

1 Biological Opinion (“BiOp”) for the Ocotillo Wind Energy Facility Project (“OWEF”
2 or “Project”), a utility-scale wind power project in the Sonoran Desert in Imperial
3 County, California. The complaint alleges Defendants violated the Endangered Species
4 Act (“ESA”), 16 U.S.C. § 1531 *et seq.* and seeks relief under the Administrative
5 Procedures Act (“APA”). Specifically, they challenge that the Biological Opinion’s
6 conclusion that the Project is not likely to jeopardize the continued existence of
7 Peninsular Bighorn Sheep (“PBS”) is inadequate and violates the ESA.

8 **Procedural Background**

9 On September 11, 2012, Plaintiffs filed a complaint for declaratory and
10 injunctive relief against Defendants Daniel M. Ashe, Director of U.S. Fish and Wildlife
11 Service; Ren Lohofener, Regional Director, Pacific Southwest Region for U.S. Fish
12 and Wildlife Service; Jim A. Bartel, Field Supervisor, Carlsbad Fish and Wildlife
13 Office, U.S. Fish and Wildlife Service; U.S. Fish and Wildlife Service, a federal
14 agency; and United States Department of the Interior, a federal agency (collectively
15 referred to as “Federal Defendants”). (Dkt. No. 1.) On October 4, 2012, the case was
16 transferred to the undersigned judge. (Dkt. No. 5.) On October 22, 2012, the Court
17 granted the joint motion for permissive intervention of Defendant-Intervenor Ocotillo
18 Express, LLC (“Ocotillo”), the Project proponent. (Dkt. No. 10.)

19 On March 29, 2013 and June 21, 2013, the administrative record was lodged
20 with the Court. (Dkt. Nos. 17, 20.) On July 17, 2013, Plaintiffs filed a motion for
21 summary judgment. (Dkt. No. 21.) On August 16, 2013, Federal Defendants and
22 Ocotillo filed their cross motions for summary judgment and oppositions to Plaintiffs’
23 motion for summary judgment. (Dkt. Nos. 24, 27.) On September 6, 2013, Plaintiffs
24 filed their oppositions and their replies to their motion for summary judgment. (Dkt.
25 Nos. 29, 30.) Federal Defendants and Ocotillo filed their replies on September 27,
26 2013. (Dkt. Nos. 31, 32.)

27 **Factual Background**

28 On December 19, 1980, the Department of the Interior approved a Record of

1 Decision (“ROD”) for the California Desert Conservation Area (“CDCA”) which
2 established a “long-range, comprehensive plan for the management, use, development,
3 and protection of over 12 million acres of public land” On October 9, 2009,
4 Ocotillo applied to the Bureau of Land Management (“BLM”) and to the County of
5 Imperial to construct and operate a wind energy facility on public land within the
6 CDCA. (SAR 8036-37.) The original number of wind turbines proposed of 193 was
7 reduced to 155 in order to minimize environmental impacts. (SAR 8037.) In February
8 2012, Interior created a Proposed Plan Amendment & Final Environmental Impact
9 Statement/Final Environmental Impact Report (“Final EIS” or “FEIS/FEIR”) for the
10 Ocotillo Wind Energy Facility analyzing the impact of a 12,484 acre right-of-way
11 (“ROW”) over public land in favor of Ocotillo to build 155 wind turbine generators.
12 (SAR 7994.) After extensive environmental analysis, the Project was further reduced
13 to 112 wind turbines on 10,151 acres of public lands. (Dkt. No. 21-3, Volcker Decl.,
14 Ex. 1, Record of Decision.) On May 11, 2012, the Department of the Interior approved
15 a Record of Decision (“ROD”) for the Ocotillo Wind Energy Facility and Amendment
16 to the California Desert Conservation Area Plan which approves a 10,151 acre
17 right-of-way over public land in favor of Ocotillo to build 112 wind turbine generators.
18 (Id.)

19 The PBS, at issue, are a distinct population segment of the desert bighorn sheep
20 (*Ovis canadensis nelsoni*) that live in the Peninsular ranges of southern California and
21 Baja California, Mexico. (AR 1688.) The sheep numbered approximately 971
22 individuals in 1972 and 1,171 individuals in 1974. (AR 5781.) By 1996, the Service
23 estimated sheep populations at approximately 276 individuals. (AR 1689.) The
24 reasons for the decline in population numbers were due to a combination of threats of
25 the effects of disease and parasitism; low lamb recruitment and habitat loss,
26 degradation, and fragmentation; and predation. (SAR 4324.) The PBS was federally
27 listed as an endangered species on March 18, 1998. (AR 1688; 63 Fed. Reg. 13134.)
28 On October 25, 2000, in order to address these threats, and pursuant to its authority

1 under the ESA, the Fish and Wildlife Service (“FWS”) approved a recovery plan for
2 the sheep. (AR 5733.) The recovery strategy included three delisting criteria: 1) at
3 least 25 ewes must be present in each of the nine regions . . . during each of 12
4 consecutive years; 2) the rangewide population must average 750 individuals (adults
5 and yearlings) with a stable or increasing population trend over 12 consecutive years;
6 and 3) regulatory mechanisms and land management commitment must be established
7 to provide long-term protection and connectivity among all portions of habitat must be
8 established so that PBS are able to move freely throughout the Peninsular Ranges. (AR
9 1711.)

10 In 2010, the PBS range-wide population increased to an estimated 955 sheep.
11 (AR 1689.) In the BiOp, the FWS noted that the sheep population in Recovery Region
12 9 (Carrizo Canyon/Tierra Blanca/Coyote Mountain) numbered about 232 individuals,
13 including “presumably far more than 25 ewes if one assumes a relatively balanced sex
14 ratio” and is the largest of the nine populations identified in the recovery plan. (AR
15 1711.) As of April 2011, eight of the nine recovery regions supported at least 25 ewes
16 as required by Recovery Criterion 1. (AR 6473-75.)

17 In order to minimize adverse effects to the PBS, BLM and Ocotillo redesigned
18 the Project to avoid placing any facilities within and directly adjacent to steep, escape-
19 route habitat” (AR 266.) Moreover, mandatory conservation measures were created
20 to protect and conserve the sheep. (AR 267 (15 miles per hour speed limit)); (AR 268
21 (weed management plan to control nonnative weeds, night lighting minimization;
22 education program; a Designated Biologist to ensure compliance; biological monitors
23 during construction and operation activities)); (AR 269 (no construction during
24 lambing season, from Jan. 1 through June 30, within .75 miles of identified lambing
25 sites; development of sheep monitoring/reporting plan)); (AR 1684 (\$200,000.00
26 contribution towards a sheep study/research program)); (AR 1709-10 (restoration of
27 Carrizo Marsh to restore important water source that is currently not suitable for sheep
28 use)).00

1 **A. Standard of Review**

2 The Administrative Procedures Act (“APA”) governs judicial review of agency
3 actions under the Endangered Species Act. See 5 U.S.C. § 706; see also Bennett v.
4 Spear, 520 U.S. 154 (1997). An agency’s decision must be upheld under judicial
5 review unless the court finds that the decision or action is “arbitrary, capricious, an
6 abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).
7 Actions that are approved “without observance of procedure required by law” are also
8 subject to be set aside upon judicial review. 5 U.S.C. § 706(2)(D).

9 “An agency decision is arbitrary and capricious if, among other things, it ‘offered
10 an explanation that runs counter to the evidence before the agency or is so implausible
11 that it could not be ascribed to a difference in view or the product of agency
12 expertise.’” Native Ecosystems Council v. Weldon, 697 F.3d 1043, 1053 (9th Cir.
13 2012) (citation omitted). The standard is “highly deferential, presuming the agency
14 action to be valid and affirming the agency action if a reasonable basis exists for its
15 decision.” Nw. Ecosystem Alliance v. U.S. Fish and Wildlife Serv., 475 F.3d 1136,
16 1140 (9th Cir. 2007) (citation omitted). Agency action is valid if the agency
17 “considered the relevant factors and articulated a rational connection between the facts
18 found and the choices made.” Arrington v. Daniels, 516 F.3d 1106, 1112 (9th Cir.
19 2008) (citations omitted); see also Nat’l Wildlife Fed v. U.S. Army, 384 F.3d 1163,
20 1170 (9th Cir. 2004) (an agency must present a “rational connection between the facts
21 found and the conclusions made.”). The burden is on Plaintiff to show any decision
22 or action was arbitrary and capricious. See Kleppe v. Sierra Club, 427 U.S. 390, 412
23 (1976).

24 A court will not vacate an agency’s decision unless it

25 has relied on factors which Congress had not intended it to consider,
26 entirely failed to consider an important aspect of the problem, offered
27 an explanation for its decision that runs counter to the evidence before
the agency, or is so implausible that it could not be ascribed to a
difference in view or the product of agency expertise.

28 Nat’l Ass. of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 658 (2007)

1 (citation omitted). “We will, however, ‘uphold a decision of less than ideal clarity if
2 the agency’s path may reasonably be discerned.’” Id. (quoting Bowman Transp., Inc.
3 v. Arkansas–Best Freight Sys., Inc., 419 U.S. 281, 286 (1974)).

4 **B. Endangered Species Act (“ESA”)**

5 Plaintiffs present four arguments in support of their motion for summary
6 judgment. First, the Biological Opinion (“BiOp”) is arbitrary and capricious because
7 it improperly downplays the significance of lower elevation, valley-floor habitat for
8 PBS. Second, the BiOP is arbitrary and capricious because it ignores evidence that
9 bighorn sheep are poor dispersers. Third, the BiOP is arbitrary and capricious because
10 it improperly downplays the potential for the project to cause stress and associated
11 adverse effects. Lastly, the BiOP fails to use the best available scientific evidence.

12 The ESA was enacted to “provide a means whereby the ecosystems upon which
13 endangered species and threatened species depend may be conserved,” and “to provide
14 a program for the conservation” of such species. 16 U.S.C. § 1531(b). Section 7 of the
15 ESA “prescribes steps that federal agencies must take to ensure that their actions do not
16 jeopardize endangered wildlife and flora.” Nat’l Ass’n of Home Builders, 551 U.S. at
17 652; see also 16 U.S.C. § 1536(a)(2).

18 Section 7(a)(2) of the ESA requires federal agencies to “insure that any action
19 authorized, funded, or carried out by such agency . . . is not likely to jeopardize the
20 continued existence of any endangered or threatened species or result in the destruction
21 or adverse modification of habit of such species.” 16 U.S.C. § 1536(a)(2); 50 C.F.R.
22 § 402.14(h)(3). The consulting agency must “review all relevant information”,
23 “evaluate the current status of the listed species or critical habitat”, “evaluate the
24 effects of the action and cumulative effects on the listed species or critical habitat”, and
25 issue a Biological Opinion assessing whether the proposed action is “likely to
26 jeopardize the continued existence of a listed species or result in the destruction or
27 adverse modification of critical habitat.” 50 C.F.R. § 402.14(g)(1)-(4); (h)(3). The
28 BiOp must include “a summary of the information on which the opinion is based” and

1 “a detailed discussion of the effects of the action on listed species or critical habitat.”
2 Id. § 402.14(h)(1), (2). Both the action agency and the consulting agency must use the
3 “best scientific and commercial data available” during the consultation process and in
4 drafting the BiOp. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d), (g)(8).

5 After an agency has issued a no jeopardy biological opinion, the FWS must
6 prepare an incidental take statement (“ITS”) if the action will incidentally take
7 members of a listed species which will not violate the ESA. 16 U.S.C. § 1536(b)(4);
8 50 C.F.R. 402.14(g)(7). “[A]n ITS is not part of the jeopardy analysis, but instead
9 provides an exemption from [take] liability under Section 9 of the ESA.” Center for
10 Biological Diversity v. U.S. Bureau of Land Management, 746 F. Supp. 2d 1055, 1120
11 (N.D. Cal. 2009), vacated in part on other grounds, 2011 WL 337364 (N.D. Cal. Jan.
12 29, 2011).

13 On May 20, 2011, the BLM initiated consultation under Section 7 and submitted
14 a biological assessment to the FWS outlining the potential effects of its proposed right-
15 of-way grant authorizing the construction and operation of the Project, on the PBS and
16 its critical habitat. (AR 156; 249 (revised on August 1, 2011).)

17 On April 26, 2012, the FWS issued its biological opinion (“BiOP”)¹ on the
18 federally endangered Peninsular bighorn sheep² in accordance with section 7 of the
19 Endangered Species Act of 1973, 16 U.S.C. § 1531 *et seq.* (AR 1673-1737.) It
20 concluded that “the proposed action is not likely to jeopardize the continued existence
21 of either species”.³ (AR 1718.) While the BiOp found that some of the effects of the

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23 ¹The BiOp dated April 26, 2012 predates the BLM’s May 11, 2012 ROW grant.
24 Therefore, the BiOp analyzed the effects of 155 turbines situated on 12,435 acres. (AR
1674-75.)

25 ²The BiOp also included a biological opinion on the least Bell’s vireo which is
not subject to the litigation in this case.

26 ³ The FWS’s no jeopardy conclusion was based on the following reasons:

- 27 1. While the proposed project is adjacent to habitat with high value
28 resources and heavy sheep use on three sides, sheep sign and sightings
indicate that sheep use the project site irregularly.
2. Sheep continue to use habitat on and around the action area despite

1 proposed Project may adversely affect the sheep, (AR 1697-1709), the FWS also found
 2 the Project's expected impact, assuming the worst case scenario of permanently losing
 3 5,156 acres of suitable habitat in and around the Project site, was not likely to
 4 negatively affect the PBS's continued recovery. (AR 1710-12.) The FWS issued an
 5 Incidental Take Statement and concluded that up to five adult ewes and their lambs
 6 could be incidentally taken as a result of the Project. (AR 1719, 1720-21.) The loss
 7 of "up to five ewes are not expected to lead to a substantial decline in population
 8 numbers or alter the continued southward range expansion." (AR 1711.)

9 **C. Significance of Lower Elevation, Valley-Floor Habitat and its Importance**
 10 **for Foraging**

11 Plaintiffs argue that the Project site's lower elevation, valley-floor areas,
 12 including hundreds of washes and alluvial fans, provide habitat uniquely valuable for

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 14 relatively high levels of human and vehicular use of the area (e.g., Border
 15 Patrol, OHVs, and I-8). Because this population of bighorn sheep likely
 16 has become accustomed to some degree to human presence and noise in
 17 their environment, we expect that neither human use nor the prevalence
 18 of noise is expected to increase substantially during O&M over baseline
 19 levels.

- 20 3. The effects of construction, O&M, and decommissioning would be
 21 minimized by implementation of conservation measures described above
 22 in the Description of the Proposed Action section.
- 23 4. The relatively pristine rugged mountain habitat on three sides of the
 24 project, which includes critical habitat, will continue to provide necessary
 25 resources for sheep.
- 26 5. The range expansion of Peninsular bighorn sheep into an area that
 27 reportedly was no longer occupied by 1996 demonstrates the ability of
 28 this population to regain former movement patterns and recolonize their
 historic range.
6. The potential functional loss of up to 5,156 ac of habitat, if avoided by
 sheep, represents a small fraction of comparable habitat otherwise
 available to the population and this potential loss would not disrupt
 population connectivity or cause other significant impacts.
7. The potential for reproductive loss due to avoidance of lambing grounds
 in the action area would not be significantly impact the survival or
 recovery of the DPS as a whole.
8. The proposed project is not likely to impede connectivity between the I-8
 Island and suitable habitat to the south, as primary movement corridors
 are outside the action area.
9. The proposed removal of tamarisk from Carrizo Marsh would represent
 a significant contribution in support of the range-wide recovery of the
 species.

(AR 1718.)

1 Bighorn sheep and the BiOp ignored the importance of this habitat and its importance
2 for foraging. Plaintiffs assert that the FWS failed to reasonably explain its conclusion
3 that the potential loss of 3,692 acres of suitable forage habitat would not be significant
4 to the sheep. Federal Defendants and Ocotillo disagree because Plaintiffs' argument
5 is based on the assumption that all low-elevation, valley-floor habitat is *per se* suitable
6 for sheep habitat.

7 A "suitable habitat"⁴ consists only of those "areas within 800 m (one-half mile)
8 of slopes equal to or greater than 20 percent." (AR 288.) This was determined on a
9 number of studies that showed that most sheep sightings were associated with slopes
10 20% or greater, and the sheep were observed within 800 meters of mountainous habitat
11 feeding in or moving across moist, low-elevation washes and alluvial fans, and that
12 sheep do not venture far from water sources. (AR 5906-09.) These areas contain the
13 preferred habitat features of escape terrain, water, and low-elevation/alluvial-fan
14 habitat. (AR 5906-09; SAR 4717-18.) Based on this standard, the FWS mapped all
15 suitable habitat throughout the sheep's range which totaled 844,897 acres of habitat.
16 (SAR 4717-18; see AR 5762 (map), 5814 (map), 5822 (map).) In April 2009, the FWS
17 analyzed the 844,897 acres of suitable habitat and designated a portion, 376,938 acres,
18 as "critical habitat."⁵ (SAR 7734.)

19 The FWS concluded that 30% of the Project site's valley floor habitat or 3,692
20 acres within the proposed 12,458⁶ acre right of way grant, is suitable sheep habitat.
21 (AR 1674; 1699.) The 3,692 acres of suitable habitat are not located within critical
22 habitat and are .004% of the 844,897 acres of mapped suitable habitat across the
23

24 ⁴"Essential Habitat" as defined by the FWS within the Project Area is equated
25 to "Suitable Habitat" for PBS. (AR 288.)

26 ⁵On February 1, 2001, the FWS designated critical habitat. (SAR 4712.)
27 However, on April 14, 2009, the FWS revised the critical habitat designation. (SAR
28 7696.) In that designation, the FWS identified 376,938 acres of critical habitat.

⁶While the BiOp states that the proposed ROW grant was 12,458 acres, the BLM
conducted a Final EIS based on the proposed ROW of 12,484 acres. (Compare AR
1674 with SAR 7994.)

1 sheep's range.

2 Defendants do not dispute that lower elevation and valley floor habitat is
3 important for the PBS and that habitat loss can impact a sheep's ability to forage,
4 reproduce, find water, avoid predators and move among important resource areas.
5 (SAR 6040.) Plaintiffs also do not dispute how the FWS defined "suitable habitat" to
6 consist only of those "areas within 800 m (one-half mile) of slopes equal to or greater
7 than 20 percent." (AR 288.)

8 Under the ESA, the FWS is not to prevent the "take" of all PBS but to assess
9 whether the Project is likely to jeopardize the continued existence of the PBS. See 16
10 U.S.C. § 1536(a)(2). According to the administrative record, 30% of the Project site's
11 valley floor habit is suitable sheep habitat. None of this area is located in designated
12 critical habitat and the suitable habitat in and around the Project site "represents a small
13 fraction of comparable habitat otherwise available to the population." (AR 1701.)
14 Moreover, the survey data revealed little sheep occurrence and use within the action
15 area. (AR 1701). Therefore, the FWS concluded that the potential loss of 30% of
16 suitable habitat would be minimal especially because the suitable habitat, not critical
17 habitat, around the Project area is only .004% of the 844,897 acres of mapped suitable
18 habitat across the sheep's range. While the loss of 3,692 acres, facially appears great,
19 in looking at all the factors, this loss of habitat would not be a significant loss to the
20 species as a whole. (AR 1701, 1718.) Therefore, the FWS's conclusion that the
21 potential loss of 3,692 acres of suitable habitat is not likely to jeopardize the continued
22 existence of the PBS is rationally based on the facts and data from the administrative
23 record.

24 **D. Importance of Valley Floor Habitat for PBS Connectivity**

25 Plaintiffs argue that the BiOp, in concluding that the Project "would not disrupt
26 population connectivity," downplays the significance of lower elevation, valley floor
27 habitat within the Project site for inter-population movement of PBS. (AR 1701;
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1 1718.) Federal Defendants and Ocotillo do not dispute that population connectivity⁷
2 is important to PBS but argue that the FWS thoroughly analyzed the connectivity value
3 of the habitat.

4 First, Plaintiffs argue that while the BiOp addresses sheep movement from south
5 of the Project to areas further south of the Project, it does not examine the permanent
6 impediment created by the Project between the populations south of the Project and
7 those north of the Project. As a result, they contend that the historic link between the
8 PBS populations in the U.S. and those in Mexico in Baja California are at risk. Federal
9 Defendants and Ocotillo argue that the BiOp noted that connectivity corridors from
10 suitable habitat in the west to suitable habitat in the north would be unaffected by the
11 Project because the main PBS route through Sweeney Pass is 6 miles northwest of the
12 project and outside the line of site of the Project. (AR 1708.) Further, they argue that
13 the connectivity corridors between north and south are already restricted by the I-8, the
14 town of Ocotillo, and off-highway vehicle use. (AR1708.) Therefore, because of these
15 impediments, the north-south connectivity corridors in the vicinity of the Project are
16 likely limited to the areas southwest of the Project site given the presence of suitable
17 habitat and lack of connectivity barriers. (AR 1708.) The FWS explained that the
18 Project would not affect the north-south connectivity corridors located within critical
19 habitat and that the Project would not further restrict, besides the already existing
20 barriers, connectivity in the area. (AR 1708.) The FWS determined that while the
21 Project may adversely affect sheep dispersal within the action area, it would not impede
22 population connectivity for the sheep as a whole at both the regional and range-wide
23 levels. (AR 1709.)

24 Moreover, even if the Project constrained connectivity within the action area, the
25 FWS analyzed the worst case scenario. The FWS noted that numerous connectivity
26 corridors exist outside the action area in both suitable and critical habitat. It explained

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28 ⁷When the habitat is fragmented, it can lead to isolation of sub-populations and
population declines. (AR 6433; 5816.)

1 that due to connectivity constraints already in the area, the primary north-south
2 connectivity corridors for the sheep population as a whole were mostly likely those
3 located within the suitable and critical habitat outside the action area; and the Project
4 would not affect these corridors. (AR 1696, 1708.) The FWS considered the worst
5 case scenario on PBS movement in the low-elevation migration corridors and habitat
6 and examined the impediment created by the Project between the populations south of
7 the Project and those north of the Project.

8 Second, Plaintiffs argue that the BiOp contradicts its conclusion that the Project
9 “would not disrupt population connectivity” by admitting that the “relative value of the
10 project site as a travel corridor is uncertain. . . .”⁸ (AR 1701, 1708.) Specifically, they
11 allege that the Jacumba mountains represent the only area of habitat connecting the
12 distinct population segment listed in the U.S. with other bighorn sheep populations and
13 the Project will completely cut off any connectivity between the population segments
14 if the sheep abandon the area completely. Ocotillo disagrees with Plaintiffs’
15 assumption that the PBS will entirely abandon the Jacumba Mountains. Moreover, the
16 BiOp recognizes that the I-8 already forms a barrier between the Carrizo Canyon
17 subpopulation and the mountains of Mexico with the most dispersal through the I-8
18 island and even that pathway is impaired by the lack of undercrossing points for the
19 eastbound lands that run south of the Island. (AR 1708.) Therefore, the Project would
20 not impede PBS movement to the south. (AR 282 (map).)

21 Third, Plaintiffs contend that the BiOp supports its claim that the PBS did not
22 use the Project site for inter-population movement based on lack of sign of sheep
23 tracks. However, lack of sign does not indicate that the area is not used as an important
24 travel corridor. (AR 421 (FWS response to comments, “The Department disagrees with
25 the statement that the site is unoccupied. Based on the applicant’s surveys PBS have
26 not been documented within the project site footprint. However, absence of sheep sign

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28 ⁸This statement concerning the uncertainty of the Project was due to the OHV
routes in the area, the I-8 barriers and the town of Ocotillo, and lack of telemetry data
or sign demonstrating inter-mountain movement. (AR 1708.)

1 does not equate to the site being unoccupied). The fact that the BiOp heavily relied on
2 lack of sign to assess PBS presence failed to give weight to the data confirming the
3 PBS's use of low elevation area for a variety of purpose, including movement. In
4 addition, the FWS also ignored its previous conclusion that suitable but unoccupied
5 habitats are necessary for maintaining population and genetic connectivity. (AR 423-
6 24.)

7 Federal Defendants and Ocotillo dispute the significance of the FWS's
8 comments to the BLM in the draft EIS. They contend that the absence of sheep sign
9 comment was not related to the unreliability of sheep sign but that the Project should
10 not be considered unoccupied because sheep sign was documented throughout the
11 proposed project site. (AR 424.) As more fully discussed later, lack of sheep sign was
12 not the only basis for the FWS to conclude that the presence of PBS in the Project area
13 was limited. There were numerous other studies, reports, data, maps, and other
14 evidence the FWS considered when it made its determination.

15 The FWS addressed the worst case scenario and concluded that the Project and
16 the potential functional loss of up to 5,156 acres of habitat "would not disrupt
17 population connectivity." (AR 1701, 1718.) In addition, the proposed Project is not
18 likely to impede connectivity between the I-8 Island and suitable habitat to the south,
19 as primary movement corridors are outside the action area. (AR 1718.) The BiOp
20 evaluated the available information regarding the path that the PBS subpopulation
21 follows in their movement from their base in the Carrizo Canyon area into the Coyote
22 Mountains to the northeast and into the I-8 island to the southeast. (AR 1693-96.)
23 The BiOp presents a rational connection between the facts found and the conclusion
24 that the Project would not affect connectivity among Bighorn sheep habitats.

25 **E. PBS as Poor Dispersers**

26 Plaintiffs argue that the BiOp is arbitrary and capricious because it ignores
27 evidence that PBS are poor dispersers and would likely remain near the Project site and
28 not move in response to habitat loss or modification. They also assert that the FWS's

1 conclusion that “comparable habitat is otherwise available” to justify its jeopardy
2 conclusion is arbitrary and capricious because comparable habitat would not assist the
3 PBS as they are poor dispersers and unlikely to leave their home range.

4 Federal Defendants argue that sheep tend to be poor dispersers but only outside
5 of their home ranges. Within their home range, the PBS are more likely to avoid the
6 Project and move to another part of their home range. In addition, the FWS analyzed
7 the worst case scenario of suitable habitat loss in and around the Project. (AR 1700-
8 01.) It considered the loss of about 5,156 acres of habitat and determined that this loss
9 of habitat would not threaten its recovery. (AR 1701.) FWS analyzed the potential for
10 individual sheep mortality against the population as a whole and concluded that due
11 to robust population numbers coupled with the availability of comparable suitable
12 habitat at both the regional and range-wide levels, the Project was not likely to
13 jeopardize the continued existence of the sheep as a whole. (AR 1718.) Ocotillo
14 argues that the record refutes Plaintiffs’ argument regarding movement within adjacent
15 mountain ranges.

16 A typical home range⁹ size for an ewe is 7.8 square miles and for a ram is 9.8
17 square miles. (AR 5764.) Sheep move across a wide area within their home ranges to
18 access different resources. (AR 1693.) The Project area does not encompass the
19 entirety of the home ranges of the PBS. (AR 1693.) Both sides do not dispute that the
20 PBS are sensitive to habitat loss or modification because they are poor dispersers,
21 learning their ranging patterns from older animals rather than on their own. (AR 5789.)
22 Habitat loss is a leading cause of species extinction and endangerment. (AR 5789.)
23 When habitat is lost, the PBS is likely to remain within their familiar surroundings.
24 (AR 5789.) Young sheep learn their habitat ranges from their mothers and do not go
25 out and colonize new ranges. (AR 5789; 3759 (The North American Wild Sheep).
26 “Once habitat is lost or modified, the affected group is likely to remain within their
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28 ⁹Home range is defined as “that area traversed by the individual in its normal activities of food gathering, mating, and caring for young”. (AR 5764.)

1 familiar surroundings but with reduced likelihood of population persistence, due to
2 reduced quantity and/or quality of resources.” (AR 5789.)

3 The FWS considered the loss of habitat and its effect on the PBS and its habitat.
4 In considering the loss of habitat, it also analyzed the impact on the sheep based on the
5 fact that they are poor dispersers outside their home range. The BiOP did not ignore
6 evidence that PBS are poor dispersers. In analyzing the fact that the PBS will avoid
7 the Project area, the FWS analyzed the worst case scenario that the sheep will lose
8 about 5,156 acres of habitat and this loss of habitat would not threaten its recovery.
9 (AR 1701.) Accordingly, the Court concludes that the BiOp is not arbitrary and
10 capricious as it considered the evidence that PBS are poor dispersers outside its home
11 range.

12 **F. Potential for Project to Cause Stress and Associated Adverse Effects**

13 Plaintiffs argue that the BiOp did not consider that noise and visual disturbance
14 have numerous negative impacts on the PBS particularly since PBS are poor dispersers
15 and will remain on the Project site. They also argue that the BiOp’s comparison of
16 noise impacts¹⁰ by comparing wind turbines to a ski lift because both involve overhead
17 structure is not a rational basis to analyze the effect of the Project’s noise effects on the
18 PBS.

19 Federal Defendants maintain that the FWS noted that sheep will avoid a
20 perceived threat such as the wind turbines and move to other areas of suitable habitat
21 within their home range. Therefore, the sheep will not be exposed to the Project’s
22 effects. Moreover, the FWS considered low-frequency noise and visual disturbance
23 on the PBS. (AR 1700.) Ocotillo argues that the BiOp adequately considered the low-
24 frequency noise and movement impacts on the PBS.

25 The PBS’ predator evasion behavior is based on its ability to visually detect
26 danger at a distance. (AR 5760, FWS’s 2000 PBS Recovery Plan.) It has long been
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28 ¹⁰Contrary to Plaintiffs’ argument, the ski lift was used to assist in the visual
disturbance analysis, not noise analysis.

1 recognized that visibility is an important characteristic of the PBS habitat. (AR 5760.)
2 “Stress resulting from human disturbance may have played a role in predisposing
3 captive lambs to disease.” (AR 5770.) Bacterial pneumonia is usually a sign of
4 weakness caused by another agent, such as a virus, parasite, or environmental stress,
5 that lowers an animal’s resistance to disease (USFWS 1998, p. 13144). Poor nutrition,
6 predation, climatic changes, and human related impacts may also have contributed to
7 high lamb mortality. (AR 6446-47, FWS’ 5 year review of PBS, 2001.)

8 Plaintiffs rely heavily on one Master’s candidate thesis analyzing human
9 disturbance in PBS in the Pusch Ridge Wilderness (“PRW”) in Arizona.¹¹ (SAR 4070.)
10 In analyzing the effects of development in the PRW, the Bighorn sheep was surrounded
11 on all sides by heavy vegetation, homes, a resort, construction activity or the city of
12 Tucson. In general, she stated that bighorn sheep can adapt to the presence of humans
13 and coexistence is possible as long as escape terrain is still available and the herd has
14 somewhere to take refuge from humans. (SAR 4071.) Because the PRW was
15 surrounded on all sides, she concluded that the bighorn sheep in PRW will incur a
16 significant amount of stress. (SAR 4071.) The author acknowledged that evidence of
17 disturbance to bighorn sheep from noise is conflicting. (SAR 4056.) Bighorn sheep
18 can become habituated¹² to noise after repeated exposure in cases where flights of small
19 aircraft are 100m above ground level; however helicopters and low altitude aircraft
20 cause negative behavioral responses. (SAR 4056.) Also, habituation to intermittent
21 noise and bursts of sound from 75-100 decibels (dB) is gradual and minimal. (SAR
22 4057.) Stress in PBS can “lower resistance to disease, infection and parasites, inhibit
23 reproductive functions and cause behavioral disturbances.” (SAR 4057.) PBS will
24 alter behavior in response to construction activities, traffic and road building. (SAR
25 4057.)

26
27 ¹¹Kathryn Alyce Schoenecker, Human Disturbance in Bighorn Sheep Habitat,
28 Pusch Ridge Wilderness, Arizona (1997) (unpublished M.A. thesis, University of
Arizona).

¹²Habituation can also be defined as tolerance. (SAR 7525.)

1 While the PBS appear to be tolerant to human activity, continued and frequent
2 human use can cause them to avoid the area which interferes with the use of resources,
3 such as water, mineral licks, lambing or feeding areas or use of traditional movement
4 routs. (SAR 7510 (FWS BiOp for Sunrise Powerlink Project 2009).) In addition,
5 human activity can cause physiological response such as elevated heart rate or changes
6 in the endocrine systems even if no behavior response is detectable and the cumulative
7 effect may affect the nutritional status of individuals. (SAR 7510.)

8 The BiOp considered and discussed the low-frequency noise and visual
9 disturbance on the PBS. (AR 1700.) While it acknowledged that the effects of low
10 frequency noise on PBS are unknown, it concluded that noise disturbance is something
11 that the sheep would habituate. (AR 1700.) It based its conclusion on the fact that
12 there already exists other noise levels that are high from the highway noise of I-8, OHV
13 use and Border Patrol helicopter and vehicle patrols. (AR 1700.) The sheep have
14 demonstrated an ability to adapt to the constant noise of vehicle speeds on I-8. It also
15 noted visual disturbance would have a greater effect on PBS than noise disturbance.
16 (AR 1700.) As discussed in the literature, vision is the primary sense the PBS use to
17 detect predators. (AR 1700.) Therefore, the wind turbines would be perceived as a
18 threat and would lead to habitat avoidance. (AR 1700.) The BiOp surmises that the
19 blades' continuous movement, the flickering shadows blade movement would produce
20 would be perceived by the PBS as a threat and lead to habitat avoidance in areas closest
21 to the turbines. (AR 1700.)

22 The BiOp also acknowledged that the collective effect of increased human
23 disturbance, vehicle access, low-frequency noise and visual disturbance of the wind
24 turbines, moving blades and flickering shadows may cause sheep to avoid the Project
25 and its vicinity. (AR 1700.) The FWS used a study concerning a ski lift as the best
26 available data and determined that a 350-yard buffer around the Project site would be
27 appropriate. (AR 1700-01.) Based on this, the FWS determined that about 5,156 acres
28 of habitat would be functionally lost. (AR 1701.) In determining the effect of the loss

1 of 5,156 acres of habitat, the BiOP concluded that the loss of this habitat is not within
2 critical habitat, represents a small fraction of comparable habitat otherwise available
3 to the population and would not disrupt population connectivity or cause other
4 significant impacts. (AR 1701.) The BiOp also considered low-frequency noise and
5 visual disturbance on lambing grounds. (AR 1704-05.)

6 Contrary to Plaintiffs' assumption that the PBS would remain in the Project area
7 and live with "chronically elevated stress levels", the FWS concluded that the PBS will
8 avoid a perceived threat and move to other areas of suitable habitat within their home
9 range. The BiOp discussed its conclusion that sheep are more likely to avoid the
10 facility and surrounding area. (AR 1698-1701.) While it is documented that noise and
11 visual disturbances cause stress in Bighorn sheep, Plaintiffs have not shown that sheep
12 would not avoid the Project site. The FWS does not dispute Plaintiffs' allegations that
13 noise and visual impact could cause stress and noted that "lack of data concerning
14 ungulate behavior around wind turbines underscores the importance of monitoring
15 efforts in the project vicinity." (AR 1698.)

16 Based on this analysis, the Court concludes that the BiOp assessment of the
17 noise and visual impacts of the Project on the PBS was not arbitrary or capricious.

18 **G. Best Available Science**

19 Plaintiffs assert that the FWS did not use the best available scientific data when
20 it prepared its BiOp because it only references the lack of sheep sign to support its
21 conclusion. Federal Defendants and Ocotillo maintain that in addition to sheep sign,
22 the FWS analyzed data from numerous other sources.

23 Under the Endangered Species Act, biological opinions must reflect the "best
24 scientific and commercial data available." See 16 U.S.C. § 1536(a)(2). "The best
25 available data requirement 'merely prohibits [an agency] from disregarding available
26 scientific evidence that is in some way better than the evidence [it] relies on.'" Kern
27 County Farm Bureau v. Allen, 450 F.3d 1072, 1080 (9th Cir. 2006). The agency has
28 considerable discretion in determining what constitutes the "best available data." See

1 Ecology Ctr. v. Castaneda, 574 F.3d 652, 659 (9th Cir. 2009).

2 Courts review the Biological Opinion based upon the evidence contained in the
3 administrative record. Arizona Cattle Growers' Ass'n v. U.S. Fish & Wildlife, Bureau
4 of Land Management, 273 F.3d 1229, 1245 (9th Cir. 2001) (“we review the Biological
5 Opinion based upon the evidence contained in the administrative record.”). APA
6 review of a biological opinion is “based upon the evidence contained in the
7 administrative record.” Arizona Cattle Growers' Ass'n v. U.S. Fish and Wildlife, 273
8 F.3d 1229, 1245 (9th Cir. 2001). Plaintiffs mistakenly argue that the BiOp must
9 contain all the scientific data the FWS relies on to support its conclusion. In its
10 analysis, the Court must look at the entire administrative record in making its
11 determination whether the FWS’s analysis in the BiOp was arbitrary or capricious. See
12 id.

13 First, Plaintiffs contend that while the FWS acknowledged that “sign” is an
14 unreliable way to determine whether sheep use an area¹³, FWS repeatedly relied on sign
15 to support its conclusion the PBS use the Project site sporadically. Federal Defendants
16 and Ocotillo oppose contending that the FWS’s sheep analysis did not focus solely on
17 sheep sign to indicate habitat use.

18 Federal Defendants and Ocotillo cite to numerous data, maps, surveys and other
19 evidence in the administrative record supporting the FWS’s conclusion that PBS
20 sightings on the Project is limited. The FWS looked at data such as “suitable habitat”
21 maps from the recovery plan, (AR 5801); “critical habitat” maps, (AR 270, 346); and
22 surrounding habitat conditions. (AR 345, Nisa Marks, Biologist at FWS, handwritten
23 field notes on a site visit); (AR 612 (12/1/11 N. Marks’ phone call notes with A.
24 Davenport)); (AR 4194-201 (biological assessment)); (AR 7039, notes). The FWS
25 also considered sheep occurrence data from different sources: sheep observations from

26
27 ¹³Plaintiffs cite to an agency comment on the Draft EIS which stated, “The
28 Department disagrees with the statement that the site is unoccupied. Based on the
applicant’s surveys PBS have not been documented within the project site footprint.
However, absence of sheep sign does not equate to the site being unoccupied.” (AR
421.)

1 project survey crews, (AR 249 (biological assessment)); data from surrounding
2 projects, (AR 3900 (PBS Baseline Report in Mountain Springs Grade for Sunrise
3 Powerlink Project, January 2009-May 2010)); FWS employee, (AR 4953-54);
4 California Department of Fish and Wildlife¹⁴ radio collar data¹⁵, (AR 4194); historical
5 information, (AR 5155-56 (article/study 1998)); (AR 5782; 5822 (PBS Recovery Plan,
6 2000)); (AR 7011 (article, 1994)); (AR 7029 (article, 1996)); (AR 7254 (CDFG report
7 study, 1972)); (AR 7446 (article/survey 1968)); and CDFG aerial surveys, (AR 1694
8 (BiOp)). This data was sufficient to estimate the number of ewes using habitat within
9 600 yards of the Project's footprint for the BiOp's incidental take statement. (AR
10 1720.)

11 The FWS also considered three months of on-site surveys conducted by trained
12 trackers who used motion-sensitive cameras. (AR 273-274; 282-287; 313-329
13 (Tracking Report, March-June 2011).) There were also additional months of on-site
14 surveys of PBS. (AR 831-857.) Contrary to Plaintiffs' argument, the FWS considered
15 an array of different scientific data, besides "sign", to support its conclusion that sheep
16 use in the Project area is sporadic.

17 In addition, Plaintiffs complain that the FWS failed to consider the Center for
18 Biological Diversity's ("CBD") documentation, on March 11, 2012, of PBS use of a
19 known lambing area within 500 meters of Turbine No. 25. (AR 1329-30.) Federal
20 Defendants contend that the CBD data is in the record, was considered by the FWS and

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22 ¹⁴California Department of Fish and Wildlife was formerly known as California
Department of Fish and Game ("CDFG")

23 ¹⁵"HELIX [the group hired by Ocotillo to create the Biological Assessment]
24 coordinated with CDFG to obtain unpublished PBS location data from a radio
25 collar/tracking study currently being conducted as mitigation for the Department of
26 Homeland Security/Border Patrol U.S.-Mexico border fence project. Six PBS ewes
27 were captured and radio collared by CDFG in October 2009 in the vicinity of
28 MountainSpring and their locations are being monitored and documented by CDFG.
Location data of the 6 radio-collared ewes were provided for the period between
October 2009 and January 2011, including lambing areas used in 2010 (email from
Randy Botta to Pete Sorenson dated February 19, 2011). The 6 collared ewes represent
less than 10 percent of the estimated population in the area. The PBS location data
were used in combination with the USFWS database of PBS sightings to evaluate
sheep use within and adjacent to the Project Area." (AR 4194.)

1 was found to overlap with previous sheep sightings within the I-8 Island. (AR 1328-
2 1335) (AR1665 (map of March 2012 sighting and other PBS occurrence dated April
3 12, 2012.)) The Biological Opinion was issued on April 26, 2012, after the CBD's
4 documentation. The administrative record demonstrates that the FWS considered this
5 data. Moreover, the map prepared on April 12, 2012, reveals that the observations
6 were consistent with prior observations of PBS in that area. Accordingly, Plaintiffs'
7 arguments are without merit and the Court concludes that the FWS used the best
8 scientific data available.

9 **Conclusion**

10 Based on the above, the Court DENIES Plaintiffs' motion for summary judgment
11 and GRANTS Federal Defendants and Ocotillo Defendant's motions for summary
12 judgment. The Court vacates the hearing date set for November 22, 2013. The Clerk
13 of Court shall close the case.

14 IT IS SO ORDERED.

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16 DATED: November 20, 2013

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18 HON. GONZALO P. CURIEL
19 United States District Judge
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