

**CSMW Meeting
8 September 2005
San Francisco**

Introductions

- Brian
 - gave update on funding (bonds, etc.)
 - \$2.5M – state funding for environmental projects (given out in grants) – 35% going to coastal cities/counties
 - In the future, may want to put in requests in a more organized effort
 - Energy Bill
 - Want to share energy revenues? – amount CA would get per year is dependent on price of oil
 - Biodiversity Council – meeting went very well – getting people to think about economics – what we are doing is important to the env as well as the economy

The Economics of Regional Sediment Management in Ventura and Santa Barbara Counties: A Pilot Study – Phil King

- Study began with Corps work
- Look at receiver beaches, dams and debris basins
- Costs and benefits of moving opportunistic sand to nourish beaches
- Develops a benefit function to measure the increased recreational value of beach nourishment
- Looked at major dams, debris basins, and dredged material as sources
- High potential for recreation value:
 - Carpinteria, Goleta, Rincon Parkway
- Benefits of nourishment not well understood
- wanted to look at estimating incremental benefits of beach width
- created benefit function for CA beaches
- Benefits Transfer Methodology:
 - Purpose is to use other beach valuation studies and apply them to CA beaches
 - USACE's method is additive even though the relationship among amenities is more complicated – it would be possible to have a recreational value if the recreation experience is not worth anything (you could have a "bad" beach, but have amenities, which would give it a rec value) – Phil's methodology does not give that kind of beach a rec value
 - Use Cobb Douglas Utility Function – standard in econ
 - Uses the following Criteria:
 - Weather
 - Water quality
 - Beach width and quality

- Overcrowding
- Beach facilities and services
- Availability of substitutes – is there a comparable beach alternative nearby – principal user is a swimmer
- Developing Beach Values – numbers need to be calibrated, working with Linwood Pendleton, weight various amenities, comes up with a number on how much money each user spends per day
 - Increasing beach width by 50% does not increase beach values by 50%
- Sources of Sediment
 - Ventura Harbor – 564kcy
 - Santa Barbara Harbor – 370kcy
 - Channel Islands – 960kcy
 - Dams/Debris Basins
 - Less material, but substantial amount
- Developed a cost function for transport – trucking, barging, hopper dredge
 - Trucking ~\$10/cy plus mileage (\$0.35 per mile)
 - Hopper dredge \$0.32 per mile
 - Barge \$0.02 per mile to transport
- Cleaning out debris basins – incremental cost of placing on beach rather than just disposing – have added cost of sorting material
- Nearshore placement costs are a lot lower than placing on the beach – still not sure about what percentage of the sand makes it to the beach (perhaps 33%)
- Conclusion
 - RSM can work
 - Hopper dredge not any cheaper than a traditional nourishment project
 - Offshore placement is promising
 - Some debris basin material can be trucked depending on distance
- Policy Recommendations
 - Start with dredge material – there's a lot of it, it's beach compatible
 - Barging and placing material in the nearshore is the most cost effective policy
 - Conduct several pilot projects to monitor the movement of sediment on shore and subsequent recreational benefits
 - Need to monitor movement of sand
 - if we place sand on the beach, need to know if more people come (better attendance data) – effect on human behavior
- Economic Data Needs
 - Better understanding of incremental benefits from nourishment
 - Better understanding of attendance shifts and substitution from nourishment
 - Better attendance data
 - Garbage IN Garbage OUT if we don't have better data

- Brian wants to make sure in the end we have a tool to be able to analyze and rank the beaches with the greatest need – that is the point of the CSA
 - Need to make sure our ranking criteria can hold up under scrutiny
- George – need to make sure we are aware of downcoast impacts of taking sand from where it should be to where you need it
 - It's a question of what you can take

SIO Activities in Support of the CSMW – Richard Seymour

- Seymour and Guza are co-PIs
- CDIP – wave measurement, modeling and web-access archiving
- SCBPS – regional and intense local beach change measurement and web-access archiving
- CALTM – statewide consortium for LIDAR terrain mapping
- CDIP- 27 stations, 150 historical station (1975-present)
 - Info is archived and web accessible
 - Have nowcasts and forecasts
 - Modeling capability is extremely important because of the wave variability along the CA coast (headlands, islands, shoreline configuration) – making predictions at 100m intervals
- SCBPS
 - Need to understand waves in order to understand how the sediment is moved
 - LIDAR, ATV, jetski, GPS on dolly
 - Doing LIDAR surveys twice a year from the Mexican border to Long Beach
 - Information is going on a website – still under construction
<http://cdip.ucsd.edu/SCBPS>
 - Sand placed by SANDAG at Torrey Pines did not last long – got a small amount of sand and the sand was too fine – the wave climate is one of the highest in the area
 - Info will go into IOOS (SCCOOS) – they are a huge user of the data
 - LIDAR accuracy is a few inches
- CALTM – Consortium for Airborne LIDAR Terrain Mapping
 - UC, CSU, and industry
 - Dedicated infrastructure (airplane, LIDAR, etc) – Scripps would provide the manpower
 - Semi-annual beach change surveys for all of CA with web-based archiving
 - Would give the ability to respond quickly to events (storms, tsunami, earthquake)
 - SHOALS/CHARTS takes a bigger plane because of cooling elements needed
 - Looking at having a fully operational system in 2 years – need funding
 - Cost of hardware = \$4-8M
 - Operational Budget = ?? (will have a number for the Ocean Protection Council presentation)

- GIS comments (data needs) – foundation data should be in a usable format (in a flat file, not just in GIS format (i.e. shapefile))

SCOUP Project – Chris Webb

- Opportunistic beach fills
- Tasked to help understand how opportunistic beach fills could be applied along the whole state
- Implementing a pilot project in San Diego County
- Prepare NEPA/CEQA document for the pilot
- Recommendations:
 - Establish and rank potential receive sites – with a checklist and matrix
 - Establish potential sources of sediment within the littoral cell that are a reasonable distance
 - Sediment characterization and comparison protocols for sand sources and receiver sites – establish an envelope of sediment size
 - Conceptual design considerations – big picture is that we are trying to back into a plan that doesn't require mitigation - look at environmental issues first, then back into a footprint/quantity that won't affect the sensitive habitat
 - Placement options
 - Beach berm
 - Construction timing
 - Spreadout the construction – smaller impact over a longer time period
 - Sand placed at low tide line – act as a feeder to the littoral system
 - For poorer quality sediment – pumped into nearshore
 - Dike material along the back of the beach
 - Monitoring requirements
- Generated a list of site selection criteria for receiver site
- Set-up a scorecard with the potential receive sites ranked
- Oceanside is the pilot project – the sites that were ranked 4, 5, and 6 also wanted a project – they have received other funds for a project
- Lots of inland sources of sand – but they didn't want to truck sand from the debris basins, but there are some debris basins within the coastal zone – some with access to railroad
- Source – ID sources – within 20 miles, relatively free of contaminants
- Grain size – take samples every 6 ft from back beach to depth of closure
 - Can easily find 35% fines at closure depth – could finer sediment be placed in the nearshore and the coarser material will make it to the beach
 - Want to set up size envelope (between the finest curve and the coarsest curve)
- Monitoring:
 - Grunion – avoid during placement
 - nearshore biology
 - beach profiles

- recreation and surfing – important for stakeholder group comfort
- turbidity
- Phil King – looking at change in beach attendance from San Clemente project?
Yes, attendance was counted before and after
- Developed a decision-making tree
- Other cities interested: Solana Beach, Encinitas, Imperial Beach, Coronado – starting the process with them – additional cities are paying over half the costs
- Susie – can we look at harbors (i.e. Oceanside Harbor) for potential nearshore placement
- Purpose is not necessarily to widen the beach, but to add sediment to the system
- Karen – are we looking at the cumulative impacts of multiple small projects
- Report is in draft form

NOAA's Shoreline Management – Rebecca Smyth – Federal, State, and Local Approaches to Shoreline Management: California Case Studies

- WRDA 1999 gave authorization
- Pacifica State Beach, Monterey Bay, Surfers Point (managed retreat), San Diego Regional Beach Project
 - Define key shoreline management issues
 - Solutions and lessons learned
- Should CCC review the project? (perhaps Lesley Ewing) – Becky will come up with a reviewer
- Ultimate purpose is to provide white paper examples of how and lessons learned for conducting shoreline management
- Report and presentation looking for comments to Keelin Kuipers by Sept 30 (keelin.kuipers@noaa.gov)
- Presentation at ASBPA by Ralph Cantral on Tuesday, October 11 at 1:40 (Session 3A)
- Could set up meeting with Ralph for those attending ASBPA at 4:30 pm on October 11
- This document will serve the national shoreline study
- Need to add example of the Master Plan
- Brian – should have info RE CSMW and the title is misleading (perhaps Agency Roles in Regional Sediment Management)
- CSMW will send overview comments

Kim's Report

- Budget passed
- \$ to Master Plan implementation
- PED \$ for Solana/Encinitas
- Funding SCoup II project
- Additional monitoring of East Cliff Drive
- Trying to define exactly where the Master Plan is going for Brian
- Brian – is there going to be a single document produced – 20 page document on how this is going to work – sediment issues are important to CA because of.....

(list the issues and the tools to solve the problem) – is it a series of studies or will there be one document

- Tony – will have a document at the end –
 - establish mechanism to issue permits (standard operating procedure)
 - DSTs developed to help fed and state rank projects – look at hot spots, inventory of sediments
 - Economic analysis – where will folks get biggest bang for the buck
- Lead with the fundamental issue in the report (where to place the sand)
- GIS emphasis because of large amount of data involved
- Syd – Watershed Portal – there's a virtual document – lots of ways to get to information
- GIS developed with tools that will be used by heavy users
- Noble – access database with erosional hot spots, but links to beach info

Next meeting after ASBPA on October 12th to discuss Master Plan studies – 1pm
Full Meeting week of October 17th

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