# CITY OF NEWPORT BEACH
# WATER QUALITY/COASTAL TIDELANDS COMMITTEE
# AGENDA

**Newport Coast Conference Room (Bay 2E)**

**Thursday, July 10, 2025 - 3:00 PM**

***Water Quality/Coastal Tidelands Committee Members:***

**Councilmember Michelle Barto, Chair**
**Mayor Joe Stapleton, Vice Chair**
**Peter Belden, Member**
**Curtis Black, Member**
**Charles Fancher, Member**
**Craig Hudson, Member**
**Sharon Ray, Member**
**George Robertson, Member**
**John Wadsworth, Member**

**Staff Members:**

**Jim Houlihan,Deputy Public Works Director/City Engineer**
**John Kappeler, Senior Engineer**
**Bob Stein, Assistant City Engineer**
**Karen Gallagher, Administrative Assistant**

**The Water Quality/Coastal Tidelands Committee meeting is subject to the Ralph M. Brown Act. Among other things, the Brown Act requires that the Water Quality/Coastal Tidelands Committee agenda be posted at least seventy-two (72) hours in advance of each regular meeting and that the public be allowed to comment on agenda items before the Committee and items not on the agenda but are within the subject matter jurisdiction of the Water Quality/Coastal Tidelands Committee. The Chair may limit public comments to a reasonable amount of time, generally three (3) minutes per person.**

**The City of Newport Beach's goal is to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, we will attempt to accommodate you in every reasonable manner. Please contact John Kappeler, Water Quality Enforcement Manager, at least forty-eight (48) hours prior to the meeting to inform us of your particular needs and to determine if accommodation is feasible at (949) 644-3218 or jkappeler@newportbeachca.gov.**

**NOTICE REGARDING PRESENTATIONS REQUIRING USE OF CITY EQUIPMENT**
**Any presentation requiring the use of the City of Newport Beach's equipment must be submitted to the Public Works Department 24 hours prior to the scheduled meeting.**

## 1) CALL MEETING TO ORDER

## 2) ROLL CALL AND INTRODUCTIONS

## 3) PUBLIC COMMENTS ON AGENDA ITEMS (10 min)

*Public comments are invited on agenda items. Speakers must limit comments to five minutes. Before speaking, we invite, but do not require, you to state your name for the record. The Committee has the discretion to extend or shorten the speakers' time limit on agenda items, provided the time limit adjustment is applied equally to all speakers. As a courtesy, please turn cell phones off or set them in the silent mode.*

## 4) REVIEW AND APPROVAL OF MINUTES (5 min)

*Recommendation: Approve minutes as presented*

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## 5) CURRENT BUSINESS (55 min)

**(a) Committee Goals/Objectives (Bob Stein) (10 min) Discussion on subcommittee coordination meetings in August.**

**Recommendation: Committee Discussion**

**(b) Santa Ana River Drainage Area Trash Mitigation (Bob Stein) (20 min) Update on a recent staff field trip of the Santa Ana River Drainage Area.**

**Recommendation: Committee Discussion**

**(c) Peninsula Point Dunes Enhancement/Creation Project (Nancy Scarbrough) (15 min) Update on the Dunes Restoration project, including discussion on a future grant proposal.**

**Recommendation: Committee Discussion**

**(d) Total Maximum Daily Load for Copper (CU) (John Kappeler) (15 min) Presentation from Surf Break Engineering Inc.**

**Recommendation: Committee Discussion**

**6) COMMITTEE ANNOUNCEMENTS OR MATTERS WHICH MEMBERS WOULD LIKE PLACED ON A FUTURE AGENDA FOR DISCUSSION, ACTION OR REPORT (NON-DISCUSSION ITEM) (10 min)**

**(a) Newport Bay Trash Interceptor - Trash Characterization (September 2025 - Ellis Peterson)**

**(b) Committee Goals/Objectives Sub-committees (September - Bob Stein)**

**(c) Newport Beach Trash Interceptor Public Outreach Campaign (Fall 2025 - John Pope)**

**(d) City of Newport Beach's General Plan - Harbor, Bay, and Beaches Element (Fall 2025 - TBD)**

**7) PUBLIC COMMENTS ON NON-AGENDA ITEMS (5 min)**

*Public comments are invited on non-agenda items generally considered to be within the subject matter jurisdiction of the Committee. Speakers must limit comments to three minutes. Before speaking, we invite, but do not require, you to state your name for the record. The Committee has the discretion to extend or shorten the speakers' time limit on non-agenda items, provided the time limit adjustment is applied equally to all speakers. As a courtesy, please turn cell phones off or set them in the silent mode.*

**8) SET NEXT MEETING DATE (5 min)**

*September 4, 2025*

**9) ADJOURNMENT**

**Date:** June 5, 2025
**Time:** 3:00 p.m.
**Location:** Crystal Cove Conference Room, Newport Beach Civic Center
**Meeting Minutes prepared by**:

**1. Call meeting to order**

The meeting was called to order at 3:02 p.m.

**2. Roll Call and Introductions**

**Committee Members Present:**
Councilmember/Chair Michelle Barto
Committee Member Peter Belden
Committee Member Charles Fancher
Committee Member Craig Hudson
Committee Member John Wadsworth

**Committee Members Absent:**
Mayor/Vice Chair Joe Stapleton
Committee Member George Robertson
Committee Member Curtis Black

Staff Present: John Kappeler, Senior Engineer
Jim Houlihan, Deputy Director of Public Works
Karen Gallagher, Administrative Assistant
Bob Stein, Assistant City Engineer
Ellis Petersen, Associate Engineer
Charles Springer, Senior Management Analyst
Mike Sinacori, Assistant City Engineer
Paul Blank, Harbormaster

Guests Present: Dennis Baker, SPON
Jim Mosher, Resident
Nancy Gardner, Orange Coast River Park
Nancy Skinner, SPON
Sharon Ray, Resident
Shane Silsby, Silsby Strategic Advisors

**3. Public Comment on Agenda Items**

Still Protecting Our Newport's (SPON) Dennis Baker reported there was an eel grass restoration project conducted near Spider Island. He lauded the results of the work, adding how evident it is at low tide. He noted the work was done by the non-profit Orange County Coastkeeper.

Committee Member Fancher joined the meeting during Item No. 03.

**4. Review and approval of minutes**

**Motion:** A motion was made by Chair Barto to approve the May 12, 2025, minutes as presented, seconded by Committee Member Wadsworth. The motion passed unanimously.

**5. Current Business**

a. Surf Break Engineering, Inc. (Peter Belden)
Presentation from Surf Break Engineering, Inc.
**Recommendation: Committee Discussion**

Committee Member Belden reported he first met Surfbreak Engineering Sciences, Inc. President Bill Dally while participating in a Surfrider Foundation webinar about coastal resiliency projects in the State of Florida aligning with some of Newport Beach's concerns. He added Mr. Dally has a presentation for them today and distributed printed copies of Mr. Dally's professional background information. He added Mr. Dally has recently retired as a Professor at the University of North Florida and is now focusing on consultancy.

Presenting remotely, Mr. Dally noted his first consulting project was at Bolsa Chica State Beach in Orange County. He reported on his educational background and previous professional work, including time with the United States Army Corps of Engineers (USACE).

Mr. Dally lamented a common problem with coastal engineers is not analyzing the cause of the problem as they merely look for simple solutions for current issues. He added, conversely, he prides himself on his beach erosion pathology studies through his use of Nearshore Synthetic Wave Records (NSWR), examining 60 years of a location's history. He added much of this NSWR field data collection is done underwater and can be expensive.

Mr. Dally stated Newport Beach's groin fields do not appear to be a sufficient answer to the City's issues. He added he has ample experience studying failing groin fields and generally supports the concept of Oblique Detached Breakwaters (ODB) for the dual benefit of shoreline management while enhancing beach recreation. He lamented poorly performed beach nourishment and reconstruction projects as they often relate to the underwater element which can ruin surfing, citing a study he did in Surf City, New Jersey looking into man-made damage to surfing conditions.

Mr. Dally reported Newport Beach's groin field is leaky because the groins are too short and too far apart, allowing too much sand to bypass the groins and escape to the open ocean. He encouraged exploring the concept of T-Head groins. He added the current USACE project takes sand from the mouth of the Santa Ana River but it produces an insufficient supply to meet the City's needs. He noted the many upstream shoals in the Santa Ana River and there are discussions about removing sand trapped behind the Prado Dam and from the shoals. He added running a pipeline down the river from behind the dam would be far more cost effective than a traditional beach replenishment project. He added the pipeline would not be a long distance and runs downhill. He acknowledged the State of California does tend to operate slowly in approving this sort of project while studying environmental impacts.

Mr. Dally reported the parking lot and infrastructure at Balboa Pier encroaches on the beach. He added Committee Member Belden has informed him of frequent parking lot floods. He noted there are possible nature-based solutions including shell-hash berms which proved resilient in recent Floridian hurricanes.

In response to Mr. Dally's inquiry, Deputy Director of Public Works Jim Houlihan reported the final portions of Balboa Pier were built in the 1930s. Mr. Baker added the parking lot was enlarged in the 1960s.

In response to Associate Engineer Ellis Peterson's inquiry, Mr. Dally clarified a T-Head groin would involve putting an offshore breakwater at the tip of Newport Beach's existing groins. He stated the advantage of the T-Head is the protection provided even when waves are shore normal by creating pocket beaches. He added they have been used regularly in Florida and globally by a colleague of his combining a groin and breakwater. He added T-Heads could be a great way for the City to stop losing sand and help control the shoreline.

In response to Committee Member Belden's inquiries, Mr. Dally confirmed a T-Head groin would be a simple structure to replicate in a computer simulation. He added if the T-Head is located inside of

the storm head it likely would not impact the surf breaks but cautioned they are often installed in more benign wave climates than Newport Beach's. He added it would be interesting to see a computer simulation for Newport Beach and possible wave impacts. He stated the ODB concept replicates what often happens naturally in locations such as this in how it reflects waves.

In response to Committee Member Fancher's inquiry, Mr. Dally confirmed a NSWR could help perform a vulnerability analysis for the City and not merely the area being discussed. He added the directional wave spectra in the near shore could be considered against the largest storms of the past 60 years. He added it could also help differentiate areas more vulnerable during certain seasons. He noted William O'Reilly at the Scripps Institution of Oceanography has long-term records of Newport Beach and his model includes the shadowing effects of the islands so he could further analyze the areas between the islands as studied by Mr. O'Reilly and the beach.

In response to Committee Member Fancher's inquiry, Mr. Dally noted the submerged and occasionally emerged structures of artificial reefs can lose their effectiveness. He stated he is not an advocate for submerged reefs protecting a wide-open coast like Newport Beach's as Floridian studies have found submerged reefs can exacerbate erosion due to its circulation pattern. He added there would be ample modeling and an exploratory structure before incorporating one locally to test for unintended consequences.

In response to Orange Coast River Park's Nancy Gardner's inquiry, Mr. Dally clarified a shell-hash berm is made of crushed Anastasia formation as not to cut feet when stepped upon like seashells. He added they are made of gravel-sized broken up particles generally with a flat shape. He noted shell-hash berms can grow their own grass and provide for sea turtle nesting. He added the particles are between 0.6 and 1.6 millimeters whereas sugar sand can be 0.2 millimeters.

In response to resident Sharon Ray's inquiry, Mr. Dally clarified in Florida hard structures were not likely to be approved for grant funding until 10 years ago unless it was a jetty, but added this thinking has changed. Committee Member Belden added there is a more likely probability of grant funding in the current California political climate, citing examples from the City of Seal Beach and the City of San Clemente.

In response to SPON's Nancy Skinner's inquiry, Mr. Dally stated a hopper dredger usually works in 50-100 feet of water. Committee Member Belden added Newport Canyon is technically a fault.

b. San Gabriel River Trash Interceptor Project (John Wadsworth)
   Update from Silsby Strategic Advisors on the San Gabriel River working group.
   **Recommendation: Committee Discussion/Approval**

Committee Member Wadsworth reported he invited Silsby Strategic Advisors, Inc. Chief Executive Officer Shane Silsby to discuss the San Gabriel River Trash Interceptor Project. He added the Project points towards the Committee's second objective – mitigating trash leaving the Santa Ana River to keep it off the City's coastline.

Committee Member Wadsworth reported the Surfrider Foundation cleans the beach near the San Gabriel River's mouth 4-5 times a year, regularly removing thousands of pounds of trash. He added the City of Seal Beach's City Council attended one of these cleanup events leading to a call for a proactive solution. He reported that State Assemblymember Diane Dixon got involved with the cause and formed a Working Group which meets quarterly. He stated lessons learned from the San Gabriel River can be deployed on the Santa Ana River.

Mr. Silsby noted from his previous experience as the Director of Public Works for Orange County that $10 million is annually spent to keep the channels clear. He added the City of Seal Beach's working group is chaired by Assemblymember Dixon and includes relevant agencies at all levels of government, including the federal. He added they have been working cooperatively with Newport Beach including many discussions with Assistant City Engineer Bob Stein about the Santa Ana River Trash Interceptor.

Mr. Silsby reported a challenge with the San Gabriel River is most of the river is in Los Angeles County before flowing only briefly into Orange County. He added 450 tons of trash were coming down the river annually and reaching the Seal Beach coastline with Los Angeles County officials originally stating it is Orange County's problem. He responded by noting the watershed is in Los Angeles County. He added another challenge is the river's outlet is not under the control of the Orange County Flood Control District as it is State-owned land with Los Angeles County holding the rights to an easement over it.

Mr. Silsby reported funding can be difficult because there is not dedicated funding for water quality when it deals specifically with trash. He stated Orange County agreed to fund a feasibility study and beach rake for $525,000 to help identify key areas in the watershed. He added the original concept was to put a giant net at the end of the river but agreed this was not ideal because a failure would send all the trash into the ocean. He added there were also challenges in determining how large of a net would be needed as it would have to intercept trash routinely, including storm events. He added the feasibility study is looking at multiple devices in multiple locations covering multiple tributaries to proactively reduce the trash volume ending up at the river's outlet.

Mr. Silsby stated they have been working to identify 15 sites on a map for facilities and will look at them in person next week, acknowledging challenges of wildlife impacts and trash removal after capture. He reported the Study is scheduled to be completed in December. He reported they are looking heavily at having a device like the Ballona Creek Trash Interceptor shortly after the San Gabriel River merges with Coyote Creek. He added a bend further down the river could also be a good location for a trash wheel like Newport Beachs. He added there has also been an offer of financial support from the Surfrider Foundation sensing the project's momentum. He reported efforts are also being made with upstream municipalities to help lobby Los Angeles County to approve potential locations. He reported the Working Group is also talking to watershed districts to help make interceptor projects eligible for funding in Los Angeles County under Measure W. He stated the goals of the upcoming community engagement efforts are also being discussed by the Working Group.

In response to Ms. Gardner's inquiry, Mr. Silsby commended Assemblymember Dixon's ability to organize a steering group and her support of the work. He added Assemblymember Dixon is engaged and makes helpful phone calls on the project's behalf in addition to allowing her staff to work directly with him. He commended Orange County for funding the feasibility study even though most of the problem is created in Los Angeles County.

In response to Committee Member Hudson's inquiries, Mr. Silsby stated an estimated 450 tons of trash annually hits Seal Beach alone, not including what escapes into the ocean. He added his focus is on the technical side, but community groups currently handle cleanup efforts.

Committee Member Wadsworth reported the trash cleanup could occur daily and still not be enough. He added regular efforts are made by groups like the Surfrider Foundation and even former prisoners in reform housing. He stated it was the need for continuous cleanups that helped the Seal Beach City Council and Assemblywoman Dixon see the need for a better long-term solution.

Committee Member Belden stated this is a snapshot into what possibly lies ahead for Newport Beach in its work with the Santa Ana River.

Committee Member Wadsworth agreed and added this is a similar look at how they could trap trash on the Santa Ana River before it reaches the City's beaches.

In response to Committee Member Fancher's inquiries, Mr. Silsby clarified funding discussions are happening at all levels of government parallel to the feasibility study looking at likely costs of design, construction, and operations. He noted potential funders want to know what they would be funding from a capital standpoint. He lamented going too quickly through the timeline slide of his presentation and detailed how the funding and technology research areas intertwine.

Mr. Baker noted the Committee has always been under the impression that Newport Beach does a good job locally led by Senior Engineer John Kappeler. He encouraged getting communities along the San Gabriel River and its tributaries to buy in and build trash collection projects of their own following Newport Beach's model.

Mr. Silsby confirmed his Working Group has been talking to watershed committees about local level projects. He noted most of the cities along the river report being compliant with Tier 1 requirements but there remains a challenge presented by the amount of trash and debris entering the waterways after street-level requirements are met. He stated the homeless population in the watersheds are a direct source of trash insertion even after the cities have complied with their State mandates. He added the issues between civic duties and homeless concerns can be nuanced and they are considering installing cameras to collect trash data to bring to cities and help show how they are still adding trash. He added they can then ask for a proportional amount of funding from the cities relative to their contribution levels to the problem.

Associate Engineer Peterson stated this approach is like what Newport Beach is trying to do.

Mr. Silsby agreed the City has an upstream problem it cannot control.

In response to Ms. Skinner's inquiry, Mr. Silsby stated their cameras are not yet in place to say how much of the trash comes from which places, including homeless encampments. He added he has heat maps from the Los Angeles and Orange County Flood Control Districts with both showing homeless encampment impacts. He reported there are no houses in Orange County's Flood Control District making homeless there a difficult collective issue between multiple jurisdictions. He stated percentage breakdowns will be an important matter in discussing funding, adding it could possibly be done simply by the population or area of the cities involved. He noted a challenge in Orange County is not having a funding source akin to Los Angeles County's Measure W.

c. Committee Goals/Objectives (Bob Stein)
   Review and update of Water Quality/Coastal Tidelands Committee Goals.
   **Recommendation: Committee Discussion/Approval**

Assistant City Engineer Stein reported everyone has been assigned to a subcommittee focused on one of the Committee's three identified objectives – beach protection and restoration, Santa Ana River trash mitigation, and candidate restoration projects. He included a proposed schedule for the subcommittees to come up with final recommendations for the full Committee to vote on by November.

Committee Member Fancher reported he will have to leave the meeting shortly due to a prior engagement.
In response to Committee Member Fancher's inquiry, Chair Barto confirmed the subcommittees do not have to go through the public noticing process to meet because each has less than a quorum of the full Committee as all three subcommittees each have no more than three Committee Members.

Committee Member Wadsworth noted Mr. Silsby gave them a roadmap to handle Objective 2 in terms of finding the offenders adding trash to the Santa Ana River. He recommended staking out strategic areas during the next major rain event. He added the Adopt a Channel program could be beneficial to their work as well for both cleaning and providing data points from each area.

Assistant City Engineer Stein added the data they are looking for isn't what is in the channels but rather what is coming in from tributaries. He suggested having video cameras to monitor the trash during the next flood and recommended reaching out to Orange County for assistance.

In response to Associate Engineer Peterson's inquiry, Assistant City Engineer Stein stated it could be as simple as cellular telephone video and still images and does not have to include pole-mounted cameras or drones. He added the Objective 2 Subcommittee will be discussing good visual points.

Chair Barto noted the more flushed out the proposal is the easier it is for her to bring it to the City Council.

Assistant City Engineer Stein stated Objective 3, which could be the easiest making it able to be best flushed out, is focused on restoration of the Santa Isabela Channel and its mudflats. He stated it would make for a great restoration park with its estuary already needing to be restored for the Balboa Island seawall project mitigation. He added Upper Newport Bay would be a great mitigation area for this project. He added the Newport Bay Conservancy has already applied for funding. He stated this Subcommittee will likely have to come up with the most detailed plans due to the grant applications.

Assistant City Engineer Stein stated Objective 1's Subcommittee has the most difficult task. He referenced the Gold Coast replenishment project in Australia discussed at a recent meeting, adding it may be applicable to Newport Beach. He added jet pumps may be an option to relocate sand as part of this process. He noted there will be permitting and funding issues facing this subcommittee.

In response to Ms. Skinner's inquiry, Assistant City Engineer Stein clarified it would be a permanent system to harvest 100,000 cu/yards annually. Deputy Director Houlihan added a similar project conducted years ago was temporary while Assistant City Engineer Stein is proposing a long-term solution.

Ms. Skinner noted the previous attempt revealed large rocks hazardous to swimmers.

Mr. Baker reported reading about a 40-mile pipeline to move sand in the State of Texas, adding this indicates the possibility of a pipeline to get sand from behind Prado Dam.

Committee Member Belden expressed doubts the Santa Ana River can supply enough sand to meet the City's needs. He added they will likely need multiple sand sources and raising the groins as one possible solution component. He added the jet pumps are likely undesirable and he would rather focus on what can get done reasonably quickly while making a difference.

Committee Member Belden stated jet pumps are an idea he will further research. He added there seems to be no consensus on whether sand is flowing down the canyon, and he would like to learn where things stand with this item. He added they could vote on a sand monitor or net to confirm the sand flows or lack thereof.

Committee Member Belden added they could build an underwater structure at the end of the canyon to collect sand and dredge it annually.

Associate Engineer Peterson added the City has a USACE report on sediment transport he can pass along.

Committee Member Wadsworth noted the Scripps Institution of Oceanography has a monitoring report.

Assistant City Engineer Stein clarified it is a Coastal Frontiers report.

Committee Member Belden stated he will be looking closely at raising the groins and getting from an 80% confidence level to 95% by performing sand monitoring.

Chair Barto offered to assist all three subcommittees with identifying potential funding sources as an avid follower of bills and potential legislation.

Ms. Skinner reported on the difficulties the City faced before the groins were installed. She stated the impression is the groins are highly successful, adding she was unaware sand still flows around the groins. She theorized it may help to put the groins out farther.

Deputy Director Houlihan reported City staff has been working with the USACE on the groins and is facing resistance to height changes and extending them. He added mere repair requests to the groins have been a struggle. He noted the USACE's west coast team is growing smaller and seeing a funding reduction.

Associate Engineer Peterson clarified the groins are getting shorter and falling apart so they do not operate as well as they once did. He added they are disintegrating and not of their original quality.

Committee Member Belden clarified he is not advocating the duplication of past research work conducted by the City.

Associate Engineer Peterson stated they can continuously nourish the beaches forever but at an extraordinary long-term cost. He added the better option is to find a way to keep the sand they already have while alleviating long-term costs.

Committee Member Wadsworth recommended assigning a City staff liaison to each Subcommittee, noting only the Objective 2 Subcommittee has this benefit.

Assistant City Engineer Stein stated either Senior Engineer Kappeler or himself would prompt each Subcommittee for City staff questions.

Resident Jim Mosher stated that to make the Subcommittees more compliant with the Brown Act the non-Committee Members on each Subcommittee should be considered advisors to each Subcommittee and not voting members.

**6. COMMITTEE ANNOUNCEMENTS OR MATTERS WHICH MEMBERS WOULD LIKE PLACED ON A FUTURE AGENDA FOR DISCUSSION, ACTION, OR REPORT (NON-DISCUSSION ITEM)**

a. Newport Bay Trash Interceptor – Trash Characterization (July 2025 – Ellis Peterson)
b. Total Maximum Daily Load for Copper (Cu) (July 2025 – John Kappeler)
c. Committee Goals/Objectives Sub-committees (July 2025 – Bob Stein)
d. Newport Beach Trash Interceptor Public Outreach Campaign (Summer 2025 – John Pope)

**7. PUBLIC COMMENTS ON NON-AGENDA ITEMS**

Mr. Mosher reported at the recent General Plan Advisory Committee meeting that the Water Quality/Coastal Tideland Committee will be reviewing the proposed General Plan's Harbor, Bay, and Beaches Element over the coming months. This element contains water quality policies and should be included in future Water Quality Committee discussion items. He added beach and harbor policies will be included in the Natural Resources Element of the General Plan and will also come to the Committee in the next couple of meetings. He added the entire General Plan updating process is supposed to be completed by September.

Discussion ensued over whether July or August would be better for this discussion due to expected poor attendance at the July meeting being the day before Independence Day and the historic frequency with which the August meeting is cancelled.

**8. SET NEXT MEETING DATE**

Recommendation: July 3, 2025

A staff member confirmed via text message that Committee Member Fancher would agree to move to the next meeting to July 10th.

**Motion:** A motion was made by Chair Barto to move the next meeting to July 10, 2025, seconded by Committee Member Wadsworth. The motion passed unanimously.

## 9. ADJOURNMENT

The meeting was adjourned at 4:38 p.m.

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**Chair / Michelle Barto**