

## **USFWS Farallon Restoration DEIS Alternatives Meeting: July 29, 2011 9 - 12am**

**Don Edwards USFWS San Francisco Bay Refuge Complex – Fremont, California**

### **Meeting Attendees:**

**USFWS** - Gerry McChesney, Mendel Stewart, Patricia Roberson, Sonce DeVries, Janet Whitlock, Jennifer Brown, Thomas Maurer, Sallie Hejl, Thomas Maurer; **DOI** Solicitor: Barbara Goodyear

**IC** - Dan Grout, Gregg Howald, Gabrielle Feldman, Richard Griffiths, Scott Birkey, Brad Keitt

**PRBO** - Jaime Jahncke, Melissa Pitkin; Pete Warzybock & Russ Bradley (phone)

**GFNMS** - Jan Roletto

**EPA** - Patti TenBrook, Karen Vitulano

**CDFG** - Conrad Jones

**USDA** - Gary Witmer (phone)

**State Water Resources Control Board** - Connie Anderson (phone)

**Meeting Facilitator:** Steve Ortega (NPS-GGNRA)

**Core Project Partners:** FWS Refuge –S.F. Bay Complex, PRBO, Island Conservation & GFNMS

### **Meeting Agenda:**

09:00-09:05 Welcome and Review Goals (*Gerry McChesney, Manager, Farallon NWR*)

09:05-09:20 Review Agenda, Introductions (*Facilitator Steve Ortega*), Core Team and Attendees

09:20-09:45 PowerPoint Presentation about the proposed project (*Multiple presenters*)

09:45-10:00 Summary of Scoping Comments received (*Gabrielle Feldman*)

10:00-10:15 Summary of Available Rodenticides (*Gregg Howald and Gary Witmer-USDA*)

10:15-10:30 Questions on Presentation

10:30-11:30 **Solicitation of Additional Agency Comments on:**

1. Scoping Period Comments received
2. Justification for Purpose and Need
3. Alternatives to be considered in DEIS
4. Environmental Issues to be addressed
5. Mitigation Measures/BMPs to be considered
6. Operational Considerations
7. Environmental Compliance: procedures/permits needed

11:30-12:00 Present draft Alternative Selection for DEIS and receive comments on it

12:00 Adjourn

### **Meeting Notes/Agency Input/Questions:**

*(Notes taken by Lillie Langlois)*

GW: Brodifacoum and Diphacinone are the only two compounds registered for Conservation use on islands in the US for rodent eradications. The current Brodifacoum and Diphacinone labels must be followed or one must apply for an exemption. For any other product, an emergency permit must be applied for.

**TM: Were there any changes in the Brodifacoum Registration Label since the Rat Island project, since the label's wording on application rates was unclear at the time of that project?**

GH: More recent label directions have been reworded to more clearly allow for the type of applications required for island eradications of rodents for conservation purposes.

GW: USDA found recently that Diphacinone has greater toxic effects on birds than previously realized; it has lethal secondary impacts on birds, such as kestrels. NWRC paper not published yet, but it was presented at the 2010 VPC: IC will make the study (*Rattner et al*) available to the group.

GW: While Diphacinone has been used in some instances to remove rats from islands, it has never been used successfully on mice. Other recent USDA studies (*Pitt et al 2010*) show that House mice are less susceptible to 1<sup>st</sup> generation anticoagulants, especially Diphacinone.

GH: Ramik by Hecco is the only registered diphacinone product in the US.

GW: A better formulation of diphacinone is needed for mice, as when USDA fed captive house mice diphacinone pellets for 3-7 days in trials, only 25-30% died. When mice were given a no-choice test for seven days (*i.e. the only food available to them was the diphacinone bait Ramik Green*) still only 40% died and 60% lived. Most mice would not even eat the bait for several days.

**CA: When are Cooperating Agency comments due to the FWS?**

GM: FWS will take agency comments on an ongoing basis, based on the phase of the project. The FWS requests that agency input on the alternative selection process for the DEIS before Aug. 10<sup>th</sup>

**KV: Has IC done any eradication where rodents were not a direct cause of resource impacts?**

GH: Yes. Despite the indirect connection between burrowing owls and mice, the main principles of rat eradication and impact assessments still apply. One usually assesses the potential impacts of an eradication, both direct and indirect impacts, in the same way.

DG: The indirect impacts of mice are not the only reason for conducting a mouse eradication, as the direct impacts of the mice on many other endemic species and important ecosystem components are also occurring on the south Farallones. While the indirect impacts of mice have been better documented recently, there is evidence available to demonstrate the other direct impacts of mice on this and dozens of other island eradication projects. All of the possible consequences are not known at this time, as a set of alternatives has not yet been described and assessed, and the purpose of the NEPA process we are just beginning is intended to try to determine and disclose the possible consequences of whatever project alternatives are developed in the DEIS. Over 330 rodent eradications have been successfully done, and assessing indirect impacts are a part of these projects.

GW: When you have a complex food web, and take one species out, it could have consequences: after mice removal, could there be much higher owl predation on storm-petrels due to less mice. Example: Golden eagles and Santa Cruz Island foxes – removing cats changed the eagle hunting dynamics that then negatively affected the foxes.

RG: IC is currently involved in a similar project with Bahamas National Trust on Allen Cay, Bahamas where introduced house mice are supporting barn owl, which are having a significant impact on the native Audubon shearwater.

DG: Whether it's the direct or indirect impacts of rodents on island systems that is deemed to be more significant, the assessment process for an eradication would be the same, involving looking at both possible direct and indirect impacts of removing the mice and leaving them there (No Action Alternative). For the Farallon Island, PRBO has a long term data set - over 40 years of daily data.

GH: Most recent eradications on Palmyra Atoll and Anacapa Island had more complex ecosystems. Design and implementation was successful on Anacapa, with a much more limited set of data on their ecosystems.

**KV: Do gulls eat mice?**

GM: The western gull population increases after the mouse population declines. Mice are not a major part of gulls' diet, but some gulls can eat mice.

**PT: FWS is missing an ecological model. Getting rid of mice may have negative consequences and analysis of this seems to be missing. Potentially it could be an ecological mess.**

DG: A food web model and analysis is not missing: a food web model is in development now, and it is in a draft stage, and it will be included in the DEIS when it has been completed, with appropriate expert input. The NEPA process will result in a DEIS that assesses the impacts of action alternatives and will also assess the impacts of No Action Alternative, which scientists say has already created an ecological mess. Forty years of research has been collected on the island by PRBO, one of the most respected research organizations in the US, on one of the best studied seabird breeding islands in the world. It is a much different situation than remote islands like the Aleutians where weather and logistics keep researchers from knowing which species may occur at some portions of the year (*e.g. eagles not expected by USFWS experts to occur on Rat Island*).

KV: The level of uncertainty regarding some information needs to be acknowledged.

GM: We will rely on the best available information at the time. By removing mice, most stopover visits by owls will be quick and they will continue on migration route, which occurs with most other migrating species. Burrowing owls are mostly new (non-resident) arrivals in October. Most owls arriving on island are juveniles and are not seen repeatedly. There are only a few repeated owl visitors from year to year.

**KV: New vs. young owls?**

GM: The burrowing owls that come each fall are mostly first young of the year lost migrants, and so we would not expect any surviving owls to return and stay on the island to prey on petrels after the mice are removed, as they have not learned to prey on petrels yet. Repeating birds are not usually coming back. Owls would not stay on the islands if the mice were removed, as at the time the owls arrive in the fall, there are few to no petrels or other food sources present. The owls would do what most all the other migrating birds do in the fall, and what they likely used to do: they would leave after a few days due to no abundant food sources being present for them.

An owl trapping program to solve the petrel part of the mouse problem would need to be perpetual and ongoing because a new group of owls are arriving on island every fall. It would not solve the other impacts the mice are having on the ecosystem.

GF: EIS will consider direct and indirect consequences. Currently we are in the early stages of this EIS process. We will analyze what might happen after mice are removed from island. First, however, we need to decide on alternatives before we can begin analyzing what impacts are predicted to occur from those alternatives.

SH: Did not understand that the owls were non-breeding first year vagrants. Suggested listing the predicted effects of mouse removal on the owls and other species in future communications.

GH: Public Scoping presentations cannot go into extended detail of every aspect of the project, but acknowledged that more information on this topic could be included in future communications with the public and reviewing agencies. All of this information will be in the DEIS, of course.

**KV: Is concerned that the project timeline seems aggressive and may create problems because necessary studies may not occur on island beforehand. If rodenticide comparisons need to be studied – that would need to occur first. Are there any plans for additional studies?**

GM: Non-toxic biomarker rodenticide bait trials were conducted on the island last year to look at uptake by mice, gulls and to assess bait application rates as part of the prior EA planning process. If we decide on different eradication alternatives, more bait trials would likely be needed.

DG: The timeline has not been aggressive; it has been a slow, methodical and cautious, with a long history of postponing milestones/deadlines to allow for more inclusive and careful planning: Project History slide: 2004 feasibility; 2006 NOI & NEPA started; 2006-2010 Scoping & Planning; February 2011: EA for 2011 implementation moved back to 2012 to accommodate an EIS schedule to include more extensive scoping (April May-June 2011); and now (July) timeline postponed for additional agency outreach and coordination to allow for revisiting the Alternatives to develop in the DEIS. This has been a very careful and inclusive and process-driven project, not aggressive.

**KV: Heavy non-target casualties (gulls) could be expected: Is hazing possible? Would you need higher application rates because gulls may consume bait?**

GM: Our main goal to prevent gulls from eating any bait. Exploration is ongoing to how this is possible. Hazing trials (USDA Wildlife Services personnel) can be brought in to help with these techniques. We can use sound, movement; even effigies seemed to work well.

MS: Remote control aircraft is being used to deter gulls from landfills.

DG: Many hazing methods are used in airports; many methods are possible. During and after hazing may be needed. Gulls might need to be hazed back to the mainland, not just a few dozen yards away from a runway. More research is being done in this area, possibly more trials.

**KV: Impact assessment should include hazing impacts, and how this could affect rodents.**

GW: Gull hazing activities would probably not affect rodent activity because mice are mostly nocturnal, and in their starving state in the fall, they are not easily discouraged from food sources. Pyrotechnics are possible. Animals can acclimate to them quickly when they performed regularly.

GM: Comment received recommended to string wires around to deter gulls from landing. Many other techniques have been looked at, and will be assessed further as part of project planning. A hazing trial was conducted in January with USDA to assess possible techniques, and more research and trials might be helpful.

**KV: How will all the studies be done and fit into the current timeline?**

GM: Best case scenario will be implementation in fall 2012. No activity can be done during seabird breeding season. Target period is the fall when non-target take will be at its lowest. Unfortunately, mouse population is at its high. Need to start eradication when mouse population is on its decline. November mice start to decline, thus this the most appropriate time of year for an eradication.

**KV: PRBO technical publication shows that storm-petrel populations are okay.**

GM: While ASSP populations seem to have increased in recent years, the new data set is not directly comparable as the previous one, as it was done using mist-net capture data (CPUE).

RB: Analyzing capture per unit effort: 1971-1992 capture rates were compared – 40% declines occurred during those years. 1992 to 2010 capture rates (using standardized methods) were higher, but it was quite variable year to year during this time, and it is difficult to assess petrel populations. Petrels are long lived species, with low reproduction rates. The greatest threat to such a species is a threat to adults, which has a much greater impact to the species' population overall. There are still major population concerns about the Ashy storm-petrel. Conservative estimates tell us that there is concern, especially since the Farallones have the world's largest population, it's important to help recover them to their former numbers.

GM: There is great urgency of this project. The long term prospects of the species are a concern. The decline of the petrels has been well documented. Are also unknown effects in the future due to global climate change. Management can try to buffer the species against other potential changes that may occur. Dealing with invasive species is very important. This perspective is for the long-

term ecosystem of the island. Removing the introduced mice has been an identified objective for the Refuge for many years. All of the other non-native mammals have eradicated already.

**KV: Timing is important because of the accuracy of studies that need to occur. What is the benefit of slowing down and looking more closely? How has the integrity of the NEPA process needs been addressed? (Conflict of interest's affect on the integrity of the work.)**

GM: IC is being contracted now solely to support the FWS in the NEPA planning process and document (EIS) preparation. There is no guarantee that IC will conduct any implementation.

**KV/MS: Does USDA do rodent eradications on islands?**

GW: Yes, we have did a ground-based eradication with bait stations and hand broadcast on Buck Island. Aerial broadcasting was done by USDA in Hawaii twice, one small 4-hectare islet success (Mokapu), and one failure (Lehua). New Zealand agencies can also implement aerial eradications.

**KV: Can USDA compete with another organization to get the work?**

GW: USDA is in theory able to do work. We do not solicit this type of work.

**KV: Is FWS going to put it out to bid or just select an organization to implement?**

GW: USDA cannot fundraise for this type of project and does not usually have the funds to do so. Island Conservation is able to seek and obtain funds for such expensive eradication projects.

GM: IC was brought in by FWS in the very beginning due to their expertise in the eradication field. USFWS respects the ability of IC to be professional and maintain their integrity in the process. The FWS will oversee EIS document and is responsible party for signing ROD and any implementation.

**KV: Isn't it hard to be objective when there are other factors that play into findings?**

Objectivity is so important, keeping that process as pure as possible. For the Palmyra EIS it seemed to me that the objectivity was not there.

MS: We want objectivity to be there. The USFWS will ensure that we make informed decisions.

SD: IPM and toxicologist with and outside of the Refuge will be coordinating on this project.

GH: IC recognizes that other organizations are interested and able to work with this type of project.

GW: These are our USDA labels and brodifacoum is under scrutiny now and our main concern that the label procedures be followed properly so that these eradication tools will be available for future conservation/island eradication purposes.

GF: When DEIS is written, we work closely with FWS on all aspects of document, as well as PRBO, and with other experts to make sure that the document is accurately and objectively written.

**KV: I have suggested more people to be involved and to hire a different NEPA contractor.**

**Palmyra was a poor example of this.**

GF: IC had a fully developed set of other action alternatives in the Palmyra NEPA planning process including two diphacinone alternatives for the FEIS. At the very last month before FEIS release, the FWS decided to pull the diphacinone alternatives out and put them in the considered and dismissed section of the EIS. This may have led outsider individuals not involved in the process to assume that no alternatives other than brodifacoum were ever considered, but that was not the case, this was just a false perception.

**CA: EPA comments are supported and I will resend my comments. Main question is about water quality data other than chemical is not soluble in water. That is our primary concern. SEFI is a small island and thus hand broadcasting could be possible vs. aerial broadcast and could be a safer approach.**

GM: Big issue with hand-broadcast is that ~50% of island is very steep and hard/impossible or too dangerous to access; it's simply not safe for personnel. Bait needs to be distributed to every single territory on entire island; thus hand baiting would likely not be possible for all areas: aerial needed.

**KV: Anacapa had some hand broadcasting. Is this a possibility for Farallones?**

GH: Hand-broad-casting occurred on some parts of Anacapa's shoreline where there was access. Many areas did not have access by foot, due to Anacapa's steep cliffs. If there is foot or boat access, bait could be distributed on some areas of the Farallones that way, but aerial broadcast would likely be needed for large portions of the island due to steep inaccessible terrain.

**PT: Do mice have territories near the shore and on the cliffs?**

DG: Yes. There are technologies that have been used to get bait to these types of areas.

**CA: Is there water quality/toxicity/solubility data on brodifacoum on marine environment?**

PT: There has not been much because it typically does not end up into the marine environment.

GW: Lehua Island had some samples collected, and so did Palmyra. Also there is a published NZ case occurred when an entire truckload spilled bait into the ocean and little to no impact was found.

IC will send out the NZ publication to the group:

*Primus, T., G. Wright, and P. Fisher. 2005. Accidental discharge of brodifacoum baits in a tidal marine environment: a case study. Bulletin of Environmental Contamination and Toxicology 74:913-919.*

GH: Most similar island to Farallones is Anacapa Island and many studies were done there on the fish, marine life, and water. No brodifacoum contamination evidence was found.

JR: Where invertebrates analyzed? Such as sculpins?

GH: Intertidal filter feeders. IC will send out Howald et al. 2010 publication:

*Howald, G., C. J. Donlan, K. R. Faulkner, S. Ortega, H. Gellerman, D. Croll, and B. Tershy. 2010. Eradication of black rats *Rattus rattus* from Anacapa Island. Oryx 44:30-40.*

GM: We could discuss composing a list of suggested reading for agency groups to read and review.

RG: There is a lot of published and unpublished literature on the effects of brodifacoum on the marine impact from New Zealand. IC can contribute these to the list of references of interest.

**KV: Does bait float or sink? The Anacapa eradication had divers out there collecting bait and recommends this also occurs during Farallones implementation.**

GM: Bait sinks, divers at Anacapa were monitored bait drift not cleaning up. Divers at the Farallones would not be possible due to the presence of great white sharks.

JR: Large tide pools are possible and protected from white sharks....these could be monitored.

KV: Assumptions of animals such as marine mammals consuming bait or not needs to be analyzed. Too many assumptions regarding secondary impacts could be problematic.

**JR: Address the unknowns and list them; it should include a list of studies that should be done and list of studies not possible due to funding. Some unknowns are: change in vegetation that could occur, gull mortality, and process that may follow. Additional funding may be needed.**

GM: Funding for this project is primarily for NEPA and the eradication project. Funding was not allocated for additional studies on developing and registering additional rodenticides. We will assess the potential impacts of the proposed alternatives based on the best of the currently available information, and we will do what we can and need to continue to supplement the existing data with additional site-specific studies as funds allow.

**KV: Will you be putting the scoping information and agency discussions into the EIS?**

GF: Any formal comments received during the scoping period will be included in EIS.

**JR: If Diphacinone is reformulated, will EPA have to approve this and how long will that take? What are the benefits of changing the diphacinone formulation vs. using brodifacoum?**

PT: Depends on how the formulation changes; for Palmyra just the brodifacoum bait application rate changed and that is a relatively quick supplemental label process. An emergency registration for some other product would be more extensive and time-consuming, and would cost much more.

USDA could perhaps provide an assessment of what might be needed to register new products.

GW: Brodifacoum is more toxic to mice, but residues remain in tissues longer than diphacinone.

**JR: Mussel-eating shorebirds: address if they consume invertebrates, will they be affected?**

**KV: Would chlorophacinone be a better alternative than diphacinone? (Bill Jacobson-EPA)**

PT: Labels off the shelf are more recent. To change (get a Supplementary label) is to use an existing registered product and determine the risk assessment if used in a way not described in the label.

**JR: How long would it take chlorophacinone to be registered?**

PT: An emergency or one-time application use might be possible, but a formulation must be designed for the Farallon project, a manufacturer must be found to make it, lab and field trials would be needed to test it on target species (mice) and potentially non-targets as well, and then this data would be used to determine if a one-time emergency permit would be authorized.

**GF: A scoping comment suggested Bromadiolone as less toxic.**

GH: The rodenticide used needs to be convincing that it will actually work in killing *all* the mice. Other rodenticides will require lab and field testing to prove this. Palatability (will mice eat it?) is a big issue, and 100% exposure in the field conditions (efficacy) and toxicity (100%) is important. The new food source (bait) needs to compete successfully with other available natural food sources.

**SH: Will non-target species be affected by one bait type more than others?**

DG: There is a very well established set of information available for brodifacoum with respect to palatability, efficacy, and the type of non-target impacts it has or does not have on many species. Most of the 330 successful rodent eradications have used brodifacoum, and all of the 30 successful mouse eradications have used brodifacoum. Its efficacy and impacts are relatively well known.

GH: Many years of study are needed for such confidence, depending on how extensive the research.

DG: First time use for chemical compound for mice is a large unknown. The FWS would need to invest a significant amount of time and money to develop a new unproven bait. A bait that showed promise would still have uncertainty, as it would be first-time use for mice. 100% lethal exposure to mice is needed, and the non-target impacts would need to be reasonably well determinable as well.

**KV: Palmyra had actual bait trials, why not yet for the Farallones?**

DG: Bait trials have already been done on the Farallones (fall 2010). If the success of the project depends on additional studies, they will likely be done. Currently existing information will be used where it exists. If other rodenticides are investigated within the timeframe of the project, they will need to be considered and assessed based on their potential for success on target species (mice), non-target impacts, and what is known about their other potential impacts on the environment, as well as whether the time and funds are available to conduct the necessary field and lab trials to develop and register them for use. What is known is that diphacinone and the other rodenticides



have never been used successfully to eradicate mice from islands....only brodifacoum has worked. The physiology/toxicology of mice is very different from rats...mice are not just small rats.

GH: Biomarker studies simulate field studies, when they are not possible. Non-toxic bait formulation is used to determine uptake by mice and utilizes dye.

DG: Diphacinone has been shown in a recent USDA studies to be lethal to only 30% of house mice, when they were fed nothing but diphacinone pellets in a no-choice trial (*Pitt et al 2010*).

IC will send the group the *Pitt et al 2010* paper on the relative efficacies of various rodenticides.

CA: Her comments will be sent by email.

**SH: How will non-target species be affected? How long until the bait disappears?**

GH: There are two elements of risk: primary (animals eat the bait), and secondary (ex. Birds of prey eat poisoned mice). From previous experience, rodents usually die underground and thus they are not generally exposed to raptors. Bait should be available to rodents at least 3-4 nights, and then ideally baits will degrade soon thereafter. Bait used on Anacapa (Brodifacoum 25D) was designed for use in the type of climate in coastal California, as it degrades with rain and humidity. Other formulations such as Brodifacoum 25W used on Palmyra and Rat Island was designed to tolerate rain and humidity. After one inch or so of rainfall, the 25D (Dry) bait pellet begins to physically break down. There are various size pellets available, some larger ones for rats and some for mice.

**GF: Does the smaller bait pellet used for mice breakdown quicker than the larger rat pellet?**

DG: Very likely. The 2010 bait trials used the smaller sized bait. Informed judgments need to be made as to how long bait might last until it degrades and becomes unavailable, depending on expected winter rainfall that would follow any eradication proposed or implemented in the fall.

**CJ: Is information available on fish stock prey base as background supporting or otherwise, to show what is causing declines in storm-petrel populations?**

GM: We don't know much about ashy storm-petrel prey base. GM's studies indicate stomach samples show krill, squid and fish. ASSPs are very pelagic feeding occurs far away from the island. We know breeding success of storm-petrels has declined. What is known is that their reproductive success in the 1970s was ~60-70%, but in the 1990s it was down significantly to less than ~50% success. It is not known if this is a result of declining fish stocks, El Nino impacts or possibly nesting disturbances. Storm-petrels are one of the most difficult species to study: during day they are far away at sea feeding, and they are nocturnal visitors to the island for nesting and they nest in small rock crevices that are difficult to find, and even more difficult to peer into to determine nest success and assess the reasons for nesting failures. Petrels are limited by Cassin's auklets due to competition to nesting, but they do use different sized burrows.

JJ: Cassin's auklets are about four times larger than ashy storm-petrels.

PT: EPA Region 9 has been keeping track of eradications that occur. EPA would like to observe the eradication operation on the Farallones due to the close proximity of the island to the EPA office. PT suggests that an EPA law enforcement officer (Federal pesticide inspector - State and Federal) could attend/observe and be onsite, record the inspection, and to provide assurance to the public that the bait application was done correctly.

KV: The stated purpose is to the remove the mice vs. improve ecosystem and or capture the owls. Suggests the P&N statement is too specific. Suggested statement: the underlying need is to help birds; mouse eradication is one alternative to accomplish that. Could potentially be a legal issue.



DG: The need is not to just help the birds...there are other species that the mice impact: endemic plants, invertebrates, salamanders and likely other ecosystem processes as well.

GH: Removing invasives is a stated goal/policy of the USFWS

JJ: 10 years ago burrowing owls were trapped and removed but that was not successful or feasible.

GF: There is more than one need for this project: it is not solely for the benefit of the ASSP.

GM: The initial funds came from a seabird restoration fund for petrels, and therefore much of the early written justification for the project tended to naturally stress the mouse impacts on petrels and seabirds, but the mice have many other impacts on the island, its species and ecosystems. Mouse removal accomplishes more than just one (ASSP) goal. The justification for the Purpose and Need could be much stronger, and we are working on strengthening that in the EIS. A reasonable range of alternatives will be considered, but the number of alternatives developed and analyzed is limited.

### **Presentation of Draft Alternative Selection Process by Dan Grout, Farallon Project Manager**

#### **Followed by Comments:**

KV: Expanding the ecosystem restoration P&N could put a check on any lack of objectivity and mitigation measures. There could be a broader range of alternatives. Did ABC submit comments?

GF: Similar matrix quantifying need. ABC comments are described and can be provided.

KV: Requests that GF provide all scoping comments to be available in PDF's.

MP: PRBO's communications team is working on comments in support of the mice eradication.

PT: Will the alternative selection matrix be included as appendix of the EIS? (GF: Yes)

JR: Unclear on use of alternative selection development handout. Are comments needed?

GM: Yes, now or within the next ten days (by Aug 10).

KV: EPA would like to be present during the field trials.

PT: Requests the PowerPoint presentation to be emailed to everyone.

#### **Noon: Meeting Adjourned**

*(Action Items from the meeting are highlighted)*

### **Agency Representatives Invited but not attending/calling into the July 29 2011 meeting:**

*Joy Albertson – USFWS*

*Ellie Cohen - PRBO*

*John Bradley – USFWS*

*Ryan Berger - PRBO*

*Winnie Chan – USFWS*

*Jim Tietz - PRBO*

*Doug Cordell – USFWS*

*Marco Buske - USFWS*

*Nancy Golden – USFWS-DEQ*

*Bill Jacobs - EPA*

*Monica DeAngeles – NOAA-NMFS – marine mammal biologist*

*Maria Brown – NOAA-Superintendent: Gulf of the Farallones National Marine Sanctuary*

*Mark Delaplaine – State Coastal Conservancy (California)*

*John Eisemann - USDA APHIS National Wildlife Research Center*

*Will Pitt – USDA APHIS Wildlife Research Center*