

## Golden Eagle Working Group Notes May 12, 2011

**Attendees on phone:** Ashleigh Blackford (FWS), Erinn Wilson (CA DFG R5), Nancy Frost (CA DFG R5), Magdalena Rodriguez (CA DFG R6), Brian Woodbridge (FWS), Jennifer Carlson (CA DFG R1), Craig Weightman (CA DFG R3), Craig Swalgard (Parks and Rec), Elliot Chasin (CA DFG), Afifa Awan (CA DFG), Cris Tomlinson (NDOW), John Boon (Great Basin Bird Observatory), Holly Ediger (Forest Service), Larry LePre (BLM)

**Attendees in person:** Marie Strassburger (FWS), Sandra Brewer (BLM NV), Patrick Gubbins (BLM NV), Carl Thelander (BRC Inc.), Steve Peterson (ESP), Patti Krueder (USFS), Pete Bloom (Bloom Biological), Jeff Smith (HT Harvey), Judd Howell (HT Harvey), Dave Sterner (First Sola), Grainger Hunt (Peregrine Fund), Dave Bittner (WRI), Heather Beeler (FWS), Carie Battistone (CA DFG), Jeep Pagel (FWS), Mike Best (PG&E), Terry Hunt (consultant), Allen Fish (Golden Gate Raptor Observatory), Laura Nagy (Tetra Tech), Tom Durin (American Wind Energy Assoc.), Eric Kershner (FWS), Dan Crum (FWS LE), Amedee Brickey (FWS), Doug Bell (EBPRD), Mark Littlefield (FWS), Jennifer Miller (FWS), Amy Fesnock (BLM).

### **Introduction (Marie Strassburger)**

Marie Strassburger provided an overview of the overall need and purpose of the Working Group, and the days agenda, emphasizing the fact that success of the working group is dependent upon group cooperation and engagement.

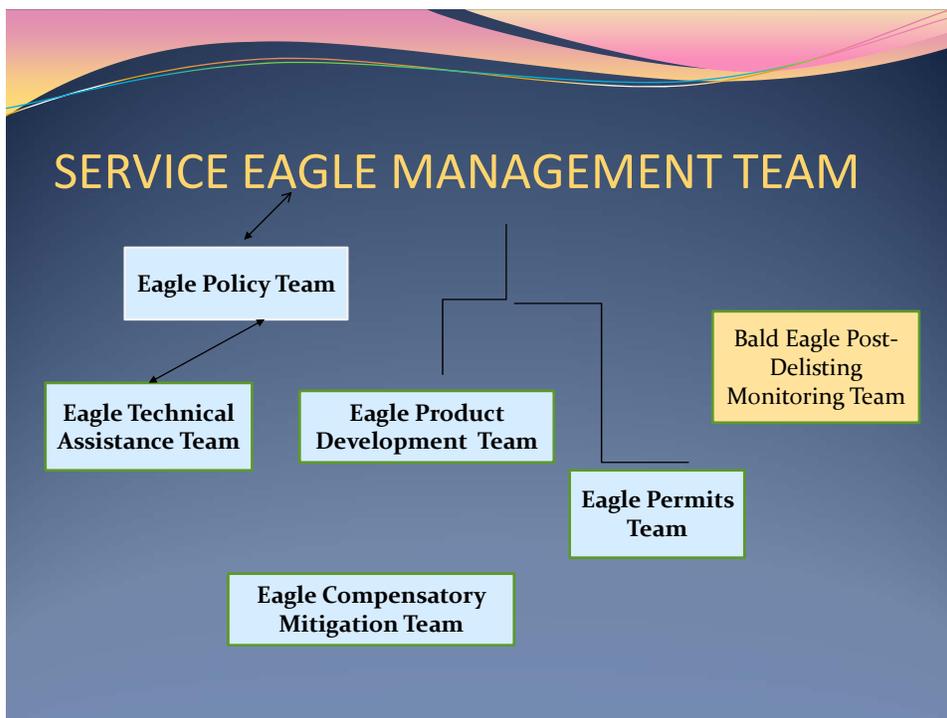
- The desired outcome of this Working Group is that at a minimum a more cohesive, coordinated effort will result in addressing anthropogenic affects on Golden Eagle populations in CA and NV for the benefit of Golden Eagles and for those whose activities may affect them.
- Additional outcomes of the working group to be determined collectively.
- This is not meant to be a working group or workshops on how to implement or interpret the eagle conservation plan guidance or the wind siting guidelines per se.
- To avoid any conflicts with the Federal Advisory Committee Act (FACA), this is not a decision making body or even one that makes formal recommendations to the State or Federal government agencies.
- Recommendations on policy or regulations will be provided through regular public forums or processes.
- The need for a Golden Eagle Working Group in the region came out of the necessity for evaluating the potential effects of renewable energy projects on Golden Eagles to meet the standards of the new Federal Eagle Permit Regulations and to address impacts on other migratory birds in accordance with state and federal regulations. However, this issue pertains to a much broader suite of actions.
- Survey coordination is important to avoid disturbing eagles. Existing monitoring efforts may be often redundant, unnecessarily costly, and potential dangerous

### **Working Group Goals and Objectives (Heather Beeler)**

Heather Beeler provided an overview of the Prospectus handed out and further expanded upon the need for this group. The lack of information regarding Golden Eagles in CA has been a major impetus for the need for landscape scale monitoring. Important components of the prospectus and future needs including coordinated research, training, database for eagle monitoring data, mitigation measures, timing of group meetings, and potential formation of subgroups,

### **Ongoing Agency Activities**

Eric Kershner reviewed FWS Eagle Management Team (EMT) organization flowchart and the purpose of each team.



- Upper management eagle management team lead by Matt Hogan R6
- Goal to advise and keep process moving forward
- Not just for wind
- Eagle Policy Team – cumulative effects, thresholds
- Technical Team – under Policy Team, modelers from USGS and USFWS, take models and adaptive management
- Eagle Product Development Team – assembling of documents (such as Eagle Guidance Doc)
- Compensatory Mitigation Team – how meet standard of no net loss
- National Permits Team – permit biologists, how issue permits
- Bald Eagle Post-Delisting Monitoring Team – separate group but working in tandem

*Discussion*

*Eric Kershner:* The Service will be sending out Avian and Bat Protection Plan (ABPP) guidance migratory birds other than eagles for review soon. This template is an outgrowth of the Avian Power Line Interaction Committee (APLIC) plan focused on utilities. ABPP is similar to draft wind guidelines structure.

- National Eagle Conservation Plan Guidance is only one module. The Service will, after review of Module I, create other modules for solar, etc. Brian Millsap is National Eagle Coordinator and coordinates all EMT teams.
- Comments on the EMT and associated products under development:

*Dave Bittner:* Brought up issue of retrofitting poles for mitigation. He believes this should have already been done by utility company and should not be used as mitigation for wind projects.

*Eric Kershner:* EMT struggled with this. Utility Co. could participate in a retrofitting program to cut a 20-year plan down to less time. Utility Co. will be responsible for monitoring and have to have an active ABPP.

*Mike Best:* PG&E has extensive comments on this issue, and will provide in the review of the draft FWS docs out now.

*Jeep Pagel:* Newest version of the National Golden Eagle Interim Monitoring Guidance will have 4 minor updates:

- (1) Increased qualifications,
- (2) encourage increased time of reconnaissance and survey in forested habitat,
- (3) emphasize that data necessary for consideration of a permit is not just for breeding birds so a component added for non-breeding birds, and other tools for surveys (aerial, carrion with cameras, ground-based).
- 4) Bighorn sheep considerations are also updated.

The desire by the Service is to this document forward in next several months for release prior to next field season, and have the important segments published in a peer-reviewed journal. The document has already received substantial review by GOEA experts and practitioners.

*Carie Battistone:* FYI, there will likely be state participation in the Eagle Technical Team via flyway participation. There is a means for information to flow up to EMT since there are individuals in this group that are also on flyway technical teams (e.g. Eric, Jeep, Carie). California DFG (CDFG) is working with the Service and has submitted comments to Interim Monitoring Guidance. Coordination of aerial surveys in lambing areas has been an issue this season.

**Action Item: Want to remind surveyors to contact the Statewide Bighorn Sheep Coordinators as early as possible in the planning process to ensure sheep conflicts are avoided. CDFG - Regina Abella; NDOW – Pat Cummings.**

**CDFG creating a map of sheep lambing areas including dates to be available in advance of next years surveys.**

*Cris Tomlinson:* NV has dealt with the bighorn sheep issue by recommending surveyors use certain avoidance measures if in lambing season, or are recommending aerial surveys outside of lambing season with follow-up ground surveys.

*Jeff Smith:* He is interested in this group coordinating a robust training program to deal with the experience issue.

*Dave Bittner:* Asked if CA/NV have coordination between the state agencies regarding the sheep/eagle issue.

*Jeep Pagel:* Jeep believes there has been good coordination between NV/CA/FWS on the issue.

*Carie Battistone/Cris Tomlinson:* Both believe level of coordination is good, and more is scheduled for the future.

**Action Item: CDFG, NDOW and the Service continue to coordinate on identifying survey options for areas supporting Big Horn Sheep and making this information available publically in the near future. Differences in chronology of sheep within the two states emphasizes the need for early coordination with State agencies.**

**Action Item: Recommendation that the Working Group coordinate a robust training program to address concerns regarding eagle surveyor qualifications and avoiding sheep lambing conflicts.**

*Jeep Pagel:* We have been alerted that GOEA nest sites had visits by possibly three different contractors for reconnaissance/survey/monitoring in one day.

*Carl Thelander:* This group needs to deal with duplicate surveys going on now with project proponents.

*Carie Battistone:* Noted that this was one of the major reasons behind setting up a group like this.

### **Permitting**

*Carie Battistone:* Reviewed handout on CA permitting related to eagles. Noted that eagles are fully protected in CA and there is no way to permit for take, besides research permits. Carie referred to Fish and Game Code and Title 14 as it relates to fully protected, and noted avenues for submitting a Scientific Collecting Permit (SCP) and a Memorandum of Understanding (MOU) – both are needed to conduct research on eagles. Proposals must be scientifically based. Carie described the need for and the contents of a research proposal for planning activities on eagles and that such a proposal should be submitted to her. Outline of the 30-day public review process for fully protected species and noted that the process for obtaining a permit can be lengthy. Early coordination with CDFG is important. Carie noted the reporting and data submission requirements of the MOU and discussed data sensitivity issues. Applicants must also have federal permits in place or in process.

Concerns expressed by several participants regarding confidentiality of data submitted to the State.

Recommended that surveyors apply now for State permits, prior to contracts being let by project proponents. In the MOU lists general locations, notify when specific location identified. Any future changes in activities does require amendment.

Dave Bittner: FOIA concern

- Jennifer: Gov't agency cannot give out another agency's information
- Amy: Putting it in CNDDDB actually protects it from FOIA
- Patty: Only data directly submitted to agency is FOIA-able (such as USFS)
- Sandra: if it stamped proprietary, cannot be FOIA-ed
- Carie: Biologists work with researchers on data submission – extensive coordination, and not posted immediately
- Carl: archaeologists – good system on protecting cultural sites
- Patty: the laws allow redacting for cultural, not for biological
- Jeep: importance of cooperation not competition – trying to protect the species, common goal

**Action Item: It is important to contact the States, particularly CA, very early on in the planning process to ensure all relevant permits are issued on time. Recommend contacting CDFG for new permits related to eagle activities up to a year in advance.**

**Action Item: Placeholder for future discussions regarding data management, limitations of confidentiality of data, and when data is FOIAble.**

*Cris Tomlinson:* NV permitting is very comparable to CA, except no MOU is required. Report form is available, includes methodology, coordination aspects, and references FWS permits. NV has data sensitivity policy to deal with public requests and can buffer some data from being released.

*Jeff Smith:* Asked if true that monitoring is not covered in NV, but is in CA.

*Cris Tomlinson:* NV does not permit for monitoring, but is trying to deal with the issue internally.

*Heather Beeler:* Pointed participants to Region 8 Q&A handout on FWS permitting related to eagles. Permitting for nest cameras may occur if the placement of the camera is conducted outside of the breeding season. State and Federal Migratory Bird Scientific collecting permits needed for nest access during breeding season. However, federal Eagle Scientific Collecting Permits required for any activity beyond USGS Bird Banding Lab permit (e.g., camera installation/maintenance after eagles have returned to a territory, use of a lure bird, etc). Eagle Scientific Collect Permits are only available to “public museums, public scientific societies, or public zoological parks”

### **Coordinated Monitoring Presentation (Marie)**

Marie gave presentation on the usefulness of coordinated monitoring efforts. Included points of historic and current efforts, and goals & objectives for coordinated monitoring. Ten main points for successful bird conservation through improved monitoring coordinated monitoring include:

- Step 1: Establish a clear purpose
- Step 2: Determine whether an existing program or protocol meets your needs

- Step 3: Assemble a team of collaborators with complementary interests and skills
- Step 4: Summarize the relationship of target populations to other ecosystem elements, processes, and stressors
- Step 5: Develop a statistically robust approach to sampling and data analysis
- Step 6: Design and pilot standardized field protocols that minimize error and bias
- Step 7: Identify or develop a data management system
- Step 8: Implement the monitoring program
- Step 9: Present results in a format that supports sound management and conservation decisions
- Step 10: Evaluate and adjust management and monitoring to make better bird conservation decisions
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Note: A number of these steps relative to Golden Eagle monitoring have already been addressed through various processes and guidance.

*Jeep Pagel:* FWS Interim Monitoring Guidance was developed for project specific monitoring only, and should not be construed that it will be applicable, as a sole source of data for regional or population level monitoring. To develop a rigorous baseline, we are talking about three layers of monitoring – (1) project level, (2) regional level, and (3) continental level. The latter two may include sampling of known sites.

*Steve Peterson:* As a working group we also need to look at data gaps which currently exist in CA and NV.

### **Moving Forward (open discussion)**

*Marie Strassburger:* Want to focus the rest of the meeting time on how we feel about the groups goals/objectives, where do we go from here, does working together on coordinating monitoring make sense for this group?

*Jeff Smith:* Group needs to maximize efforts with regards to other raptors found while surveying for eagles, including migration monitoring (e.g. Prairie Falcons, Peregrine Falcons, Ferruginous Hawks, Rough-legged Hawks, etc.). We can monitor and submit data for other raptors while we accomplishing GOEA work.

*Marie Stassburger:* Does the group want to focus on eagles now and expand to other raptors later?

*Dave Bittner:* We see many raptors while doing eagle surveys, so makes sense to report this data as well. Group needs to address other impacts, not just wind energy impacts. For example, rock climbing activities at cliff sites may prove to have substantial impacts to cliff nesting raptors.

*Jeff Smith:* Group needs to address population-level components for eagles, regardless of the mechanism of impacts. We should go beyond wind energy.

*Patti Krueder:* Group needs to address the need for coordinated research. Dealing with duplicate efforts is important. Uncoordinated monitoring will have negative impacts on the birds.

*John Boone:* There is a framework to detect broad-scale trends already developed in NV that could be useful to group. John is willing to share these concepts with the group.

*David Sterner:* This group seems to be geared to wind energy impacts, although there are other impacts (e.g. solar) as well.

*Marie Strassburger:* This is setup to be generic and can address all impacts.

*Ashleigh Blackford:* Group needs to focus on general eagle data that can be applicable to all forms of potential industry impacts.

*Cris Tomlinson:* The protocol NV uses is conducive to multi-species monitoring. A research need is the gap in fall migration corridors.

*Pete Bloom:* The reason we are here is because there is data suggesting golden eagle populations may be in a downward trend. We really need to determine what is causing this decline – turbine collisions, Pb poisoning, disease? Our purpose should be to discover what may be causing decline. Need to look at from a productivity and migration stand point.

*Carl Thelander:* Groups like this should act to provide expert opinion on matters, and also to be the repository of data. It is the agencies job to develop guidance-type documents.

*Dave Bittner:* We need to address timing of next meetings and avoid meetings that conflict with the field season.

*Pete Bloom:* Agrees with Dave's comment. Believes 2 meeting per year are not enough to deal with what is on our plate.

*Jeff Smith:* Group could possibly have more meetings via email/phone. Webinar may be an option.

*Doug Bell:* We are here to ensure a self-sustaining population. However, this is not in the goals outlined for this group. We need to make sure this is an overall goal of the group.

*Jeff Smith:* Question to address - what do we know so far? Where are the birds?

*Laura Nagy:* We should look at what the gaps are and how research to address these gaps can move forward?

*Steve Peterson:* Agree that we should figure out where are we at and what are we trying to answer. This question should be addressed regularly by this group.

*Larry Nagy:* Need to consider research questions by BCR.

*Jeep Pagel:* This group could focus on CA/NV rather than BCR, as BCR's may not be large enough to understand Golden Eagle issues in CA/NV.

*Heather Beehler:* We can start with CA/NV, and then expand later if needed.

*Allen Fish:* We have a renewable energy mandate as a driving force. The gaps are bigger than what we know or can even think of. We need a strategic plan to deal with gaps and future unknown gaps that may come up. Agree with Jeff – we need to look at what we now know and look at where the hot spots are.

*Jeep Pagel:* In Oregon, Franks Isaacs is coordinating a volunteer program to monitor nest sites. There is no way this group alone could cover all habitat in CA/NV. We need to share data with each other openly and honestly. But we also need to obtain information from other sources such as private entities and research institutes. Coordination with everyone is important to get the big picture of Golden Eagle occurrence and population trends.

*Grainger Hunt:* Frank Isaacs has approximately 280 participants in his volunteer program. It would be great to get something like that going here.

*Brain Woodbridge:* Important to coordinate all of these efforts. We need to make this systematic. It will take an advocate to pull together information into one place. Has an attempt been made to do that? If not, this is a good place to start.

*Grainger Hunt:* We need to get a Frank Isaacs type project here.

*Dave Bittner:* We need to be aware that industry is cooperative now, but may not be as cooperative in future. Group should deal with project proponent's issue about data proprietary.

*Mark Littlefield:* If data is collected in federal process then it is technically federal property.

*Judd Howell:* American Wind Wildlife Institute (Tabor Alison Director), writing a contract to develop a pilot database system

*Tom Durin:* At end of the day, we will have guidelines to follow for surveys. Group should be focused on a set of research questions - baseline inventory, local population levels, impacts of technology, etc. This will focus our direction.

*Carl Thelander:* Need a data repository. Could there be an organization to be repository for this data?

*Carie Battistone:* FWS and CDFG recently had a meeting with BLM and a database developer that they have on board. The need for a statewide eagle database was discussed and may be a real opportunity for this group to use.

*Jeep Pagel:* The discussion arose out of the need for a statewide database comparable to the Peregrine database which was fostered by the late Brian Walton. Carie and I were trying to establish something comparable to this comprehensive database.

*Steve Peterson:* Keep an eye on the developer's interest (e.g. siting). Make some of this data available to industry/public. Coarse modeling needed.

*Patti Krueder:* We should table the data conversation to a focused discussion later.

*Pete Bloom:* The Institute for Bird Population (IBP) has a robust approach to determine productivity/survivorship. We need to get population-level assessment and IBP has group model we can use for this.

*John Boone:* Avian Knowledge Network is repository for data. We should look into using this as a model. The data protection aspect is already included here.

*Patti Krueder:* Forest Service has data for eagles that is now available for all.

*Grainger Hunt:* We need to determine the key research questions.

*Mark Littlefield:* Where are the birds? How to mitigate for loss of pair? How to calculate replacement of loss?

*Jeff Smith:* The North American Golden Eagle Science Meeting which Jeep convened in Fort Collins in 2010 focused on questions that need to be addressed. We should use that here rather than reinvent the wheel.

*Jeep Pagel:* The North American Golden Eagle Science Meeting used expert opinion from about 36 Golden Eagle experts from Mexico, United States, and Canada. As an outgrowth of the day of discussion, the assembled experts developed 30 research questions, which were later, narrowed down to five key questions.

*Pete Bloom:* We should deal with the quality of data as an issue

*Jeff Smith:* Any data is useful, regardless of quality. We don't have a good handle on how many eagles are out there and how threats affect them.

*Eric Kershner:* Need to figure out what is out there now and how to pull it all together.

*Additional Invitees:*

*Marie Strassburger:* USGS should be invited to future meetings.

*Jeff Smith:* Also need to get academia at the meeting.

*Patti Krueder:* SoCal Edison, APLIC should have representative here.

*Pete Bloom:* Audubon should be here.

*Jeep Pagel:* US Military were included on initial invitation lists, and while not present today, should be encouraged to attend.

*Jeep Pagel:* The North American Golden Eagle Science Meeting developed a list of top 5 research needs coming out of the larger set of 32.

1. What are the critical habitat factors across all seasons (breeding, floaters, migration, and wintering) and age classes, including 3-dimensional attributes such as physiographic influences on wind dynamics during migration and use of airspace around a territory?
2. What are minimally biased, age-specific survival rates (especially for adults) and causes of mortality?
3. What is the population size and trend over multiple scales (WEST, Inc. surveys may be providing this information for parts of western U.S. but there is no comprehensive survey effort in California, the Pacific Northwest, e U.S., Alaska, and Canada)?
4. What are basic attributes of population demography; i.e. age structure, natality, and mortality?
5. What is the range of (variance) natal dispersal distances (including movement patterns from subadult to adult) within and among regions?

*Eric Kershner:* Do we have data mentioned in these top 5 needs? Which of the top 5 do we put more effort in?

*Dave Bittner:* WRI has data on dispersal, but not enough to say anything yet. Limiting factor is that transmitters are placed on young and the breeding age is 5 years. There is an associated time delay and transmitters don't last that long.

*Jeff Smith:* 33 birds tagged in NV and manuscript is in process.

### **Wrap-up**

*Marie Strassburger:* Open for volunteers to lead efforts.

*Eric Kershner:* An action item should be to take the 30 questions, send out to group, find out who is doing what, ID gaps, and prioritize as to which are important to address first.

*Carie Battistone:* Reminded participants to fill out survey (to be developed) and send electronically or via mail. We can compile input to send out to the group.

*Cris Tomlinson:* Need to update data sets and assimilate telemetry data.

Steve Peterson: Who will be coordinating the data (what we have)?

*Jeep Pagel:* Volunteered to compile data.

*Jeep Pagel:* Also, I have been working with others in the FWS to develop a Golden Eagle mortality database. This will include multiple data fields, as well as information on cause of death. Since Pb and rodenticide are a big issue with eagles, there will be a toxicology section. FYI, if you have a "fresh" dead eagle, UC Davis will do testing from the liver on Pb and rodenticide analysis for approximately \$140, which as you may know from contaminant testing, is very reasonable and provides considerable data if collated across the range of the species. Please send Carie and I any mortality data you may have.

*Steve Peterson:* Will mitigation fund a unified data base and GIS system? Thought that this avenue of mitigation was not acceptable

*Eric Kershner:* NFWF fund considered as mitigation bank. But FWS cannot set up a mitigation fund to pay for research related work. Mitigation has to be used to directly offset loss.

*Doug Bell:* So sounds like everyone is to send data, research, and location of research to Jeep and Carie/Jeep will produce a report.

**Next meeting: Possibly in late August/early Sept. (post breeding season) & Dec./January (pre breeding season). More to come on this later.**

Action Items:

1. FWS/CDFG to send notes from The North American Golden Eagle Science Meeting notes out to group. (Attachment 1)
2. FWS/CDFG to send out 30 research questions from the Golden Eagle Science Meeting to group (Attachment 2)
3. All participants to fill out research spreadsheet (Attachment 3) as appropriate to provide input on:
  - a. Who is doing any research or monitoring that contributes to these research questions.
  - b. Where surveys or research was/is conducted
  - c. Location of dataSend to Jeep by June 24 ([Joel\\_Pagel@fws.gov](mailto:Joel_Pagel@fws.gov)) .
4. All participants to send in survey forms (Attachment 4) to Carie Battistone by June 24 ([cbattistone@dfg.ca.gov](mailto:cbattistone@dfg.ca.gov)). Please note additional questions have been added from the original survey based upon discussions during the meeting.
  - a. Provide input relative to the research questions in Attachment 2 what you consider are the most important questions we should be addressing for CA/NV first
  - b. Identify other research questions of importance to CA/NV
  - c. Should initial attention be given to (a) wind, (b) all renewable energy, or (c) all regional threats
5. FWS, CDFG and NDOW will coordinate in developing a summary of the survey and research spreadsheet responses to the group by July 22.
6. Please submit your contact information to Heather Beeler ([Heather\\_Beeler@fws.gov](mailto:Heather_Beeler@fws.gov)) if you are interested in participating in a small subgroup in regarding data management concerns that were raised during the meeting starting late summer/early fall.