

**NOTES | 4/4/2011 Conference Call**

**Altamont Pass Wind Resource Area Scientific Review Committee**

Prepared by the Center for Collaborative Policy

Reviewed & Approved by the SRC.

**All 4 Current SRC Members Present**

**Discussion Topics**

**Composition of SRC**

**Burrowing Owl Distribution & Abundance Study**

**Monitoring Updates**

**Meeting Outcomes**

- The SRC reviewed the sampling distribution for the NextEra Burrowing Owl Distribution & Abundance Study

**Action Items**

Party	Due Date	Action
SRC	<b>June 6-7, 2011</b>	<b>Next in-person meeting</b>
SRC	9 a.m., Friday May 27	<b>Tentative conference call meeting</b> SRC Members – Please hold this date for now. We will try to confirm ASAP whether we need this meeting.
Monitoring Team	End of April, 2011	09-10 Monitoring Report released
Monitoring Team	Mid-April	Release summary of call with Julie Yee on QAQC simulation
Monitoring Team		Publish 09-10 revised data and Oct-March data, and announce to public
Monitoring Team		Revise data dictionaries to reflect new publicized data
Alameda County & Monitoring Team		Identify turbine status information needed from wind companies and hazardous turbine information maps needed from Monitoring Team for SRC discussion at in-person meeting (NextEra topographic mapping services available to help)
Jesse Schwartz		Once a new SRC member is appointed, hold a walk-through of the new data for the SRC
CCP		Once a new SRC member is appointed, provide them with the list several SRC members developed for the Science Advisors on suggested readings (P140)

## Composition of SRC

### Related Documents

#### [P1 SRC Charter](#)

Sandra Rivera of Alameda County discussed the process for replacing SRC Member Shawn Smallwood, who has resigned from the SRC to undertake scientific research work for NextEra in the Alameda County portion of the APWRA. He joined the SRC through a consensus nomination by Audubon, CARE and the Center for Biological Diversity, so she has contacted the three organizations to develop a new nomination, which County staff would then take to the Board of Supervisors for action. She is still trying to verify who the representative would be from the Center for Biological Diversity, but expects to receive a nomination from the three groups in the next few weeks.

An SRC member suggested that the new SRC appointee be provided with the list of suggested readings that several SRC members compiled for the HCP/NCCP Science Advisors. This list would provide a starting point of documents the SRC feels are important to review.

## Burrowing Owl Distribution & Abundance Study

### Related Documents

#### [P205 Smallwood & Neher Progress on Sampling Burrowing Owls across APWRA](#)

#### [M70 Burrowing Owl Distribution and Abundance 3-3-11 Subcommittee Meeting Results](#)

#### [P198 Smallwood Proposal to Sample Burrowing Owls across APWRA](#)

### Agreement with NextEra and Clarification of SRC Study Review Role

Sandra Rivera of Alameda County said the County and NextEra are working on a Memorandum of Understanding (MOU) laying out the various roles for the study. ICF will provide one FTE to the study. Through his contract with NextEra, Shawn Smallwood will serve as principal investigator, will manage all aspects of the field effort, data management, analysis, and reporting, and will be solely responsible for the study results and report content. Neither the Monitoring Team nor the SRC will have project or project review responsibilities. However, data collected during the study will be shared on a monthly basis with Alameda County. The study period will be four months. Data will be available to ICF and the SRC to use for other studies and evaluations.

### SRC Questions & Discussion

SRC members raised the following issues in discussion:

- The SRC, then, appears to have no review role in the study itself. Sandra Rivera responded that it did not, however, the SRC will have access to the data. .
- Shawn Smallwood was asked about the timing of data collection, what data would be collected, and what would constitute evidence of burrowing owls and burrowing owl use, information that is not incorporated into the methods described in P205. He said that information was in P198. He will be looking for presence/absence of a burrowing owl, and whether he can conclude the presence of a nesting pair.
- SRC members suggested, for repeatability, it would be helpful to combine the two documents into one, so that information is explicit and clear. Shawn Smallwood said

this is a good idea, however he will be in the field next week. He can send out a list of data variables that will be collected.

- The SRC was interested in developing information on burrowing owl distribution and abundance, to explore fatality rates and whether owl abundance and proximity to turbine rows is associated with turbine-related fatalities. Once the data from the study are available, perhaps the SRC and the Monitoring Team could use them to look at those questions. Looking at distribution and abundance for purposes of siting repowered turbines is different than issues the SRC wanted to look at. Sandra Rivera said that would be consistent with the permits, to see if the data can help with the estimates of fatalities.
- Shawn Smallwood told SRC members that they will have the data, so if they differ with his analysis, they will be able to conduct their own analysis.

### **Review of Sample Distribution**

Shawn Smallwood reviewed the sampling design as laid out in [P205 Smallwood & Neher Progress on Sampling Burrowing Owls across APWRA](#).

### **SRC Questions & Discussion**

SRC members asked the following questions about the sampling design:

- Does every field group have a primary and secondary pick? Answer: There are two on the east side that only have a primary pick.
- There is a very small sliver of a green area, denoting a second random pick, on the map on Page 4 (this green area can be found on the lower half of the map, northward from the second jagged corner from the lower right corner of the map). What is this area? The sampling design seems to be short one second random pick. Shawn Smallwood said most likely, it reflects a selection that did not get built into the GIS plot, and will be fixed.
- Sometimes, in using random selection with rare populations, selections can be picked with no populations. One strategy might be to stratify the area on the basis of known owl densities. Where there are known populations of burrowing owls, randomly select from this stratum; similarly, randomly select from the stratum with unknown populations. In response, Shawn Smallwood said, looking at the map, he feels comfortable that the areas selected will have quite a lot of burrowing owls. There are also some areas that will have none. He believes that the heat maps produced by the Monitoring Team ([M71 Analysis of Burrowing Owl Fatalities](#)) will correlate fairly well with APWRA burrowing owl distribution.
- In response to a question, Shawn Smallwood said different analysts have different figures for how large the APWRA is, depending on criteria used to draw the boundary.
- Is there any way to field test the model after it's built to see if its predictive attributes correspond with distribution and abundance? Answer: it would be possible to post check. A better way would be to hold some plots in reserve, however, that hasn't been done in this case, because of the desire to cover more area.
- What will happen if the task takes longer than expected -- how much of the research would be sufficient? Answer: This is one reason for using a random sequence. A power analysis was not done to determine at what point the sample is sufficient. The study will produce more information than what is available now. The advantage of

using a fuzzy logic model is that it is helpful for analyzing situations where there are a lot of zero events, when something is happening in a large sea of nothing happening. Given experience with burrowing owl mapping, there should be sufficient time to undertake their tasks. An SRC member agreed about the sample design, saying this study is not framed as a hypothesis test, which would give context to a power analysis.

- Has the study design taken into account that grass will continue growing as the study continues? Answer: key issues will be determined in the first month of the study when visiting survey plots.
- Some of the study polygons are adjacent to each other because of the random selection. If burrowing owls tend to cluster, there could be redundant information. One approach might be to use GIS to force spacing between polygons to get more even coverage. Answer: this could be looked into. The polygons do have natural boundaries, as they run from the top of the hill to the bottom, which could result in differences in burrowing owl presence. (The questioner said she was reassured by these answers that the issue is not a key one.
- It was suggested that some of the sampling protocol information be added to this document.

Monitoring Team members raised the following questions and comments about the sampling design:

- Restricting the study to areas where there are turbines and leases would affect what area could be used for the extrapolation. How much space in the internal polygons doesn't have a lease? In response, Shawn Smallwood said he will extrapolate to the area he is sampling. This would be congruent with the larger extrapolation unless burrowing owl abundance is different in areas without turbines. The question is a good one that the researchers struggled with. He thinks this might be the subject for a different study.
- Will the study be able to compare geographic and topographic areas and positions to identify if there is any bias that results? Answer: Yes.

### **SRC Conclusions**

SRC members agreed that they were comfortable, after the discussion, with the study design relative to addressing the issue of the siting of repowered turbines.

### **Next Steps**

Shawn Smallwood said the data will now be modified for GPS. He will meet with NextEra Monday and go into the field. He will begin working with the ICF researcher together, and then they will separate to cover more area. The study will run from April to July, and final results will go to the SRC at the end of summer.

### **Public Comment**

Jim Hopper of AES said the plot at the Midway Road site has been turbine-free for four years, and only foundations remain. In response, Shawn Smallwood said that will be an interesting area, then, to survey.

Renee Culver of NextEra said NextEra representatives are excited about undertaking the new study.

## **Monitoring Updates**

### **Monitoring Reports/Data**

Doug Leslie, Monitoring Team Project Manager, said he hopes that the annual monitoring report, on 2009-10 data, will be out by the end of April.

Jesse Schwartz of the Monitoring Team said revised data will be published that day. An announcement will go out on the listserv when it is done. The data are through October 2010, and were used for the 09-10 analysis. He will also provide a review copy of the current data set, from October through March, for public review and input. In addition, the QAQC schedule will be posted. He will update the data dictionaries to reflect new transect and search types.

### **QAQC Simulations**

SRC Member Julie Yee said she has been working on a simulation of the QAQC study, but has nothing new to report.

Monitoring Team members said they will complete their review of the summary of their call with Julie Yee.

## **Wrap Up and Next Steps**

### **Next conference call meeting:**

An available date, should the SRC need to hold a conference call meeting before their next in-person meeting, is 9 AM, May 27. CCP and Alameda County will attempt to resolve whether a conference call needs to be held ASAP, so the date can be released if it is not needed.

### **Next in-person meeting:**

June 6-7, 2011

#### **Topics:**

- Historical burrowing owl data maps review
- Monitoring Report
- Discussion of SRC hazardous turbine review called for in the Adaptive Management Plan. Last year, the SRC convened a subcommittee to go out in the field and update hazardous turbine rankings, based on changes in field conditions, such as removals that would create a new end-row turbine.

NextEra offered its topographic mapping services to help prepare maps for the analysis.

### **ATTENDEES**

#### **SRC**

Joanna Burger

Jim Estep

Sue Orloff

Julie Yee

#### **Consultants**

Doug Leslie  
Brian Karas  
Jesse Schwartz

**Identified Public**

Renee Culver, NextEra  
Jim Hopper, AES/SeaWest

Shawn Smallwood, consulting scientist to  
NextEra  
Joan Stewart, NextEra

**Staff**

Sandra Rivera, Alameda County  
Mary Selkirk, CCP  
Ariel Ambruster, CCP