

DOCKETED

| | |
|-------------------------|---|
| Docket Number: | 23-OPT-01 |
| Project Title: | Fountain Wind Project |
| TN #: | 253382 |
| Document Title: | Jim Wiegand Comments - Against Fountain Wind #9 |
| Description: | N/A |
| Filer: | System |
| Organization: | Jim Wiegand |
| Submitter Role: | Public |
| Submission Date: | 11/29/2023 3:38:47 PM |
| Docketed Date: | 11/29/2023 |

Comment Received From: Jim Wiegand
Submitted On: 11/29/2023
Docket Number: 23-OPT-01

Jim Wiegand Comments - Comments Against Fountain Wind #9

More proof of fraudulent research from green energy developers and the Interior Department

Additional submitted attachment is included below.

Comments on the Fountain Wind Project Draft Environmental Impact Report

In these Fountain Wind comments are clear reasons why Shasta County must reject this DEIR, the wind industry's history of mortality impact research, and all the dismal studies relied upon for this DEIR. I will give plenty of scientific reasons why Shasta County should never rely on or condone the false analysis presented in this DEIR. Instead, **Shasta County should follow environmental law and demand new credible studies so the public will know what impacts to expect from this project and the hidden impacts actually occurring to special status species from the Hatchet wind project.** Only then will it be known what impacts can be reasonably expected from the Fountain Wind project.

My comments are based upon nearly 5 decades of expert observations, being a raptor expert and research. These comments are both factual and based upon scientific principles. I will show time and again why the opinions given in the DEIR are not based upon facts, true research and any reasonable observations or expectations.

But as bad as the content of this DEIR is, it does serve one useful purpose for the residents of Shasta County. **This DEIR has put Shasta County on notice that credible studies have to be conducted.** Otherwise a massive industrial blight with horrendous negative impacts, that are far greater than what's being presented in this DEIR, will be headed to this county.

The many impacts hidden and the few that are disclosed will have a profound impact on Shasta County residents and its wildlife species. The decision to approve a massive project that will blight Shasta county for generations to come, really should have been put to a county wide vote. The decision to accept such blight, the hidden impacts, the rigged research and a mountain of wind industry lies by omission should be up to voters.



***EAGLES FORCED TO LIVE WITH WIND TURBINES ALWAYS DIE.
THAT'S WHY A LAW WAS PASSED IN 2016 ALLOWING 4200
BALD EAGLES TO BE KILLED EACH YEAR. THE WIND INDUSTRY
AND USFWS DO NOT DISCLOSE THESE ONGOING EAGLE KILLS.***

If not for independent eye witnesses, not bound by wind industry or government gag orders, these images of eagles killed by wind turbines would have never been disclosed to the public.

June 13, 2012

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Office of Law Enforcement
National Fish and Wildlife Forensics Laboratory
1499 East 17th Street
Ashland, OR 97102

FWS/LE LAB CASE #12-000160

IN ANY EVENT TO
U.S. Fish and Wildlife Service
Office of Law Enforcement
1306 N. Lincoln Ave.
Indianapolis, IN 46204

REPORT OF
REPORT BY: 2012-
APPROVED - CASE

(b)(6)
(b)(7)(C)

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
OFFICE OF LAW ENFORCEMENT

Note: This document contains neither recommendations nor conclusions of the Office of Law Enforcement, U.S. Fish and Wildlife Service. It is the property of this office and is loaned to your agency; it and its contents are not to be distributed outside of your agency.

REPORT DATE: 07/09/2012

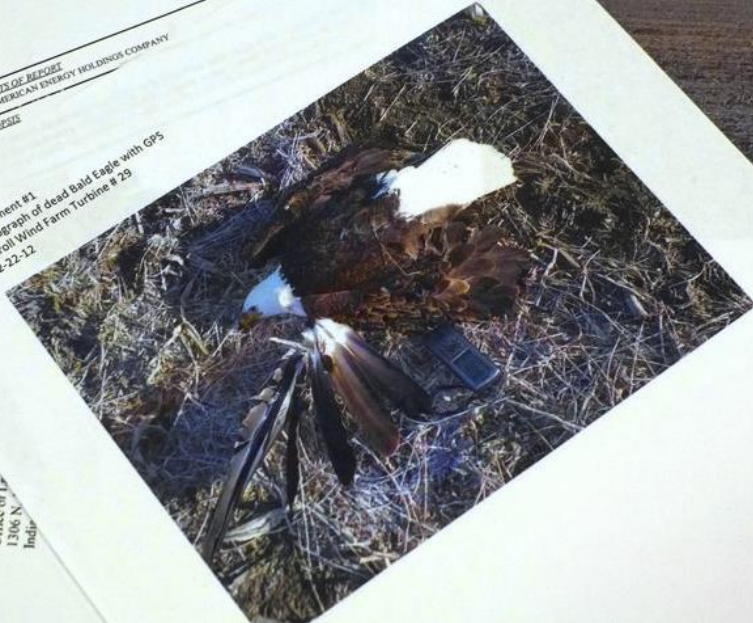
APPROVED BY: [Redacted] 11/20/12

CASE TITLE: MID-AMERICAN WIND GENERATION

SUBJECTS OF REPORT: MID-AMERICAN ENERGY HOLDING COMPANY

SYNOPSIS:

Attachment #1
Photograph of dead Bald Eagle with GPS
Carroll Wind Farm Turbine # 29
02-22-12



Attachment #1
Photograph of dead Bald Eagle and surrounding area



Attachment #: 1
Page: 4 of 6



The Fountain Wind DEIR is both a research and disclosure disaster

This EIR has not been prepared in accordance with CEQA (Public Resources Code [Pub. Res. Code] §21000 et seq.) and its implementing regulations, the CEQA Guidelines (14 California Code of Regulations [Cal. Code Regs.] §15000 et seq.). CEQA requires state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. Shasta County, as lead agency, considered the potential impacts of the Project in an Initial Study before determining that an EIR would provide the appropriate level of CEQA

documentation for the Project. The Initial Study is included in Appendix A of the Scoping Report, which is provided as Appendix J of this Draft EIR.

The overall purposes of the CEQA process are:

1. **Does not disclose to decision-makers and the public** the potential significant environmental effects of a proposed discretionary project.
2. **Does not** prevent or minimize potential damage to the physical environment through the development of project alternatives, mitigation measures, and mitigation monitoring.
3. **Does Not Enhance** public participation in the environmental review process through scoping meetings, public notice, public review, and hearings.
4. Involve other potentially affected governmental agencies through coordination, early consultations, the scoping process, and State Clearinghouse review.

As defined in CEQA Guidelines §15378, a “project” is any action that “has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” CEQA Guidelines §15093 requires the County, as the lead agency, to balance the benefits of a proposed project against any significant unavoidable environmental effects it may have. If the benefits of the Project outweigh the significant unavoidable adverse impacts, then the County may adopt a statement of overriding considerations that finds the environmental consequences to be acceptable in light of the Project’s benefits to the public. The environmental review process as set forth under CEQA is outlined below.

California Environmental law

Article 9. Contents of Environmental Impact Reports

(a) An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives.

(c) Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. **The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context.**

Federal Environmental Law • Part 1502. ENVIRONMENTAL IMPACT STATEMENT

- **Section 1502.24. Methodology and scientific accuracy.**

....."Agencies shall insure **the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.** They shall identify any methodologies used and shall make explicit reference by footnote to the **scientific** and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix."

Shasta County Supervisors will be voting on this project and I want them to fully understand that the impact information supplied on behalf of the Fountain Wind Development is not true, scientific or even remotely accurate. **CEQA law has no provisions that allow for Shasta County to accept to any biased, unscientific and contrived research created to achieve predetermined nonfactual results. CEQA does not allow research to be rigged so significant effects can be hidden from decision makers and the public.** Yet this rigging is taking place and it is so easy to prove.

While Draft EIR for the Fountain Wind Project does in a small way describe the applicant's proposed project; discuss potential significant direct, indirect, and cumulative impacts to the environment; and discuss ways to avoid or reduce potential significant impacts..... It does not discuss ways to avoid or reduce hidden impacts. What this DEIR refers to as "**significant**" really tells the public almost nothing of the devastation to species that will and have already taken place. The discussions and opinions are based upon fraudulent research designed to conceal facts. Reality has been deliberately hidden from the public and Shasta county planners.

Most importantly in this DEIR, **Shasta County has been asked to look or at the impact information supplied for the Hatchet Wind Project, to determine the possible impacts for this new and much larger project.**

While at some point in the future, Shasta County Supervisors should look to Hatchet Ridge when considering a new wind project, **now is not the time.** The primary reason, the 3-year mortality studies conducted for Hatchet Ridge have been an orchestrated coverup.

Impact research provided from the Hatchet Ridge turbines **deliberately avoided scientific principles, good judgment, full disclosure and accurate observations.** Hatchet Research may have met the requirements of our colluding government agencies, but sadly Hatchet Ridge research was just one more example of the

wind industry's version of research, specifically designed to hide their mortality to species.

In this DEIR there is a list of several hundred past wind industry mortality studies. **Shasta County Supervisors can choose any 5-10 of these studies they wish and I will show them the ways that the industry rigged them to conceal turbine mortality.** Some of these studies and their rigging will be discussed later in these comments.

Draft EIR

A Draft EIR is an informational document that provides a detailed analysis of the potential environmental consequences of approving a proposed project. The Draft EIR for the Fountain Wind Project will: describe the applicant's proposed project; evaluate potential significant direct, indirect, and cumulative impacts to the environment; and discuss ways to avoid or reduce potential significant impacts, including mitigation measures and alternatives to the project as proposed. As an environmental disclosure document, the Draft EIR will inform one factor among several to be considered as part of the County's overall decision-making process. Documents produced during the Draft EIR process include the Draft EIR and project-specific or site-specific technical studies that will be considered as part of the analysis. The County will release the Draft EIR for a 45-day comment period, during which agencies and members of the public will be invited to review the Draft EIR and provide comments.

I will start with an overview of the Hatchet Ridge post construction impact research. I will also prove that the opinions submitted for the approval of Fountain wind project are not true and the post construction mortality studies conducted at Hatchet Ridge were not even close to being scientifically credible.

For 10 years the public and Shasta County Supervisors have had no idea of the real impacts to species that have been taking place up on Hatchet Ridge. Contrived research and the deliberate avoidance of meaningful scientific studies have hidden the truth. **Nondisclosure agreements are also to blame and if one thinks about it, how could supervisors or the public ever know the truth when the people they have to rely on are being silenced?**

I will remind Shasta County officials that pretending to do research is not science, deliberately collecting false data is not science, failing to make reasonable observations is not science and just because public being exposed to this false information, does not make any of it true.

Important questions not answered in this DEIR

What has actually happened to the eagle population and nesting attempts around the Hatchet Ridge project since 2010?

Why did the DEIR not mention that adult and immature bald eagles routinely hunt the small creeks holding fish in and around the proposed Fountain wind turbine sites?

Why did the DEIR not mention that the Fountain wind turbines will have tip speeds approximately 50% faster than those at Hatchet Ridge turbines, with speeds approaching 300 mph?

Why did the DEIR not mention that the total deadly rotor sweep for the Fountain wind project will have over 4 times the deadly cubic rotor sweep of Hatchet Ridge?

Why did the DEIR fail to mention that some turbines will be placed so close to creeks that birds and bats hit by blades are likely to be launched into them?

Why did the Hatchet Ridge studies use carcass searches only out 63 meters from turbines, when **most carcasses** can be found past this limit around 400 ft. turbines?

What has happened to all the occupied raptor nests that were once reported in the Hatchet Wind EIR?

Today in 2020, how close is the nearest occupied nest of any raptor species to the Hatchet Ridge turbines?

Why did researchers avoid looking for Goshawks in **all the suitable habitat around the Fountain Wind project** and not disclose that other Goshawks migrate into this habitat annually?

Why did the DEIR fail to mention that Wind projects do not report fatalities except when conducting the industry's contrived research?

Why did this DEIR not mention that all turbine mortality reported by this industry to species is completely unreliable because USFWS secretly removes carcasses like eagles, spotted owls, falcons and goshawks from wind projects?

Why did this DEIR fail to mention that currently over 3000 eagle carcasses each year are being secretly shipped to the Denver Repository and their origin is protected by law because this industry's annihilation is considered a trade secret?

TRADE SECRET

The United States Patent and Trademark Office refers to a trade secret as a type of intellectual property. This **definition of trade secrets** is in reference to the business ownership of a formula, pattern, compilation, program, device, method, technique, or process that provides a competitive edge. As a member of the World Trade Organization, the U.S. government has a responsibility to protect trade secrets. The passage of the Defend Trade Secrets Act of 2016 (DTSA) also increased trade secret protection. Under the DTSA, an individual or organization may be found liable in a civil case for the misappropriation of trade secrets.

Fish & Wildlife News

November 1997

About 95 percent of orders received at the repository are for whole eagles, with an average of about 1,000 people applying for the 800 to 900 available birds each year.

Requests are filled on a first-come, first-serve basis by date of application.

Eagles turned in to the repository typically have died of natural causes or fatal encounters with power lines, windmills, vehicles, or illegal shooters or trappers. The repository does not accept poisoned birds because of the hazard they pose to human health.

The typical dead eagle stays only three to five days at the repository before it is shipped out to the next applicant on the list.

| NATIONAL EAGLE REPOSITORY ANNUAL REPORT: 10/01/12-09/30/13 | | | | | | | |
|--|-------------------------------------|--------|---------------|---------------------------|-------------------------------------|----------------------------------|--|
| REGION | WHOLE EAGLES & EAGLE PARTS RECEIVED | | | WHOLE EAGLE ORDERS FILLED | EAGLE FEATHER & PARTS ORDERS FILLED | COMBINED FILLED ORDERS BY REGION | |
| | BALD | GOLDEN | REGION TOTALS | BALD/GOLDEN | BALD/GOLDEN | | |
| 1 | ● 186 | 60 | 246 | 143 | 384 | 527 | |
| 2 | 30 | 30 | 60 | 527 | 1,222 | 1,749 | |
| 3 | ● 547 | 10 | 557 | 164 | 446 | 610 | |
| 4 | ● 281 | 10 | 291 | 26 | 119 | 145 | |
| 5 | ● 206 | 3 | 209 | 36 | 166 | 202 | |
| 6 | ● 256 | 246 | 502 | 197 | 558 | 755 | |
| 7 | ● 273 | 4 | 277 | 3 | 13 | 16 | |
| 8 | 16 | 136 | 152 | 74 | 260 | 334 | |
| TOTALS | ● 1,795 | 499 | 2,294 | 1,170 | 3,168 | 4,338 | |
| NEW REQUESTS RECEIVED | | | | | | | |
| | BALD EAGLES | | 1,214 | | | | |
| | GOLDEN EAGLES | | 1,906 | | | | |
| | EITHER SPECIES | | 1,422 | | | | |
| | TOTAL | | 4,542 | | | | |

NOTES:
This is why the new Dec 2016 rule was created in DC, allowing up to 4200 bald eagles to be killed annually.



Why did the DEIR fail to mention the last time the Bald eagle nest located 1 mile away from Hatchet turbines at Lake Margaret, was actually occupied and successful?

How many eagle, osprey, owl and goshawk carcasses have been secretly picked up around the Hatchet turbines by wind farm personnel and USFWS agents over the last 10 years?

Why did someone report to me that an abundance of feathers and remains can be found in the vegetation near the Hatchet Ridge turbines?

Why does the DEIR mention so few occupied nests and territories of other raptor species living in or near the Fountain Ridge project?

Why did the DEIR fail to mention the status of the Peregrine Falcon nest that had been occupied in the Pit River Canyon for decades, if not centuries before the Hatchet wind turbines were built?

Why doesn't the DEIR mention that most of the bats and raptors located within in the project area will be killed off?

The Fountain Wind DEIR and the research conducted project do not answer any of these questions and I have many more.

Scientific research and credible facts are missing components from the Hatchet Ridge studies and Fountain wind DEIR

- (b) The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.
- (c) In determining whether an effect will be adverse or beneficial, the Lead Agency shall consider the views held by members of the public in all areas affected as expressed in the whole record before the lead agency. Before requiring the preparation of an EIR, the Lead Agency must still determine whether environmental change itself might be substantial.

Shasta County must dismiss all the Hatchet Ridge Studies – The studies are not honest.

A closer look at the research conducted at Hatchet Ridge

In the image below is a summary of the research methodology that was set up for the Hatchet Ridge mortality study.

“Twenty-two turbines searched biweekly with standardized searches with the remaining 22 searched on a monthly search interval”?

It did not happen. Linear transects may have been set up but they are meaningless when the bad weather hits or snow is piling up on the ground for

months.

Standardized Carcass Searches

In order to maximize coverage of the Project, standardized carcasses searches were completed at all turbines. Twenty-two turbines were searched on a biweekly (2 week) search interval with the remaining 22 searched on a monthly (4 week) search interval (Figure 1).

Biweekly Search Plots

Biweekly search interval turbines were selected to maximize the searchable area available beneath the turbines and sample evenly across the distribution of turbines along the ridge to capture various elevations and vegetation communities and turbine position along the string (Figure 1). Square search plots up to 50 percent of the maximum turbine blade height were established beneath these turbines. Centered on the turbine, search plot size was 127 meters x 127 meters, extending 63.5 meters (208 feet) from the turbines on each side. Linear transects spaced at 6 meter intervals were established within the search plot, with searchers scanning out to 3 meters on both sides of transects.

Despite what the 3 -year Mortality report from Hatchet Ridge states, standardized carcass searches were not preformed around these turbines at all times of the year as the study suggests. Having lived in this Intermountain area for 18 years, I know that due to weather, deep snow, **it is impossible to complete this study methodology under these conditions.** On Hatchet Ridge these conditions can exist for months from Nov through April and even into May.

Table 1. Hatchet Ridge fatality survey dates.

| Survey Season | Survey Period | Year 1 (2010 - 2011) | Year 2 (2011 - 2012) | Year 3 (2012 - 2013) |
|---------------|---------------|-------------------------|-------------------------|-------------------------|
| Winter | 1 | 12/12-12/23 | 12/12-12/14 | 12/27-1/2 |
| | 2 | 12/27-12/31 | 12/26-12/29 | 1/7-1/10 |
| | 3 | 1/10-1/17 | 1/10-1/13 | 1/22-1/25 |
| | 4 | 1/25-1/27 | 1/25-1/27 | 2/4-2/9 |
| | 5 | 2/7-2/13 | 2/7-2/9 | 2/18-2/20 |
| | 6 | 2/22-2/28 | 2/21-2/23 | 3/4-3/8 |
| | 7 | 3/7-3/17 | 3/5-3/9 | |

| Spring | | | | |
|--------|----|-----------|-----------|-----------|
| | 7 | | | 3/18-3/21 |
| | 8 | 3/22-3/31 | 3/19-3/22 | 4/2-4/5 |
| | 9 | 4/4-4/9 | 4/2-4/7 | 4/17-4/18 |
| | 10 | 4/19-4/21 | 4/17-4/18 | 4/29-5/4 |
| | 11 | 5/3-5/11 | 4/30-5/4 | 5/13-5/14 |
| | 12 | 5/19-5/21 | 5/15-5/16 | 5/28-5/31 |
| | 13 | 5/30-6/4 | 5/29-6/1 | 6/11-6/12 |
| | 14 | 6/13-6/15 | 6/11-6/14 | |

The Hatchet Ridge study was severely interrupted and altered by weather related conditions. But not a word is mentioned about bad weather, 3-4 feet of snow being on the ground or having to shut down or alter searches in any way. **A credible study would have mentioned this, especially since carcasses were being covered with snow.** Other studies do mention bad weather and having to curtail searches because of fog, rain, lightening, sleet high winds and snow but not according to the contrived Hatchet Ridge studies.

Below are a few quotes from several **mortality studies discussing search cancellations and from** areas of lower elevation than Hatchet Ridge...

We sampled the plots four times each through the study period, once every three to four weeks. We observed behaviors in various weather conditions, except when rain or fog reduced observer visibility to < 60%, which was too poor to track bird activity accurately.

Searches are conducted when weather and other conditions permitted. Work was not done during lightning but was conducted during light rain.

3.1.2 One-Day search sites (N = 10 turbines):

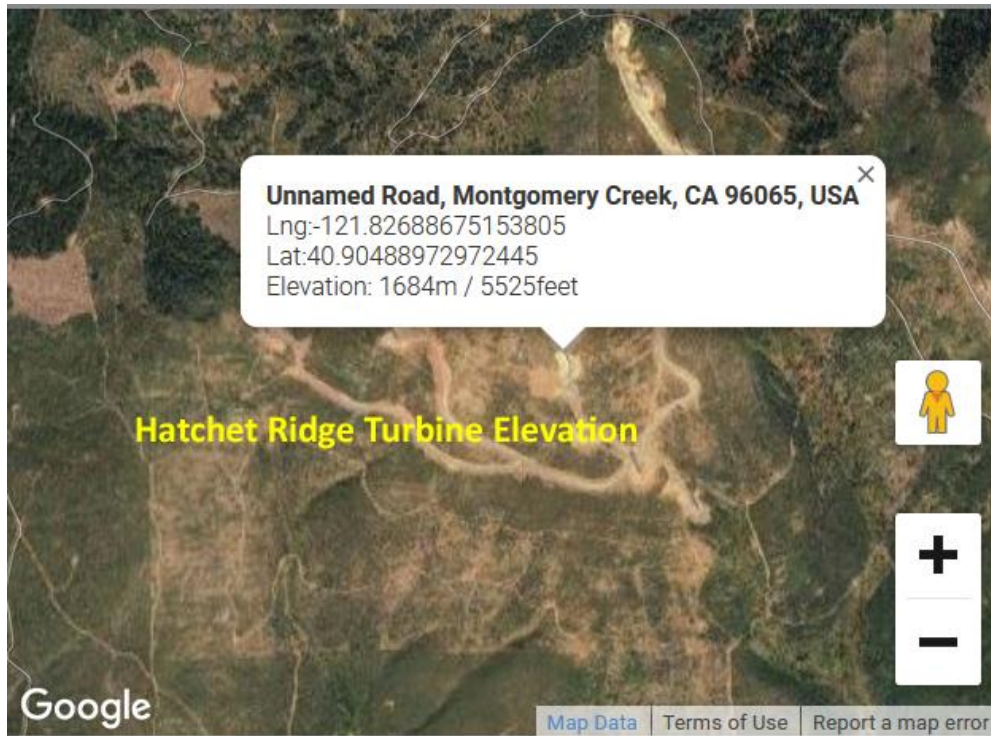
These wind turbines are at an elevation of 1,600 to 1,800 feet. Hatchet ridge turbines 4500-5500 ft

A total of 127 complete rounds of standardized searches were conducted between June 17, 2006 and November 15th, 2006 (Table 2), for a total of 1,270 turbine searches. The total search period was 152 days, out of which sites were not searched on 25 days due to inclement weather (heavy rain during the summer, inaccessible sites due to snow in the winter). The average number of days between successive searches for each tower was 1.16 days.

3.1.3 Three-Day search sites (N = 10 turbines):

A total of 45 complete rounds of standardized searches were conducted between June 29, 2006 and November 15th, 2006 (Table 2), for a total of 450 turbine searches. The total search period was 138 days. When sites could not be searched due to inclement weather (heavy rain during the summer, inaccessible sites due to snow in the winter), field technicians accessed the sites at the earliest available date before the next search round was due to occur. The average number of days between successive searches for each tower was 3.20 days.





2.1 Selection of Turbines

The turbines chosen for inclusion in the mortality monitoring were selected to cover the extent of the project area and for their varied habitats, vegetation types, and geographic characteristics. Site selection was completed with the approval of the PGC during a site meeting on March 30, 2010.

2.2 Dates of Surveys

In 2010, the post-construction bird and bat mortality studies were to be performed from March 1 through December 15 for a total of 290 potential search days. However, due to inclement weather (deep snow), surveys could not be conducted from March 1 through March 31, reducing the total potential search days to 259. Furthermore, no searches could be conducted from May 12 through May 16, 2010 and between May 22 and June 23, 2010 because of a site-wide safety stand-down authorized

2.9.6.1 Estimate of Mortality for the Entire Monitoring Season

² The 31 days that were missed in March 2010 due to inclement weather (deep snow) were excluded from the mortality estimates for the 2010 monitoring season.

Below are a few snowpack readings from Snow Mountain, located just 5.5 miles from the Hatched Ridge wind project. Snowpack readings show several feet of

snow being present for months at a time at nearly the same location and elevation as Hatchet Ridge.

➔ Daily Snow Sensor Report

April 08, 2011 **Snow Mt. survey 5950 ft. Hatchet Mt. 5580 ft.**

Provided by the California Cooperative Snow Surveys for selected automatic reporting snow gage sensors

Report generated: 05/10/2011 11:24

Snow Water Equivalents

| Station | ID | Coop. Agency | Elev (FT) | Apr 1 Avg (IN) | Today (IN) | Percent Apr 1 | 24 Hrs Ago (IN) | 1 Week Ago (IN) |
|-------------------------|-----|--------------|-----------|----------------|------------|---------------|-----------------|-----------------|
| SACRAMENTO RIVER | | | | | | | | |
| Cedar Pass | CDP | NRCS | 7,100 | 18.1 | 25.0 | 138% | 24.5 | 25.0 |
| Blacks Mountain | BLA | DWR | 7,050 | 12.7 | 17.9 | 140% | 17.8 | 18.4 |
| Sand Flat | SDF | DWR | 6,750 | 42.4 | 59.3r | 139% | 59.3r | 59.7r |
| Medicine Lake | MED | DWR | 6,700 | 32.6 | 42.7 | 130% | 42.4 | 42.8 |
| Adin Mountain | ADM | NRCS | 6,200 | 13.6 | 17.6r | 129% | 17.4r | 18.1r |
| ● Snow Mountain | SNM | DWR | 5,950 | 27.0 | 51.6 | 191% | 51.8 | 53.5 |

➔ Daily Snow Sensor Report

April 08, 2012 **Snow Mt. survey 5950 ft. Hatchet Mt. 5580 ft.**

Provided by the California Cooperative Snow Surveys for selected automatic reporting snow gage sensors

Report generated: 02/05/2013 12:20

Snow Water Equivalents

| Station | ID | Coop. Agency | Elev (FT) | Apr 1 Avg (IN) | Today (IN) | Percent Apr 1 | 24 Hrs Ago (IN) | 1 Week Ago (IN) |
|-------------------------|-----|--------------|-----------|----------------|------------|---------------|-----------------|-----------------|
| SACRAMENTO RIVER | | | | | | | | |
| Cedar Pass | CDP | NRCS | 7,100 | 18.1 | 13.3 | 73% | 13.4 | 11.6 |
| Blacks Mountain | BLA | DWR | 7,050 | 12.7 | 9.8 | 77% | 9.7 | 9.2 |
| Sand Flat | SDF | DWR | 6,750 | 42.4 | --- | --- | --- | --- |
| Medicine Lake | MED | DWR | 6,700 | 32.6 | 25.2 | 77% | 25.2 | 23.2 |
| Adin Mountain | ADM | NRCS | 6,200 | 13.6 | --- | --- | --- | --- |
| ● Snow Mountain | SNM | DWR | 5,950 | 27.0 | 23.5 | 87% | 23.4 | 21.6 |

March 08, 2013

Provided by the California Cooperative Snow Surveys for selected automatic reporting snow gage sensors

Report generated: 05/28/2013 08:29

Snow Water Equivalents

| Station | ID | Coop. Agency | Elev (FT) | Apr 1 Avg (IN) | Today (IN) | Percent Apr 1 | 24 Hrs Ago (IN) | 1 Week Ago (IN) |
|-------------------------|-----|--------------|-----------|----------------|------------|---------------|-----------------|-----------------|
| SACRAMENTO RIVER | | | | | | | | |
| Cedar Pass | CDP | NRCS | 7,100 | 18.1 | --- | --- | --- | --- |
| Blacks Mountain | BLA | DWR | 7,050 | 12.7 | 10.7 | 84% | 10.2 | 8.0 |
| Sand Flat | SDF | DWR | 6,750 | 42.4 | 23.6r | 55% | 23.4r | 20.8r |
| Medicine Lake | MED | DWR | 6,700 | 32.6 | 28.8r | 88% | 28.8r | 26.6r |
| Adin Mountain | ADM | NRCS | 6,200 | 13.6 | 8.5 | 62% | 8.4 | 8.1 |
| ● Snow Mountain | SNM | DWR | 5,950 | 27.0 | 18.8 | 69% | 18.2 | 17.6 |

The mortality surveys and search protocol claimed to have taken place at Hatchet Ridge, never did. But even if every survey had been conducted, the methodology used for the Hatchet Ridge studies was still designed to hide most of the mortality taking place.

The Hatchet Ridge Studies used Rigged study methodologies that hid mortality

The information below about Ice shedding from blades was mentioned in the Fountain DEIR. Information like this can give Shasta County an idea of how far carcasses can be launched from hundreds of feet up on a windy ridge by a turbine blade. Keep in mind the huge turbine being proposed for the Fountain project will be spinning with tip speeds approaching 300 MPH (not disclosed in DEIR), and **at least 50% faster than the turbines studied in the Swiss Alps**. Blades will also be nearly 700 feet in the air.

Impact 3.11-4: During normal operation, weather conditions could lead to ice shed from turbine blades, resulting in a potential hazard. (*Less-than-Significant Impact*)

Ice shed can occur as air temperatures rise, causing ice on turbine blade to thaw and for ice fragments to drop from the rotors to the ground near the base of the turbine (Morgan et al., 1998). Ice also can be thrown from an operating turbine due to aerodynamic and centrifugal forces. A Swiss report entitled *Wind Turbine Ice Throw Studies in the Swiss Alps* (Cattin et al., 2014) confirms that underneath the turbine is the most dangerous place for ice-related wind turbine hazards, and cautions that in arctic conditions, approximately 5 percent of ice fragments can land more than 80 meters (approximately 262.5 feet) from the turbine. GE, a wind turbine manufacturer, reported in 2006 that "rotating turbine blades may propel ice fragments some distance from the turbine— up to several hundred meters if conditions are right" (Wahl and Giguere, 2006). The actual distance that ice could be expected to travel would depend on several factors, including turbine dimensions, rotational speed, weather and especially the wind conditions, the instrumentation of the wind turbine's control system, and on the strategy of the control system itself (see, e.g., Seifert et al., 2003).

Statement taken from Fountain Wind DEIR. They do not provide additional information as to the ice throw distance to expect from their 672 ft turbines. Using the formula from the Swiss study, ice throw could be 430 meters from the Fountain Wind turbine towers. But with faster tip speeds ice throw distances will increase. The DEIR discusses none of this.

These numbers from the Swiss Alps study illustrate the power of these huge turbines blades. This power also sends carcasses flying great distances. A small bird hit by a spinning turbine blade in high winds can travel hundreds of meters. For those that do not believe this, drop a 2-3 ounce bird carcass off the I-5/Pit River bridge during high winds and then propel another out into the wind in

several directions. You will be amazed. The industry has known all this for decades, and they have deliberately avoided research to show this and have designed studies to use tiny search areas that will miss most carcasses. Hatchet Ridge pulled this same trick with their 400 ft turbines.

The USFWS is also aware of this but will also say nothing nor will this agency conduct or require any credible turbine mortality research.

As scripted, the research conducted at Hatchet Ridge showed no significant mortality impacts. Hopefully, Shasta County officials will not use this industry's contrived research, and then proceed with a fraudulent mitigation process for the Fountain Project. After all, **how can Shasta County officials or anyone for that matter, fairly mitigate turbine impacts with so many lies on sitting the table?** The 400 ft. turbines installed at Hatchet Ridge really can send carcasses over 200 meters from towers. Yet for Hatchet Ridge research, most fatality searches were limited to clear areas that reached out to about **63 meters**.

Unlike wind turbine research, past communication tower research, reached out 1 ½ times the maximum tower height from bases and carcasses searches were daily. **Not with the 400-foot turbines Hatchet Ridge.** Carcasses searches were restricted to small areas with searches extended out every two weeks and in some cases a month. This massive flaw allowed extended periods of time for turbine carcasses to disappear from tiny search areas by industry insiders or by beast. Currently wind industry research allows carcasses to be picked up by industry insiders.

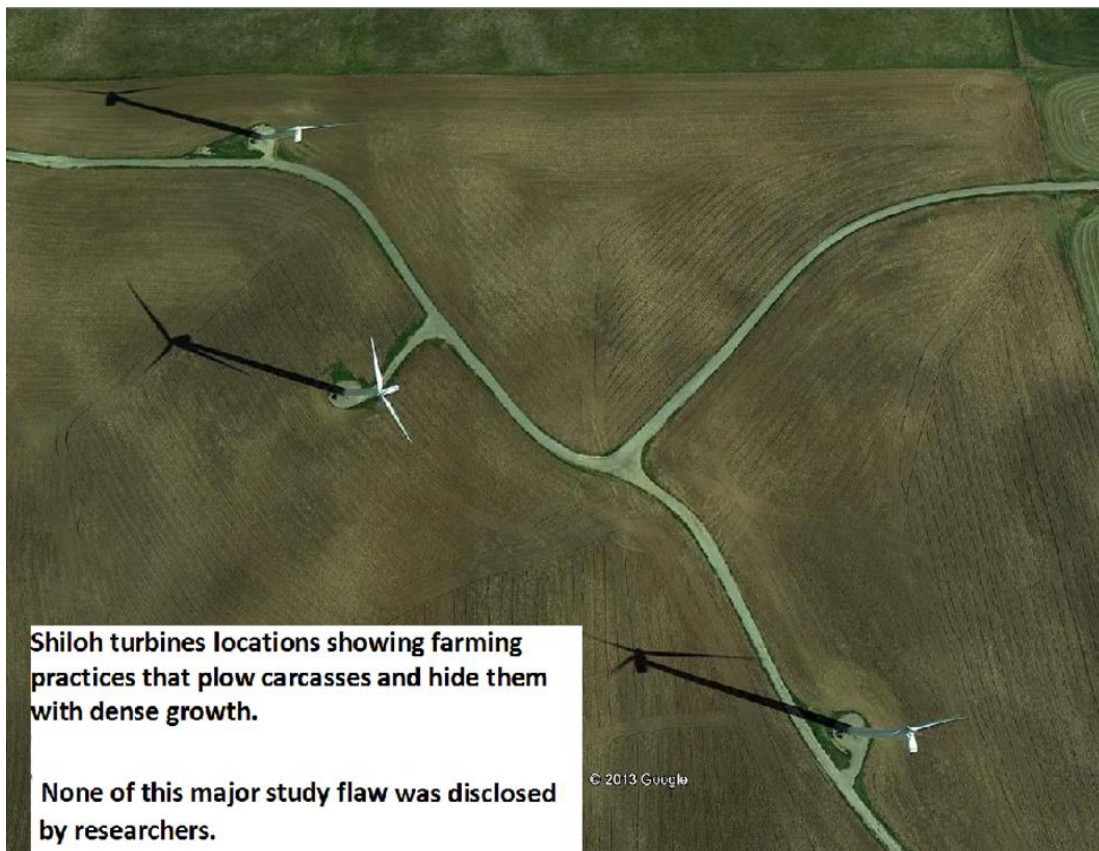
Speaking of beasts, the Hatchet ridge location is somewhat unique because of the abundance of ground predators that exist in this habitat. The Hatchet Ridge location is inhabited by bears, foxes, martins, coyotes, bobcats, and Mt lions along with many other flying scavengers. Under these search conditions, if not first found by an employee, a special status species or an endangered species that happened to be killed by turbines, would probably never be found.

None of these ground predators and a multitude of others factors are even mentioned in the Hatchet Ridge mortality reports. Just their contrived and meaningless scavenger removal studies, But I know the foot prints of all these animals were there to seen because the smell of a bloody turbine carcass, will bring them in from miles away. But typical of wind energy research, many important things like this are not even mentioned because **this industry's so-called research, is actually a fabricated stage performance.** For them the less they say the better while ignorant readers are dragged into their rigged world of

hundreds of meaningless pages, fake, data meaningless calculations and unethical conclusions.

Below is a little more factual information about wind turbine carcass dispersal. It illustrates the absurdity of the mortality research that was allowed to be conducted at Hatchet Ridge. It was taken from 3-year study in Solano county. While this study was far better than most conducted by the wind industry, it still had a number of very serious flaws.

When compared to the Hatchet Ridge turbines, the Solano County turbines were not only shorter in height, they sat on relatively flat ground, and had blades 17 meters shorter that the Hatchet turbines. This study, like at Hatchet Ridge, had infrequent searches but did had search areas **completely searched** in all directions that extended out 105 meters from towers. This methodology of 105 meters was still not adequate because fatalities were still being found much further out and farming practices were plowing them carcasses into the ground.



Shiloh turbines locations showing farming practices that plow carcasses and hide them with dense growth.

None of this major study flaw was disclosed by researchers.

© 2013 Google

Two of the reported fatalities were carcasses that could not be plowed under. A golden eagle found at 200 and another 155 meters away from these turbines.

Now look close at this search methodology taken from the study conducted at Hatchet Ridge..... With the search methodology used for Hatchet Ridge,

they set it up so that at least 2/3 of the carcasses would be missed or if found, would be classified as incidental. Of course, not looking beyond 63 meters and by not searching the entire 63-meter area out from turbine bases allowed searchers to conveniently miss the majority of carcasses.

2.1.2 Incidental Fatalities

When a bird or bat carcass was found outside of the designated search plot and/or outside of the standardized search period, it was recorded as an incidental fatality. Incidental fatalities were documented with the same level of detail as survey finds; however, they were excluded from statistical analyses. All fatalities documented during the initial sweep survey and during the monthly searches were considered incidental.

covered. Non-searchable area varied between search plots. Four plots were fully searchable, 12 had non-searchable area between 0.5 and 10 percent, and 6 had non-searchable area between 10 and 19 percent, for a total of 7.8 percent of search plots designated as non-searchable. Non-searchable areas were generally located in the outer most third of the established search plot.

But most importantly **the total area beyond 63 meters, the area where the most carcasses from these turbines would be found, was dismissed from the biweekly searches.** Now imagine the multitude of wind turbine carcasses and scattered remains, that were there to be found, but were never reported from the Hatchet ridge turbines. Then there are all the carcasses carted off by the USFWS that can't be reported.

The word "incidental" is important here because it is a trump card for data exclusion, being used in wind industry studies. It also allows wind industry personnel to handle, move and even hide carcasses when studies are being conducted. When studies have a week, two weeks or even month intervals, wind personnel have reams of time to locate carcasses ahead of searchers.

These research activities produce fraudulent research data. For example, at Altamont Pass during years of formal studies, dozens of golden eagles killed by turbines were excluded from mortality estimates because they have been placed in the incidental category. How do these dead eagles get placed in the incidental category? Wind personnel went around and picked them up ahead of the people doing standardized surveys.

The Wolfe Island studies conducted by Stantec reported hundreds of carcasses being found in their tiny little search areas shown in green below, with just a few others reported beyond 50 meters. I believe the furthest carcass distance reported was 59 meters. For 400 ft tall turbines, with 50 meter blades, like at Hatchet ridge it's simply not possible.

Yet the wind industry with all their trade secret protections, are selling this research fraud to the public.



- Study declared a 50 meter search area to determine turbine mortality but only reported carcasses found from a fraction of this 50 meter area.
- Research from Altamont disclosed that 95% of carcasses could be found within 125 meters from small 100 kW turbines approximately 100 feet tall.
- Proper search area size for 2.3 MW 400 ft tall turbines used on Wolfe Island.

The truth is that wind industry's mortality research across America has changed from bad to worse over the years. Now carcass or mortality searches used in the industry's fake studies, are generally completed about once per week on the clear roads and gravel pads of turbines.

In order to understand the absurdity of all this, imagine a mailman pulling up to a mailbox then glancing at your driveway. In a fraction of a second, a carcass

sitting there in a mangled heap would be incredibly easy to spot. Now think of the hundreds of stops a mailman makes every day. It is about that easy to pre-scan for carcasses ahead of formal searches.

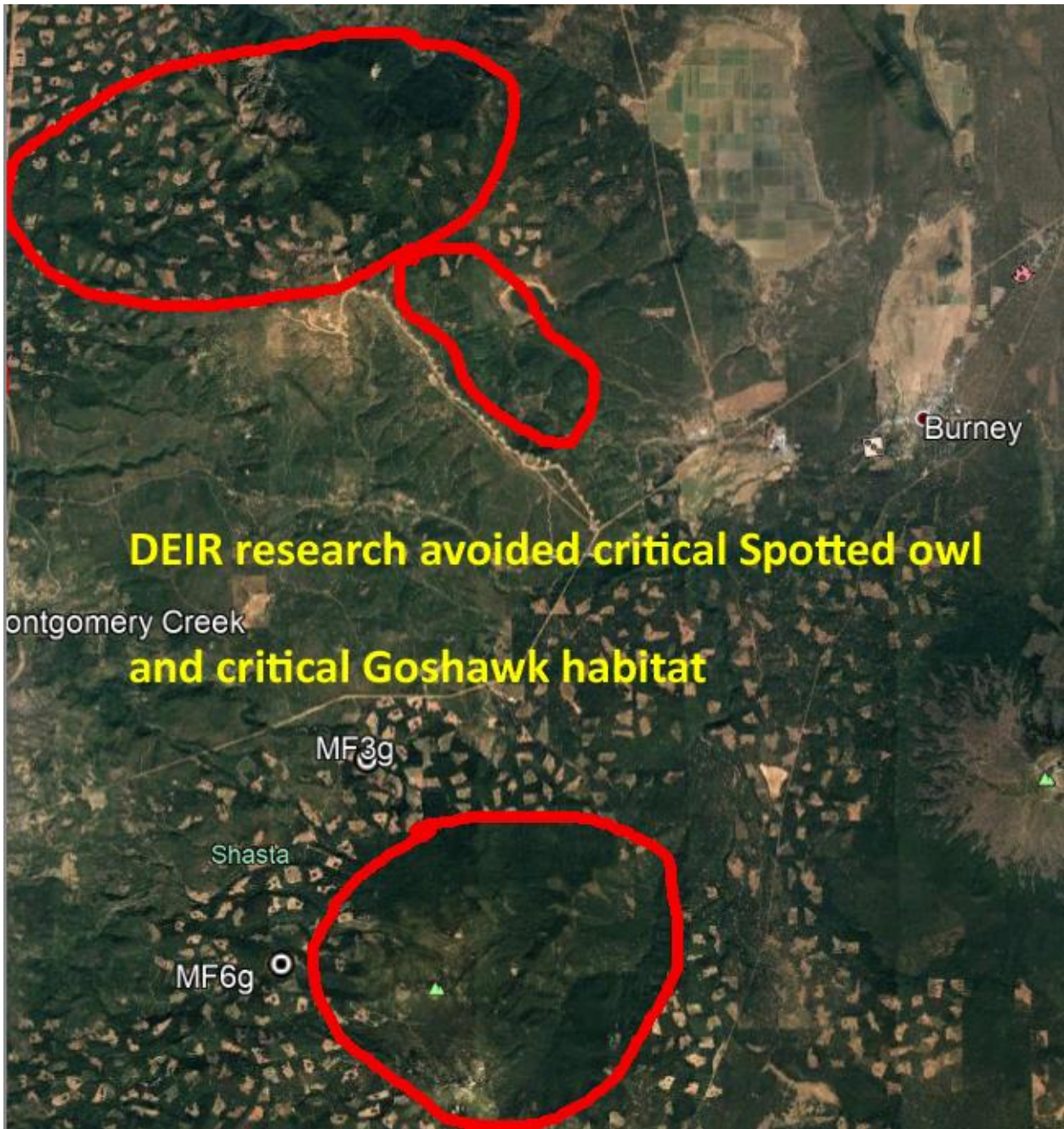
Yet in the wind industry's research now being produced, the industry makes it seem so difficult to find anything from the size a bat to an eagle in their search areas.

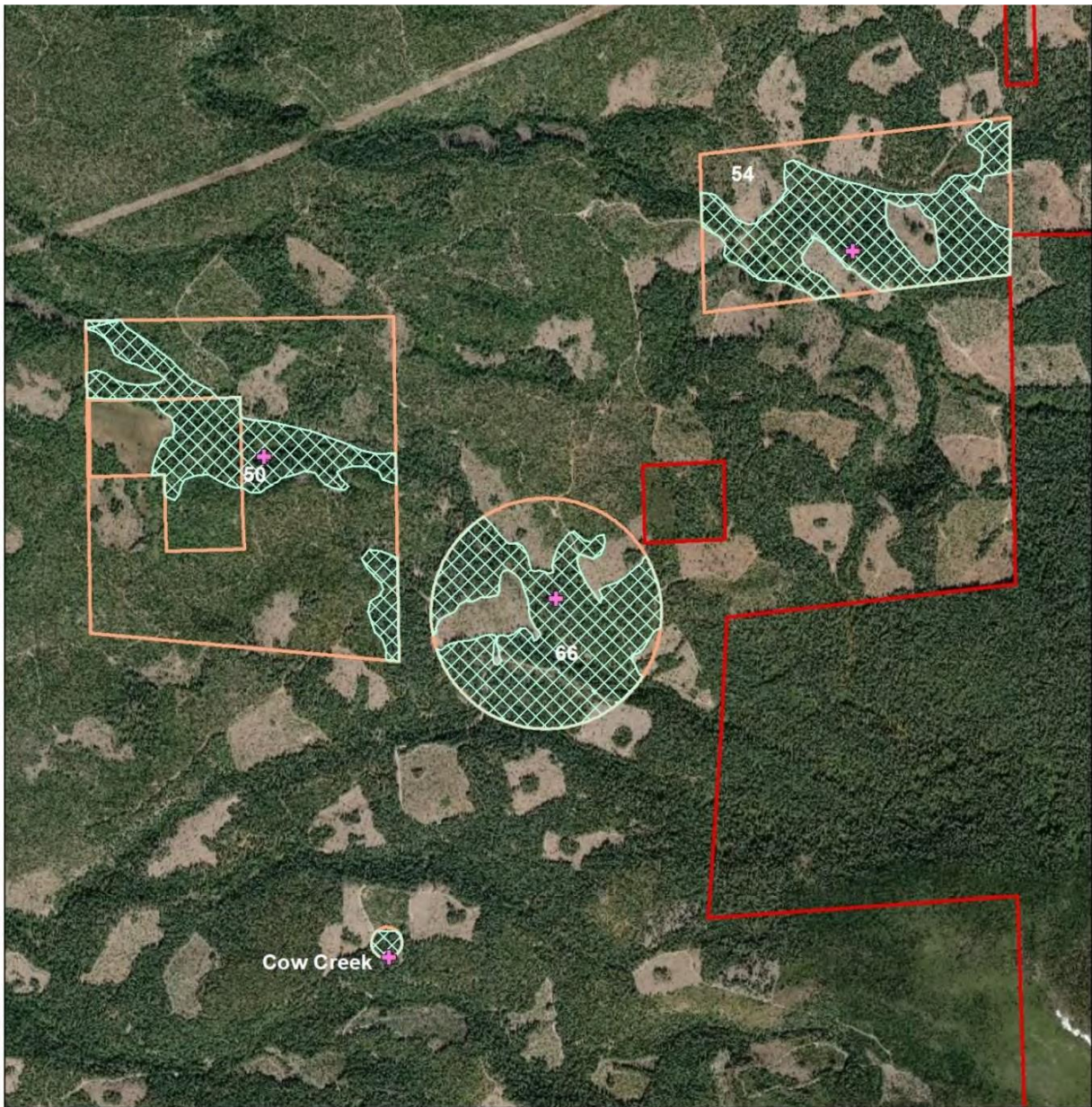
Spotted owls, Bald Eagles, Goshawks and other raptors

Hatchet Ridge has been killing off regional raptor populations and some of this information does exist in the DEIR to prove it. Keep in mind the wind industry doesn't have to report wind turbine fatalities, so they don't. Even so, nesting failures and habitat abandonment by special status species should be discussed in wind industry EIR's. This is a well-known but rarely mentioned impact from wind turbine developments.

Northern goshawks have been detected within the Project area during fixed-point large bird use surveys and incidentally by WEST biologists in 2017 and 2018, totaling five observations between April 2017 and May 2018. Potential risk to goshawks from Project operations (i.e.,

No Goshawk nesting or nesting territories were reported in the DEIR. This information tells me otherwise. But DEIR studies were deliberately **created to avoid** the most favorable habitat. Habitat well with the mortality footprint of both wind projects. There could be active nests 100 yards from turbine sites near MF3g and MF6g. But if research avoids looking, the public would never know.





| | | | |
|---|--|--|--|
| <p>Fountain Project Shasta County, CA</p> | | <p>+</p> Listening Station □ Northern Goshawk Occurrence Area | |
| | | <p>⊗ Broadcast Survey Area □ Project Boundary</p> | |
| <p>N W — E S</p> | | <p>Miles 0 0.25 0.5</p> | |
| <p>Data Source: Esri, CNDDB</p> | | <p>WEST</p> | |
| <p>Coordinate System: NAD 1983 UTM Zone 10N</p> | | <p>Date: 9/18/2018 Author: K. Hutchison</p> | |

Turbine site locations and critical habitat avoided in DEIR research.

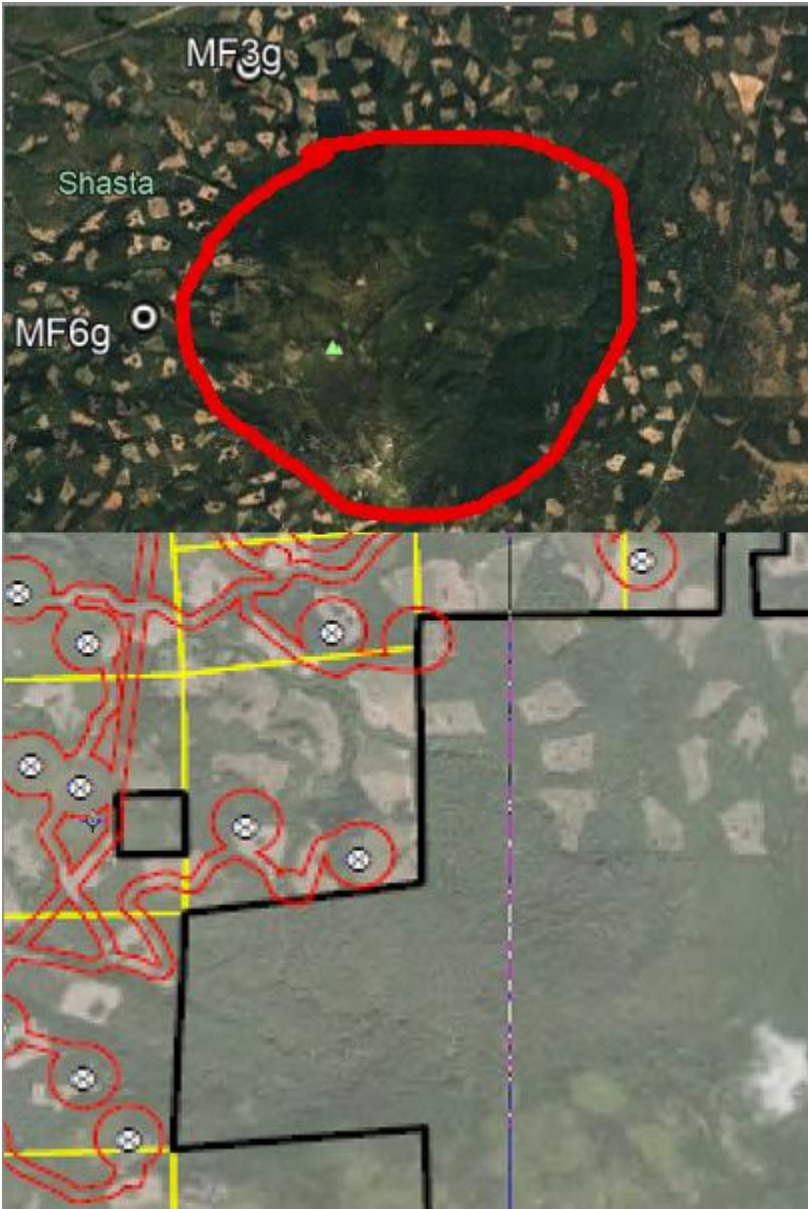
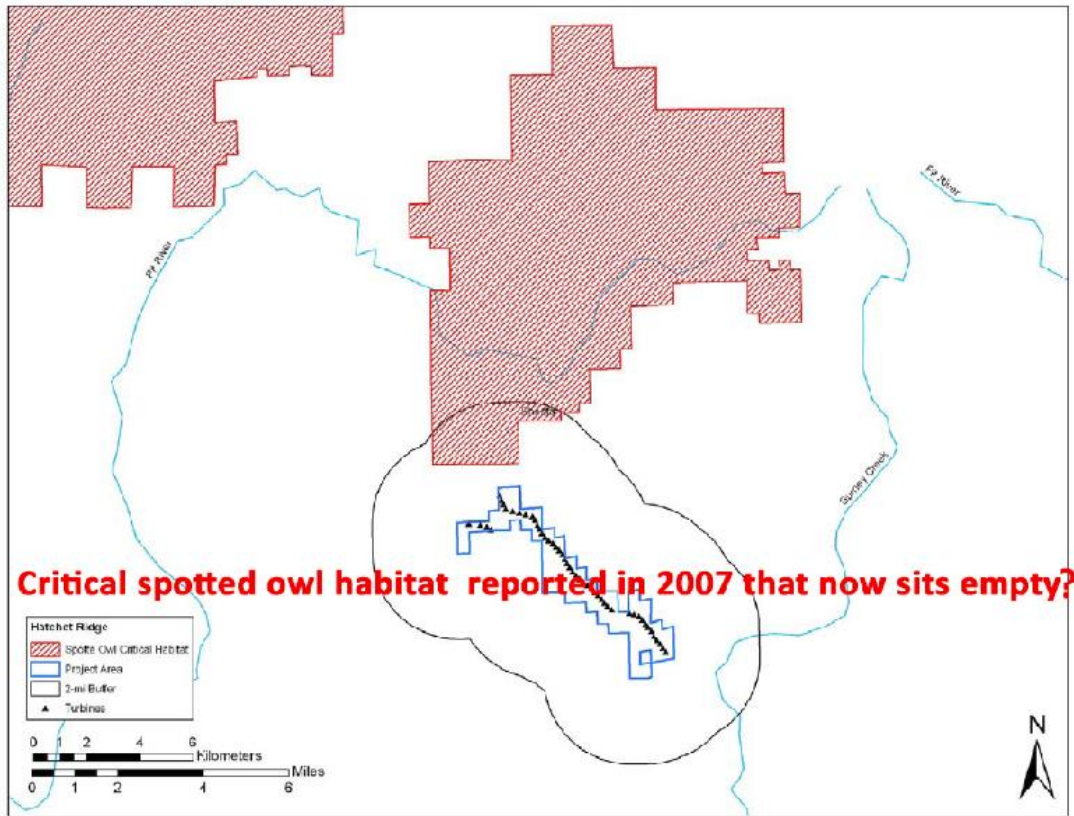
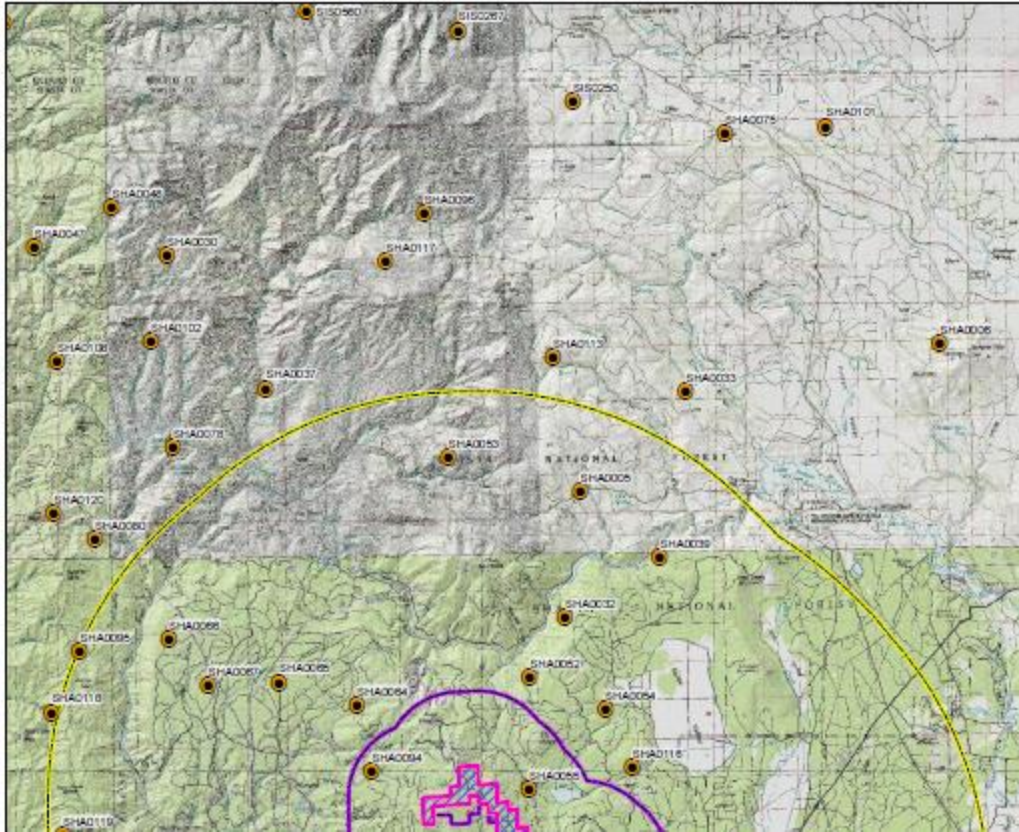


Figure 5. Critical habitat areas for the northern spotted owl near Hatchet Ridge.





Besides the Fountain fire burning some of this owl habitat, what has happened to all these spotted owl nesting territories reported in the Hatchet Ridge EIR?

The Fountain Wind DEIR does not say

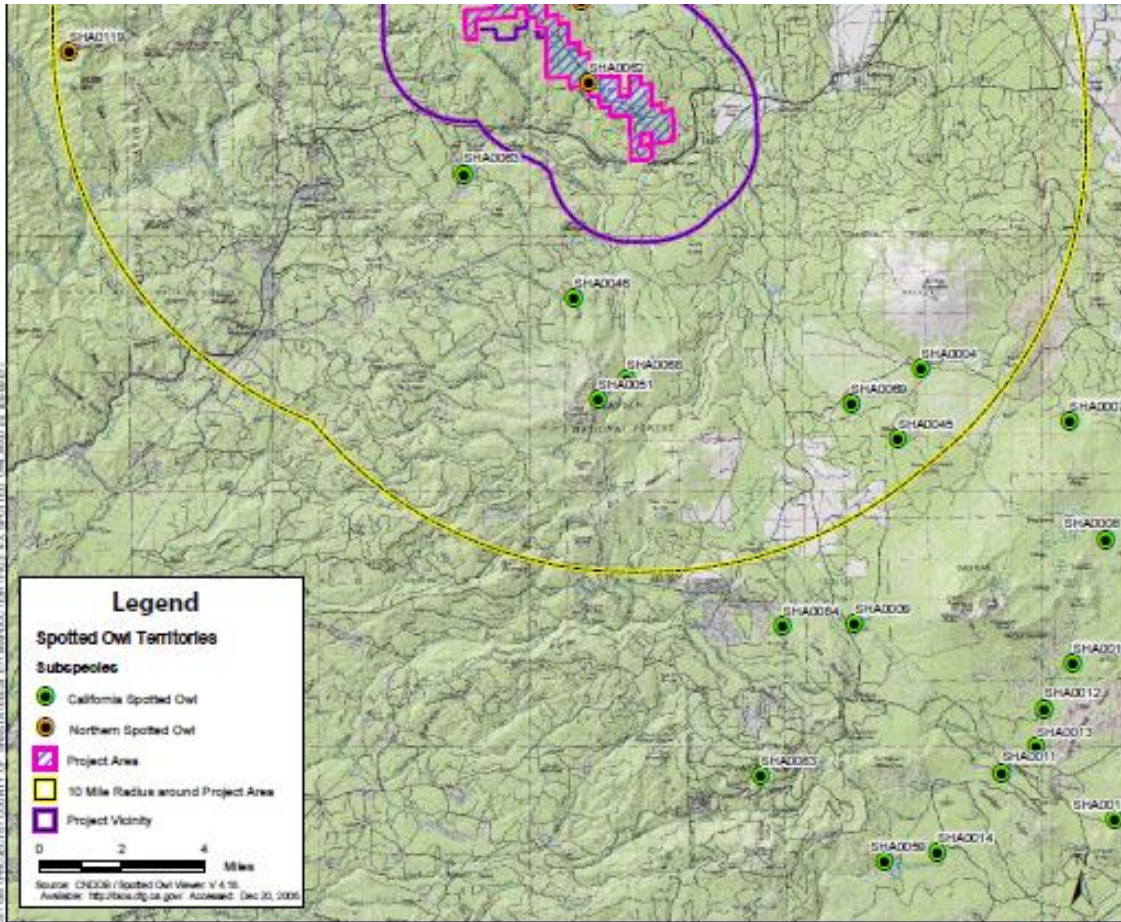
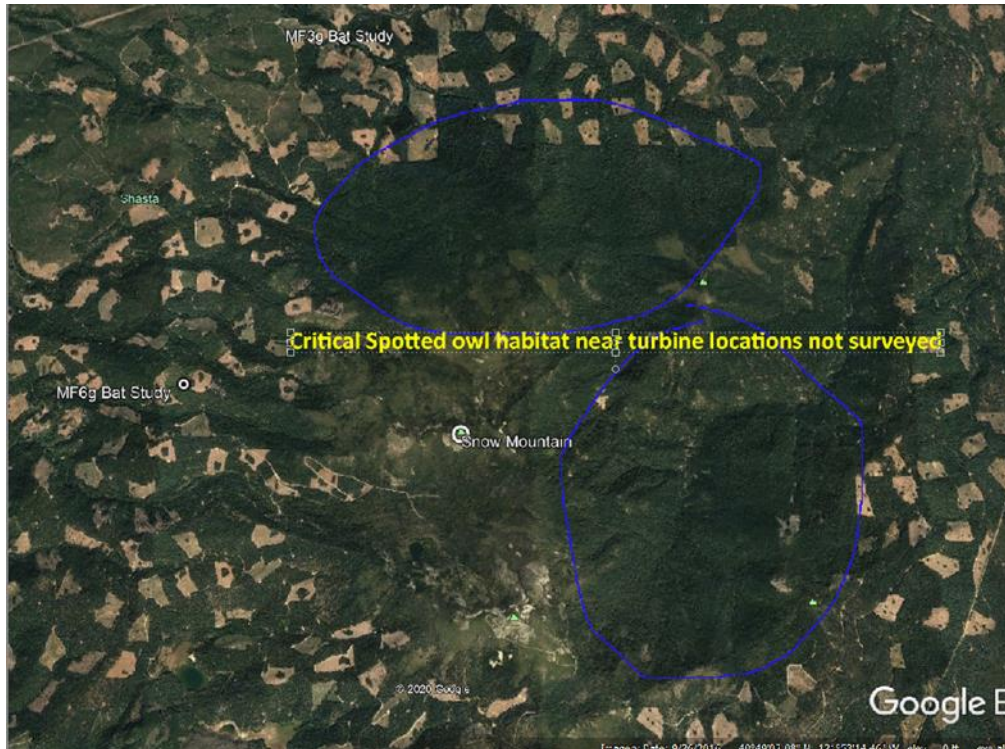


Figure 3.4-4
Spotted Owl Territories in the
Hatchet Ridge Wind Project Region



Over the last 4 decades, impact studies disclosing turbine related species devastation from nesting failures and habitat abandonment, has been probably avoided the most by this industry. **Empty habitat is legacy of all these projects and they know it. They also know that empty habitat attracts new inhabitants that also end up getting killed by turbine blades.** The industry had proof decades ago when the eagles were killed off in and around Altamont. An insider told me golden eagles on occasion have attempted to nest within the 86 square mile area of the Altamont Wind Resource Area, but they fail.

An honest raptor survey around the Hatchet turbines will show abandoned habitat far beyond ridgeline turbine locations.

The 4,464-acre site reported for Fountain Wind is about 7 square miles and the mortality footprint to raptors will not only be far more dangerous to species with a much higher density of deadly rotor sweep than at Altamont, because of this concentration, the mortality footprint will also reach out many more miles further in each direction from turbine locations.

In fact the Fountain wind project would probably have the highest concentration of deadly blade sweep in North America.

In 2006 before the Hatchet Ridge wind project was built, 23 spotted owl nesting territories were reported within 10 miles of the site. Today, the surveys being conducted in the same general area for the much larger Fountain Wind Project

report none. If these owls are gone and not just because of the Fountain Fire, the public needs to know. If they still exist in the habitat that was not surveyed close to the project site, the public still needs to know because they will perish.

Those Poor Bats

There is a lot more that needs to be disclosed in this DEIR. Like the carnage coming to all those poor bats living near the streams and creeks. If post operational studies are honest and studies have daily searches of turbines, thousands and thousands of bat carcasses will be found.

Regarding bats and turbine mortality, pay close attention to the mortality study I mention later that was conducted at the Criterion wind project.

With Fountain Wind, most of the bats living around this project and this much concentrated rotor sweep, are destined to be wiped out. While Hatchet may have only reported 50 or so bats in their contrived mortality research, keep in mind that up until Altamont conducted a 4-month study, using tiny 40-meter search areas and 2-day search cycles around a group of turbines, only a handful of bats had ever been reported at Altamont. This study methodology revealed that Altamont's 30-90 day search cycles had likely missed many thousands of bat carcasses over the years. And with daily searches and larger search areas, even more would have found.

At Altamont the small reported number of bat carcasses, was because most all of these tiny carcasses were being eaten or carted off before they could be found.

While daily searches are imperative, ignoring the obvious is not science. Results from a 5-year study around thousands of Altamont turbines with ludicrous 30-90 search cycles. Only 4 bats were found.

| | | | | |
|--------------|--------------|------------|------------|------------|
| Hoary bat | 4 | 4 | 4 | 0 |
| Raptors | 519 | 363 | 380 | 139 |
| TOTAL | 1,162 | 923 | 910 | 252 |

Table 3. Results of bat acoustic surveys by sampling station in the Fountain Wind Project area from 30 April – 13 November 2017. Passes are separated by call frequency: high frequency (HF), low frequency (LF), and very low frequency (VLF).

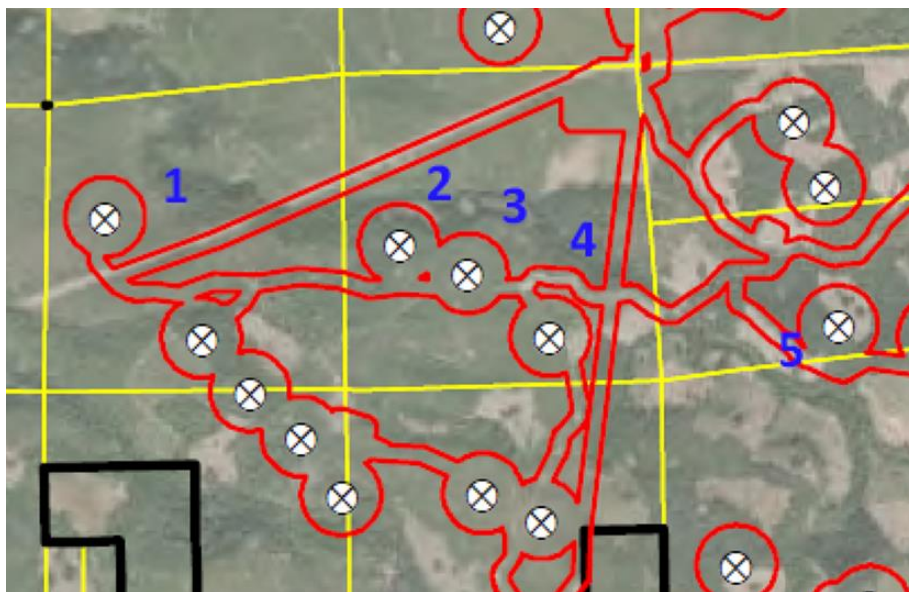
| Sampling Station | Type | Habitat | # of HF Bat Passes | # of LF Bat Passes | # of VLF Bat Passes | Total Bat Passes | Detector-Nights | Mean Bat Passes/Night (\pm Standard Error) ^{*†} |
|---|-----------------------|---|--------------------|--------------------|---------------------|------------------|-----------------|---|
| MF1g | Ground representative | Representative of future turbine locations | 1,114 | 5,756 | 1 | 6,871 | 189 | 36.35 \pm 3.32 |
| MF1r | Raised representative | | 132 | 4,885 | 1 | 5,018 | 189 | 26.55 \pm 3.18 |
| MF2g | Ground representative | Representative of future turbine locations | 2,151 | 4,324 | 1 | 6,476 | 194 | 33.38 \pm 3.31 |
| MF2r | Raised representative | | 284 | 4,681 | 1 | 4,966 | 194 | 25.60 \pm 2.64 |
| MF3g | Ground feature | Includes features possibly attractive to bats | 23,031 | 26,508 | 2** | 49,541 | 190 | 260.74 \pm 18.75 |
| MF4g | Ground representative | Representative of future turbine locations | 9,913 | 7,498 | 1 | 17,412 | 198 | 87.94 \pm 5.32 |
| MF5g** | Ground representative | Representative of future turbine locations | 2,539 | 1,719 | 0 | 4,258 | 88 | 48.39 \pm 5.72 |
| MF6g** | Ground representative | Representative of future turbine locations | 566 | 999 | 0 | 1,565 | 59 | 26.53 \pm 3.99 |
| Total: Ground Representative Sampling Stations | | | 16,283 | 12,798 | 3 | 36,582 | 728 | 50.25 \pm 4.33 |
| Total: Raised Representative Sampling Stations | | | 416 | 9,566 | 2 | 9,984 | 383 | 26.07 \pm 2.76 |
| Total: Feature Sampling Stations | | | 23,031 | 26,508 | 2 | 49,541 | 190 | 260.74 \pm 18.75 |
| Total | | | 39,730 | 56,370 | 7 | 96,107 | 1,301 | 68.18 \pm 4.08 |

* \pm bootstrapped standard error.

†Sums may not total the values shown due to rounding.

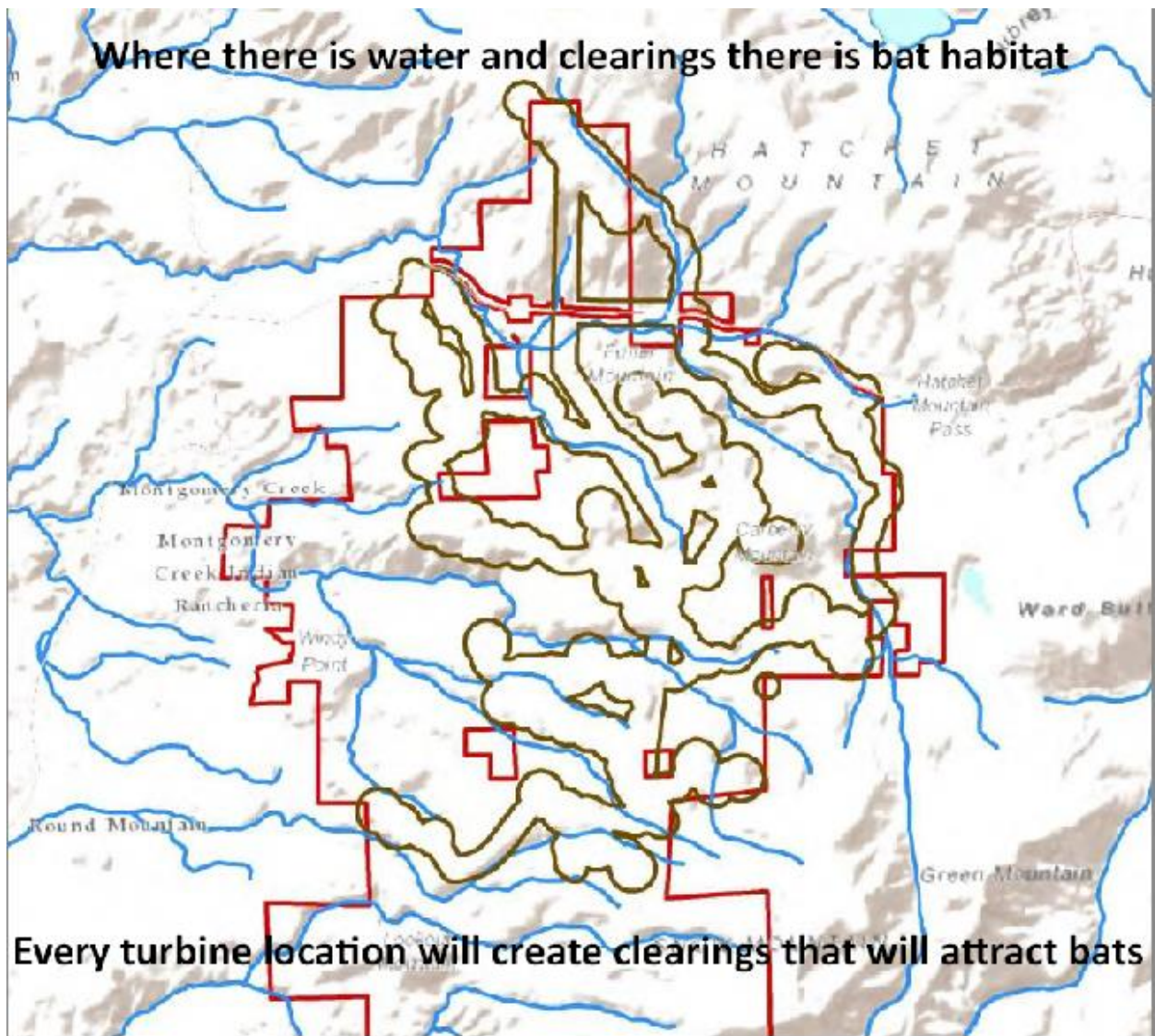
The single feature sampling station recorded 49,541 bat passes on 190 detector-nights for a mean of 260.74 \pm 18.75 bat passes per detector-night (Table 3). The mean activity rate at the single feature station is not representative of activity levels at future turbine locations and should be considered an upper reference for bat activity in the Project area.

Not True - Five massive turbines will be located along this creek location (see image).



If the Bat Acoustic survey had positioned all their equipment in open areas near water with clearings, the total bat passes in this survey would have easily been several hundred thousand. The MF3g site shows this. Wind Biologists also know this and when bat surveys are conducted, they try to locate equipment away from the best bat feeding locations. I have examples that show this research pattern in other studies. Of course, the bats living near MF3g will be annihilated by at least 5 of the Fountain Wind turbines, that will be locate along this creek site.





The importance of daily searches

In 2011 the Criterion wind project conducted a 7-month mortality study around 28 turbines. With **daily searches** in tiny search areas, that amounted to about a 40-meter area out from towers, **they still found 664 bat carcasses in these small search areas**. These turbines, like the Hatcher Ridge turbines, had a rotor sweep of 100 meters and search areas should have been accounted for bats being located in areas at least 10 times larger.

Carcasses reported in 2011

| | | | | | | | | |
|----------------------|------------|------------|-----------|------------|----------|------------|------------|------------|
| American redstart | 0 | 0 | 1 | 5.0 | 0 | 0 | 1 | 0.4 |
| turkey vulture | 0 | 0 | 1 | 5.0 | 0 | 0 | 1 | 0.4 |
| Overall Birds | 241 | 100 | 20 | 100 | 1 | 100 | 262 | 100 |
| Bats | | | | | | | | |
| eastern red bat | 231 | 34.8 | 13 | 31.0 | 0 | 0 | 244 | 34.6 |
| hoary bat | 216 | 32.5 | 20 | 47.6 | 0 | 0 | 236 | 33.4 |
| silver-haired bat | 96 | 14.5 | 7 | 16.7 | 0 | 0 | 103 | 14.6 |
| tricolored bat | 47 | 7.1 | 0 | 0 | 0 | 0 | 47 | 6.7 |
| big brown bat | 37 | 5.6 | 1 | 2.4 | 0 | 0 | 38 | 5.4 |
| little brown bat | 30 | 4.5 | 1 | 2.4 | 0 | 0 | 31 | 4.4 |
| unidentified bat | 5 | 0.8 | 0 | 0 | 0 | 0 | 5 | 0.7 |
| Seminole bat | 1 | 0.2 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| unidentified myotis | 1 | 0.2 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| Overall Bats | 664 | 100 | 42 | 100 | 0 | 100 | 706 | 100 |

In 2012 the study was drastically changed and 16 times fewer bat carcasses were reported.

“With the weekly search interval and to spread the standardized searches over time, 2 or 3 turbines were searched each day for five consecutive days. The same turbines were searched on each day of the week to maintain a seven-day interval between searches at a given turbine. The order in which the 2-3 turbines were visited on the specified search day was varied over the course of the study so that any given turbine was not always searched at the same time of day.”

Carcasses reported in 2012

| | | | | | | | | |
|------------------------|-----------|------------|-----------|--------------|-----------|------------|-----------|------------|
| Philadelphia vireo | 0 | 0 | 0 | 0 | 1 | 11.1 | 1 | 3.6 |
| unidentified passerine | 0 | 0 | 0 | 0 | 1 | 11.1 | 1 | 3.6 |
| Overall Birds | 14 | 100 | 5 | 100.0 | 9 | 100 | 28 | 100 |
| Bats | | | | | | | | |
| eastern red bat | 26 | 65.0 | 6 | 31.6 | 12 | 52.2 | 44 | 53.7 |
| hoary bat | 10 | 25.0 | 9 | 47.4 | 8 | 34.8 | 27 | 32.9 |
| big brown bat | 2 | 5.0 | 0 | 0 | 1 | 4.3 | 3 | 3.7 |
| silver-haired bat | 1 | 2.5 | 4 | 21.1 | 1 | 4.3 | 6 | 7.3 |
| tricolored bat | 1 | 2.5 | 0 | 0 | 0 | 0 | 1 | 1.2 |
| unidentified bat | 0 | 0 | 0 | 0 | 1 | 4.3 | 1 | 1.2 |
| Overall Bats | 40 | 100 | 19 | 100 | 23 | 100 | 82 | 100 |

*Fatalities found incidentally on turbine search plots were included in analyses.

Collecting carcasses ahead of formal searches? Is this also an industry “TRADE SECRET” protected by law?

When mortality studies were being conducted at the Criterion Wind Project this activity was reported to me by an eyewitness

“Because I purchased a pass from the Walnut Bottom Hunt Club to enter the land with my ATV, I frequently went out to observe activities on the project site, which is when I encountered the survey crews doing carcass collections. During my first trip out and encountering the crews, I noted them pulling up to turbine sites in an unmarked white truck and getting out and wandering around, as if they lost something. I watched for awhile and they moved on to the next turbine and repeated the same wandering around. There was no pattern to the wanderings and they seemed to walk from the road to the wood area past the turbine base and return to the truck in nearly the same path and move on. I waved and was friendly, and they waved back and smiled.

“During my second encounter with the crews, I saw nearly the same process and waved as I went passed. On my return trip, they were getting out of the truck as I approached, so I pulled up and attempted to

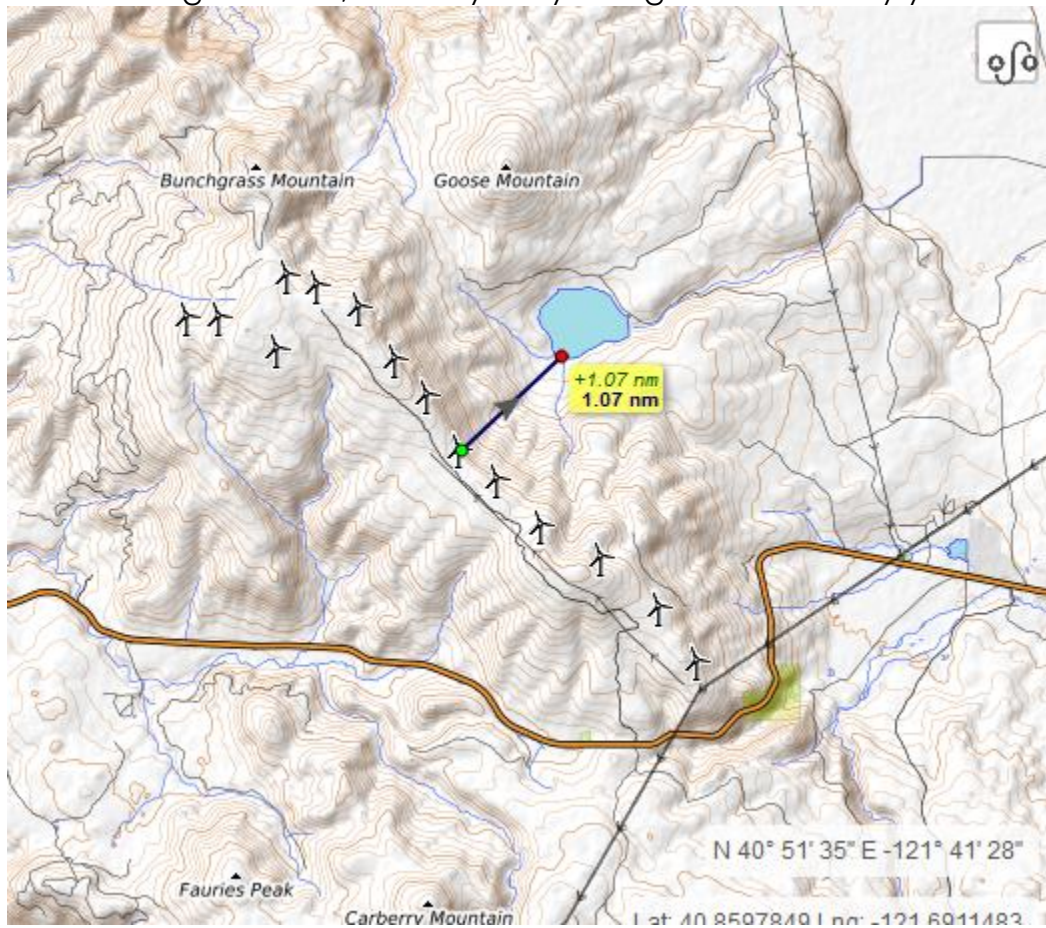
*see what they were doing. **Both had very heavy Hispanic accents and broken English, but they related that they were looking for “dead birds and bats”.** The female didn’t seem to care for the bats by the way she reacted to the word. I asked if they had found any bats and they said “yes”. I thought what the hell they’re being chatty, so asked if they had found any Eagles or Indiana Bats. The male said they **were not allowed to talk about what they found** and if I understood him correctly, they had signed a paper saying they could not talk about anything they found. The male appeared to be getting very nervous so I moved on, so as not to upset the possibility of getting something later.”*

“During my last encounter with them, I pulled up to a high point and just watched as they did their searches. Again no real pattern, they would park on the road parallel to the turbine, get out and both walk past the turbine base, separated by approximately 40-50 feet and turn around near the tree line and return to the truck. I saw on several occasions that they stopped and picked something up and upon returning to the truck would place it in a 5 gallon bucket in the back of the truck... whatever was found, didn’t appear to be documented, there was no measuring, no pictures and again it was tossed into a bucket with other “finds”.

Hatchet Ridge Ten Years later

Now, 10 years after the Hatchet Ridge wind turbines started spinning, the Fountain Wind DEIR reported one occupied raptor nest, within 5 miles of these turbines with no credible explanations. Since 2010 bald eagles attempting to

nest at Margaret lake, are very likely being killed off every year.



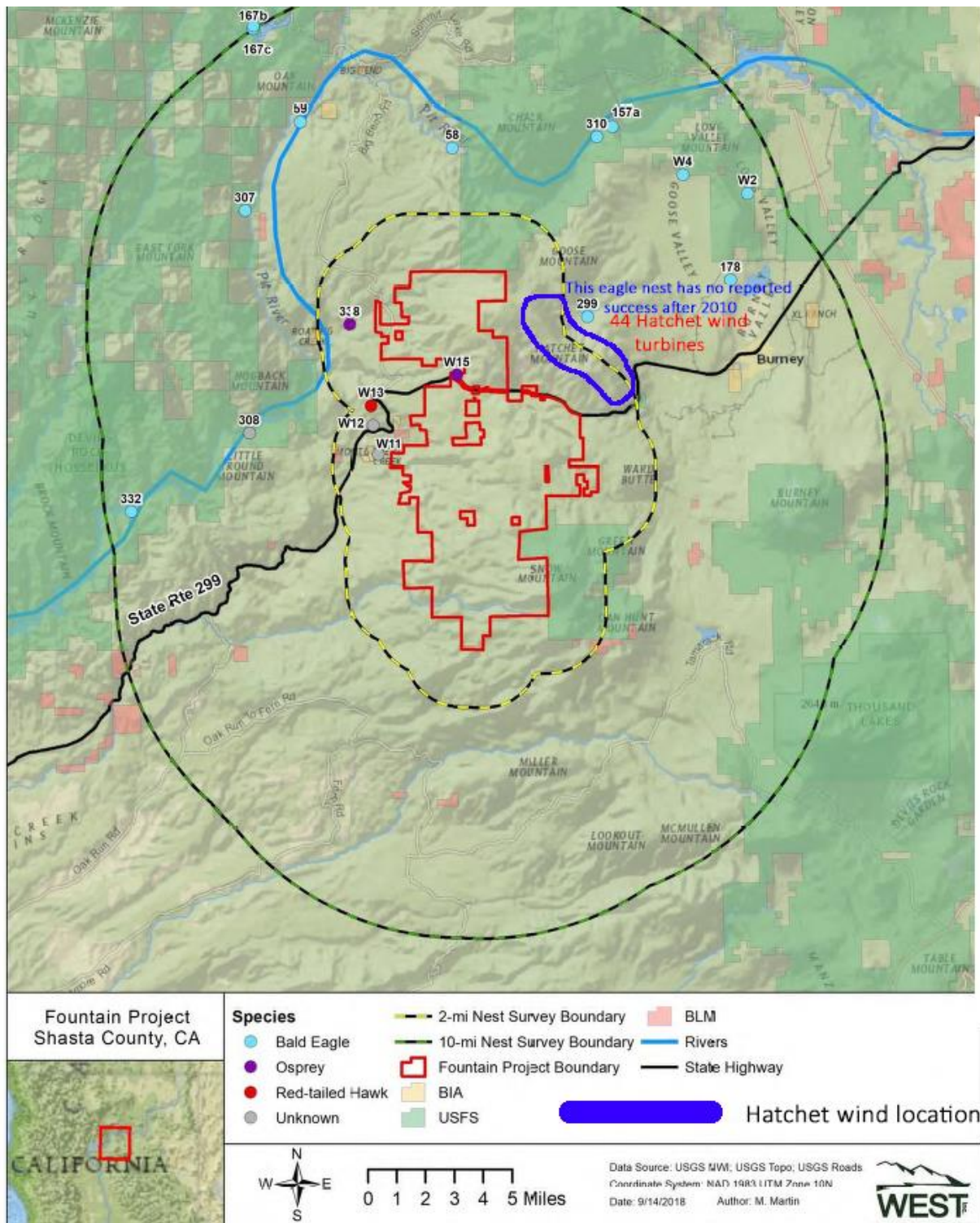
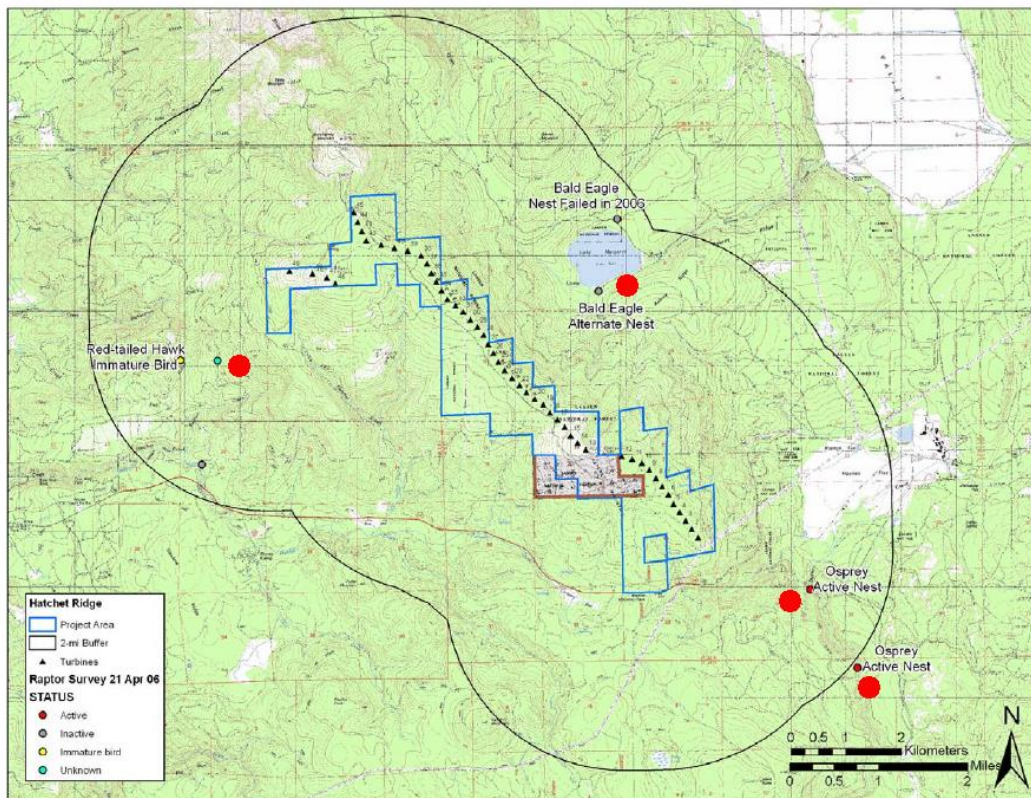


Figure 2. Eagle and other raptor nest locations documented during aerial surveys for the Fountain Wind Project, March 20 and May 9, 2017.

Figure 7. Locations of raptor nests within two miles of Hatchet Ridge.



What has happened to these nesting territories since 2010 after 44 Hatchet ridge turbines became operational ???

Since 2010, no nesting history success has been reported for the bald eagle nest just east of the Hatchet Wind project. Just nesting failures. In 2017, DEIR helicopter surveys reported four bald eagle nesting failures within 10 miles of the Hatchet Ridge wind turbines.

Two helicopter-based aerial nest surveys were conducted in 2017. The initial survey was conducted on March 20 and the second survey on May 9.

Table 1. Results of the 2017 eagle/raptor nest surveys conducted on March 20 and May 9 at the Fountain Wind Project in Shasta County, California.

| Nest ID ¹ | Species | 2017 Nest Status ² | Nest Attributes | | Comments |
|----------------------|-----------------|-------------------------------|-----------------|-------------------|---|
| | | | Substrate | Size ³ | |
| 310 | Bald eagle | Occupied / In-use | Tree | Very large | One chick in nest estimated to be 28 days old on May 9 |
| 178 | Bald eagle | Occupied / In-use | Tree | Very large | Two chicks in nest estimated to be 21-28 days old on May 9 |
| 58 | Bald eagle | Occupied / In-use | Tree | Very large | Two chicks in nest estimated to be 21-28 days old on May 9 |
| 59 | Bald eagle | Occupied / In-use | Tree | Very large | One chick in nest estimated to be 21 days old on May 9 |
| 307 | Bald eagle | Occupied / In-use | Tree | Very large | One chick in nest estimated to be 14 days old on May 9 |
| 157a | Bald eagle | Occupied / In-use | Tree | Very large | One chick in nest estimated to be 21 days old on May 9 |
| W4 | Bald eagle | Occupied / In-use | Tree | Very large | Adult in incubating/brooding position during May survey. No of young/eggs unknown |
| Fail 332 | Bald eagle | Occupied / In-use | Tree | Very large | Adult observed in incubating position in March; no evidence of nesting in May indicate failed nesting attempt |
| Fail 299 | Bald eagle | Occupied / In-use | Tree | Very large | Adult in incubating position in March; no sign of nesting in May indicate failed nesting attempt |
| Fail W2 | Bald eagle | Occupied | Tree | Very large | Adult observed tending nest in March; no evidence of nesting in May |
| Fail 167b | Bald eagle | Occupied | Tree | Very large | Adult observed tending nest in March; no evidence of nesting in May |
| 167c | Bald Eagle | Unoccupied | Tree | Very large | Historical bald eagle nest in good condition; no evidence of use |
| 308 | Bald eagle | Unoccupied | Tree | Very large | Historical bald eagle nest in good condition; no evidence of use |
| W15 | Osprey | Occupied / In-use | Tree | Large | Three eggs observed in nest during May survey |
| Fail 338 | Osprey | Occupied | Powerline | Very large | Adult osprey observed tending nest in March; no evidence of nesting in May |
| W13 | Red-tailed hawk | Occupied | Powerline | Medium | Medium-sized nest in good condition |
| W11 | Unknown raptor | Unoccupied | Powerline | Medium | Medium-sized nest in good condition |
| W12 | Unknown raptor | Unoccupied | Powerline | Medium | Medium-sized nest in good condition |

¹ IDs preceded by W indicate nests newly discovered by WEST during surveys. All other IDs are consistent with historical IDs provided by California Department of Fish and Wildlife.

² Highest level of reproductive status determined for the current breeding season: **Occupied** = contained eggs, young, or an incubating eagle, or had a pair of eagles on or near it, or had been recently repaired or decorated. **In-use** = an occupied nest in which eggs were laid, as evidenced by the presence of an incubating bird, eggs, young, or any other indication that eggs had been laid in the current year. **Unoccupied** = no sign of nesting or territory occupancy in the current nesting season, based on at least two visits. **Unknown** = nest was not located or status as occupied/unoccupied could not be confirmed as defined herein.

³ **Small** = small stick nest characteristic of corvids or accipiters; **Medium** = medium stick nest characteristic of buteos and large owls.; **Large** = large stick nest that could support eagles, but may also be used by other large buteos, osprey, large owls; **Very Large** = very large stick nest characteristic of eagle nests

Five documented nesting failures with the outcome unknown for nests still occupied on May 9

IN 2018 eagle nest surveys were changed from helicopter to ground. In doing so, it appears the failed nesting attempts or abandonment taking place was not reported because a helicopter can look inside nests. A skilled observer from the ground can still tell if a nest is really occupied and how many fledged offspring there are. The fate of the nests that were known to fail in 2017 were also covered up with the useless data collected in 2018.

Also in 2018, only 5 nest images were (13 in 2017) were submitted for the DEIR and one of them was a duplicate from 2017.

A skilled observer could have easily taken images of every occupied bald eagle nest and offspring.

Same image submitted for both surveys. 2017 survey submitted 13 images
2018 submitted 5 including this duplicate. In 2018 it was claimed to be occupied.

Fountain Wind Project

2017 Nest Survey Report



Nest 308, located approximately 5.0 mi (8.0 km) west of the Fountain Wind Project.

Fountain Wind Project

2018 Nest Survey Report

This nest reported to be occupied in 2018 looks beat down from snow and abandoned



Nest 308, located approximately 5.0 mi (8.0 km) west of the Fountain Wind Project, Shasta County, California.

April 2018 at all previously documented bald eagle nests within the 10-mi survey area that were accessible by public road and viewable from a public access-point.

Table 1. Summary of the 2018 bald eagle nest status surveys conducted within a 10-mile buffer of the Fountain Wind Project, Shasta County, California. Additional details on 2017 nest status surveys are available in the 2017 nest survey report (WEST 2018).

| Nest ID ¹ | Species | 2017 Nest Status ² | 2018 Nest Status ² | 2018 Survey Date | Comments |
|----------------------|------------|-------------------------------|-------------------------------|------------------|---|
| 310 ? | Bald eagle | Occupied / In-use | Occupied | April 19 | Two adults observed perched in nest tree, but not on nest |
| W4 ? | Bald eagle | Occupied / In-use | Occupied | April 22 | Adult observed landing on nest, but not confirmed as incubating/brooding/tending young |
| W2 ? | Bald eagle | Occupied | Occupied | April 21 | Adults seen in nest tree, but not on the nest |
| 178 | Bald eagle | Occupied / In-use | Occupied / In use | April 21 | Adult(s) observed, two nestlings |
| 308 ? | Bald eagle | Unoccupied | Occupied / In use | April 19 | Adult(s) in incubating/brooding position |
| 58 ? | Bald eagle | Occupied / In-use | Unknown | April 19 | No activity observed during 4-hour survey |
| 59 ? | Bald eagle | Occupied / In-use | Unknown | April 25 | Nest not visually located, but no activity observed in area during 4-hour survey |
| 157 ? | Bald eagle | Occupied / In-use | Unknown | April 18 | Pair observed flying in the area, but no adults visited the nest or nest tree during the 4-hour survey |
| 167b ? | Bald eagle | Occupied | Unknown | April 23 | Nest not visually located; Nest is close to Nest 167c; Pair of adults observed flying on one occasion, but no activity observed at nest location during 6-hour survey |
| 167c ? | Bald eagle | Unoccupied | Unknown | April 23 | Nest not visually located; Nest is close to Nest 167b; Pair of adults observed flying on one occasion, but no activity observed at nest location during 6-hour survey |
| 307 ? | Bald eagle | Occupied / In-use | Not surveyed / Unknown | not surveyed | Not accessible |
| 332 ? | Bald eagle | Occupied / In-use | Not surveyed / Unknown | not surveyed | Not accessible |
| 299 ? | Bald eagle | Occupied / In-use | Not surveyed / Unknown | not surveyed | Not accessible |

¹ IDs preceded by W indicate nests newly discovered by WEST during surveys. All other IDs are consistent with historical IDs provided by California Department of Fish and Wildlife.
² Highest level of reproductive status determined for a breeding season: **Occupied** = contained eggs, young, or an incubating eagle, or had a pair of eagles on or near it, or had been recently repaired or decorated. **In-use** = an occupied nest in which eggs were laid, as evidenced by the presence of an incubating bird, eggs, young, or any other indication that eggs had been laid in the current year. **Unoccupied** = no sign of nesting or territory occupancy in the current nesting season, based on at least two visits. **Unknown** = nest was not located or status as occupied/unoccupied could not be confirmed as defined herein (e.g., only a single visit in 2018).

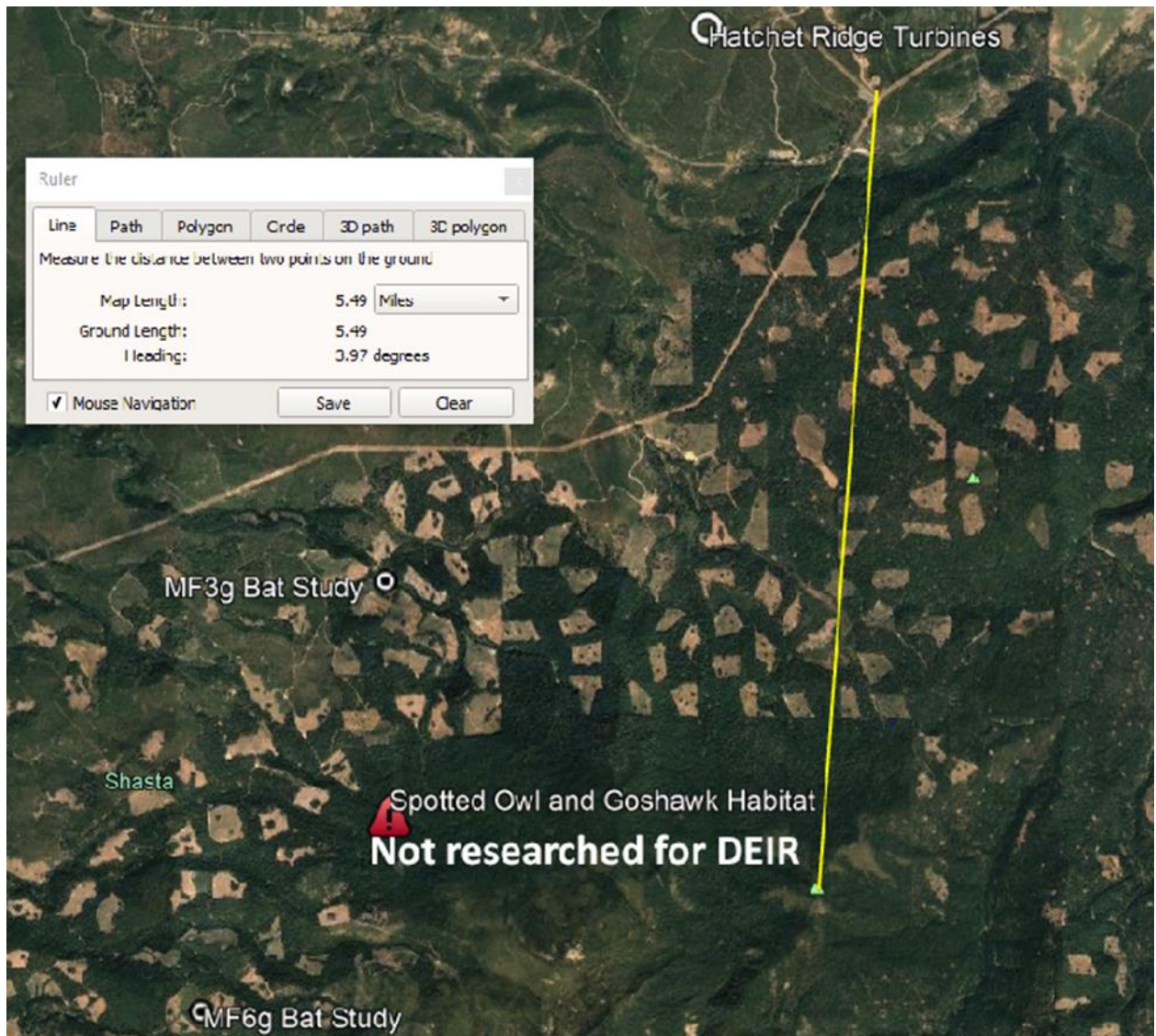
Status and nest outcome unknown for every nest

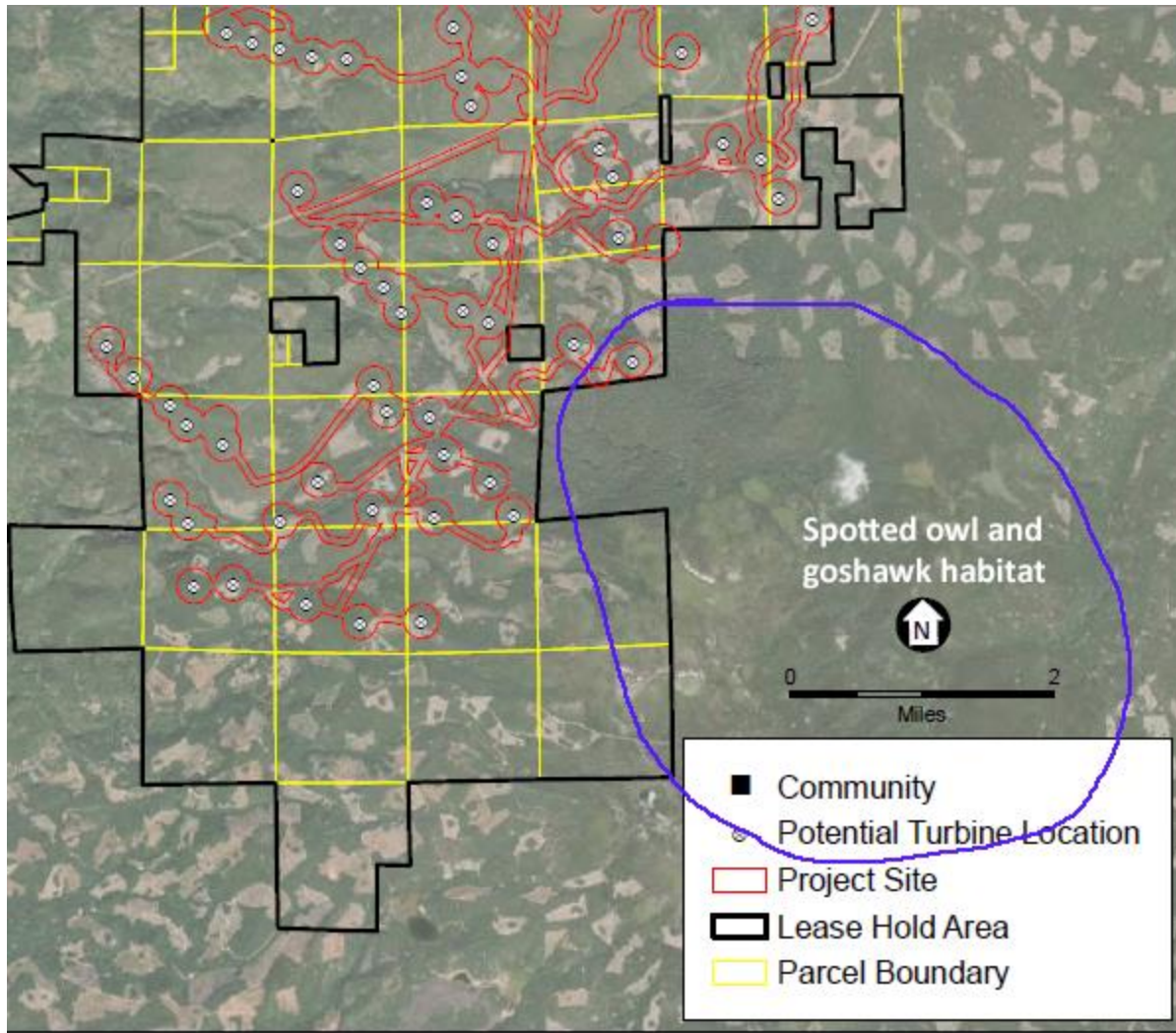
Nesting Failures are a common impact for raptors nesting near wind projects.

When one adult is killed the nest fails. The proper DEIR eagle surveys could have cleared this up, but they don't and instead the public is being fed a smattering of deflective information. **From the information given it appears nesting adult eagles nesting near the Hatchet Ridge project are being killed or that eagle territories are being abandoned. New surveys have to be conducted with credible observers so this information can become available to the public.**

The raptors studies conducted for the **DEIR showed a very deficient effort by researchers.** The DEIR should have reported far more nests and inhabited territories for other raptor species living in and around this project site. If the nests of sharp-shinned hawks, cooper's hawks, red-shouldered hawks, American kestrels and red-tail hawks cannot be documented in this habitat, then the Hatchet wind turbines have to be killing them off. The habitat for these species is there and at least 10 nests from these species should have been located.

There is also gross lack of information provided about the eagles, spotted owls, and goshawks,





But our disappearing raptors are just a peep hole look into a world of annihilation to species taking place from wind turbines in our remote ecosystems.

Nocturnal migrations and the wind industry

From the Fountain Wind DEIR.....

"The results of the Hatchet Ridge fatality studies suggest generally low risk to passerines and no disproportionate."

Correction, this DEIR suggestion came from the fraudulent data collected from the fake research conducted at Hatchet Ridge.

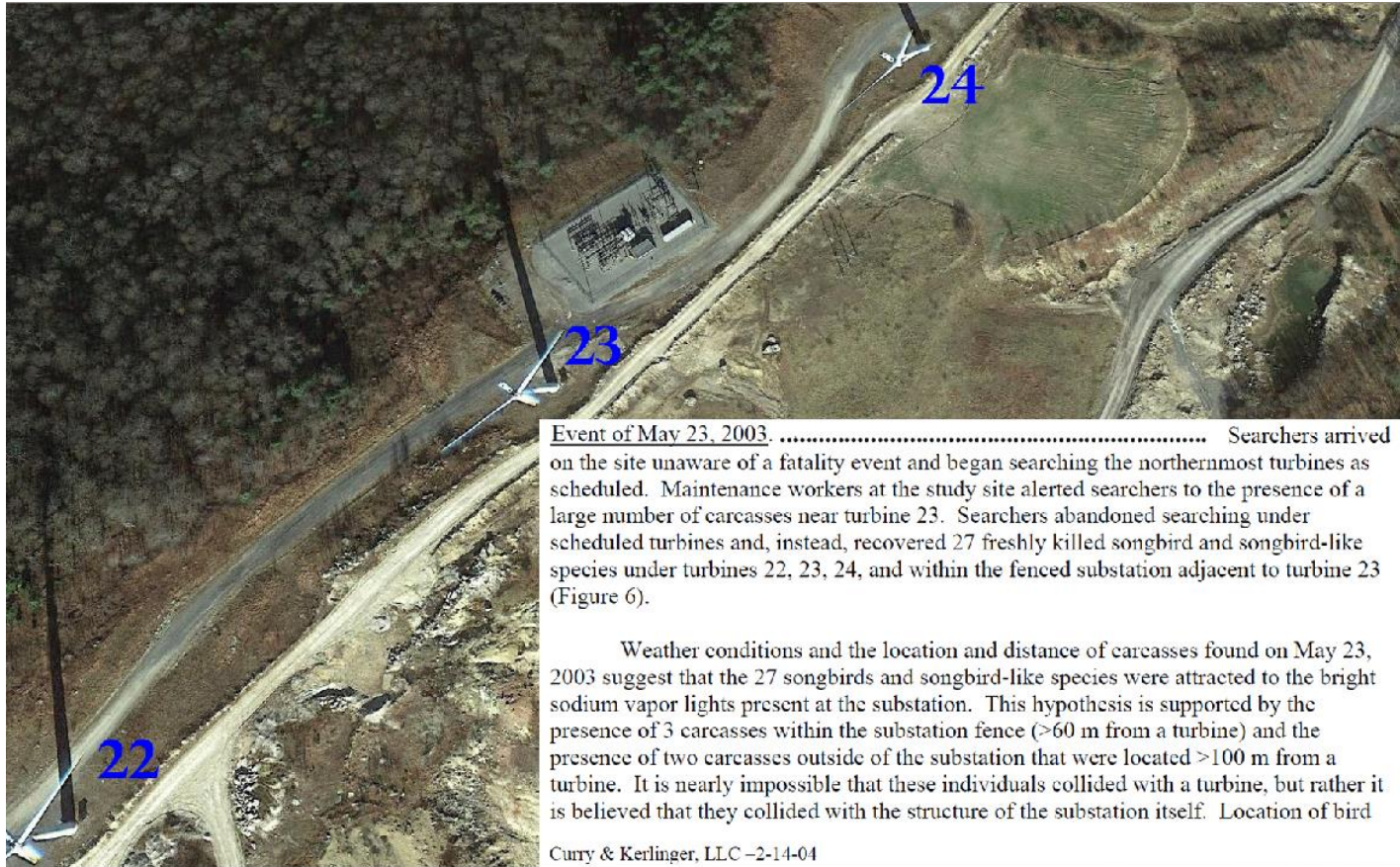
This industry can make references from hundreds of contrived studies, but they cannot cite one scientifically credible study conducted in the last 30 years related to the flying species impacted by wind turbines.

Over the years, another one of this industry's biggest lies by omission, has been the species **slaughter taking place during nocturnal migrations**. In America the first and only truly credible scientific turbine related mortality study I have come across, took place in 1985. It was conducted in Southern CA around a few small turbines and the results were published in 1986. This study estimated a mortality rate of 6800 fatalities annually from about 150-200 MW of small 40-100 kW turbines at San Geronio Pass. Using daily searches of 50-meter search areas around these tiny turbines, this study estimated mortality rate of 34-45 birds per MW and the majority of these fatalities were determined to be **nocturnal migrants**.

Since this study was conducted in 1985, there has never been another such study conducted in North America. This study has also been stripped from the internet and hidden for years.

This lack of credible green energy research on wind turbine impacts to migrating birds is no accident, it is deliberate. From wind industry research it would appear that flocks of birds are safer at night than during the day. But the wind industry has known for decades how vulnerable and deadly wind energy developments are to nocturnal migrations of birds. Even a 2009 report from New Zealand took notice of the lack of turbine mortality research that has been conducted on nocturnal migrant birds.

Mass fatality events do occur to nocturnal migrants at wind farms. But these events are routinely covered up with this industry's fake research. Gag orders, not searching turbines daily and allowing wind personnel to handle carcasses during studies has help keep a lid on this. But on occasion word of one of these events does happen to get out. When it does, these wind farm fatalities are blamed other structures and equipment like a light being left on.



Look at this Google Earth image and read several quotes from a mortality study. Read how fake wind industry research explained away this mass fatality. Turbine killing these migrating birds “nearly impossible”? Yes, but only for this industry because wind industry guidelines require no science. In reality, the impact from any of these three large wind turbines in the image could have easily launched migrating bird carcasses 100-200 meters, far beyond this substation. In my opinion there was far more than the 27 birds bird fatalities during this mass fatality event.

The study then went on to report these fatalities as being **“an anomaly in the annual data and therefore these carcasses are not included in the annual estimates of avian mortality.”**

When science and accountability are not required, fake research like this is produced. Wind industry research going back decades is riddled with this sort of deception. It is also why millions of birds and bats that are being killed annually by wind turbines are not reported. Without scientific principles, the post construction mortality research for the Fountain Wind project will be no different.

How to Stop Fraudulent Wind Energy Research

How Shasta County Can Stop Fraudulent Wind Energy Research

When the public hears the word research, they assume that researchers are seeking out the truth. This is not the case with wind industry developments. With this green industry, preconstruction, post construction research and mitigation have all been an orchestrated fraud. It's very easy to prove and if the Interior Department chose to do so, they could shut this industry down today. But this will never happen because this branch of government has been a gatekeeper in green energy's massive industrial fraud.

This leaves communities stuck to fend for themselves. Communities can file lawsuits that expose this industry's fake research or laws can also be passed that require accurate research and accountability.

Wind energy developments rely on two types of research, preconstruction and post construction research. Both types of research are needed to determine projected impacts to regional species and post construction research is conducted that will supposedly document actual impacts to species. Problem is, it's all been an orchestrated side show, charade or fabrication. If not amended by Shasta County, the studies proposed for Fountain wind will end up being one more contrived fraud on the public.

Since government agencies help this industry hide carcasses and have not or will not enforce legitimate wind energy PCMM research, I have put together some post construction research guidelines that can stop this cycle of fraud. If Shasta County insists on credible scientific guidelines and does not let developers or our puppet government agencies dictate their rigged own post construction methodologies, some of the true devastation from wind energy projects can be revealed.

Unfortunately, credible research would mean that most projects would be cancelled because the truth of this industry's true impact to species would then be documented. The public would also know of the habitat abandonment in and around wind projects and the carnage taking place from wind turbines.

The truth of this industry's impacts will also send offsetting mitigation for these destructive projects, into the stratosphere. With honest guidelines, ethical officials involved in the approval process, can cross check with wind developers to determine any presence of corruption.

I have looked over hundreds of wind industry studies and know most of the tricks used over the years to hide turbine mortality. If Shasta County planners do not see anything close to the conditions I have listed below, then as sure as your

next breath, the mortality impact research for the project will be fabricated just as it was for the Hatchet Ridge Wind Project.

Credible science-based study guidelines for the Fountain Wind's post construction mortality studies.

1) The words "Independent researchers" actually the industry has hired insiders that will go along with the industry's nonscientific industry study protocol. From past research it can be shown that these false experts cannot be trusted or are unqualified for their positions. They must never be hired unless you can watch them with camera surveillance 24 hours a day and treat them as if they were casino employees.

1) In order to maintain the scientific integrity of any mortality research, **post operational studies shall never allow wind personnel, USFWS agents, lease holders or anyone else except independent researchers**, to handle, move or touch carcasses. All past wind industry studies have allowed this.

2) The words Independent researchers actually the industry has hired insiders that will go along with the industry's nonscientific industry study protocol. From past research it can be shown that these false experts cannot be trusted or are unqualified for their positions. They must never be hired unless you can watch them with camera surveillance 24 hours a day and treat them as if they were casino employees.

3) For accuracy and integrity, nobody involved with wind energy research should be bound by any non-disclosure agreements or gag orders. Gag orders allow lying by omission and this tactic has been used to hide turbine impacts for decades. In other words, these are people that can't be trusted. Government agents are bound by Nondisclosure agreements or gag orders as are all wind farm employees. Just knowing this, means that whatever is said to Shasta County planners regarding the Fountain Wind project, will not be accurate.

4) All scanning for carcasses will require researchers to use a reasonable and ethical attempt to find carcasses. Besides the less frequent intense formal searches 1 ½ times out from maximum turbine heights, all turbine sites shall be scanned for carcasses twice a day. This task only takes a few minutes and the industry knows it. Scanning for large carcasses or even mid-sized carcasses the size of a cooper's hawk is relatively easy with the aid of binoculars. This scanning shall include all areas out at least several hundred yards from turbine towers.

5) During studies, **every carcass or wounded species** found must be photographed and this information disclosed to the public. In addition, this disclosure will apply to all special status species for the operational life of the

wind project. **This includes every carcass, picked up by wind project personnel, USFWS agents, state wildlife agents and cripples picked up by animal rescue personnel.** This way the public will be aware of all the totality of the endangered and special status species being killed by a project's wind turbines.

6) If during studies, wind personnel must visit any turbine sites for work related duties, they must first check with researchers so they are aware of their presence and can keep an eye on their activities.

7) To further assist in the integrity of the post operational research, 24-hour surveillance including remote cameras will be used in open areas around specific turbine towers and roadways. This coverage will not only aid researchers of scavenger removal, it will act as a deterrent against inside rigging. With this industry, remote camera images and videos have a history of disappearing. I can provide examples if needed. So, if any of this coverage disappears or is found to have been tampered with, there should be very severe consequences.

I have many other suggestions maintaining ethical and scientific field research but I wanted to make sure that Shasta County planners could easily understand that there will be nothing close to these conditions will be proposed in Post Operational studies for the Fountain Wind project.

Instead of these conditions, post operational research protocol will use words like standardized methods, approved, in accordance with USFWS guidelines, in collaboration with state and federal experts, and so on. But these words are meant to deceive and mean absolutely nothing in the realm of science. Shasta County planners must keep in mind that with wind energy research, science has been missing for over 3 decades.

The Purpose of This Document Has Not Been Met

1.1 Purpose of This Document

This Draft Environmental Impact Report (EIR) is an informational document intended to disclose to the public and decision-makers the potential environmental impacts of the Fountain Wind Project (Project). The Shasta County (County) Department of Resource Management, Planning Division, as the lead agency under the California Environmental Quality Act (CEQA),¹ has prepared this Draft EIR to document its analysis of the potential direct, indirect, and cumulative impacts of the Project described in Section 2.4, *Description of the Project*, and the alternatives described in Section 2.5, *Description of Alternatives*. All resource areas in the CEQA Guidelines Appendix G Checklist have been studied: Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. The potential for the Project to result in communications interference is also examined. See Chapter 3, *Environmental Analysis*.

The purpose of the DEIR has not been met and anybody that reads over these comments will also know this to be true. The impacts reported from Hatchet Ridge are based upon fraudulent nonscientific research.

Will Shasta county look the other way and approve this project? Will Shasta county force hidden impacts on the people and our wildlife? Will there be a fraudulent and meaningless mitigation process? Or will Shasta County insist on new studies so the truth about our eagles and other species forced to live around wind turbines, can be told.

A parting thought..... Avoiding science, research fraud, lying by omission and the rigging of data will never solve this world's problems.

Jim Wiegand
Lakehead, CA