceanside's beaches since the initial dredging to construct Camp Pendleton Harbor in 1942. This includes the subsequent dredging and sand placement from the construction of the Oceanside Harbor in 1963, the annual Harbor dredging that's occurred since, and sand from two regional beach sand replenishment projects.

All in all, Oceanside's beaches have received more beach nourishment than any other shoreline in San Diego County. Despite this colossal amount of sand, the City's shoreline is unable to sustain a healthy beach along the majority of its coast. The City of Oceanside shares responsibility for its chronic erosion due to unsustainably developing on top of its historic back beach, but the fact remains: beach nourishment alone will only go so far to restore Oceanside's shores.

Rather than solely pumping more sand onto Oceanside's beaches, Surfrider asks that USACE seek to actually fix what the Army broke when Camp Pendleton Harbor was built. To that end, Surfrider proposes a third option for reconsideration by the United States Army Corps - a fixed Harbor bypass system that would allow beach nourishment from both Camp Pendleton's beaches and offshore sources. We are aware that this concept was already attempted in the 1980s with limited success due to technical and financial constraints, and has therefore been deemed infeasible by USACE, but we urge you to consider how technology has progressed in the past 30-40 years. Proof of concept already exists across much of the Australian coast, incidentally designed and constructed by the very firm that the City of Oceanside has hired to assist with its [RE:BEACH](#) project.

Speaking of RE:BEACH, we are aware that the City of Oceanside will likely advocate for the beach nourishment without groins option, and will ask USACE to harmonize its beach nourishment schedule with the RE:BEACH project (if approved and funded). International Coastal Management (ICM), in its winning “Living Speedbumps” design for the RE:BEACH project, initially proposed a fixed bypass system as an ideal add-on to their project design. Therefore, the concept is already harmonized with their RE:BEACH design to some extent (we think it’s the best mitigation regardless of whether RE:BEACH happens, however). Additionally, this concept has been considered by GHD, Oceanside’s main contractor for RE:BEACH. Below are several images from ICM’s presentation at public outreach events during the initial 2023 RE:BEACH design competition (which they won).

1. SEDIMENT DEFICIENCY

	Gold Coast	Oceanside
• Bypassing	<input checked="" type="checkbox"/>	
• Backpassing		
• Maintenance dredging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Offshore source dredging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Examples of working bypass and maintenance dredging on GC



One bypassing example considered by GHD



The initial slide includes a bypassing example considered by GHD; enlarged in the next image.



SAND - ADAPTIVE FLOW - BYPASS SYSTEM



Bypass Pipe under "Seat"

- Adds boundary from beach to road
- Allows for beach level to raise & SLR
- Access to pipe maintenance

Bypass
"tap"
turn on/off
as needed

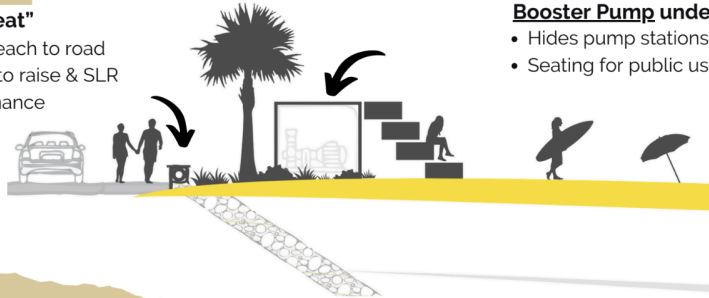
Bypass
elements
multi-
purpose

Booster
can be
electric
pump



Booster Pump under "Steps"

- Hides pump stations
- Seating for public use/ watching surf comp.



Scan for [bypass info](#)
& [examples](#)

International Coastal Management

ICM has successfully installed fixed bypass systems all over Australia, where they are based - this [article](#) from their website details over 10 successful, long-term bypassing (and backpassing) systems in various locations on the Australian coast. Ironically, it was Oceanside's own failed bypassing system that helped inspire ICM's principal, Angus Jackson, to bring sand bypassing technology back to Australia after he visited Southern California in 1984.



Since Camp Pendleton Harbor disrupted the flow of sand to Oceanside and the rest of North County, a sand bypass through the Harbor is the truest and most direct form of mitigation that USACE could provide to restore shorelines to the conditions that existed before the harbor was constructed in 1942. Like we said before, this is how to actually fix what Camp Pendleton Harbor broke - the natural flow of sand across the harbor. Additionally, a fixed bypass system with various outputs along Oceanside's shoreline would make annual Harbor dredging (along with bypassing from north of the harbor and/or offshore) simpler and more effective than laying down pipes along a mile of Oceanside's beaches every year. One sand input on the beach north of the harbor breakwater, and one for dredge boats in the harbor would be ideal.

We urge USACE to reconsider its alternatives and conduct a serious exploration of a renewed harbor bypass system, working alongside the City of Oceanside and their subcontractors, GHD and ICM, the latter of whom is arguably the world leader in designing and implementing successful sand bypass systems. Thank you for the opportunity to comment on this important mitigation study that will help determine the future of Oceanside's beaches.

Sincerely,

Mitch Silverstein
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