

## **FLETCHER COVE REEF ROUNDTABLE - MEETING SUMMARY**

December 7, 2011

The City hosted a public roundtable discussion at City Hall on December 7, 2011 from 2-5pm to discuss the status and future of its reef project and to identify and discuss challenges and opportunities associated with building the structure. The meeting was facilitated by Dr. Richard Seymour, Head of the Coastal Engineering Department at the Scripps Institution of Oceanography at UCSD.

More than 30 residents, surfers, biologists, engineers, and scientists attended the meeting and participated with City Staff and Councilmembers in a productive discussion. Additionally, federal, State and regional regulatory agency staff from the U.S. Army Corps of Engineers, California Department of Fish and Game, Regional Water Quality Control Board and National Oceanic Atmospheric Administration also participated in this roundtable discussion.

The following is a summary of the questions that were raised and the answers provided in the meeting as well as a list of the challenges and opportunities raised by the roundtable participants.

### **Questions and Answers:**

When will next phase begin?

Phase II – 2013 at the earliest

What funding will be used?

Section 227 program or Regional Sediment Management or Section 103

Would the city fund this alone?

No.

Where would it be located?

Offshore of Fletcher Cove

How much has been spent already?

\$100,000 spent already by USACE. City has spent an additional \$20,000.

What is the cost of the project?

Estimated \$1,000,000 for engineering and environmental and \$5 million to construct.

Sand moves from north to south, how will you address loss of movement to the south?

Dr. Seymour does not agree the net movement was from north to south. The structure design can account for trapped sand to minimize this issue.

Objection to plastics (geotextile bags) from reef in ocean.

Materials have improved –plastic bag is not a fair analogy.

What are the challenges for removing it.

The cost to remove is more than the cost to place it (in the case of Prattes' Reef).

How long will it be in place? The project would need to be decommissioned if it caused significant adverse effects.

The period of analysis used for performance is 50 years. If the structure caused environmental damage that could not be fixed, removal may be considered.

## **Challenges**

- Could be perceived as “armoring” the shoreline
- Securing the funding for planning, construction, and possible removal
- Need to understand topography of Tabletops vs. Fletcher Cove
- Ability to depict/characterize existing surf breaks
- Surf quality is highly subjective
- Determining what makes a good wave varies among surfers
- Achieving target salient/beach width goals
- Not impacting natural ocean movement
- Tradeoffs between retaining sand, destroying surf, destroying habitat.
- Do we have acceptable impact thresholds?
- Minimize impacts in immediate area including surfing, other recreational opportunities, and marine life
- Design is very important. Make the reef look as natural as possible.
- If submerged, how will people know it is there
- What is the liability if natural conditions are altered in terms of public safety
- Design criteria for visual/aesthetic effects
- If USACE funds are used the first priority is sand retention. Once built will be more challenging to alter for enhancing surf quality reasons.
- Project must address sea level rise/climate change
- The project could create more stingray habitat or attract more of them
- The type of wave it can produce is questionable
- Coastal Commission issues/objections
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- Look at the Del Mar “hot dog” example
- Use of fabric bags will not be as good as rock
- To actually design an artificial reef that could satisfy the diverse objects

## **Opportunities**

- Rely on Table Tops as a local example of a well performing sand retention reef
- Could create tide pooling opportunities if shore-connected
- Improve lobster catch and recreational fishing
- Improve beach experience with a wider beach
- Mitigate for climate change
- Take stress off of Tabletops – too many surfers there now

- Maintain the Shoreline
- Surfshop.com has daily pictures that can be used to create background info to understand existing waves for surfing
- Retain sand and create a wider beach, visitors can be further from the bluff (safety) and the bluff will encounter less surf
- Project would be visitor serving and a tourism enhancement
- Sandy beaches are better biologically for shorebirds and grunion
- Reef can be biologically beneficial for lobsters and sea lions
- The site provides a great opportunity to produce something because existing surf quality is not great in this area
- Finding a balance between size and efficacy at retaining sand
- Surfing wave database being compiled – could be used to establish a baseline
- Need to better understand how Table Tops functions to retain sand even in major storm events/high tides
- Less sand would be needed during renourishment cycles and would stay longer
- Reduced risk of bluff failures
- Protection of beach, Fletcher Cove Community Center and Marine Safety Center
- Design to retain sand under all conditions
- Transmission coefficient must be like Table Tops if reef is to perform like Table Tops – this data should be collected.
- Visitor serving commerce benefits from a wider beach
- Use existing beach user data for background info on surf spots
- A reef could enhance existing events at Fletcher Cove like “grom-a-rama”
- Define the problem, state why it exists evaluate the options
- Beach nourishment can offset the loss of riverine sediments and others now blocked from reaching the shoreline
- Design a reef to look “natural” and mimics Table Tops
- Make use of existing available extensive biological resources data for area
- Use Section 227 funding or Regional Sediment Management funding for project

The following are possible action items/next steps based on the input received during the roundtable discussion:

- Analyze Table Tops reef performance including transmission coefficient, bathymetry, biological resources, wave angles and performance after storms.
- Review surf data collected as part of the San Elijo Lagoon Restoration Project and the RBSP 2 project to understand existing range of wave types, quality, locations, performance conditions and use.