**ELMORE COUNTY PLANNING AND ZONING COMMISSION**
**War Memorial (American Legion Hall), 515 East 2nd South Street, Mountain Home, ID 83647**

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**Wednesday, February 17, 2016 at 7:00pm**
**Agenda**
**PLEASE SILENCE CELL PHONES**

## CALL TO ORDER

## ESTABLISH QUORUM

- ☐ Chairperson Patti Osborn
- ☐ Dave Holland
- ☐ Ed Oppedyk
- ☐ Jeff Blanksma
- ☐ Vice-Chairperson K.C. Duerig
- ☐ Sue Fish
- ☐ Shane Zenner

- ☐ Attorney of Record Phil Miller

## PLEDGE OF ALLEGIANCE

## OLD BUSINESS

## PUBLIC HEARING

- **Continuation for Cat Creek Energy, LLC Appeal Hearing for the requirement of an Environmental Impact Statement for a Conditional Use Permit application for a Pump Storage Hydroelectric Electrical Generating Facility**.

- **Continuation for Cat Creek Energy, LLC Appeal Hearing for the requirement of an Environmental Impact Statement for a Conditional Use Permit application for a Solar Electrical Generating Facility.**

- **Continuation for Cat Creek Energy, LLC Appeal Hearing for the requirement of an Environmental Impact Statement for a Conditional Use Permit application for a Substation.**

- **Continuation for Cat Creek Energy, LLC Appeal Hearing for the requirement of an Environmental Impact Statement for a Conditional Use Permit application for a Transmission Line.**

- **Continuation for Cat Creek Energy, LLC Appeal Hearing for the requirement of an Environmental Impact Statement for a Conditional Use Permit application for a Wind Turbine Electrical Generating Facility.**

## ITEMS FROM THE PUBLIC

## MINUTES

- Minutes from 02-03-2016

## INFORMATION ITEMS

- Upcoming P & Z Schedule

## MEETING ADJOURNED

# Elmore County Land Use and Building Department

**520 East 2nd South Street**
**Mountain Home, Id. 83647**
**Phone: (208) 587-2142 ext. 254**
**Fax: (208) 587-2120**
**www.elmorecounty.org**

**Alan Christy**
*Director*

**Tell Riley**
*Building Official*

**Beth Bresnahan**
*Planner I*

**Kacey Ramsauer**
*Administrative Assistant*


February 10, 2016

Cat Creek Energy
c/o Terri Pickens Manwweiler
398 S. 9th Street, Ste. 240
P.O. Box 915
Boise, ID 83706
(sent via email)

Re: Wildlife Mitigation Plan

Terri,

Thank you for speaking with me on the afternoon of February 4, 2016. To give a brief back ground, Cat Creek Energy, LLC (the "Applicant") submitted five conditional use permit applications (the "Applications") to the Land Use and Building Department (the "Department"). The Applications include the following:

- Conditional use permit application for Transmission Lines. ("CUP-2015-03")
- Conditional use permit application for Pump Storage Hydro ("CUP-2015-04")
- Conditional use permit application for PV Solar ("CUP-2015-05")
- Conditional use permit application for Wind Power ("CUP-2015-06")
- Conditional use permit application for a Substation ("CUP-2015-07")

A deficiency letter was issued to the Applicant on October 21, 2015. Appeals to the Department Director's decision requiring an Environmental Impact Statement were received by the Department on November 2, 2015. Appeal hearings were scheduled for December 16, 2015. A Wildlife Mitigation Plan for Cat Creek Energy (the "Plan") was submitted on December 11, 2015. The Applicant agreed to table the appeal hearings until February 17, 2016.

The purpose of this letter is to provide information and status on the Plan. The Plan appears to follow the format required by Elmore County ("County") and contains some of the information required by the County. The County consultants have reviewed the Plan, as well as, the Idaho Department of Fish and Game ("IDFG"). Comment letters from IDFG and the County wildlife consultant are attached to this letter as attachment #1 and #2. Even though the County can accept the Plan as part of completing the Applications it is strongly encouraged that the numerous items listed in attachments #1 and #2 are addressed prior to any public hearing. At this time, I do not believe the tabled appeal hearings scheduled for February 17, 2016 are necessary. However, I strongly urge the Applicant to adequately address the comments in attachment #1 and #2. The Applicant's response to those comments will have a substantial impact on the ultimate recommendation that staff forwards to the Planning and Zoning Commission.

Please recall that in my letter of October 21, 2015 I also pointed out other items needed to complete the Applications. Once these are submitted we will be happy to schedule the Applications for public hearing. The October 21, 2015 letter is attached to this letter as attachment #3.

Please feel free to contact the Department if you have any questions regarding this letter.

Sincerely,

**Alan Christy**
**Director**
**Elmore County Land Use & Building Department**

Attachments
1. Letter from IDFG dated February 1, 2016
2. Analysis from Power Engineers Dated February 9, 2016
3. Deficency letter dated October 21, 2015

cc. Mike McDonald, IDFG (sent via email)
Bill Doering, Elmore County Consultant (sent via email)
Phil Miller, Elmore County Counsel (sent via email)

Attachment #1
2·10·16

**IDAHO DEPARTMENT OF FISH AND GAME**
MAGIC VALLEY REGION
324 South 417 East, Suite 1
Jerome, Idaho 83338

C.L. "Butch" Otter / Governor
Virgil Moore / Director

February 1, 2016

Alan Christy, Director
Elmore County Land Use and Building Department
520 East 2nd South Street
Mountain Home, ID 83647

**RE: Wildlife Mitigation Plan for the proposed Cat Creek Energy Generation Facility**

Dear Alan:

Idaho Department of Fish and Game (IDFG) staff has reviewed the Elmore County Wildlife Mitigation Plan for the proposed Cat Creek Energy Generation Facility. It is our understanding the plan was prepared in response to Elmore County's (County) decision to require Cat Creek Energy, LLC (CCE) to complete an Environmental Impact Study for conditional use permits to construct and operate an energy generation facility. According to the plan the facility would include a 400 MW pump-store hydroelectric facility with a 50,000 acre-ft. reservoir, a 40 MW AC photo-voltaic solar energy array, a 39 tower, 110 MW wind energy facility, approximately 8 miles of 230 kV transmission line, a substation, operations and maintenance buildings, an unknown quantity of new and improved all-weather road, and various other infrastructure. IDFG staff has participated in the conditional use permitting process with the County and CCE since July 2015. Our involvement to date has included three briefing and issue identification meetings with CCE representatives and their consultants and development of proposals for services provided by IDFG. No commitment has been made by CCE to retain IDFG services.

The purpose of these comments is to assist the decision-making authority by providing a technical review of mitigation plan relative to potential adverse effects on fish and wildlife and their habitats and an evaluation of the strategies identified in the plan to mitigate adverse effects. It is not the purpose of IDFG to support or oppose this proposal. Resident species of fish and wildlife are property of all Idaho citizens, and IDFG and the Idaho Fish and Game Commission are expressly charged with statutory responsibility to preserve, protect, perpetuate and manage all fish and wildlife in Idaho (Idaho Code 36-103 (a)). In fulfillment of our statutory charge and direction as provided by the Idaho Legislature, we offer the following comments regarding the mitigation plan.

**Background Information**

Wildlife Resources

The Cat Creek area provides habitat for an assortment of native wildlife. The project area lies within a major migration corridor for mule deer, elk, and pronghorn moving from high elevation summer habitats to low elevation winter range and back. While the exact pathways and magnitude of the migration has not been quantified, several thousand animals likely use this corridor on an annual basis. Data from elk and mule deer radio-marked during winter in 2015 and 2016 confirmed

considerable seasonal movements through the project area. Energy development has the potential to disrupt these movements.

Nearly the entire project area contains 'important' sage-grouse habitat as identified by the State of Idaho. Two occupied sage-grouse leks are known to occur within a half mile of the project area. From 2013-present the Mountain Home Sage-grouse Local Working Group has conducted a radio telemetry study of grouse in and around the Cat Creek area. Data from this study indicates grouse use the project area during all seasons, but particularly during the breeding season (mid-March through early June).

In Idaho, roughly 80% of nests occur within 8-12 km (5.0-7.5 miles) of capture leks. Sage-grouse nest success is highest in areas with adequate sagebrush overstory (>15%), where abundant perennial herbaceous cover is available to conceal nests. Components of suitable sage-grouse (and other sagebrush obligate bird and mammal) habitat are present in the project area including adequate sagebrush cover and height. Project development has the potential to alter sage-grouse productivity and use of the area. Research has shown that anthropogenic disturbances like energy developments, linear features (improved roads), and tall structures (communication towers, transmission towers, wind turbines, etc.) can affect sage-grouse habitat use, production, and survival at distances beyond the development footprint (indirect effects - effects caused by the action and are farther removed in distance or later in time, but are still reasonably foreseeable).

Numerous raptor species have been documented during the breeding season in and around the project area including species of conservation concern like golden and bald eagles and peregrine falcons. The geology, topography, and hydrology of the Cat Creek area suggest the project area may also lie within migration corridor for raptors. Research has shown that renewable energy can be compatible with breeding and migrating raptors if addressed early during the planning phases of a project.

Like raptors, the geology, topography, and hydrology of the Cat Creek area suggest the project area may support resident and migratory bats. Little information is available for bats in the area due to a lack of survey effort. Wind energy related bat mortality (primarily migratory species) has been well documented throughout the western U.S. In southern Idaho bat mortality has been documented at several wind energy facilities. The cumulative implication of this form of mortality on bat populations is unclear.

Fish Resources

Anderson Ranch Reservoir (ARR) is managed as a mixed species fishery including rainbow trout, mountain whitefish, kokanee, bull trout, landlocked Chinook salmon, yellow perch, and smallmouth bass fishing opportunities. The majority of the fishing pressure is made up of those anglers targeting kokanee and smallmouth bass. The quantitative management goal for ARR is to provide a fishery that result in catch rates of 1 kokanee / hour with a mean size of 12-14 inches. There is a history of hatchery rainbow trout supplementation; however, this hatchery trout program has been suspended because angler returns did not meet management goals. Kokanee and bull trout express an adfluvial life history (seasonally migrating to and from reservoirs and streams) largely dependent upon the South Fork Boise River (SFBR) upstream from the reservoir. Reservoir management directly influences these adfluvial species particularly related to their access to the SFBR.

The SFBR is mostly under general rules management with emphasis on a put-and-take rainbow trout fishery and a small section in the upper drainage is managed for quality trout. The fishery is made up

of redband trout, rainbow trout, brook trout, bull trout (catch-and-release only), kokanee, and mountain whitefish. Adfluvial kokanee and bull trout are seasonally available within this fishery. There is an active and popular stocking program within the SFBR and Big Smoky Creek including one put-and-take pond. The current hatchery program is meeting or nearly meeting angler return management goals. The kokanee spawning run represents a unique experience for campers and day trip recreationists.

Fish and Wildlife Based Recreation

Hunting, fishing, trapping and wildlife viewing are major economic drivers in Idaho, supporting over 14,000 jobs and hundreds of small businesses, many of which are in rural parts of our state and generating over $1.4 billion per year for Idaho's economy. An economic survey of fishing was completed for the entire state in 2011. Spending by anglers on fishing trips to Elmore County ranked 15th out of the 44 Idaho counties. Angler spending on fishing with destinations in Elmore County was about $14 million. This survey estimated that anglers made approximately 26,000 trips and spent about $4,270,000.00 to fish at ARR.

Hunting is an extremely popular recreational activity in Elmore County. As an example, in 2014 hunters spent nearly 17,000 days pursuing deer and almost 4,000 days hunting elk in the SFBR drainage alone. Hunting-related trip expenditures in 2011 for big game in Idaho were estimated at $96/trip/day; translating to around $2 million in economic activity in and around Elmore County for mule deer and elk hunting alone (license and tag sales, food and lodging, gear and equipment, transportation, etc.).

**General Comments**

IDFG finds that the proposal is less of a mitigation plan than a general series of intended development actions and Best Management Practices (BMPs). IDFG considers BMPs to be standard in any development proposal, and as such not a mitigation strategy. The lack of detail made a realistic determination of resource impacts infeasible. Therefore, discussions of mitigation are premature and impractical.

From IDFG's perspective, a mitigation plan should disclose the full range of actions and the potential effects of those actions prior to developing a strategy on how to mitigate. An effective mitigation plan should (1) identify potentially affected resources, (2) determine potential impacts to those resources, (3) estimate the scope of impacts, (4) evaluate strategies to avoid, minimize, or replace effected resources, and (5) contain performance measures and an adaptive management framework for monitoring mitigation effectiveness. We have included an IDFG working document discussing how impacts should be assessed and mitigated.

At a minimum, we suggest the County seek a mitigation plan that discloses three items, in order. These are:

- The specific items proposed for the development which will cause impacts to fish and wildlife resources.
- For each proposed development item, an analysis and accounting of the impacts to fish and wildlife resources which would potentially occur.
- For each development item, a prioritized strategy (in order of preference) to (1) avoid the impacts identified by not implementing the development item or choosing an alternative item, (2) minimize the impacts by altering the proposed item, or (3) mitigate for the impacts by replacing the values lost to the public or a similar value of related resources.

**Specific Comments**

We have several over-arching questions regarding the plan and have identified multiple inconsistencies, inaccuracies, and information gaps. A few of these include:

Fish Resources/Water Quality/Water Management

- We were unable to determine how and if the plant would produce power in the event water were delivered downstream after high flows had subsided; which is the period identified for upper reservoir recharge (page 6, paragraph 3).
- The document repeatedly refers to replacing lost fish resources as mitigation for fish lost to entrainment, but fails to identify how this will be measured and valued (page 16, paragraph 5 and elsewhere). Further, the proposal eludes to design features for the pump inlet and powerhouse to limit entrainment, but offers no detail on what or how this will be achieved and how it will be monitored for effectiveness.
- A daily $\leq$2.2 ft. fluctuation in ARR elevation will be most noticed in the inlet area and in the head of bays (SFBR, Lime Cr, Falls Cr, etc., page 18, paragraph 2). These daily fluctuations could have substantial impacts to boat ramps, shoreline boat mooring, and kokanee escapement from July-September. The rapid dewatering of ARR in late summer/early fall already stall kokanee escapement into the SFBR until the mud flat delta stabilizes. Kokanee are vulnerable to predation and delayed during this time. It is likely a daily 2+ foot fluctuation will exacerbate this problem and potentially strand kokanee. While we will defer to the US Forest Service regarding impacts to boat ramps they manage, it is likely boaters that anchor boats just off the shoreline could experience problems.
- We understand the details may not be available yet, but entrainment issues have been very important in licensing discussions for hydroelectric projects on the Snake River (page 20, bullets 3 and 4). In many cases, post-construction entrainment problems cannot be economically addressed by the license holder because the infrastructure does not accommodate the preferred entrainment mitigation. This discussion should be fleshed out early to allow the applicants to incorporate best options, or at least include the potential for enhanced entrainment deterrence options should they be warranted (e.g., bubble screens, consideration of intake/flume elevation in relation to seasonal thermocline, etc.).
- The proposal discusses water quality as it relates to daily operations, but does not address water quality impacts should water be made available to downstream users (e.g., when > 10,000 acre-ft. are released to meet downstream demand, page 51, paragraph 1). The proposal implies studies are in progress, and attempts to address water quality are from a macro perspective. While this is understandable, more careful discussion and study is warranted. For example, the hydro discharge occurs in a relatively confined reach of the reservoir. A 10,000 acre-ft. release could have a substantial localized effect that would then slowly move down reservoir toward the dam. We are concerned this could create a barrier type effect for fish. We question whether a disturbed thermocline (stratification of water based on temperature) would remain localized or would drift toward the dam. The proposal also failed to address runoff into the upper reservoir. Nutrient loaded runoff could lead to eutrophication of the upper reservoir. It is also unclear if operation of the facility over time and under certain conditions could mobilize sediment.
- The proposal should elaborate on the "unlikely if properly maintained" statement about Biological Demand (BOD, page 59, paragraph 4). A new reservoir will grow aquatic vegetation and have algae blooms. Natural processes will affect the BOD particularly if

runoff or land management results in surface runoff nutrient loads. We agree BOD will be less of an issue because of the frequent turnover; however, it does appear that a resident pool will persist. Eutrophication will likely occur and could impact ARR at some level.

- The proposal indicates entrained fish will be detected, captured, and transported but again provides no detail on how this will occur (page 76). We assume there will be some level of "detected entrained fish" that would invoke the capture and transport of those fish. The proposal failed to identify who will transport those fish. The capture and transport of live fish is under IDFG jurisdiction. IDFG consultation and permit authority would be required with the US Fish and Wildlife Service if bull trout were involved.

Wildlife Resources

- The reference to open space being maintained to allow the project area to be used as a migration corridor is probably not realistic nor is it supported by science. The elimination of approximately 1,000 acres of habitat being used to site the upper reservoir will likely have a funneling effect that 'squeezes' migrating big game into areas also being developed for wind and solar and other ancillary infrastructure. Though some level of continued movement through the area would be anticipated, it is highly likely that the structural complexity of the new environment would, at some level, affect the current degree of use. The long-term ramifications of this effect are unknown, but certainly worth further study.
- The plan contains little discussion of indirect effects. While it may be beyond the purview of the County to require a hard look at indirect effects, we suggest they should be considered particularly in the context of sage-grouse and big game habitat use, productivity, and movement.
- Statements implying the loss of habitat as a result of project development will not have a significant impact on wildlife because these habitat types are abundant elsewhere is unfounded. The use of an area by wildlife represents a suite of habitat selection criteria that include, but are not limited to (1) the availability of resources arranged in a manner that makes them accessible (without excessive cost to energetic resources of the animal), (2) learned behaviors resulting from repeated generations of use and individual experience/familiarity, and (3) avoidance of risks (e.g., predators, lower quality habitats, geography, perceived threats, etc.). Impacts to one of these selection criteria may not force an animal to avoid previously used areas, but may have survival or productivity implications. For example, sage-grouse are known to exhibit strong fidelity to seasonal use areas. Hens commonly lay nests less than 0.5 miles from previous nest sites, often moving along identical routes from year to year, using the same breeding locations throughout their lives. If a disturbance eliminates or reduces the quality of a portion of their habitat, they do not simply move to adjacent habitats. Their learned behaviors force them to use suboptimal habitats which can lead to reduced nest initiation, reduced nest success, reduced fledging success, disrupted mating activities, or mortality.
- The plan recognizes the project area could provide habitat for resident and migratory bats, raptors, and songbirds. The plan acknowledges wind energy related bird and bat mortality can be an issue, but failed to articulate how potential mortality would be assessed, analyzed, and mitigated (avoided, minimized, or replaced).
- The potential for utility-scale solar energy facilities to affect wildlife was not addressed. Potential effects include habitat loss and fragmentation, altered distribution and dispersal patterns, altered or interrupted migration routes, avoidance of otherwise suitable habitat, disturbance during sensitive periods, injury, and/or mortality. The proposal should clearly

communicate how potential effects would be assessed, analyzed, and mitigated (avoided, minimized, or replaced).

**Closing**

We appreciate the opportunity to provide a technical review of the mitigation plan. We remain committed to assist the County in review of proposals regarding this development. However, enough accurate and substantive detail must be provided regarding the proposed action, its effects, and appropriate mitigations for IDFG to assess the value of the proposal relative to fish and wildlife resources in the area.

As the conditional use permitting process moves forward, including any environmental analysis, the State of Idaho may be submitting comments from relevant state agencies in a coordinated manner. These comments will be provided by a Cooperating Agency designated by the state. If you have any questions or need additional information please contact Mike McDonald, Environmental Staff Biologist, at this office.

Sincerely,

Toby Boudreau
Magic Valley Regional Supervisor

Cc: Cat Creek Energy, LLC (J. Carkulis)
OER – Boise (J. Chatburn)
IDFG – Boise (S. Kiefer/G. Vecellio)
Ecc: R4 staff

Attachment #2
2.10.16

February 09, 2016

# ELMORE COUNTY LAND USE AND BUILDING DEPARTMENT

## Cat Creek Energy Wildlife Management Plan Review


***PROJECT NUMBER:***
*123934*

***PROJECT CONTACT:***
*Bill Doering*
***EMAIL:***
*bill.doering@powereng.com*
***PHONE:***
*208-288-6461*


POWER ENGINEERS

# Cat Creek Energy Wildlife Management Plan Review

**PREPARED FOR:** ELMORE COUNTY LAND USE AND BUILDING DEPARTMENT

**PREPARED BY:** BILL DOERING
208-288-6461
BILL.DOERING@POWERENG.COM

# INTERNAL TRACKING SHEET

| | |
|---|---|
| Project Name | Cat Creek Energy Wildlife Management Plan Review |
| Project Number (include subtask numbers) | 123934 |
| Project Manager | |
| Project Coordinator | |
| Project SA | |
| Document Author | Bill Doering and Beth Colket |
| Folder Location | R:\Environmental Projects\123934_ELMORE CNTY\PER\02 Environmental\CatCreekEnergy\Deliverables\WMP Review |
| Footer Number | 199-017 |

| TASK | NAME | DATE | COMMENTS |
|---|---|---|---|
| Peer Review | | | |
| Sr. Staff Review | | | |
| Technical Edit | | | |
| Formatting (SA) | Patsy Friend | 2/09/2016 | |
| PM Review | | | |
| | | | |

| DOCUMENT REVISION | | |
|---|---|---|
| REVISION | DATE | COMMENTS |
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# INTRODUCTION

As requested by Elmore County Planning & Zoning Department, POWER Engineers (POWER) conducted an independent review of the proposed Cat Creek Energy Generation Facility Wildlife Mitigation Plan (CCEGF-WMP), dated December 5, 2015 (hereafter "WMP" or "Plan"). As described in the WMP the proposed CCEGF project is comprised of five major components associated with five separate county use permit applications, including:

1) Approximately eight miles of new dual circuit 230 kV transmission lines;
2) Pumped-storage hydroelectric facility, which would use the existing Anderson Ranch Reservoir, a Bureau of Reclamation (BOR) impoundment on the South Fork of the Boise River, where there would be a "powerhouse" containing two 200 MW turbines, which would connect to a new constructed "upper" reservoir of 914 surface acres by four 16-ft diameter penstocks. Approximately 3.5 miles of new road would also be needed for this component.
3) 480 acre photovoltaic solar array along the path of the transmission lines;
4) 39 wind turbines on 3,160 acres (p. 13) or 2,700 acres (p. 52) in three development areas, located southeast of the Upper Reservoir area. Each turbine would produce 2.85 MW and be 380 feet tall; and
5) New transmission substation on approximately 20 acres.

A variety of ancillary project elements are associated with these main components. The proposed CCEGF project is predominantly on private ranch lands in Elmore County. According to the WMP, the powerhouse, 800 feet of transmission line, 800 feet of penstocks, and 1,500 feet of new road would be located on lands managed by BOR and the U.S. Forest Service (USFS).

POWER's review consisted of evaluating the WMP's habitat assessments, description of wildlife species that may occur in and around the project area, impact assessment, and proposed mitigation measures.

# TECHNICAL COMMENTS ON THE WMP

## Overall Comments

The WMP follows the outline provided in the County ordinance, but needs additional depth and detail in all areas to fully assess the potential impacts to wildlife and evaluate proposed mitigation measures. A logical sequence running from the project description, to the existing wildlife and habitat conditions within the area potentially affected by the site (both directly and indirectly), to substantiated arguments for or against all reasonable potential wildlife impacts, and finally to measures to address impacts and conserve wildlife resources at the site needs to be presented to the reader. A wildlife mitigation plan such as this should first present a clear and consolidated description of the project that is not necessarily comprehensive, but focuses on all aspects of the project's construction and operations that may be potential sources of direct and indirect impacts to wildlife and wildlife habitats. Where project activities would occur is as important as what activities would occur. Next a thorough presentation of existing conditions for wildlife and vegetation communities within the area potentially affected both directly and indirectly by the project should be provided so the reader can begin to see the logical connections between what is on the ground, the project activities, and the resulting impacts to wildlife. Elmore County understands that developing a complex project such as this is a long process and a suite of biological resources studies would occur going forward; nevertheless initial efforts to fill essential gaps in knowledge and due diligence in gathering the most up-to-date available information should be demonstrated. Third, the document should review the range of potential direct and indirect, as well as, cumulative impacts caused by the

project. These should be grounded in our current understanding of the types of impacts associated with the project components (e.g. transmission and sub-transmission lines, pipelines, photovoltaic solar generation facilities, wind farms) and their potential to affect wildlife within the project area. For impacts that the applicant feels are not significant, these can be discussed and dismissed. Supporting discussion with relevant literature would help the County evaluate the Applicant's conclusions. Discussion should detail specific avoidance and minimization measures, institutional controls, BMPs and the like applied to remove or diminish impacts to the extent possible. Once these measures are applied, remaining direct and indirect impacts (sometimes called residual impacts) can be more precisely framed and effective mitigation measures developed. When presented, mitigation measures should be specific, tied to a defined goal or outcome, measureable and have means of accountability.

Some general concerns with the WMP include:

- Rather than a single concise narrative, details of the project description are scattered throughout the document
- Mitigation goals and objectives are not presented. Without these there is no means to assess the effectiveness of mitigation measures
- The WMP describes some of the wildlife resources which may be affected by the project, but does not adequately describe vegetation communities or present sufficient information on all wildlife and plant species including sensitive plants.
- No methods are presented
- Information on the existing conditions is limited, sometimes outdated, and not referenced to data sources
- Direct impacts to wildlife resource resulting from actions associated with all project components are inadequately presented
- Indirect impacts are not presented
- Cumulative impacts are not addressed
- Mitigation measures are not specific, measurable and do not address all potential impacts. Without an appropriate analysis of affected resources and impacts, the WMP is incapable of substantiating how the mitigation measures will adequately avoid, reduce, or minimize the various impacts, and how the measures will be enforced or monitored for success
- An adaptive management strategy is not presented
- Only five wildlife-related references are provided and four of these are related to sage grouse.
- The Applicant's degree of coordination with IDFG is not clear.

## Specific Comments

### 1. Comments relevant to the entire Plan

- The project description is incomplete. Important details of the project are scattered throughout the entire plan and some project elements are only lightly addressed. The project does not appear to be sufficiently developed to prepare this WMP.
- Language used for mitigation measures should reflect the Applicant's commitment to conserving and protecting wildlife resources in the project area. Avoid equivocation. Phrases such as "may include/would/if warranted/will consider" are frequently used in conjunction with mitigation discussions.
- It would be helpful to have a clear list of county, state, and federal requirements, including documentation of personal communication with these agencies, and how this WMP addresses each of these.

- The maps provided are difficult to interpret and incompletely labeled in some cases. Some maps and tables appeared to have been prepared for other documents as is reflected in inconsistent numbering. All the maps need to be redone so that they are created at the appropriate extent, with legible text and a legend, and consistent symbology throughout the WMP. This applies to Figure1 (p. 22), Figure 2 (p. 24), Figure 4 (p. 26), Figure 5 (p. 27), Figure 6 (p. 30), Figure 7 (p. 31), and others. It appears that Figure 3 in the text refers to Figure 1.
- The Idaho Conservation Wildlife Strategy (2005) is cited frequently in the WMP, but is out-of-date. This document is being supplanted by the 2016 Idaho State Wildlife Action Plan. In late 2015, a draft version of this plan was provided to wildlife biologists throughout the state for review and comment. The WMP should at least recognize that information in the 2016 Idaho State Wildlife Action Plan (which will be completed soon) will be updated in the document upon its completion.
- Some tables and figures are missing (as numbered) and need to be organized clearly.
- The WMP appears heavily weighted towards describing and assessing impacts from the pumped-storage hydroelectric facility, but does not adequately describe and assess impacts from the other four major project components, which would likely present the most significant impacts to wildlife species, wildlife habitats, and plants.
- There is a good deal of well-prepared fisheries information and analysis that is beyond the scope of this WMP and might be best captured in a discrete fisheries management/ mitigation plan. This could be tiered to this plan.
- There is a large amount of material related to resources in the human environment. This material should be removed unless relevant to wildlife.

## 2. Table of Contents

- This is more of an outline. Some of the headings don't match the County headings; indents are misplaced for 3.1, 3.2, 5.1, and 5.2; references section is missing; list of tables and figures are missing. No page numbers are provided.

## 3. Chapter 1 – Introduction

- General description needs a table summarizing acres disturbed for each project component, a clearly presented and current project overview map, and diagram of project components. Information on acres of disturbance are scattered over 53 pages of the document. Some project details are not presented until very late in the document (e.g. fencing p. 72) or are incorporated into non-wildlife relevant sections (e.g. 230 kV transmission structure types in visual impacts section p. 68). Acres are not compiled in a single table or even a single section. This makes it difficult for a reader to gain an understanding of how the project's construction will affect the environment.
- (p. 6) Turbine height of 380 feet is provided. Other values are presented elsewhere. This is possible a simple typographical error but should be corrected. If a range of turbine sizes is possible (depending on technology, prices, schedule, and availability at the time of construction) a reasonable range should be presented and analyzed.
- Table 1 (pp. 6-8), Land Ownership Summary, doesn't provide any information on land ownership; just raw data for township range section are provided. Need a clearly organized table so reader can discern acres for each component by land ownership.

- (p. 9) Information on Upper Reservoir dam height, acres, and construction should be presented here.
- (p. 10) Additional power/ pump house details would be helpful here. How would the structure be sited accounting for seasonally fluctuating water levels in the reservoir?
- (p. 10) Very limited information on the electrical line from the powerhouse to the substation is presented. Voltage and construction information are absent. We surmise this line (34kV?) would run from the southern shoreline of Anderson Ranch Reservoir, ascend to the canyon rim through open forest habitat and then cross mixed grass land and shrub steppe to the substation. The line has the potential to cause a number of impacts to wildlife which would need to be addressed.
- (p. 13) For the wind energy generation plant, 16-foot wide access roads do not seem realistic. To support large equipment access for construction and maintenance, these roads are often twice as wide. On hilly terrain (like this project) greater widths and more turns are often estimated. Information on staging and storage areas is not presented or accounted in acres of ground disturbance.
- "Mitigation measures" section seems misplaced (p. 16)
- Construction disturbance buffers and other temporary disturbance areas are not clearly presented and quantified.
- The Plan states that "all applicant-owned private lands will be preserved as open for wildlife use and facilities located and constructed to maintain the function of this land as a migration corridor"(p. 17), but there are no specific details such as a conservation easement that would demonstrate that the Applicant would follow through on this measure.
- Under 1.1 Mitigation Goals and Objectives (pp. 19-20) presents few goals or objects. A goal is a conservation endpoint or outcome. Mitigation performance can be evaluated against these. A number of mitigation "features" are listed.
- The Plan states that "all areas disturbed by construction (would be re-vegetated) using plant species beneficial to wildlife" (p. 19). Agencies typically have local, habitat-specific seed/planting lists that are preferably native and from local sources, intended to stabilize soils, prevent erosion and weed invasions, maintain visual integrity with surrounding vegetation, and are beneficial to pollinators and native species. It would not be beneficial to rehabilitating temporary disturbance areas with plant species beneficial to wildlife alone, particularly if the list was tailored to a single wildlife species such as the greater sage-grouse. BOR and/or USFS may have specific seed/planting lists that are required for development projects on lands managed by these agencies.
- The Plan states that "the shoreline of the Upper Reservoir (would be planted) with wetland/riparian plant species to develop new wetland habitat and create and/or augment wetland habitat elsewhere to assure no net loss of habitat" (p. 19). However, obligate wetland plant species as defined by the U.S. Army Corps of Engineers (ACOE 2015) are unlikely to persist with the weekly and daily hydrologic fluctuations occurring at the Upper Reservoir under the described water cycling scheme (p. 19). An argument to the contrary would need to be substantiated to support a "no net loss of habitat" determination.
- For 1.3 Qualifications of WMP Authors (p. 22-23), the Plan lists the preparers as Nicholas Josten, a geophysicist, and Ted Sorenson, a hydrological engineer. As their qualifications are presented, neither would meet the County ordinance requirements of a Qualified Wildlife Biologist (QWB):

  *An individual or professional firm where the individual or principal(s) of the professional firm have a minimum of five years experience in the development of wildlife and habitat mitigation*

*plans or the monitoring of such plans or have supervised or performed other wildlife and habitat monitoring or mitigation implementing actions, and hold a graduate level degree in a biology field.*

According to this definition, the WMP was not prepared by a QWB as defined. In general a wildlife biologist sufficiently trained and experienced to prepare a plan such as this one would have an academic background which would include extensive coursework in zoology, ecology, and wildlife management, and additionally have several years of experience planning and conducting field research on wildlife, analyzing data, and making management recommendations for wildlife. For a large and complex project such as this, additional experience analyzing impacts to wildlife from renewable energy projects, pipelines, and transmission lines would be extremely useful. Under 1.1.1 (p. 23), the Plan lists Dr. Roger Rosentreter, a retired BLM Idaho State Office Botanist, and Dr. Bradley Shepard, a senior aquatic scientist, as biological consultants who reviewed the plan, even though on p. 83 of the Plan, Dr. Rosentreter and Dr. Shepard are listed as the individuals who prepared and reviewed the WMP (along with their signatures). This should be clarified.

Dr. Rosentreter is a highly respected botanist and plant ecologist. His work is well known and well regarded by both wildlife and plant ecologists throughout the state of Idaho. However, these credentials do not make him a QWB according to the County ordinance definition. In addition, Dr. Shepard's experience as an aquatic scientist and fisheries biologist also does not make him a QWB according to the County ordinance definition. Both of these individuals are experienced ecologists and are certainly sufficiently experienced to provide review and comment on a well-prepared plan. It appears that no one qualified to prepare the wildlife portions of this wildlife management plan was involved in its preparation.

## 4. Chapter 2 – Methods

No methods are presented. The WMP only states that "the methods used in the preparation of this WMP are standard in hydrological engineering and environmental impact assessment." This is inadequate for a wildlife mitigation plan. The methods section should describe the methods employed to:

- Establish a sufficient understanding of existing wildlife and wildlife habitat conditions within the area potentially affect by the project,
- Evaluate potential impacts from the project on these resources, and
- Develop actionable mitigation measures to address impacts.

Information in the methods section should include documentation of methods used to map and classify vegetative communities and condition; description of how presence/absence was determined for wildlife and sensitive plant species; agency correspondence and data provided; and documentation of site visit(s) conducted by CCE's wildlife expert. A site visit by an Elmore County biologist and IDFG is expected by Elmore County and should be documented in the methods section.

This WMP needs to follow methods typically used in wildlife mitigation planning and not hydrological engineering. There needs to be a list of surveys/site visits conducted specifically for this project, including dates, types of surveys conducted and survey methods, qualifications of surveyors, and how each survey ties into mitigation planning as well as any

agency requirements and species lists (i.e. IDFG, BOR and USFS). Several special status species can be difficult to detect and may require species-specific surveys by qualified individuals at the appropriate time of year.

## 5. Chapter 3 – General Site Description

- A description of the regional landscape setting and the relationship of the project area to surrounding features would be useful here.
- There is a description of historic land use for Elmore County, but it needs to also describe historic land use at the project site.
- A map of neighboring land use and ownership is not included in the WMP.
- The photograph of the Upper Reservoir (p. 28) appears to be excellent wildlife habitat which would be lost to the reservoir; habitat and impact assessment as described in the text do not match this photograph.
- There is a paragraph on Elmore County's population growth from 1960-2010, but this does not seem to be relevant to the Plan and should be removed.

## 6. Chapter 4 – Site Resources

- This section is incomplete and needs to reference the Elmore County Soil Survey and USDA, Soil Conservation Service. There needs to be a table listing all vegetation types, their condition/quality, acreage of vegetation types by condition, and their patchiness/functionality in the project area. Currently there is a single insufficient paragraph with outdated, generalized information for the Owyhee Uplands ecological section (p. 29). A broad narrative of the vegetation and habitat setting of the project area and it relationship to the surrounding landscape and tied to specific discussion of the habitats detailed in the subsections following would seem appropriate here. See associated comments in bullets below.
- There is a description in the first paragraph (p. 29) of "…the project footprint is evergreen forest." Evergreen is not a term typically used by botanists or plant ecologists in this region, and is more commonly used for descriptions in the eastern United States. A more appropriate description is needed.
- 4.0.1 Wetlands as Defined by ACOE (p. 30): Need to incorporate wetland data as presented by USFWS in iPAC (USFWS 2016).
- 4.0.1 Wetlands as Defined by ACOE (p. 30): Recommend a table and text listing and describing all wetlands, including non-jurisdictional wetlands that provide wildlife habitat. This wetlands section is incomplete and insufficient for meeting Elmore County requirements.
- 4.0.1 Wetlands as Defined by ACOE (p. 30): Need to add information on whether a preliminary wetlands determination or legal jurisdictional determination was mapped and submitted to ACOE.
- 4.0.2 All the Others (p. 32): The two habitats listed here (mountain big sagebrush/bluebunch wheatgrass and low sagebrush/bluebunch wheatgrass) do use the Elmore County Soil Survey data. However, there should be more vegetation types than this, including mixed conifer forest, riparian/wetlands and anything else supported by site visits, iPAC/National Wetland Inventory data, LANDFIRE data, and vegetation data that the USFWS or BOR may have. Figure 6, which appears to be a map based on outdated

GAP data, indicates there may be introduced grassland, forest types (symbology is unclear which types), shrub/scrub, and possibly other vegetation types.

- 4.0.3 Noxious Weeds (p. 32): Need more than the "top 8 weed species" for Elmore County. There are at least six other noxious weed species known to Elmore County that have equal priority.
- 4.0.3 Noxious Weeds (p. 32): Elmore County requires noxious weed locations/extent being described, but this was not done. It may be sufficient to have a complete list of noxious weeds with the potential of occurring in the project area, and to say pre-construction noxious weed surveys would be conducted as described in the Noxious Weed Management Plan.
- 4.0.3 Noxious Weeds (p. 33): "Threatened and Endangered Plants" and "Critical Plant Habitat" headings seem associated with noxious weeds and may be better moved to Section 4.1.6.
- 4.1 Wildlife (p. 33): This section should provide more information and substantiate with references to site visits or surveys, agency correspondences, agency reports, literature etc. The information is insufficiently developed for this WMP. Any available spatial data should be presented. This section is where all information on existing conditions for wildlife resources is presented. It forms the basis for assessing the significance of potential impacts to wildlife.
- 4.1 Wildlife, under "Wildlife Inventory" (p. 33): This section is probably one of the most important sections for describing wildlife communities and their ecology at the project are; yet, the entire discussion (except for one sentence) is copied directly from page 99 of the Boise National Forest Land and Resource Management Plan, save some punctuation changes and dropping the term "Region 4" and replacing "management area" with "project area". The text in the Forest Plan is intended to characterize the entire Lower South Fork Boise River Management Area, not the project area. The text in the WMP is not sufficient to characterize the project area.
- 4.1 Wildlife (p. 33): "Wildlife Habitat" and "Critical Wildlife Habitat" do not belong here, move to Section 4.0 Vegetation/Habitat Types and Section 4.1.6, respectively. The "Wildlife Habitat" section describes "narrow strips of riparian shrub and woodland" which was not mentioned or assessed in Section 4.0 Vegetation/Habitat Types.
- 4.1.1 to 4.1.3 (pp. 33-34): The Plan inserts information from an IDFG proposal, but this proposal cannot substitute for analysis. The WMP states that the Applicant is working with IDFG; however, IDFG reports that they are not working with the Applicant (IDFG 2016b).
- 4.1.1 Game and Travel Corridors (p. 33): Need a big game winter range map, and any other pertinent maps. IDFG houses these data.
- 4.1.1 Game and Travel Corridors (p. 33): This section is insufficient for describing and locating the major migration corridor the project would be cited on.
- The section of 4.1.2 Raptors (as listed in the Table of Contents) is missing from the text (p.34), as it appears to have been lumped with 4.1.3 Migratory Birds. There are some major issues with each of these topics which are not sufficiently described in the text. These need to be separate sections, appropriately described, and with better citation support. There is a USFWS iPAC list of migratory birds and raptors that should have been included in these sections, with about 20 species.
- 4.1.3.1 Bats (p.34): Bats should not be categorized under the migratory bird sub section. Should have heading name of "4.1.3.1 Other Terrestrial Wildlife".
- 4.1.3.1 Bats (p. 34): It is insufficient to say that "little information is available…due to a lack of survey effort." Need to research the available information better and state what information is required or recommended for meeting Plan objectives and goals. Idaho has

an active community of bat researchers and experts who may be able to provide expertise. Idaho, through a multi-agency collaborative effort, is participating in the North American Bat Monitoring Initiative (NABat).

- 4.1.4 Other Terrestrial Wildlife (p. 35): Text refers to Table 7 as SGCN known or predicted to occur in the project area. This should be Table 8. Table 7 is a list of federally listed aquatic species not. No information is presented on wildlife communities or common species characteristic of habitats within the project area.
- 4.1.5 Aquatic Wildlife (p.35): Under the "Critical Fish Habitat" header, there needs to be detailed elaboration on the project's proximity to bull trout critical habitat, and how bull trout critical habitat could be affected by the project.
- 4.1.5 Fish Populations (p.35): None of the scientific names are formatted correctly. Other than fish no other aquatic animal species are discussed.
- 4.1.6 Threatened, Endangered, and Candidate Species (Plant and Animal) (p. 36): Need to update sage-grouse information so it's current with the October 2, 2015 USFWS Not Warranted decision. Based on this decision, all information on sage-grouse should be moved to Section 4.1.7 Special Status Species. Do this for Chapters 5.0, 6.0, and 7.0 also.
- 4.1.6 Threatened, Endangered, and Candidate Species (Plant and Animal) (p. 37, 2nd paragraph): Text here on the "area proposed for the new Upper Reservoir have been altered by past agricultural practices and contain only fragments areas of sagebrush cover" does not correspond with the photograph shown on p.28 of this area.
- 4.1.6 Threatened, Endangered, and Candidate Species (Plant and Animal) (p. 37): Table 7 probably does not need to include the Bliss Rapids snail as iPAC does not include this species for the project area—verify boundary.
- 4.1.6 Threatened, Endangered, and Candidate Species (Plant and Animal) (p. 37): Lengthy text on fisheries/snails does not belong in the section, and is better suited for Section 4.1.5 and/or a Fisheries Mitigation Plan.
- 4.1.7 Special Status Species (p. 39): Text mentions "a full list of SGCN species…in Appendix A." This seems unnecessary, but there is no Appendix A —please correct this.
- 4.1.7 Special Status Species (pp. 39-40): Tables 8 and 9should cross list all wildlife/aquatic species that are Forest Sensitive and/or are protected by BOR and have potential to occur in project area, and/or are on USFWS's iPAC list; and not just SGCNs. T&E species (i.e. bull trout) should not be included here since they should already be included Section 4.1.6.
- Table 8 (p. 39-40): Table is outdated. Many species habitat preferences seem odd; for example Canada lynx preferring open water.
- 4.1.7 Special Status Species: Need a section and table describing and listing sensitive plant species, which at a minimum should include all plant species that are Forest Sensitive and/or are protected by BOR and have potential to occur in project area; and all rare plants associated with wetlands/riparian areas on the Idaho Native Plant Society (INPS) Rare Plant List (INPS 2015) and have potential to occur in any areas requiring a wetland permit (CWA 401/404). The INPS Rare Plant List becomes the list of plants tracked by the State Heritage Program (IDFG's Idaho Fish and Wildlife Information System (IDFG 2016a), the primary database for spatial information and population and habitat conditions for rare plants.
- 4.2 Water Resources (p. 41-44): Having a water resources section is not relevant to this Plan and needs to be removed.
- 4.3 Historic and Cultural Resources (p. 45): A Historic and Cultural Resources section is not relevant to this Plan and needs to be removed.
- 4.4 Recreational Resources (p. 46-47): A Recreational Resources section is not relevant to this Plan and needs to be removed. However, some of this information, particularly the

map (Figure 11) may be relevant to Section 3.2 Neighboring Land Use, and could be incorporated there.

- 4.5 Scenic and Aesthetic Resources (p. 48): A Scenic and Aesthetic Resources section is not relevant to this Plan and needs to be removed. However, some of this information may be relevant to Section 3.2 Neighboring Land Use and/or 4.0 Vegetation/Habitat Types, and could be incorporated there.
- 4.6 Socio-Economic Conditions (p. 48-49): Having a section on Socio-Economic Conditions is not relevant to this Plan and needs to be removed.

## 7. Chapter 5 – Impacts

- This section is not adequate for wildlife. Research on development impacts on wildlife has been published. This literature should be referenced. See Theobald et al. (1997) and Odell et al. (2003) for an overview of development impacts on wildlife. Information of the types of impacts expected from specifc project components are readily available for APLIC, the American Wind Wildlife Institute, USFWS, BLM and other organizations. Potential impacts from all project components are not full elaborated. A number of widely recognized impacts are not mentioned.
- 5.0: Recommend defining what direct, indirect, temporary, permanent, and cumulative impacts are.
- 5.0.1 Water Quantity and 5.0.2 Water Quality (p. 49-51): this section provides a good deal of information; however, its relationship to wildlife is not explained. As written it needs to be removed. This is a good example of the plan's emphasis on the hydro components of the project and under emphasis on other project components.
- .0.1 Water Quantity and 5.0.2 Water Quality (p. 49-51): Impacts from erosion beyond water quality are not presented in the impacts chapter.
- 5.0 Impacts: Recommend following the same headings as 4.0 Site Resources, so that the site resources present match up with the impacts assessed. An impact assessment for a WMP would typically also calculate acreage of habitat lost or otherwise impacted, by vegetation type and condition. Need to refine vegetation types present in the project area so they are accurate and current, and match them between 4.0 and 5.0. Missing analysis of Game and Travel Corridors, Raptors, Migratory Birds, Other Terrestrial Wildlife, Special Status Species, and noxious weeds.
- 5.0.3 (p. 51): Vegetation Resources: Recommend using LANDFIRE or other agency recommended imagery for vegetation mapping, rather than NLCD.
- 5.0.3 (p. 51): There is no Table 17 and it is supposed to have "species recommended by (Applicant's) biological consultants for upland planting and around the Upper Reservoir". This list should incorporate requirements for USFS and BOR, which may have their own lists for that area. I don't think any native, obligate wetland species could survive the hydrological fluctuations at the Upper Reservoir, so this needs to be addressed further.
- 5.0.3 (p. 52): Table 16 needs to have more specific vegetation types calculated which should match with 4.0 Site Resources. The total disturbance acres presented in Table 16 is 1,486 acres, but it does not seem to include a comprehensive list of project elements. Is this calculation just for permanent impacts? This table needs to clearly list acreage for all permanent and temporary impacts and explicitly state all impacts with all project components.
- 5.0.5 Wildlife Resources. The Applicant asserts that project impacts to wildlife would be a function of habitat loss caused by the development of project facilities. This is not

supportable or consistent with analysis for similar types of projects. Agencies may provide some key insight in developing a list of direct impacts.

- 5.0.5 Wildlife Resources. Referenced Table 9 does not refer to SGCN. Writing off impacts to SGCN because habitat types in the project area are abundant throughout the lands immediately surrounding the project footprint areas is not a good approach for mitigation planning. No broader habitat assessment or other information is provided to substantiate this analysis approach. Early project documents identified the total project area as approximately 28 square miles. The project would likely have a substantial effect on wildlife occurring between Bennett Mountain and the South Fork of the Boise River, as well as wildlife moving between the Camas Prairie and the western arm of the Snake River Plain.
- 5.0 (pp. 61-68): Everything here is irrelevant to the Plan and should be removed.
- 5.1 Indirect (p. 68-69): The short paragraph on indirect impacts is incoherent and needs to be re-written. It seem pasted from a socio-economic analysis, possibly. No indirect impacts to wildlife are discussed.
- 5.2 Cumulative (p.69): These are not cumulative impacts, see outline requirements and revise. Cumulative effects should discuss proposed development projects in the vicinity of the proposed CCEGF project at scales relevant to types of impacts. (For example, if the Applicant, through their analysis, has identified impacts to big game migration resulting from the project, then the WMP should discuss the cumulative effects of other past, present and reasonably foreseeable projects that will also impact populations of big game migrating in the area.)

## 8. Chapter 6 – Management Actions to Avoid, Minimize, or Mitigate Adverse Impacts

- 6.0 (pp. 69-71): WMP needs to describe which impacts can be avoided and/or minimized, how, and for which species/species groups.
- 6.0.1 Avoided (p. 69): Impacts regarding "air and water quality" are not relevant here and needs to be updated to be relevant for wildlife.
- 6.0.2 Minimized (p. 69-70): Need specifics here, too vague and insufficient. Also, migrating wildlife is unlikely to move through solar arrays, even if it is not fenced; provide research citation which would support this claim. It would seem operationally undesirable to have large antlered ungulates such as elk encouraged to move among solar panel structures within the array, especially if equipment is mounted close to the ground, as described on page 12.
- 6.1.1 How Open Space Plan Correlates to WMP (p. 70): This statement does not seem to apply because the project is likely going to inhibit wildlife movement, and it seems unlikely unless there is a Conservation Easement in place. The project's potential impacts associated with reduced connectivity, increased fragmentation, habitat, avoidance, increased human disturbance and wildlife community changes are not discussed.
- 6.1.2 How Wildlife Might Benefit from Proposed Open Space (p. 70): Remove benefits and use by livestock, this is supposed to be for wildlife. Section does not address the question. Some mitigation is suggested, but this is better described and discussed elsewhere.
- 6.1.3 Funding Source for Management of Open Space (p. 70): Text does not answer this question, needs to be re-done.
- 6.1.4 Connectivity Opportunities with Abutting Properties, Trails, etc. (p.71): This is the first time substantive details regarding big game movement corridors through the project area are presented. The County assumes this information was provided by IDFG, but no

citations are provided. Some of this information should be presented in Chapter 4. The project would appear to present a nearly continuous barrier to big game movement extending from the south shore of Anderson Ranch Reservoir to Little Camas Reservoir. A few pinch points for wildlife would remain. This needs to be discussed and analyzed in this WMP.

## 9. Chapter 7 – Mitigation Activities and Implementation

- 7.0 (p. 71): First paragraph states "highly experienced plant, animal, and aquatic biologists, working in close cooperation with the IDFG are gathering the data and formulating the detailed mitigation policies that will be implemented." This does not seem accurate, as there is no demonstrable close relationship with IDFG as of yet, and these mitigation policies should be listed in this Plan, not referred to.
- 7.0 (p. 71): There is a lot of emphasis on protection of sage-grouse habitat, but not on other wildlife habitats (i.e. winter range, riparian/wetland). Rehabilitation measures need to mitigate for all wildlife species to the extent practicable. This section also does not address actions/measures for mitigating for migratory species and other special status species.
- 7.0 (p. 71): Need a list of specific, measureable mitigation measures and how they meet compliance with federal, state, and county requirements (including BOR, USFWS, USFS, IDFG, ACOE).
- 7.0 (p. 72): Need to check with the USFS and BOR and incorporate their approved seed lists, which will include species beneficial to erosion control and noxious weed prevention, and habitat-specific seeding requirements.
- 7.0 (p. 72): Need to incorporate federal, state, and county requirements for rehabilitation, seeding, and weed control; and none of these are included in this Plan. May be helpful to tier to a Noxious Weed Management Plan and Rehabilitation and Revegetation Plan.
- 7.0 (p. 73): Table 22 (Sage-grouse/Pollinator Species List) should not be used for rehabilitation purposes related to this project, as this list is intended to be used more for assessing sage-grouse habitat and includes a noxious weed species, which is illegal to plant according to Idaho State Code. There are no native perennial grass species listed here and seed mixes for rehabilitation have large proportions of locally appropriate native perennial grass species, since they are critical for erosion control and noxious weed prevention.
- 7.0.1.1 Bull Trout (p. 75): This would be better tiered to and addressed in a separate Fisheries Mitigation or Management Plan.
- 7.0.1.2 Sage Grouse (p. 76-77): CCE needs to verify these measures comply with current USFWS, BOR, USFS, IDFG, and APLIC requirements and guidance, including June 2015 APLIC Sage-Grouse Guidance (APLIC 2015).
- 7.0.1.3 Raptors (p. 77): Need to make sure to incorporate current USFWS, BOR, USFS, IDFG, and APLIC requirements and guidance, including Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC 2012) and Developing Power Pole Modification Agreements for Compensatory Eagle Mitigation for Wind Energy Projects, June 2014 (APLIC 2014).
- 7.0.1.4 Bats (p. 78): Rename "Other Terrestrial Wildlife" to match Table of Contents and outline requirements. Need to add specifics on mitigation requirements from USFS, BOR, IDFG, including citations. Aviation warning lights are not recognized as the cause of increased bat mortality at wind energy generation plants. The Applicant needs to provide references to substantiate this discussion. See Bennett and Hale 2014.

- 7.0.1.5 Wildlife Corridors (p. 78): Rename "Game and Travel Corridors" to match Table of Contents and outline requirements. Mitigation measure listed is not measureable. Need to add specifics on mitigation requirements from USFS, BOR, IDFG, including citations, and tangible measures.
- 7.0.2 Timeline and Cost (p. 78): This needs to be re-written to be specific and measureable using the best information available to the project proponents.
- 7.0.3 Management and Monitoring Plans (p. 78): Need more specifics, recommend multiple plans to tier to for compliance with federal, state, and county requirements, as listed above (Comments relevant to the entire plan).
- 7.0.4 Financing Plan with Funding Source (p. 78): This section is insufficient for describing financing and the funding source of the project, need specifics and enough information to demonstrate there is sufficient financing for the project.
- 7.0.5 Alt. Mitigation Strategy (p. 78): This doesn't make sense as written.
- 7.1 Wetlands (p. 78-79): The Plan states that "the shoreline of the Upper Reservoir (would be planted) with wetland/riparian plant species to develop key wildlife habitat". However, obligate wetland plant species as defined by ACOE (2015) are unlikely able to survive the hydrologic fluctuations occurring at the Upper Reservoir; thus there would not be "no net loss of habitat". Need to properly assess vegetation/wildlife impacts to the area where Upper Reservoir would be constructed, and also to Anderson Reservoir. The rest of this section is insufficient, as it tiers to 7.0.2 and 7.0.3, which were also insufficient.
- 7.2 Noxious Weeds (p. 79-80): This section does not sufficiently describe mitigation measures that would keep the project proponent in compliance with federal, state, and county noxious weed laws (including APHIS, BOR, USFS, and State of Idaho). Also, the "erosion control measures" mentioned will need to be documented in a SWPPP, which the Plan should tier to. Recommend a Noxious Weed Plan to keep in compliance with noxious weed regulations. The rest of this section is insufficient, as it tiers to 7.0.2 and 7.0.3, which were also insufficient.
- 7.3 Visual Impact (p. 80): This section has no relevance to the Plan and needs to be deleted.

## 10. Chapter 8 – Federal Permitting

- (p. 80): Use "Incidental Take Permit" instead of "Incidental Taking Permit (if warranted)".
- (p. 80): Use "CWA 401/404" instead of "Potential Clean Water Act permission".
- (p. 80): Need documentation of contact and requirements from USFWS, USFS, BLM, BOR, and IDFG.
- (p. 80): If BLM permits are required, the Plan needs to be updated to reflect this, including management and mitigation for wildlife, habitat, and BLM Sensitive plant and animal species.

## 11. Chapter 9 – Overall Actions and Methods to Meet Goals

- (p. 81): Sections 9.1, 9.2, and 9.3 are missing from text.

## 12. Chapter 10 – Adaptive Management Strategies

- (p. 81): No content in this section describes the Adaptive Management approach that would be employed for the project.
- (p. 81) The section titled "Alternative Means of Obtaining Power" is not relevant to wildlife, this section, or the WMP itself, so it needs to be deleted. It seems more appropriate for a "Purpose and Need" section of some other type of document.

  The US Geological Survey provides a concise definition of Adaptive Management: "*Adaptive Management is a structured approach to resource management. Through this iterative process, managers and scientists team together to improve resource management over time by learning from management outcomes. Adaptive Management entails a multi-step process:*
  *1. Considering various actions to meet management objectives;*
  *2. Predicting the outcomes of these management actions based on what is currently known;*
  *3. Implementing management actions;*
  *4. Monitoring to observe the results of those actions; and*
  *5. Using the results to update knowledge and adjust future management actions accordingly.*
  *By repeating this cycle and increasing to the body of knowledge about the system in question, managers are able to refine their prescriptions to more closely meet the original objectives."*
  http://www.usgs.gov/ecosystems/wildlife/adaptive_management.html
- (p. 81-82): The section titled "Continuing Studies" seems out of place here and the material may should be reworked and incorporated into Chapter 2 and Chapter 7.
- (p. 81) The WMP states here that "it is based on information available for open sources including many studies conducted by the federal, state, and local agencies that manage public land and resources at and around Anderson Ranch Dam and the South Fork of the Boise River, along with observations and studies being performed onsite." For wildlife, none of this is substantiated with references or even the presentation of specific wildlife data. Of 27 citations in the reference section of this wildlife management plan, only five address wildlife and four of these are related to sage-grouse.
- (p. 81): This section mentions "applicant is supplementing this analysis by conducting additional studies where necessary to adequately assess project impacts." Where is this list and how was it determined that studies were "necessary"?
- (p. 82): For the bullet "Vegetation and Wildlife", need to document when field verification was conducted, who did it and what were their qualifications, and what methods were used. The results of any field verification or other studies should be incorporated into 4.0 and 4.1. The studies and their methods should be incorporated in to Chapter 2.
- (p. 82): For the bullet "Cultural Resources", this has no relevance to the Plan and needs to be deleted.
- (p. 82): "Inclusive Mitigation Stewardship" belongs in 7.0, not here.
- (p. 81-82): There are no adaptive management strategies listed in this section. Need to also document a process for periodic WMP review and revision by an oversight committee that includes Elmore County and IDFG.

13. **Shepard Fish Lit Review Cat Creek**

- (p. 84-94): This section does not belong here and seems irrelevant, so it either needs to be deleted (if irrelevant) or added as an appendix.

## POWER'S RECOMMENDATIONS

The CCEGF is a complex and interesting project. It is includes a number of discrete project components each of which have unique potential impacts to wildlife species. Few projects would combine a hydro, solar and wind plant into one integrated effort. This is innovative and commendable; however, it presents the Applicant with a number of unavoidable challenges to address issues concerning wildlife resources at the project area.

This WMP generally follows the Elmore County WMP outline with some omissions, but the content is insufficiently developed in most areas. More information is needed; more agency coordination is needed; a greater understanding of direct and indirect project impacts is needed. As presented the WMP is inadequate to address impacts to wildlife that may result for the CCEGF.

## REFERENCES

Army Corps of Engineers (ACOE). 2015. NWPL – National Wetland Plant List. http://rsgisias.crrel.usace.army.mil/NWPL. Accessed January 27, 2016.

Avian Power Line Interaction Committee (APLIC). 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012.

_____. 2014. Developing Power Pole Modification Agreements for Compensatory Eagle Mitigation for Wind Energy Projects. http://www.aplic.org/uploads/files/15523/APLIC%20PPM%20FINAL_June%202014.pdf Accessed January 27, 2016.

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Attachment #3
2-10-16

# Elmore County Land Use and Building Department

520 East 2nd South Street
Mountain Home, Id. 83647
Phone: (208) 587-2142 ext. 254
Fax: (208) 587-2120
www.elmorecounty.org

**Alan Christy**
*Director*

**Tell Riley**
*Building Official*

**Beth Bresnahan**
*Planner I*

**Kacey Ramsauer**
*Administrative Assistant*

October 21, 2015

Cat Creek Energy
398 S. 9th Street, Ste. 240
P.O. Box 915
Boise, ID 83706
(sent via email)

Re: Deficiency List.

Cat Creek Energy:

Thank you for taking the time to meet with myself and other Elmore County staff on October 6, 2015 regarding the status of five conditional use permit applications (the "Applications") that have been submitted to the Elmore County Land Use and Building Department (the "Department"). As was discussed during the meeting the purpose of this letter is to provide Cat Creek Energy, LLC a list of outstanding items needed to complete the applications. The Applications are comprised of the following:

- Conditional use permit application for Transmission Lines. ("CUP-2015-03")
- Conditional use permit application for Pump Storage Hydro ("CUP-2015-04")
- Conditional use permit application for PV Solar ("CUP-2015-05")
- Conditional use permit application for Wind Power ("CUP-2015-06")
- Conditional use permit application for a Substation ("CUP-2015-07")

As a reminder each use requires a separate conditional use permit under the Elmore County Zoning and Development Ordinance (the "Ordinance"). As stated in the Applications each of the uses are dependent and function with each other. Therefore, some of the outstanding issues may only need to be submitted once. If you do not agree with any of the outstanding determinations you may appeal this decision to the Elmore County Planning and Zoning Commission pursuant to Ordinance section 6-3-1. The appeal must be made within ten days of the date on this letter. An appeal application is attached to this letter as Attachment #1.

For this deficiency review the County has received the Applications submitted on February 26, 2015 and supplemental information submitted on July 2, 2015 and July 31, 2015 (the "Supplemental"). Many of the deficiencies have been addressed with the Supplemental. However, based upon the review of the Department and Elmore County consultants there are still outstanding deficiencies. The following deficiencies apply to all five of the conditional use permits.

- Legal descriptions and Parcel #'s have been provided. Please provide a breakdown of which parcel numbers belong to each project. In addition, it would help the Department if a metes and bounds description for each project can be provided.

- The Critical Issues Analysis (the "CIA") is not sufficient for the environmental studies required by Elmore County. The Department has repeatedly required an Environmental Impact Statement ("EIS") be approved and completed prior to deeming an application complete. An EIS can be required by the County. The requirement for an EIS is found on the CUP applications, the Ordinance and Idaho Code. The County is willing to consider an

environmental study completed in the form of the attached outline that is attached as Attachment #2. If you are willing to complete a study in this form please contact the Department to discuss. Please note that at a minimum, an environmental study with this information shall be submitted to the Department and be prepared by a qualified wildlife biologist as defined by the Ordinance. The County has utilized the plan format in Attachment #2 on other land use and conditional use permit applications.

- Exhibit E of the Supplemental is an attachment that was previously given to you by the Department. The Department is confused to why this was submitted back to the County to show your relationship with Idaho Fish and Game. Please provide additional clarification for Exhibit E.

- As stated in previous letters please provide documentation identifying how James T. Carkulis has been authorized as an agent to sign the lease agreements and act on behalf of Cat Creek Energy, LLC. According to the Idaho Secretary of State website, John L. Faulkner is the only listed member of the corporation.

- As requested earlier please clarify the timeframes necessary for completion. The timeframes on the Applications do not match. The information provided in the Supplemental is ambiguous and does not provide the Department a clear answer to the timing.

- Exhibit F in the Supplemental does not accurately portray or describe the Area of Critical Concern Zoning designation in Elmore County. Please accurately show the Area of Critical Concern on the Master Site Plan. Please provide documentation on how the Applications comply with Ordinance section 6-8-26.

- The General Site Plan submitted as Exhibit G is not legible and does not meet the requirements of Chapter 18 of the Ordinance for a Master Site Plan.

- Please provide 5' contours on the Master Site Plan as required by Ordinance section 6-18-5A.3

- Please provide existing and proposed roads, with descriptions on the Master Site Plan as required by Ordinance section 6-18-4C.

- Provide location of structures as required by Ordinance section 6-18-4A. Specifically locations of wind tower and solar panel structures. The generalized area of thousands of acres is vague and does not give the County enough information to determine the impacts.

- Provide utility locations as required by Ordinance section 6-18-6F.

Additional questions have been raised by the applicants. The questions by the applicants and response from the Department is listed below:

- County approvals needed for geo-bores on site over the proposed reservoir?

  Response: With the information provided by the applicants on October 7, 2015 there are no county approvals needed to conduct the geo-bores. Please note burn permits are likely needed from the Idaho Department of Lands. If there is any change in use described by the applicants please contact the Department.

The Department has the following concerns with the timing and scope of the Applications. It is anticipated these items will likely be discussed during a public hearing. I recommend that additional information be provided on the following concerns.

- Approving the Applications in the proposed scope may be detrimental to existing surrounding property owners. It is the Department's understanding that approvals from federal and state agencies can take time and may be heavily protested. CUP-2015-03 and CUP-2015-04 appear to rely heavily on surrounding properties and will require approvals on neighboring land. The Department is concerned a county approval would be premature without surrounding land approvals.

- No input from downstream water users has been provided with the Applications. The Department recommends meeting and getting approvals from Idaho Department of Water Resources before proceeding with the Applications.

- Conditional Use Permits are required to comply with State and Federal regulations pursuant to Ordinance section 6-27-7. The Applications appear to be premature and are not currently in compliance with State and Federal regulations. Additional information should be provided to show how the Applications are currently in compliance with State and Federal regulations.

Please feel free to contact the Department if you have any questions regarding this letter.

Sincerely,

**Alan Christy**
Director
Elmore County Land Use & Building Department
520 East 2nd South, Mountain Home, ID 83647
Ph: (208) 587-2142 ex. 269 \ Fax: (208) 587-2120
achristy@elmorecounty.org \ www.elmorecounty.org

Attachments
1. Appeal application
2. Wildlife Mitigation Plan Outline

**ELMORE COUNTY LAND USE & BUILDING DEPARTMENT**
**520 E 2nd South – Mountain Home, ID 83647 – (208) 587-2142**
**www.elmorecounty.org**

# Appeal of Elmore County Land Use & Building Department Director Decision
**$800**

Please attach additional sheets of paper if necessary. **Appeal shall comply with Elmore County Zoning and Development Ordinance Section 6-3-1. Do not fax!** Please complete in **INK.**

Name:_____

Address:_____

Email / Phone:_____

Subject of Appeal & Case #:_____

_____

_____

_____

Basis for objection:_____

_____

_____

_____

_____

Signature:_____

Printed Name:_____

**For Administrative Use Only**

File Number:_____

Fee: $800 Date Paid:_____

Receipt Number:_____

Date Accepted:_____ By:_____

# WILDLIFE MITIGATION PLAN

In addition to any information that may be required by law Elmore County can request a written Wildlife Mitigation Plan. (WMP). The WMP shall be prepared by a Qualified Wildlife Biologist as defined in the Elmore County Zoning and Development Ordinance. The County also has the right to require additional environmental studies based on the scope of the project. The following outline and plan requirements shall be followed and incorporated into the WMP.

## Elmore County Wildlife Assessment and Mitigation Plan

### Chapter 1 Introduction

1.0 General Project Description and Overview
1.1 Mitigation Goals and Objectives
1.2 Elmore County Regulatory Framework and Requirements
1.3 Qualifications of WMP authors

### Chapter 2 Methods

2.0 Narrative of Methods Used

### Chapter 3 General Site Description

3.0 Geographical Setting
3.1 Historic Land Use
3.2 Neighboring Land Use

### Chapter 4 Site Resources

4.0 Vegetation/Habitat Types (as referenced by the Elmore County Soil Survey and USDA, Soil Conservation Service)

- 4.0.1 Wetlands as defined by U.S. Corps of Engineers
- 4.0.2 All the others (native grassland, introduced grassland, riparian, bitterbrush/sage, etc.)
- 4.0.3 Noxious Weeds

4.1 Wildlife

- 4.1.1 Game and Travel Corridors
- 4.1.2 Raptors
- 4.1.3 Migratory Birds
- 4.1.4 Other Terrestrial Wildlife

4.1.5 Aquatic Wildlife
4.1.6 Threatened, Endangered, and Candidate Species (plant and animal)
4.1.7 Special Status Species

**Chapter 5 Impacts**

5.0 Direct
5.1 Indirect
5.2 Cumulative Effects

**Chapter 6 Activities to Avoid and Minimize Project Impacts and Open Space**

6.0 Activities Narrative

6.0.1 Avoided
6.0.2 Minimized

6.1 Open Space Management

6.1.1 How Open Space Plan Correlates to WMP
6.1.2 How Wildlife Might Benefit From Proposed Open Space
6.1.3 Funding Source for Management of Open Space
6.1.4 Connectivity Opportunities with Abutting Property, Trails, Etc.

**Chapter 7 Mitigation Activities and Implementation (written format)**

7.0 Wildlife

7.0.1 Actions and Methods to Meet Goals
7.0.2 Timeline & Cost
7.0.3 Management and Monitoring Plans (duties and responsibilities)
7.0.4 Financing Plan with Funding Source
7.0.5 Alt. Mitigation Strategy

7.1 Wetlands

7.1.1 Actions and Methods to Meet Goals
7.1.2 Timeline & Cost
7.1.3 Management and Monitoring Plans (duties and responsibilities)
7.1.4 Financing Plan with Funding Source
7.1.5 Alt. Mitigation Strategy

7.2 Noxious Weeds

7.2.1 Actions and Methods to Meet Goals
7.2.2 Timeline & Cost
7.2.3 Management and Monitoring Plans (duties and responsibilities)
7.2.4 Financing Plan with Funding Source
7.2.5 Alt. Mitigation Strategy

**Chapter 8 Federal Permitting**

8.0 Summary of Federal applications or permits that may be required.

**Chapter 9 Overall Actions and Methods to Meet Goals**

9.0 Timeline & Cost
9.1 Management and Monitoring Plans (duties and responsibilities)
9.2 Financing Plan with Funding Source
9.3 Alt. Mitigation Strategy

**Chapter 10 Adaptive Management Strategies**

**References**
**Tables**
**Figures**
**Appendix**

Draft

# ELMORE COUNTY
# PLANNING AND ZONING COMMISSION

## MINUTES
## Wednesday, February 03, 2016 at 7:00 pm

Chairperson Patti Osborn called the meeting to order. Members of the Elmore County Planning and Zoning Commission present were Vice Chairman K.C. Duerig, Jeff Blanksma, Sue Fish, and Dave Holland. Also present were Attorney of Record Philip Miller, Director Alan Christy and staff member Beth Bresnahan.

## PLEDGE OF ALLEGIANCE

## PUBLIC MEETING

Ordinance Work Session

The commission discussed chapters 13, 22 and 19.

## MINUTES

01-20-2016
Duerig moved to approve.
Blanksma seconded.
Motion carried unanimously with commission members Fish and Oppedyk abstaining as they were absent for this meeting.

## INFORMATION ITEMS

Upcoming P&Z Schedule

Christy stated that there will be a continued public hearing on February 17, 2016.

## MEETING ADJOURNED at 7:18 pm.

Draft

_____

Patti Osborn, Chairperson Date:

Attest: _____

Alan Christy, Director Date: