To: **South Bay Salt Pond Restoration Project Team**

From: **Center for Collaborative Policy**

Re: **Outcomes from the July 13, 2005 Stakeholder Forum Meeting**

Background: The ninth meeting of the Stakeholder Forum (Forum) was held Wednesday, July 13, 2005 from 1:00 am to 4:00 pm at NASA Ames located in Mountain View. The Forum has been convened to provide ongoing input to the South Bay Salt Pond Restoration Project Management Team (PM Team) and its technical consultants on the development of the South Bay Salt Pond restoration, flood management, and public access plan.

Meeting Attendance: Attachment 1 lists meeting participants.

Meeting Materials: In advance of the meeting, Forum members were provided a meeting agenda, directions to the meeting location, Phase 1 Selection Criteria, and sections of the Draft Adaptive Management Plan, the entirety of which was posted on the Project website for review.

Substantive Meeting Outcomes:

1. Welcome, Introductions, and Agenda Review
Steve Ritchie, Executive Project Manager, welcomed everyone and asked both Forum members and public attendees to introduce themselves. Ritchie provided an overview of the meeting's objectives, and a review of the agenda. The meeting objectives were:

- Status Report on the Initial Stewardship Program
- Review Draft Project Alternatives
- Briefing on the Draft Adaptive Management Plan
- Briefing on Status of Long-Term Funding
- Phase I Selection Criteria

2. Initial Stewardship Plan Update
Clyde Morris, of the U.S. Fish and Wildlife Service, discussed the Refuge part of the Initial Stewardship Plan (ISP). He mentioned when salt ponds were purchased in the North Bay by the Dept. of Fish and Game, they did not have any money to restore them and the ponds continued to increase in salinity. It was poor for wildlife, too saline to release into the Bay, and there were problems with the levees. So this time the Initial Stewardship Plan was created. U.S. Fish and Wildlife Service, last July, opened ponds A1-A8. In March, Phase II began, and next spring, along with the Santa Clara Valley

Water District, the island ponds will be breeched, breaking the levees and having tidal action going in and out.

Then in the future, the Service will be taking over Ponds A22 and A23 and the Ravenswood Ponds. Now these ponds have high salinity and Cargill needs to operate and maintain them until the salinity is lowered. For continuous releases, 44 ppt is the number the Regional Water Board gave for discharging into the Bay.

Morris said they are stopping the solar and wind evaporation in some of the ponds, and with funding from the Resources Legacy Funds, the four foundations that helped us purchase these ponds, they did some modeling and built some new water control systems. They separated some ponds from the rest of the system so that the water comes in at high tide and goes out at low tide and the salinity does not build up. The new system is working very well.

One problem, however, he said is that they did not anticipate low dissolved oxygen levels. In natural systems, the oxygen varies. It tends to go up during the day when the temperature heats up and lowers in the evening when the temperature drops.

The other issue Morris said they had last year is where the sites were selected, and what was not realized, is that in the afternoon a lot of algae gets blown against the levees and dies and decomposes there, taking up a lot of oxygen. They went out to the pond and sampled the whole pond and found that 95% of the pond's dissolved oxygen is very good, but the place where it was discharging into the bay was very low. To mitigate for this, they put in baffles or silt screens to bring water from the area of the pond with high oxygen directly to the outlet structure, bypassing the zone of low oxygen next to the levee.

Morris said that they have a plan to do the same pond retrofit work at the Ravenswood ponds under the ISP, but that Cargill will probably maintain these past the time limit of the ISP implementation, so the Service may not implement the new water control structure plan at Ravenswood.

He added that the wildlife on the Refuge is being monitored and under Phase I, Ponds A1-A8, had an over 100% increase in waterfowl use of these ponds and some ponds had over a 300% increase. Phase II just happened in March and is operating very well. They are gaining a lot of information from what they are doing and this can be applied to better management of the ponds during the ISP, as well as to the long-term restoration. They did not see the low dissolved oxygen levels reflected in the receiving waters in the sloughs, except for Pond A3W, but that problem has not been seen this year.

Morris said that they are doing another experiment on Pond A7 this year, which has high DO during the day and low DO at night. They have put in a technology called Solar Bees or pond mixers. They are operated by solar power and batteries and mix the water so that there is no stratification of oxygen levels, and so far, it is working.

He concluded that with the help of scientists and the Regional Water Board, they are accomplishing a lot and are very pleased. They have also put a transmitter on Pond A7 and the public can go on the website and see how the pond's water quality is doing. They are also going to be building docks on several of the ponds and opening them back up to waterfowl hunting to the public.

Q: Where is the funding coming from to build the docks for the hunting?

A: The funding is coming from our base budget this year, and the following year we will be charging for the hunting--we have to go through a public process to determine what the amount is. The money we collect can actually be applied to our Visitor Services Program, including hunting and other public access activities, like the Bay Trail.

Q: What's your projected revenue amount from the hunting licenses?

A: I can't tell you yet, because it's a public process and I have to justify it and then put out a proposal and get public comment. Cargill was renting out their ponds for $1000 per year.

Q: If the hunting season opens in October, then you will be starting this public process quite soon?

A: We won't be charging hunters this year, actually, Congress has changed the rules and we're waiting to see how to do the public process. So it will be free hunting this year, but they will still need their duck hunting license and stamp, etc.

Q: Are we going to have any elevated viewing platforms?

A: Not as part of the ISP, we really not doing that, but as a part of the long-term restoration, I imagine we certainly will have viewing platforms. As far as the Bair Island restoration project in Redwood City, we will have three wildlife viewing platforms.

Q: You mentioned about public access, are you going to put in a trail at the same areas that are being opened to hunters?

A: No, we have designated areas for the hunters to drive in or bicycle or walk that will not be open to the public, though actually one of them is on a trail that is already open to the public, but is not used very often. So the hunters will be very confined. We hope that as part of our first phase of the long-term plan, we will really open up some areas to public access as long as we have the funds to build the facilities necessary.

Q: How many ponds will be open to hunting?

A: Eight. All in the Alviso area—from Stevens Creek up to Alviso Slough.

Q: You talk about the ponds in the Alviso system, but I don't see A8.

A: Yes, there were two ponds in the ISP, A3N and A8, that had difficult elevations, where their location is difficult, and we could not get good flow through. It would be too expensive to put water control structures in unless you put in pumps and the Refuge cannot afford pumps. Those are our two seasonal ponds right now. We get rainfall in those ponds and then that evaporates. Some birds like a certain amount of elevated salt. We did add water to one pond because we have hundreds of Forster's terns, avocets, and stilts nesting there and you need to make it an island to keep predators from them. Pond A8 is also subject to a flood control effort that we worked with the Santa Clara Valley Water District on, so that when the high flows come down that may be overtopping the levees, there will be a weir in here, so the real high flows would go into A8. We try to keep that pond low in order to protect Alviso.

Q: Did I hear you say no duck hunting in Ponds A1 and A2W and why?

A: Because part of the Bay Trail runs across there and 350,000 people that use that every year. Since it's a very popular trail, it would not be compatible with hunting uses. The ponds that we have open with one trail, which receives very little use, and this was part of the public input process as well.

Q: When you lowered the salinity levels, what types of waterfowl and other birds responded best to that?

A: Northern shovelers, widgeon, which the hunters call bald plates, scaup, a lot of ruddies and canvasbacks, as well as Eurasian widgeons and other unusual species we don't see too often. Some ponds had 8,000-10,000 ducks in them--it was really something.

Q: On the reestablishment of hunting, how does that fit in with the future increase of public access.

A: Yes, we've had hunting on the refuge before. Congress told us to prioritize wildlife-dependent activities and hunting is one of them. So before we allow bicycling, jogging, etc. which are not wildlife dependent activities, we have to determine if they are compatible with the Refuge purpose where wildlife comes first and other public use activities. One process we put together is to take what we're proposing to do for the restoration and public access and do compatibility determinations. We will determine where will it be compatible to have waterfowl hunting, where will it be compatible to have bird-watching, will they be in the same place, will they be separated--these are all questions that will be resolved through our public process.

John Krause, of the California Department of Fish and Game, gave an update of the Eden Landing Ecological Reserve. He said the Ecological Reserve would continue to provide hunting opportunities to the public, which used to be a private lease program under Cargill. He said it is the third year of the program, which will run for six days. It is operated on a lottery basis, and has an application process where 50 permits are allotted.

In terms of the ISP operations of the ponds, Krause said that Cargill has transferred all of the ponds to Fish and Game. Last year, they began operating Ponds 10 and 11 by retrofitting the existing Cargill intake in Pond 10, which was deteriorating, in order to allow discharge operation of the structure. Unfortunately, the structure was deteriorated beyond repair, so now Pond 10 operates as a muted tidal system and Pond 11 is seasonally dry. They will be replacing that structure as part of the final phase of the Eden Landing Restoration Project, which is an 835-acre site. The Pond 2 system they began operating last year as well, and had some dissolved oxygen problems, but those have largely been corrected. The Pond 2 system this year is currently not operational because a dredge is in there doing maintenance to maintain the integrity of the levee. The pond will be operating again sometime in August.

For the Eden Landing Restoration Project, there will be a breach of a former portion of Pond 10, which connects into Mt. Eden Creek and restore tidal action essentially along its historical alignment. In the south part of the property, the Eden Landing Restoration Project will be fed by North Creek, which was reestablished along its historical alignment and opened to tidal action by a breach completed in April. It is a beautiful new creek, which hasn't been operating as a creek for many, many decades. With the opening of North Creek, they were able to begin operation this year of the 8A system. The Pond 2 system they began operating last year as well, and had some dissolved oxygen problems, but largely those have been corrected. They are beginning to operate the 2C system, which is an intake and discharge down in Alameda Creek Flood Control Channel and is generally operating quite well. The rest of the ponds are largely seasonal at this time of year.

Krause said that Ponds 5 and 6 are medium salinity ponds that they allow to build up to higher salinities during the summer, and then mix that water into Pond 4 and Pond 2 and discharge that water when they want to change the operations. He said it is a new operation of those ponds, and thinks it will be a good experience in learning how these ponds operate and provide information for what they hope to do in the the ISP, and in the design of the long-term plan's managed ponds.

The last part of the ISP is the Pond 6A system, and they will install a water control structure this summer, which will begin operation as an intake and discharge system in the fall for the fall bird migration and the overwintering season as well.

Krause said that maintenance operations money is coming from the Resources Legacy Fund as well, which has been an integral partner with Fish and Game.

Q: What percentage of those ponds operates by pumps versus gravity flow?

A: Generally we're operating on a gravity flow system. There are three pumps at the Eden Landing area, but we are not going to use those unless we absolutely have to. At this point we've been able to operate passively through gravity—the pump process is very expensive and we're going to try to minimize that.

Q: When are you planning to breach in the north part of Eden Landing?

A: It depends what happens with the *Spartina* control of the creek this year, we're hoping that it will be very effective. We also have some wells that need to be addressed in that area. We would like to get a handle on these before we open up the tidal restoration area, so it will be probably be later next year, just depending on how things work this coming season.

Q: I've been viewing Ponds 10 and 11 this year and they look really good. I am concerned about managing water levels for the migrating and nesting population of snowy plovers.

A: It's limited by Mt. Eden Creek not being tidal yet, so we have very limited ability to bring water on and off the site. Fortunately, the winter water comes from rainfall.

Q: We will see it rise then with the rains?

A: I'm going to try to maintain habitat values depending on which species, for instance for the snowy plovers. That will certainly be the long-term plan for breeding up there in the summertime and really good water levels in the winter. Snowy plovers are in pretty good numbers right now nesting in Pond 8A and that pond's water was historically much higher so they didn't have the opportunity to nest there before. There was a Forster's tern colony that established there this year as well.

3. Review Draft Project Alternatives

Steve Ritchie reviewed the process of identifying the range of options for alternatives that began last fall, and then developed to the preliminary alternatives last December. Earlier this year, they started to go through different types of analyses, in particular, at the landscape scale, to try to identify how the system overall might respond to opening the ponds up to tidal action.

He mentioned that that was discussed at the last meeting, that they have found some errors in the data that went into the analysis, so they will be rewriting that analysis and that will result in about a three-month delay in the original schedule. They are looking at the process coming to a conclusion in mid-December of this year. That will be the final alternatives that are going to the EIR/EIS review at that time.

Ritchie said they have the alternatives maps at the meeting for two reasons: (1) because it has been a while since people have seen the maps and they want to make sure everyone has a chance to refresh themselves by looking at them, and (2) to show changes they are considering for the final alternatives as they move forward. One change is that some of the trails that get out into the tidal marshes are marked off as probably not being in the alternatives. There was some concern expressed at the last stakeholder meeting about the interaction between humans and endangered species and that the U.S. Fish and Wildlife Service and Dept. of Fish and Game expressed some of the same concerns. So there will

be a reduction of the trails that actually get out into the tidal marsh. It does not reduce the completion of the Bay Trail spine and a lot of those related trails will still exist.

He said that there is also a little shifting around of some of the ponds based on some of the operational considerations, but that the basic mix of ponds still stays there.

4. Briefing on the Draft Adaptive Management Plan

Lynne Trulio, Lead Scientist on the Project, discussed some of the recent Science Team activities, including three Sediment Dynamics Workshops, two meetings of Birds and Habitats with another one coming up, and a Fish and Habitat Workshop. The Science Syntheses, which the Science Team has been developing to provide a scientific basis to the most important issues in the Project are posted on the Project website. There are still more in development, but there are currently nine that are completed.

She set the Adaptive Management Plan in context to the various visions of a restored South Bay that are coming out of this process. These visions – 50/50%, 75/25%, and 90/10% (tidal marsh/managed ponds), she said are the draft alternatives that have been developed through the process. The ISP operation is where we are starting. Some other visions came out of the Charette, a meeting held by the National Science Panel, to develop a vision of a restored South Bay in 50 years. One of the visions is virtually a fully tidal system, but because there are a lot of uncertainties with respect to this project, there is a second vision which includes much more managed ponds. There are many project challenges that are inherent in the Project, such as balancing tidal marsh species recovery with maintaining values for current bird species using the South Bay. How will tidal marsh restoration result in methyl mercury moving into the food chain? Balancing public access and wildlife? There are a number issues that are uncertain as we move forward.

Trulio provided a graphic to show the role of adaptive management, which shows starting at the ISP and moving the system in the direction of more full tidal action, which should result in the tidal marsh mosaic-- channels, ponds and pannes, as well as vegetated marsh plain. So they will be moving phase by phase up a continuum of tidal action. As they implement a phase, they will use adaptive management to see how well the Project objectives are achieved. She said they might find at one point that they are achieving a number of Project objectives, but that they still need to move in the direction of more tidal marsh to achieve the project objectives for tidal marsh species. As they move forward, they will ask, "are we meeting all the Project objectives yet?" We use adaptive management to determine where along this continuum our optimum system is, where we are meeting the Project objectives the best way we can. This is not meant to imply anything at a particular time, but conceptually that at any point along the continuum, they may decide, using adaptive management, that they have optimally achieved the project objectives and now it is time to stop. No one knows right now, because there are so many Project uncertainties.

She said that typically in NEPA and CEQA documentation, you would identify your project alternative. In this Project, that approach does not work well, because to identify any particular alternative is difficult because they don't know that that is the optimum place where they are achieving the Project objectives. So they want to evaluate the alternatives as best as they can to see where they think they have the best chance. But in reality, they are going to be implementing the Project in phases and evaluating every phase as it goes along.

Q: One of the goals is to maintain migratory and other bird populations and it is easy in this step-wise process to see that you are reaching, say tidal marsh, but for migratory birds, how do you know at any one point, the next change you make doesn't result in a decline that takes you too far and then how do you recover?

A: The stops (on the graph) are meant to indicate a stop to the Project. As we gain information and evaluate each step, we will be able to see how shorebirds and waterfowl are responding to changes in the system and have a better way to predict change and not go too far. This is meant to be viewed from the bottom up and the top down—we don't want to take irreversible actions that move the Project towards tidal marsh, but beyond the limits of our knowledge. On the other hand, we don't want to implement the Project that precludes us from moving towards more tidal marsh if we want to. So we might find that as we move along the tidal marsh continuum, we are able to accommodate significantly more shorebirds and waterfowl in ponds, pannes, sloughs, and channels than we thought we would be able to in the tidal marsh matrix. The South Bay was historically predominantly tidal salt marsh, so it means that's how the South Bay originally functioned, and we want to recapture as many of those functions to as great an extent as we can, while still maintaining the current habitat values that are provided by the salt ponds.

An extremely important part of the Adaptive Management Plan is implementing applied studies to help us understand how the system will respond to a full-fledged action. We might want to implement some studies with respect to shorebirds and waterfowl where we take a pond and we put in a number of habitat features that we think will attract more of them and that the birds stay healthy. We gain the knowledge through the studies before we take an irreversible action.

Q: What I've been hearing is shorebirds and waterfowl, not fisheries or opening the waterways, or flood control. If you're only going to measure by shorebirds and waterfowl, I think we're missing a big key factor.

A: I didn't say we were only going to measure by shorebirds and waterfowl. When I say meeting the project objectives, I mean <u>all</u> of the Project objectives. We want to evaluate how we are doing at each one of these phases with respect to all the Project objectives, including fish and other species, public access, and many other factors.

Q: Over time, will the project objectives possibly change based on adaptive management?

A: Yes, that is possible. That can happen for a number of reasons: a project objective may not have been really feasible to begin with, or a project objective might be being achieved through other means and then the Project doesn't have to achieve it. So as the project is evaluated, we may respond differently to some of those.

Trulio said that the Draft Adaptive Management Plan is on the website and she asked for the audience's comments. She described adaptive management as an iterative process for learning from management decisions and applying that information to the current Project and future directions. It is important to view management actions as experiments since we don't know exactly what is going to happen when we implement these actions as even the ISP has shown us. You have to monitor it and learn from it—collect data through monitoring and applied studies.

She further explained that adaptive management is a planned approach to reliably learn why policies are working or are not working. It is not haphazard or trial and error, and it's not changing management direction in the face of failed policies. Adaptive management is not a very well developed or defined process. There are some other large projects that have adaptive management plans, but every one of them is different—they have to be tailored to the project.

Adaptive management is based on understanding a system as much as we can before we implement, but not studying it to death. We try to predict the system response to change and then we monitor to assess the response to our management actions, and then study and implement the applied studies to improve predictions and understand unexpected responses.

She went over the plan structure: the rationale for the plan, the scientific background, restoration targets, monitoring and applied studies, and more detail in the appendices. In the institutional sections there is a part on the structure and function of the decision-making and how that would be implemented, and then public involvement and data management and reporting. Funding is very important, too, but that section has not been very well developed yet until we know more about what is going in to Phase I.

She described the restoration targets are being developed from the literature; field data, monitoring, compliance targets and that they are essential for planning. They are measurable targets for assessing whether the Project objectives have been met. We want to have targets that are linked directly to the objectives that we can measure when the project is implemented, and the measurements are assessed through monitoring. So when we are developing restoration targets you need to have interim targets for each phase and final targets for the whole project. We also need to incorporate ranges and natural variability. Projects will evolve and so will targets as our knowledge evolves.

In the Draft Adaptive Management Plan, there are project targets suggested, but no interim targets yet. The targets themselves need to be developed with all of the stakeholders. She gave an example of clapper rails parameters and targets such as 1500-

2500 rails in winter, number of chicks fledged, habitat connectivity, density of prey, mercury levels in the prey, subpopulations, and ranges of variability. Monitoring is used to do a number of things, it is highly important. You run your experiment and you collect your data. Monitoring is the data collection part of the project implementation--it acts as an early warning system for problems that might be occurring. It helps us to learn about the underlying functioning of the system.

She said that Science Team has identified a number of studies it thinks should be implemented as soon as possible to help reduce some uncertainties before anything for the Project is implemented. Applied studies are also undertaken to address questions that help us find answers to and provide data that is useful to managers.

Q: What are the tools available to make a change in response to something not going right?

A: Those are contingency or remedial measures that are addressed in the document, but they are not laid out specifically. They will need to be in Phase I.

She talked about the institutional structure needed for decision-making that can generate and synthesize information and convert that information into effective decisions. It involves components such as collaborating with the public, effectively storing and organizing data, and doing preliminary analysis, among other factors. She showed a graphic that provided an organizational structure for the Project, and mentioned that each team listed would need a specific operating plan for day-to-day operations. She emphasized that having a Central Data Repository would be essential to the Project.

Trulio asked for comments on the Draft Adaptive Management Plan by August 15, in order to compile for a second draft by October 28 that will go to the National Science Panel for review, and then for more public comment. She mentioned wanting to establish a preliminary adaptive management team to start implementing some of the applied studies. She also said that there will be a Pond Ecology and Management Workshop on August 17.

Q: What if we had an Adaptive Management session to give feedback after we read the draft?

A: Steve Ritchie: Yes that sounds fine. We could have it on September 8 instead of the scheduled Stakeholder Forum meeting. We will finalize that and get back to you.

Steve Ritchie asked for comments around four areas of the adaptive management plan: Visions for the South Bay, Monitoring/Targets, Applied Studies, and Decision-Making Structure.

Q: To what extent are we basing decisions on quantitative or qualitative information and how do you plan for each specific steps in the sequence?

A: We probably won't try to answer all of the questions here. There are going to have to be judgments made and actions taken as a result, and that question of how we make management decisions is a very important one we need to address.

Q: The Martin Luther King Marsh in San Leandro Bay had a five-year intensive monitoring program, and one thing it showed it that things change slowly. I'm confused about the timeline on the chart—how long are we going to give ourselves to really see what each of these steps results in—do you wait 5 years, 10 years? That has to be part of the Adaptive Management Plan.

A: You're right. All of these changes are going to take a certain amount of time and we have to allow time for things to evolve and then determine how long is long enough.

Q: I would like to hear from Fish and Wildlife Service, their opinion of the adaptive management plan--so much thought has gone into it. It's terribly difficult to apply science to operational actions. How do you bring them together?

A: Clyde Morris: Well, it's something that traditionally Fish and Wildlife Service has not done really well—one, having the budget to make changes because we have to set up our budget years ahead of time to get approval by Congress. There was a good discussion when we were bringing up the water quality issues that we didn't think would be a problem and they were. We were violating emissions, and the regional water board said we needed to do something about that. That is when we decided to put in the solar bees. A couple of the scientists said we don't want to have a knee-jerk reaction; we need to do a study and think about that. I thought, that's true, we should go out there and do an investigation and gather all the information and do a great analysis that would be the proper way of doing it. Of course the water board said we could be fined $35,000 a day for not being in compliance and then we said, in this case, we are not going to do the study. But we need to do studies, we need to develop a baseline mark, and we need to make sure that the changes we see are the result of the solar bees that we implemented. We have to compromise sometimes where we can't really follow scientific methods properly, we have to respond to something fast, but we can do it in a proper way and try to learn as much as we can. So it's really something the Refuge can look at and do a better job at.

Q: When you see this Adaptive Management Plan, do you see that the way it's organized is nimble enough to accomplish that?

A: Clyde Morris: I think we need to work on the nimbleness, and of course we need the funding for it. But I'm very excited about that, that's the way we should have been doing business for a long time now.

Q: If you can think of it as knee-jerk analysis, you can think of it as real-time data management, and the fact that we have monitoring requirements every 15 minutes for quality assured data is a very healthy way to work now and also over the long-term.

A: Clyde Morris: While we're doing these "knee-jerk" things, Lynne (Trulio) has been generous enough to organize a workshop to try to get more outside expertise in than we have at the table to start to learn more about pond management and to design studies to get us better informed. So that's taking a more scientific approach to solving problems. We have to do that for a project of this size because so much of it is unknown, it's incredibly important.

Q: I was hoping that the plan would incorporate a public communication plan and a connection to that that there is a public information function beyond just reporting that would last the duration of this project, and that it would be dynamic and work throughout this process to help determine how we plug in this important information.

Q: I think that in this group we have to do something that is a little hard and that is to be a little patient and a little disciplined about not trying to get into too much detail. We don't actually have projects or alternatives, but what I would like to see the basic adaptive management plan structure identify the critical milestones in terms of decisions. One example would be how much tidal habitat can we restore before we can begin to affect seasonal habitat? That would be a really critical decision. We don't have to get super detailed at this stage as to how to measure those things, but you have to have a framework here that would develop a project that starts making seasonal ponds fully tidal. You're going to monitor whether or not getting habitat into the area provides some seasonal components in the high marsh that should exist in the natural system. If we have the discipline to not make it too detailed at this stage, but focus on management decisions that will be made over the 30 or 40 years, that will be the guidance.

Q: We're also talking about monitoring and measuring public access, and that will use considerably different methods.

A: Steve Ritchie: Yes that is important—how we measure public access success.

A: Lynne Trulio: There has been a lot of research on how we measure public access and there is a strong research basis for metrics and how you measure that component.

Q: Maintain or improve flood control. Maintain—that word should not be in there. This is a picture of my grandson. When you to make a case for flood control, this is about the people that you have to worry about. It's not the flood amounts, it's the people. Don't wait. Improve flood control—make it safe for the children of the community, for the families of the community. The water district is going out of its way to improve flood control, but they can't do it alone. They need the help of the salt pond program. I didn't hear anything about Pond A8. Let's protect the people, the children.

A: Thank you.

Q: On the applied studies, I think it might also be helpful to also have some applied studies that deal with compatibility issues between public access and wildlife. We talk about metrics that measure people's impact on wildlife, but I think we really need to

design studies that help advance our knowledge on that. I know that there is a study going on now on the impact kayaking has on water birds and there are a number of trail studies. I think we need to expand our knowledge on this in order to make more informed management decisions.

Q: Could you clarify something on this? So #2 is monitoring and targets and #3 is applied studies. That sounds like the same thing or perhaps applied studies are a subset of monitoring?

A: Lynne Trulio: Monitoring is applied to aspects of the system that we understand relatively well. Applied studies are designed for those parts of the system that we don't understand very well. We need to gather more information on the monitoring saying with respect to tidal marsh.

Q: I want to follow up on the study on trail interactions and haven't found a place that had no access and could measure what happens before and after. Here's a chance to identify a trail now that is planned on one of the ponds that won't be changed for a long time and know that the pond will have a trail there in the future. Get some bird data now for a year or two so that you have a baseline and then when the trail is opened, you have a much better ability to say whether the results are accurate or not. There has been a lot of controversy on this information because we did not have this kind of opportunity.

Q: There is a levee that is exactly two miles long that has a locked gate on each side behind Moffett's runway. I don't think there are a lot of birds there—most of them are concentrated more in the South Bay around the Alviso ponds and on the islands. That would be a perfect example because it doesn't require any funds or any maintenance. The benefit is that it is connected to the Sunnyvale Bay Trail, the Mountain View Shoreline Trail, where Clyde mentioned that there are a lot of activities. So that would connect a dead end trail to a trail that goes almost all the way up to the Dumbarton Bridge. The part about taking two years to study the interactions of people and birds I think is a little lengthy. We've been in this process for over a year and a half and I know originally it was stated that there may be no public access to any part of the salt ponds for five years. I would like to see that timeline decrease, particularly in specific areas. If you're going to have access for hunting, what harm is there in having a few individuals walking and running along that trail? To me, it's far more disturbing to the wildlife to have guns going off than having people walking for pleasure and exercise.

Q: I think I feel similarly to others that we shouldn't get bogged down in too many details. We can use common sense and we can be speeding things up. Flood control is paramount and I think we need to get back to a common sense approach. In Alviso, we can't sit around and wait until 2007 or 2008. This is a serious issue and we need to speed things up.

Q: I was wondering about the long-term funding. There has been a discussion about public access and action taken regard to flood control and I think all of these things are going to be critical to successful long-term funding. Because the funding is going to

come from the public and we need the support of the public, and we need to show that there is action – people want to see things happen now.

5. Briefing on Status of Long-Term Funding

Steve Ritchie said that he was in the process of developing a white paper on long-term funding. There are certain types of funding that will be needed and the first is capital improvement funding, which is one-time funding when you build something. That is the kind of thing a bond measure is good for. Other funding needs are operations and maintenance. There is a strong need for annual funds for just basic operations and maintenance. Another important funding need is for adaptive management, including public information as well. That is a real annual funding need, you can't just get some funding up front to do some experiments initially and have no more funding.

He explained that some funding sources are good for certain aspects of the Project and bad for others. For example, state appropriations are bad for annual funding because you can't count on them from year to year. Federal appropriations are similar. So when they start to look at a funding package for the Project, it is a combination of sources.

He said they are looking at federal, state, local and private funds as how to fund a set of projects in the South Bay. Significant federal funds for capital improvements primarily come through the Water Resources Development Act (WRDA). This is funding through the Army Corps of Engineers Program for flood management and ecosystem restoration—they have multi-purpose funding packages. When looking at the opportunities for federal funding, it comes down to WRDA and the Bureau of Reclamation. He said he is working with the Corps of Engineers on developing WRDA funding for the Project through the South San Francisco Bay Shoreline Study.

Ritchie said that the state funds that have been useful for the last several years have been bond measures, which tend to be capital improvement funds. They will be pushing for bond measures that have language written into them that provide for adaptive management. This allows modification of capital improvement funding over time. Also on the state side is the Department of Fish and Game appropriation, which, he noted, is not a significant source of funds.

On the local front, Ritchie said, the Project is going to need local funders, such as the Santa Clara Valley Water District and the Alameda County Flood Control District, which are significant players. Santa Clara County's flood protection and habitat restoration and protection activities have been carried out most recently through Measure B, which was on the 2000 ballot, and the water district was successful in getting that in place. The state taxed that, so it was a real disappointment to the people we promised about these issues. We're still working on that to get some of that money back.

Ritchie stated that habitat restoration and flood management are both key issues in getting a two-thirds vote on these measures. Santa Clara will be looking at how to carry that into the future. The Alameda County Flood Control District has zones where they

have parcel assessments. That is where they have accumulated funds for their flood control and habitat restoration projects.

The last funding sector Ritchie mentioned is private funds, which are a combination of foundations, businesses, and individuals. What is very clear to a lot of us now, he said, is to have access to or create a non-profit organization, some type of entity that can allow for donations and grants. Private funds can be a substantial amount of the funds for the Project. Through the acquisition, Initial Stewardship Plan and planning process the foundations put $35 million into this process so far, which is a lot of money and a lot more than Fish and Wildlife Service could put in. He said that has really made all of this happen and we need to be talking with local businesses and others in the area.

Q: Combining habitat restoration and flood management are key components and there is another one—urban and non-point source run-off. Clean water is a very important issue to people.

A: With respect to the "friends of the South Bay Restoration," the State Coastal Conservancy has a non-profit organization set up to receive funds, which could be a temporary way to get private funding.

Steve Ritchie emphasized that it will have to be a combination of these sources of funds, that they are not going to be able to draw on any one of these to accomplish all of the things that we need to do. They will be producing a short white paper on this talking about the different funding sources and what appear to be the most promising opportunities now and the specific actions to pursue those. At the federal level, for example, it's going to be lobbying by a number of different voices that will carry that forward.

Q: You didn't mention mitigation as a source of funds and creating a broader coalition for the funding, this is something we should consider.

Ritchie posed the question of how much funding the Project will need. He said that they have not done any extensive cost estimating, but certainly it is about a half-billion of capital investment, but probably not the $2+ billion from the original estimates they had. As for annual funding, ten million dollars a year is not an unreasonable number to be thinking about.

6. Phase I Selection Criteria

Steve Ritchie reminded people to get comments in because the process is beginning to determine what the explicit Phase I actions will be, including restoration actions as well as applied studies. Different criteria will be important, such as how much funding will be available and who will be providing it? What is the likelihood of success? Ease of implementation—can it be permitted and constructed in a timely manner? Visibility and accessibility to the public and to decision-makers? Opportunities for adaptive management and applied studies—what do we need to learn first to move the Project

forward? Will Phase I actions be distributed throughout the project area? Projects in different areas will be needed to make sure we get relatively uniform support.

He said they will have an adaptive management working session and will probably have some type of meeting on Phase I, such as an array of possibilities or recommendations. The Project Management Team has just started to grapple with this. As soon as they get the alternatives complete, they need to get specific about Phase I criteria and then into the EIR/EIS process.

Q: I have a process question. How are the criteria reviewed?

A: We had a common deadline and I had four sets of comments on a lot of different topics, and none of them suggested changing the criteria. So we brought the comments to the Project Management Team to show them what people commented on and it was recommended that no changes be made to the criteria. Because of the way the process is set up, there is no legal mandate for this. The criteria themselves are not like the Project objectives where once they are set up, they are unlikely to change. This is a set of thoughts that will go into form the alternatives of the Phase I actions, and the public, through the processes through the end of the year, will have opportunities for comments.

Q: In Phase I, I haven't heard mentioned any type of policy issues, for example, dogs on trails. You need policies in place whether you allow dogs, you allow dogs on leashes, off leashes—there has to be a policy before you implement the Project.

A: Yes, that's a good point.

Ritchie said that they are staying on schedule for the Record of Decision in 2007, with restoration formally commencing in 2008. After they have the final alternatives, they will develop the draft EIS/EIR around the first of the year. He pointed out that the Corps of Engineers schedule for the South San Francisco Shoreline Study will take longer to accomplish, therefore Phase I restoration will not go forward with WRDA authorized construction projects, so they will be looking at other resources for Phase I.

7. Wrap-up

Ritchie discussed upcoming meetings for the Project. He said that the Adaptive Management working session will be set up for late August or early September, the weighting and ranking exercise meeting will be moved to October 14, and if they stay on schedule, they will seek consensus on the Project alternatives and Phase I actions with a Stakeholder Forum meeting in the middle of December. There is a National Science Panel meeting on November 7 and 8 and probably another Local Government Forum meeting around December 7.

The meeting was adjourned.

Attachment 1: July 13, 2005 Meeting Attendance

Stakeholder Forum Members	**Organization/Affiliation**
Dan Bruinsma	City of San Jose
Kristine Buccholz	PG&E
Peter Dunne	Eden Shores Community
Arthur Feinstein	Citizens Committee to Complete the Refuge
Lorrie Gervin (Alt.)	City of Sunnyvale
Melissa Hippard	Sierra Club
Mondy Lariz	NCCFFR
Marilyn Latta	Save the Bay
Jane Lavelle	San Francisco Public Utilities Commission
Jim McGrath	Port of Oakland
Julia Miller	City of Sunnyvale
Richard Santos	SCVWD
Carol Severin	Hayward Area Shoreline Planning Agency
Kirsten Struve (Alt.)	City of San Jose, Envir. Services
Brenda Torres	Audubon Society
Laura Thompson	ABAG Bay Trail
Project Management Team	**Agency**
Brenda Buxton	State Coastal Conservancy
Beth Dyer	SCVWD
Nadine Hitchcock	State Coastal Conservancy
John Krause	California Dept. of Fish and Game
Clyde Morris	U.S. Fish and Wildlife Service
Michelle Orr	Philip Williams and Associates
Steve Ritchie	SBSP Restoration Project Mgr.
Mendel Stewart	US Fish and Wildlife Service
Lynne Trulio	San Jose State University
Carl Wilcox	California Dept. of Fish and Game

Other Attendees	**Affiliation**
Maria Adas	Eden Shores
Greg Appling	Wetlands and Water Resources
Bryan Bemis	Applied Marine Sciences, Inc.
Vivian Blomenkamp	LWVPA
Doug Bloyd	Santa Clara Co. Resident
Patryja Bossak	Bay Trail
Joan Cardellino	State Coastal Conservancy
Margot Carroll	USGS
Deborah Clark	Center for Collaborative Policy
Evelyn Cormier	Wildlife Stewards

Other Attendees - continued	Affiliation
Mary Cousins	UC Berkeley
Mike Downey	Cargill Salt
Don Eisenberg	EOA, Inc.
Gerry Ellis	SF Bay Bird Observatory
Jim Foran	SCCOSA
Tom Ford	San Francisco Bay Brand
Tim Gasser	
Pat Gordon	OAS
Phil Gordon	OAS
Greg Green	Ducks Unlimited
Tracy Grubbs	Center for Collaborative Policy
Carin High	Citizens Committee to Complete the Refuge
Rob Holt	Photowall Design
Beth Huning	SF Bay Joint Venture
Stephanie Hughes	RMC
Kran Kilpatrick	NASA
James Kulpa	Environmental Data Solutions
Joe LaClair	BCDC
Eric Larson	CDFG
Libby Lucas	CNPS
Laura Marshall	Brown & Caldwell
Austin McInerny	Center for Collaborative Policy
Eileen McLaughlin	Wildlife Stewards
John McLemore	SFBBO
Sean Michael	Alviso Water Task Force
Steve Moore	RWQCB
Trisha Mulvey	CSB
Peggy Olofson	SF Estuary Invasive Spartina Project
Silvia Quast	Resources Law Group
Antoinette Romen	Santa Clara Co. Parks
Ray Schuler	NASA
Anne Schultz	USGS
Dan Strickman	Santa Clara Co. Vector Control
Caitlin Sweeney	BCDC
Charles Taylor	AWTF
George Trevino	Alviso resident
Kirk Willard	Lockheed Martin
Lisa Windham	USGS
Cheryl Woodward	Acterra
Kevin Woodhouse	City of Mountain View