CARPINTERIA, CALIFORNIA, TUESDAY, SEPTEMBER 23, 2003

PROCEEDINGS BEGIN AT 6:38 P.M.

CARPINTERIA SHORELINE FEASIBILITY STUDY BEGINS

MR. MILLER: Good evening, ladies and gentlemen. We want to thank you all for being with us tonight for -- to help us kickoff this important study. The Carpinteria Shoreline Feasibility Study is one of the big study items on the Corps of Engineers program this year.

My name is Jared Miller. I'm a retired Corps planner and presently do a little consulting work for the Corps of Engineers' Los Angeles District. It's my job tonight to try to facilitate this meeting, to keep it going -- to help you folks get your input and to make sure that these guys are given the opportunity to make their full presentations so that we're understanding each other.

The proceedings tonight are being transcribed by Ms. Lutz. Just a quick reminder. Please, when you get up, use the microphone -- because she's also recording this -- please identify yourself clearly and also who you're with and that will help us get the transcript together so it will be more useful to us.

And finally, please allow the people who are speaking to finish their presentations. We'll entertain all your questions and listen to all your comments at the end of this thing for as long as we have to be here. So we get through the

presentation then we will get to the significant or more important part of this thing, the public input session when you folks let us know what you need or what you think we should be doing.

The Carpinteria Feasibility Study is being conducted in cooperation with the City of Carpinteria, our non-federal planning partner. The two principal players here tonight are Alex Bantique, the Corps study manager; and Matt Roberts, who is the director of parks and recreation for the City of Carpinteria. Now, I'm going to let -- hope that Mark -- Matt will get up and give you a few comments. Matt, could you continue.

MR. ROBERTS: (Speaks off the microphone)

Apparently I don't have a loud enough voice.

Anyway, I have managed the Carpinteria city beach since 1983 for better or worse. And part of that management has been emergency storm response, and I've witnessed -- even before that I've witnessed some very severe storms. As a child, I witnessed the 1969 winter which was a flood year. In fact, our beach was covered with debris that washed from the creeks watersheds.

It was 1983 that I was the first -- my first exposure to the emergency response. And since then I think we've had 1985 and 1987. I'm sure 1995 was a bad year. 1997 was the El

Nino. I think in year 2001 and even last year 2002, we had extreme erosion events. And the inventory of sand on our beach is becoming less and less -- just my personal observations. I think that the opportunity we have today with the partnership with the Army Corps of Engineers is probably unique and profound in that we can now using the Federal expertise evaluate alternatives which might turn the beach back toward a beach that has accretion where the sand begins to build as opposed to erode.

And that has tremendous amount of benefit for the community at large. Not only is the beach a very important recreational resource but it also provides a lot of protection from our shoreline. Our state beach will enjoy better protection from a wider beach. Our residential front -- which brings a lot of tourism, a lot of economy, a lot of value to the community -- will be protected.

So that's why the City is extremely interested in going through this process. It's only with the federal participation and following the federal procedures that we can attract federal dollars to build a project should we decide that a project should be built. And it's your participation which will help shape the course that we're going to take on this study which I think is predicted to take about thirty months. So even as -- even the evaluation, what they call the

feasibility portion of the study, is a very thorough and very lengthy, I think, a very lengthy process. But it could lead to a different future than the one which is the no action future, which as I, I believe will be an erosion of our beach back to where the structures are threatened, where we lose a lot of camp sites on our state beach, a different picture. And I'd like to think of a future where the beach is wide, we have a vegetated dune line, we have habitat in that dune line, perhaps we have better offshore environment as well. So I think that's why the City's so interested. Thank you.

MR. RISKO: Good evening. My name is Tony Risko. I'm with the U.S. Army Corps of Engineers, Los Angeles District. And I'm the chief of coastal planning with the district. I'd like to go ahead and introduce the team that we have assembled within the Corps of Engineers tonight to work on the Carpinteria study.

First off let me introduce Rob Blasberg. He is a senior coastal planner in my group, and he'll provide the general guidance for the study. We have Jane Grandon sitting in the back there. She is one of our coastal engineers that will be assisting us on the technical side of, of the house. Kirk Brus, our environmental manager on the study. Joe Lamb, our economist on the study and Greg Fuderer. He is our public affairs officer, and he'll be directly involved in the study

from a public relations perspective.

Let me just say that we under the problem that is going on here in Carpinteria. We are looking at -- we will be looking at several solutions -- alternatives to see what we can do regarding the potential for implementing a project, to solve the problem that you folks are having. We have some case studies and projects that are currently underway or about ready to get underway that we'll utilized to assist us in our technical analysis for the Carpinteria area. And so we're not, we're not coming into this study with limited knowledge, and I think that's what the Corps of Engineers will really introduce into this whole study effort.

What I'd like to do is turn this, turn this presentation back over to Jared and then we'll have our study manager Alex Bantique talk about the technical aspects of, of this upcoming feasibility study. Thank you.

MR. MILLER: The Carpinteria Feasibility Study is a spinoff of a 1997 Ventura-Santa Barbara Counties shoreline study. It basically was conducted to -- to determine if there was a federal interest in solving the problems along those county's shorelines. That study pointed to Carpinteria. There were problems to be solved here, and now we've moved onto the next phase, this feasibility stage.

Let me tell you where you are. Carpinteria's located

in Santa Barbara County just above the border with Ventura County. We're about twelve miles from Santa Barbara and fifteen miles from Ventura. Los Angeles is about 80 miles down the coast. Carpinteria has two point five square miles and a 1,500 -- or a little more than 1,500 in population. That's 15,000, excuse me. It grew so fast. I -- excuse me. Carpinteria is home to a very popular surfing area, Rincon Point, and well used swimming beaches, some 4,000 feet of them, under both county and city jurisdiction. They have more than 80,000 annual visitors, to the beaches and the other facilities.

Tonight, this is our agenda: I'll briefly take you through the first five items. Then Alex Bantique will talk to you about the study. And finally we'll get to any comments or questions you people may have.

The Corps of Engineers has a multiple mission. We have a Civil Works Program, a Military Construction Program, and Support and Work for Others. Civil Works, briefly, is planning, designing, building, and operating water resources projects for navigation, flood control, environmental protection - and we also do natural response.

The Military Construction Program included designing and managing the construction of military facilities for the Army and the Air Force -- we sometimes work for other branches

of the service. Support and Work for Other Programs include providing design and construction management for the other defense agencies and sometimes interagency and international clients.

The Coastal Studies Group, which Tony heads up and all the -- the folks up in the front here, at least, work for, focuses on coastal resources problems including safe navigation access to Southern California ports and harbors and the restoration of ports, coastal lagoon and estuary ecosystems restoration and coastal storm damage reduction. We are here tonight to kick off a study which hopefully will provide storm damage protection to the Carpinteria shoreline.

Let's take a look at how a Corps of Engineers project is developed. The six step process is initiated when citizens recognize that they have a coastal resources problem that they cannot solve. Federal assistance from the Corps of Engineers is requested through a congressional representative. The representative requests a planning study, authorization by the Congress, or a congressional public works committee.

The third step is initiated when -- whoops -- the third step is when the Corps of Engineers gets together and -- studies the problem, and prepares a report on it. A draft report presenting the study findings and the District Engineer's recommendation will be prepared and released for

public review to include a study ending final public meeting.

After the public meeting, all pertinent review comments -- concerns and comments – will be considered and revisions, if necessary, will be made to the report. The final feasibility report, including the Los Angeles District Engineer's recommendation, will be forwarded to the South Pacific Division Office in San Francisco. The Division Engineer will review the report and issue a public notice with his recommendation and forward the report to Washington.

The next step is Washington level review. Usually a six-month process, which is -- and when it is completed, the report is transmitted to Congress for authorization. In the meantime, we continue at the district level with the project's plans and specifications. When the Congress authorizes the project in a Water Resources Development Act, we proceed to construction.

This slide will show you the various stages of the Corps planning process. It shows you that the early reconnaissance study is paid for 50%/50% by the Corps of Engineers and the -- non-federal sponsor, in this case, the City of Carpinteria. The City of Carpinteria is also totally responsible for the project when it is constructed and operating. The feasibility study is cost shared 50%/50%. And the, the construction and implementation phases are cost shared

65% Federal and 35% non-federal.

From start to finish, the Corps planning process takes approximately seven to ten years. These are the rough -- a rough time schedule for all of them -- all of those phases.

This next slide is an interesting slide that was borrowed from a Chief of Engineers presentation. For every one hundred planning studies the Corps of Engineers initiates, only eighteen get built. That means that 84% don't make it.

MR. ROBERTS: (Speaking off microphone) I think it would important to note that (inaudible)

MR. MILLER: Completed the, the Rincon Study?

MR. ROBERTS: (Speaking off microphone) (Inaudible) 65% of the projects (inaudible)

MR. MILLER: These are the criteria used by the Corps of Engineers to determine the viability of a project. It must be technically feasible. It must be effective in meeting planning objectives and, and doing -- to do the job that it is set up to do. The environmental impacts and environmental acceptability must me ascertained and adverse effects would be -- should be -- avoided if at all possible.

Economic justification, in accordance with current guidelines and policies, must at a minimum equal the costs of a project. Ideally, benefits will clearly outweigh costs. The alternative with the greatest net benefits is selected as the

national economic development plan, and is generally selected as the recommended plan.

And, of course, the fifth item is non-federal -- a non-federal sponsor. We have one of those in this study, and we must -- our project must be acceptable to them and to the general public. And a very important -- go ahead.

MR. RISKO: An important note to be made is that the cost of a proposed project cannot -- cannot exceed the benefits derived from that project. If we were to experience something like that, then obviously we won't have a project. But -- just to reiterate -- we will look at multiple alternatives and, and the hope is that there should be sufficient benefits that outweigh the cost of a project and we'll have something that we can implement.

MR. MILLER: Tonight's meeting is also a kick off for our -- of our environmental activities. It's an environmental scoping meeting which is called for under the National Environmental Policy Act.

Any proposed project must comply with the National Environmental Policy Act. Tonight's meeting fulfills, as I said before, the beginning of scoping the environmental requirements, and allows us to get your input -- start getting your input early in the study process.

A great deal of public involvement is required under

NEPA. Our feasibility study will include the preparation of an environmental impact statement that satisfies NEPA requirements. I want to point three things here. The third, environmental scoping, which we're beginning tonight, that goes on throughout the study through -- throughout the preparation of the environmental impact statement.

Other key points are, in yellow, after the draft EIS and draft feasibility report are completed, there's a 45-day period for comments. They are made available to folks for review and we do want as many comments as we can get. The other comment period of 30 days at the end of the process is on the final EIS and the final feasibility report.

Number nine -- the record of decision. That's the, that's the final word. That's the document that sums up the environmental impacts and the environmental course of action on this study. Now, I'm going to let Alex talk to you about the feasibility study and how it works.

MR. BANTIQUE: Good evening, ladies and gentlemen. My name is Alex Bantique, and I'm going to be talking about the feasibility study. I'm going to be starting with the study objectives. The objectives of this, this bill study will to be provide a storm damage protection to public and private properties, reduce the annual erosion rate, improve the migrational opportunities, and to develop environmentally

sensitive solutions.

In 1997, the Corps of Engineers completed the reconnaissance space along the shoreline of Santa Barbara and Ventura Counties to access the federal in the undertaking the shoreline protection projects. It was concluded that the Carpinteria study area was the only stretch of the shoreline with Federal interest to proceed to the feasibility study. Unfortunately, at that time there were insufficient financial resources to undertake the recommended feasibility study.

In 2003, Carpinteria Shoreline Reconnaissance Study, the Corps of Engineers updated the economic analyses of the -- of this report and verified federal interest in a possible offshore feasibility study. In June 2003, after securing sufficient financial resources, the Corps of Engineers and the City of Carpinteria executed an agreement for a feasibility study. The study area is between Ash Avenue and Linden Avenue (indicates on map).

The state beach borders the southern limit of the region -- the Carpinteria Salt Marsh and the private protective revetment borders the northern limit of the beach. There's approximately 13 structures within the ridge that are directly effected by shoreline erosion and wave attacks. The structures behind the prompting properties may be affected by coastal flooding during storm events.

On our reconnaissance report we identified four potential, potential problems along the Carpinteria shoreline, which is storm damage due to ocean -- coastal flooding and recreational visitation. During the winter season, there is a substantial loss of sand protecting the structures, exposing them to possible wave attacks and coastal flooding.

Five potential solutions were -- identified during the reconnaissance study -- two beachfills, two offshore artificial reefs, a seawall, and a combination of these potential solutions. These potential solutions are yet to be identified during the feasibility phase. These pictures will give you an idea how a beach fill looks like after we place a compatible sands within your shore. This picture is the before, which is the top right there. And the after is the one at the bottom. And this project is located in Seal Beach, which is in summer, surf's up.

MR. RISKO: This photo was taken almost immediately after the project was completed. Basically, what the Corps of Engineers does is once every five years we come in and we place approximately 2 million cubic yards of material on the Surf-side beaches. This area has an accelerator erosion rate so at year two after the project is completed, you'll see quite a bit of cutback on the beach and at year five the beach might look like this before photo.

UNIDENTIFIED AUDIENCE MEMBER: What's that over there?

MR. RISKO: That's Anaheim Bay. There's two jetties that jet out at Anaheim Bay, and that's where -- that's the home of the Naval -- U.S. Naval Weapons Station, Seal Beach.

MR. BANTIQUE: Another potential solution is an offshore artificial reef. The concept would be to construct a submerged structure offshore to dampen the wave energy and to build up the beach behind it. This picture was taken in the Dominican Republic.

Another potential solution is a seawall. A seawall could be placed effectively to address storm damage concerns to stabilize the shore or maybe looking at combinations of these alternatives. This seawall is located in Carlsbad.

Phase one is the study that determines the existing and without project future conditions and includes preliminary screening of the alternative plans. Phase two includes detailed evaluation of several alternative plans and selection of the recommended job. The study cost is $2.2 million and this is a 50%/50% cost shared Corps of Engineers and the City of Carpinteria. And the Carpinteria cash requirement is about $840,000.

MR. ROBERTS: The City of Carpinteria is depending upon assistance -- financial assistance, cash assistance from

the State of California, and apparently the state has given the city a $280,000 grant. In this current state fiscal year -- actually, some of that came from a previous fiscal year, but we've gotten $280,000 so far.

Under a new program where the state actually does have a beach erosion program and that's new. That's only a couple years the state's offered that to local jurisdictions and that is why to a large extent you don't see a lot of Army Corps projects on the west coast. East coast states have traditionally provided local matches or non-federal matches to their local jurisdictions. The State of California wasn't and consequently it wasn't allowed a federal shoreline where -- you can correct me if I'm wrong -- but I believe that's why we haven't seen this kind of project too frequently in California.

So that's a startling number of the City's budget, and the only way we're able to afford it is through state help. Most of the money that the state is using for this program statewide believe it or not is coming from the Department of Boating and Waterways. They take money that comes really from gas sales -- I don't know what the nexus is, but they find one -- gas sales that go into boats, that would be the highway taxes that aren't burnt on the highways, and drive it into beach erosion and boating infrastructure. That's an important point.

MR. BANTIQUE: That's the end of my presentation, and Jared will take over the public involvement session. Thank you.

MR. MILLER: During the course of the study, a wide variety of public involvement efforts and citizen participation activities to get the public involved and keep the local, affected citizenry interested and keep them aware of this study. The Corps of Engineers, Los Angeles District has a website. You see it marked up there. There's a lot of good information in there. Among that information, once we get started here, will be summary progress summaries on the study.

We're going to keep close touch with folks in Carpinteria during the study, and we're also going to keep in close touch through the variety of activities that I mentioned, with interested individuals and organizations and agencies that may want to be involved. In short, the Corps of Engineers folks who are conducting the study will be available to meet with interested folks such as you, to answer your questions and keep you up to date.

You met these two guys tonight -- oh, I'm sorry -- rearranged the slides. We're going to turn this thing over to you in a very few minutes. Has anybody indicated that they wanted to make -- nobody has indicated that they wanted to say

anything? Each of you, we hope, that we -- it'll be just a minute. We hope that you do speak, since you've gone through all this information and heard the various presentations -- that you might have something you might like to say, or a question for clarification.

As you look at this slide, these are some things that we would appreciate it if you would do. Wait until you're recognized. I don't think we're going to have a riot here tonight. Identify yourselves and your affiliation and try to keep to meeting topics. We -- we're not averse to talking about other things, but we're here to talk about that study and whatever you want. And please remember that Ms. Lutz over there, needs you, no matter how many times you may speak, to introduce yourself.

We're going to leave this slide up. These are the two guys that are the principal players in this study for the City of Carpinteria and for the Corps of Engineer. You can jot that down. It will be up for awhile while we are doing the public session. Both of them will be available to you, and they're -- I think they're both responsible for dealing with your concerns and getting information from them as well as anybody else on the team. But this is -- Alex is the principal for the Corps of Engineer, and Matt is the go to guy for Carpinteria.

Now, are there -- is there anybody who wants to make a comment, ask a question? Yes, sir. Could --

MR. BROOKS: Yes. My name's Andrew Brooks. I'm the director of the Carpinteria Salt Marsh reserve, which makes up about 45% of the Carpinteria Salt Marsh. First, I'd like to say that all the options that I've seen here I think there's a variety. One that was initially mentioned in a list that I didn't see actually pop up in your feasibility study was the use of groins. I would have concern about the place of a groin somewhere between Ash and Linden to accumulate sand on the backside if that sand were to accumulate to a point where it would actually cross over the mouth -- the entrance to the Carpinteria Salt Marsh.

One of the biggest environmental problems that we have in the Salt Marsh is the accumulation of sand as it comes down the coast line. It actually eddies into the mouth of the Salt Marsh. We have quite a bit not accumulated. It's affecting the subtitle habitat to some extent. We have several federally listed endangered species within the marsh. They include light footed clappers; a species of plant, the Salt Marsh bird's beak; two species of fish that are actually managed by the Pacific Coast Fishery's Management Council. So we have several species of federal and also state concern that we have to worry about being affected by any plan that's going

to accumulate sand.

On the other hand, we have lots of sand inside the Carpinteria Salt Marsh that you would love to get rid of. So one of the ideas you were talking about was beach replenishment. If you're looking for a source of sand, we've got one. The sand is mainly sand that's just, as I've said before, come down the coast and made its way into the mouth. It should be fairly clean, and it may actually offer you an additional benefit because, as mentioned, one of the Corps' objectives is habitat wetland restoration. This would qualify as wetland restoration.

In addition, any economic improvements to the marsh, because of these commercially important fish species, can perhaps be counted as an economic gain as part of the project. It might help you meet your burden of benefits exceeding costs.

So I'm available at any time to staff or anyone else. Matt has my contact information, and I'll make sure I get a card to Alex too before we leave. Thanks.

MR. MILLER: Is there anyone else who wants to make a comment? These guys are here to assist you. With that being the case, do any of you have something you'd like to say?

MR. RISKO: Actually this is kind of odd. Typically, we're here to answer questions, but I'm going to ask a question. You mentioned that there's a quite a bit of sand

that's building up in the mouth of the Salt Marsh and that there's an opportunity for us to potentially mine the sediments should we go forth with the beach nourishment and the field project. The question I have is, is that pretty much it or are there potential opportunities within the marsh where we could look at getting in there and doing some, some additional reconfiguration of the marsh land for -- or do we want to get into that?

MR. BROOKES: Matt can probably fill you in on some of this. There is currently underway an environmental impact statement that has been prepared. The County of Santa Barbara Flood Control District is in process of obtaining the necessary permits to remove a lot of accumulated sediment from the two creeks that enter into the marsh on the eastern side, Franklin and Santa Monica Creeks. And as part of that, they're going to also remove accumulated sediments from the point to the west where those two creeks join up and flare out the mouth, and the mouth is going to be slightly realigned to meet county flood control objectives. So that operation is continuing, and we'll lose some accumulated sediments from those activities.

The sand I'm that I'm referring to actually doesn't appear on your map. It's just off the left-hand edge. And this is the channel that runs up the main branch through the section of Carpinteria Salt Marsh that you don't have on your

photograph. And that sand that's not slated to be removed by the flood control operations, it's sand that has been building up over the last 15 or 20 years, and that's mainly the sand that accumulated from long shore drift -- longshore transport of sand down the coast.

So I think in conjunction with these flood control activities, there's, there's opportunities to provide the beach with nice clean sand and also achieve some restoration objectives as well. But I wouldn't want to sort of reconfigure any channels in there.

MR. MILLER: Anybody else? Yes, ma'am.

MS. ADAMS-MORDEN: I don't really have a specific question.

So you guys haven't informed us yet so these are a bunch of questions that we have. I'm a member from -- a representative from the Carpinteria Salt Marsh friends. Anyway, we want to know --

MR. MILLER: And your name?

MS. ADAMS-MORDEN: Andrea Adams-Morden.

Okay. We're curious about knowing where you're, you know, where you're going to get the sand and how you're going to remove it. Are you going to deal with mound near the mouth? That's what Andy's talking about. Well, he was talking about some other stuff. Maybe the mound too? That's left over from

another dredging situation. How's the sand going to be disbursed? We heard that it was going to be at Ash Avenue?

MR. ROBERTS: Maybe I can say a little, or maybe a lot.

There -- the City engages in several different projects. This is one of them and if you saw the aerial shot that showed the study reach I believe, that's important to know because we're talking about the Carpinteria City Beach, which is that 15,000-foot section between Ash and Linden.

Recently in this chamber at the planning commission level, which Penny Bloodhart here -- she's one of the City's planning commissioners -- she heard a proposal to get a coastal development permit for BEACON which is the regional consortium of Ventura and Santa Barbara Counties with some cities in there as well, and that was called the "Opportunistic Beach Fill Program."

In that program, it's a program where there would be standing permit and should some beach quality sediment become available -- we have not identified any sediment yet -- but should some become available and should it be close to the Carpinteria City Beach, a person who owns that sediment might propose to put it on our beach. And BEACON would then have a permit from not only the City of Carpinteria but from the coastal commission allowing them to place it because often,

when you get good quality beach sediment and you want to put it on the beach, the permitting process is so lengthy that you don't have time to wait.

So you're -- let's say you're dredging a channel in the Ventura River and you've got some wonderful sand to get rid of, but by the time you get a permit to put it on the beach you've lost your construction window because it's going to rain and you got to get out of the riverbed. Those kind of things. That's probably a bad example. But the point being is so we're doing an opportunistic beach fill program and this the Army Corps of Engineers' feasibility study for shoreline protection, which is a different project.

The third thing the City does of course for shoreline protection is that winter protection berm that the kids love.

MS. ADAMS-MORDEN: It's fun to stand on it.

Well, we -- I mean, the stuff that has been written in the paper so far, I mean, it said it was going to come out of Franklin and Santa Monica Creeks. That's what it appeared to be implying, and the county flood district has dredges out -- I don't know if they do both of them, but they do Franklin every year. And so we were wondering they're going to come dredge it out all at once and then take the trucks down Ash and dump it all at one time. You know, what -- you know, how it's going to be done?

MR. ROBERTS: Yeah, that's a different project. It's not a part of this study.

MR. ADAMS-MORDEN: So this -- so they -- you don't even know where you're going to get it from yet?

MR. RISKO: Tony Risko. That'll be part of the study effort will be to identify potential sources of sand should we opt for a beach fill contract.

MS. ADAMS-MORDEN: Okay. You know, and what size the loads would be? How often they would be dumped? Where they're going to get dumped? On the beach service -- surface? Are you just going to put, put it out where the berm normally is and let the tides take it out again? You know --

MR. RISKO: Right. Right. That -- that'll be part of the engineering analysis. Let me, let me give you an example scenario -- don't, don't fix me on this scenario because they're all sorts of different scenarios we can be working on. We need to do the engineering analysis to run all this down.

We could potentially recommend, you know, a project that comes in and puts sufficient amount of sand on the beach to provide protection to the structures along that stretch of shoreline for a 50 year period, okay. What width a beach will need to be? We won't know until we actually run our engineering and economic analysis.

What will be the frequency of renourishment? There is a possibility that the Corps of Engineers would recommend a beachfill project that would come in once every five, once every seven, or once every ten years and renourish that beach to maintain that beach width -- for shoreline protection and to protect those structures. So those are all the things that we're going to get into the nitty -- nitty gritty details once we start the technical analysis part of the study.

MS. ADAMS-MORDEN: And so you're just going to dump it on all the guys that are living off the edge there.

MR. ROBERTS: Matt Roberts with the --

MS. ADAMS-MORDEN: I mean, you know, there's guys living right there and so you're going to dump all this tons of sands on the -- the animals that live right there. That's what you're replenishing.

MR. ROBERTS: Well I -- there's a --

MS. ADAMS-MORDEN: And it'll kill 'em off if you dump it all at the same time.

MR. ROBERTS: There's a variety of ways you can move sand and a lot of -- I know being -- participating with BEACON since the day they started and looking at the different variety of solutions that they've proposed to raise beaches and looked at projects elsewhere in the country, often sand can be brought from sea. They have these boats that are called hopper barges.

And, in fact, I believe that Goleta Beach is going to be doing this very thing as a demonstration project in the spring time. I don't know if the schedule slipped on that or not yet, but they propose to dredge up sand that they -- they found a borrow site, meaning a site that has beach quality sediment which has sufficient grain size. It's coarse enough to be good beach sand, offshore. They found this site, and they've done an environmental analysis, determined this is a good source of sand. It's in about 60 feet of water.

So they can literally take a big boat out, dredge it up, fill their hopper barge in this boat, and the boat's literally split open. So the boat's able to come very much into the near shore where the surf --

MS. ADAMS-MORDEN: And kill all the guys out there.

MR. ROBERTS: -- interacts with the sand. They -- they've managed to get their environmental clearance to do this, and I can't speak specifically about if there's environmental harm in this not. I don't think they identified any. But the point is, is that there's a way to introduce a lot of sand into the -- onto the beach without using a truck.

MS. ADAMS-MORDEN: Maybe it's better to use a truck.

MR. ROBERTS: Also, you notice regularly up in Santa Barbara -- and they use hopper barges in Ventura Harbor. I think the Corps uses that for Channel Islands Harbor. And then

the pipeline, which is you see that in Santa Barbara every year.

MS. ADAMS-MORDEN: But, Matt, maybe there's less damage done if you just take that one truck and dump it on there and wait a couple of days and then dump another one on there. Maybe -- you know, maybe that's better.

MR. ROBERTS: Bringing it in -- and I think that's what the study will consider, certainly.

MS. ADAMS-MORDEN: Another thing, we have really nice sand at our beach and if you start dragging sand from somewhere else, it's going to be different sand. If you take it from the local sources, it's going to be the same sand.

MR. ROBERTS: I would only add to that, that when they identify a sand source, the characteristics of that sand will be weighed very heavily as to its compatibility not only in grain size but in color and other things with the City Beach. That's -- that's definitely part of beach sciences, when you do nutrition, you'd match your existing material as much as possible. In fact, you may even have indigenous material, as Andy pointed out, they have an inventory --

MS. ADAMS-MORDEN: I mean, they --

MR. ROBERTS: -- of sand and -- that would be our sand.

MR. ADAMS-MORDEN: I mean, the county has to dredge

it out. So that's sand that --

MR. ROBERTS: For example, another source that Goleta Beach is going to be using is West Beach sand, which is in their harbor. Well, boy, that sand that belongs here in Carpinteria. That's been impounded by the artificial harbor, which is our beloved Santa Barbara Harbor. So that would have, I believe without actually doing a core sample or test or sift analysis any of that, I believe that would have 100% compatibility because that was destined to come this way anyway. It's native material. I think in Seal Beach they went into the desert because it was a nice --, and I guess they found compatibility with that, I don't know. But I think we would look at the cheapest sources which would be the most local sources first.

MS. ADAMS-MORDEN: The marsh.

MR. ROBERTS: Yes. Thank you.

MR. MILLER: Does anybody else have anything to say? I apologize for that. I don't know what that is. That's not the ring I get on that phone. I thought it was off -- I think somebody's looking for me. Tony. Oh, I'm sorry. Yes, ma'am.

MS. BLOODHART: Hi. I'm Penny Bloodhart. I'm just came down to give my support tonight. We did have an extensive planning commission meeting here on the BEACON Beach Replenishment EIR. Some of my concerns were just some of yours

about dumping a large amount sand from other areas. My -- one of my main ones was the way in which it was going to be moved. As Matt said, the truck carry only, what, about 15 cubic yards?

MR. ROBERTS: This is Matthew Roberts. They -- their regulated I think to 25 tons, and I'd guestimate it's going to be 20 cubic yards.

MS. BLOODHART: Right. And we spend a lot of time figuring out how many minutes apart it would be for these trucks to go through town and down Sandyland to dump a bulldoze or two, distribute the sand along the beach for the wave action. So there's a little -- some of my concern too is the effectiveness of this. I was just watching the coverage from Hurricane Isabel. We were talking about a multi-million dollar beach plan that's pretty much been wiped out. I guess you guys probably know that better than I do.

But I was also commenting that a few years ago in Goleta during one of the El Nino storms that a massive amount of sand was dumped on Goleta Beach and in soil apparently fines. But that it's pretty much gone now. And I mean I certainly appreciate efforts to save our beach here, but there are concerns and I'm certain you guys know all of them.

But the City, you know, we have been having the hearings on the BEACON project, which involves much less sand deposits so. Anyway, I just wanted to comment on that. But

everybody, if you're interested, keep your, keep your eyes open for this reappearing.

MR. ROBERTS: Matt Roberts for the City of Carpinteria.

I think one the, one of the characteristics of the Carpinteria beach that's a very good characteristic is that cobble sub-straight that exposes itself in the winter time, and that's something we're encouraging the Army Corps to take due consideration of that it may be by the importation of additional sub-straight material, that cobble, that that can be a foundation that would be more resistant to the seasonal erosion and have a longer life, a longer residency on the beach.

The coarser sediments last longer. And the sand veneer, which is the exact structure that we've always had down there. I can see -- I can find pictures of myself when I was four years old standing on a cobble-strewn beach in the winter time. That, again, is just a coarser sediment. It stays on the beach during a higher energy environment like a winter surf zone, and the sand migrates in and out like it's supposed to. You know, a perfectly functional beach is what I've been told is that sand is supposed to erode and move off shore and form sandbars which trip larger wave farther off shore. And that's a perfect winter scenario. And in the spring the general waves

migrate the sand back onto the beach.

And so if we can build that -- and I have witnessed during some of the severe winter storms not only what we all see the sand eroding, but I've also seen, and I've never seen it anytime worse than that eleven-day El Nino event that we had, where the southeasterly swells and currents swept a tremendous amount of that cobble away. And that softball and larger sized cobble that got rinsed up coast -- in fact, you can look up at Sand Point, which is at the mouth of the marsh, and you can see that artificial riprap wall absolutely covered with cobble. The ocean picked it up and just covered that. And then the next day all of it was missing from there.

So that sediment does move around in extreme conditions but tends to have a better residency in the average high-energy winter years. Anyway, that's one of the differences between Goleta Beach, which is nothing but a sand spit. It was a parking lot and a park built on a absolute, hundred percent sand spit. It's much more fragile than the City beach.

MR. MILLER: Anybody else?

MS. ADAMS-MORDEN: Okay. We got the condition with the revetment right there, and they always say revetments erode the beach. So, I mean, putting the sand there is just -- is -- I mean, is it going -- I mean, if it's at Ash Avenue, that's

were you're going -- that would be the start of where you'd replenish. Is that right? So the revetment would --

MR. RISKO: Yeah, that is a -- Tony Risko. That is a possibility that, that, when we look at the beachfill alternative that will determine that -- the renourishment frequency would be such that it would actually result in a cost that would exceed the benefits. And that would then mean that, you know, that would not be an alternative that we would want to recommend. That is a possibility that, that we may see when we do our -- when we go through the engineering analysis as part of this study effort. So --

MS. ADAMS-MORDEN: Has there been a place that's like that where there's a revetment you know, above it and where you just really fill in heavy where the revetment is and that protects the lower stuff?

MR. RISKO: Some -- well, we got something similar down in Imperial Beach, only it's -- and that's, the answer is, yes, there is something like that. At Imperial Beach we have a situation where on the south side of Imperial Beach there is about 2,000 feet of revetment. On the north side of Imperial beach, which is another 2,000 feet approximately -- it's all sandy beach with some seawalls placed here and there.

And the Corps of Engineers just recently completed a study in which we recommended going forth with a beachfill

project. Based upon the assessments that we're doing, however, was that we would actually put sand in front of that revetment so that revetment would not really contribute to any erosive problems on the north side of Imperial Beach. So we do have a similar case.

Imperial beach is a little bit different. We'll need to take a look at whether or not, as we go forth with a possible beach fill alternative, on where we, we should actually start. We're not saying that we're going to start at Ash Avenue – but we're saying that that is the reach we want to protect. Theoretically, we may want to go further, further west and put material there. As long as we ensure that there aren't any impacts to the Salt Marsh, you know, with any return flow. As long as, as long as we don't have any significant environmental impacts.

MS. ADAMS-MORDEN: Well, we have a reef out there too. I mean --

MR. RISKO: That -- that's something that we will consider, as far as our environmental assessment is concerned, is that if we were to place material in a vicinity where we believe that material will migrate back to the offshore reef, we will determine whether or not that would have significant impact to the reef. So we are sensitive to the --

MS. ADAMS-MORDEN: Well, where would you be -- if

you're going to do an artificial reef, where would you be putting it? Inside of where the reef our out, out? What was the idea?

MR. RISKO: Most likely the artificial reef will probably along the similar where the existing reef is now. Where the actual -- where the reef that you have now is, probably along the same line as that reef, not any farther out or any farther in shore.

Now, I can't tell you that's what, that's what were going to recommend. I can't tell you that's what the announcement's going to be. I'm just giving --

MS. ADAMS-MORDEN: Yeah. I'm just asking what ideas are.

MR. RISKO: Right.

MR. ADAMS-MORDEN: Okay. Also, the ocean's rising.

MR. RISKO: Yeah.

MR. ADAMS-MORDEN: Maybe it doesn't matter what you do. It'll just all get washed away.

MR. RISKO: That is a distinct possibility but, but the way that we do our economic analysis is we take a look at a period of 50 years. So even though we will have some sea level rise during that 50-year period, it ought to be relatively insignificant to our analysis. I mean, if you're looking out, out at, you know, 200 years from now, well, that's a different

story. But because of the uncertainties of our analysis, we really don't want to go past 50 years.

MR. MILLER: Anyone here have anything to say?

MR. ROBERTS: Always.

MR. MILLER: Good. I knew I could count on you.

MR. ROBERTS: Is -- Matt Roberts, the City of Carpinteria.

As far as the artificial reef, we're sort of referring to that as an artificial reef submerged breakwater. And the idea, should that -- that'll be looked at in the study, should it become a preferred option, the design concept is that it would be submerged even at low tide. So it wouldn't be visible. It would only be a structure that would trip larger waves.

You know, I believe the calculation, as a wave breaks, when -- is at about one point three times it's height in depth. So a 13-foot wave -- maybe I have that backwards. I think a 13-foot wave breaks in about ten feet of water, or is it the opposite? Okay. So in the absence of current and wind. It's an interesting thing to know. I spent many years as a lifeguard, we use that as a tool to judge water depth. Yeah, it's a three-foot wave, it must be about four feet of depth out there in the shallow end.

And that's true with an ocean -- a bigger ocean wave,

the storm wave. The idea behind that is that larger waves would be tripped a lot of energy dispersed off shore, and in the summer time it would be a very benign thing, except that perhaps it could provide additional rocky habitat. That's not what the Army Corps really considers as one of their benefits or they are limited to the amount that they can consider that among the benefits of a project. But as your Parks Director here in the City, things like rocky off shore habitat, enhancement of that area with a juvenile fin fish, producing perhaps better snorkeling and better environment -- all those things are very consistent with our vision of Carpinteria as being sort of an eco tourist center. That's why we're working on all the environmental projects that we do here.

So we think that that's a nice option because it's not a structure on the beach, it doesn't change the profile of the beach. It doesn't -- or I shouldn't say that. It doesn't change the character of the beach except maybe help to build it, make it thicker and a better recreation area. But it also has some environmental benefits that we like so --

MR. MILLER: Okay. Thank you very much for coming tonight. I think we all gained a great deal of information. You're here -- you're interested enough to be here, so keep in touch with these Corps folks. They'll -- they want to do a good job for you and they need your help in doing it. Thank

you very much.

MR. ROBERTS: And then please share this with your friends and neighbors down there if you're, if you're interested in the beachfront or your happen to have beachfront property or beach area property or just live in the community. Share this, get the word out because we really want as much participation, we want as much straight information out there as possible. So thank you for coming.

PROCEEDINGS CONCLUDED AT 7:34 P.M.

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