May 6, 2016

Via electronic mail and certified mail, return receipt requested

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Re: Proposed Arroyo Grande Oil Field Aquifer Exemption: Endangered Species Act Compliance Regarding the Federally Endangered Pismo Clarkia and Other Listed Species

Dear Mr. Albright and Mr. Montgomery:

On February 24, 2016, the Center for Biological Diversity ("the Center") sent you a letter urging the U.S. Environmental Protection Agency ("EPA") to deny the request by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources ("DOGGR") for an aquifer exemption for Class II injection wells in the Arroyo Grande oil field ("AGOF"), operated by Freeport McMoRan Oil & Gas ("FMOG"). As outlined in the letter, the EPA's denial of the aquifer exemption request is fully warranted because DOGGR and FMOG have failed to demonstrate that the aquifer meets federal and state criteria for the exemption. Subsequently, on March 9, 2016, the Center sent you a supplemental letter requesting the EPA to conduct environmental review on the proposed exemption under the National Environmental Policy Act ("NEPA"); any approval of the exemption without such review would violate NEPA. The Center also sent you a letter, dated February 11, 2016, requesting that the EPA undergo a formal rulemaking process under 40 C.F.R. section 145.32(b)(2), on the basis that the aquifer exemption is substantial, complex, and controversial.

For the reasons set forth in the prior letters, the EPA should immediately deny DOGGR's request for the aquifer exemption for FMOG's Class II injection wells in the AGOF. However, in the case that the EPA seeks to approve the aquifer exemption, the EPA is legally required to comply with the federal Endangered Species Act ("ESA") and, prior to any federal exemption approval, engage in Section 7 ESA consultation with respect to the federally endangered Pismo clarkia and numerous other ESA-listed species found on or nearby the project site of the proposed aquifer exemption. Failure to engage in consultation on the impacts of the aquifer exemption on these federally listed species violates the procedural requirements of Section 7(a)(2) of the ESA, and EPA's substantive duty to ensure against

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jeopardy of these listed species and the adverse modification of their habitats. Any such ESA violation is subject to citizen suit pursuant to Section 11(g) of the ESA.[1]

I. LEGAL BACKGROUND

Congress passed the Endangered Species Act, 16 U.S.C. §§ 1531-44 ("ESA"), in response to growing concern over the extinction of plants, fish, and wildlife,[2] and recognized that certain species "have been so depleted in numbers that they are in danger of or threatened with extinction."[3] Accordingly, a primary purpose of the ESA is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such . . . species."[4]

To reach these goals, Section 9 of the ESA generally prohibits any person, including any federal agency, from "taking" any endangered species.[5] The term "take" is statutorily defined broadly as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."[6] The definition of "harm" has been defined broadly by regulation as "an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering."[7] Courts have found federal agencies liable for take of listed species — both endangered and threatened—where an agency authorized activities resulted in the killing or harming of ESA-listed species.[8] With respect to endangered plants specifically, Section 9 of the ESA prohibits any person to "remove, cut, dig up, or damage or destroy such [endangered species of plants] in knowing violation of any law or regulation of any State."[9]

Additionally, Section 7(a)(2) of the ESA requires federal agencies to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [the critical] habitat of such species."[10] "Action" is broadly defined to include "all activities or programs of any kind authorized, funded, or carried out, in whole or in part" by federal agencies and includes conservation measures, granting permits and licenses, as well as actions that may directly or indirectly cause modifications to the land, water, or air.[11]

While many of the ESA's provisions work to effectuate the conservation goals of the statute, the "heart of the ESA" is the interagency consultation requirements of Section 7 of the ESA.[12] To facilitate compliance with Section 7(a)(2), an "agency shall . . . request" from the U.S. Fish and Wildlife Services ("FWS") information regarding whether any listed species "may be present" in a proposed action area, and if so, the "agency shall conduct a biological assessment" to identify species likely to be affected.[13]

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[1] 16 U.S.C. § 1540(g)(2)(A)(i).
[2] 16 U.S.C. § 1531(a)(1).
[3] *Id.* § 1531(a)(2).
[4] *Id.* § 1531(b).
[5] 16 U.S.C. § 1538(a)(1)(B); *see also* 50 C.F.R. § 17.31(a) (extending the "take" prohibition to threatened species managed by the U.S. Fish and Wildlife Service).
[6] 16 U.S.C. § 1538(a)(2).
[7] 50 C.F.R. § 17.3; *see also Babbitt v. Sweet Home Ch. of Communities for a Great Oregon*, 515 U.S. 687 (1995) (upholding regulatory definition of harm).
[8] *See e.g.*, *Defenders of Wildlife v. Envtl. Prot. Agency*, 882 F.2d 1294, 1300-01 (8th Cir. 1989); *Strahan v. Coxe*, 127 F.3d 155, 163 (1st Cir. 1997).
[9] 16 U.S.C. § 1538(a)(2)(B).
[10] 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).
[11] 50 C.F.R. § 402.02.
[12] *Western Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 495 (9th Cir. 2011); 16 U.S.C. § 1536.
[13] 16 U.S.C. § 1536(c).

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The agency must then initiate formal consultation with FWS if a proposed action "may affect" any of those listed species.[14] The "may affect" standard broadly includes "[a]ny possible effect, whether beneficial, benign, adverse or of an undetermined character."[15]

Formal consultation under Section 7(a)(2) results in the preparation of a biological opinion by FWS that determines if the proposed action is likely to jeopardize the continued existence of a listed species or adversely modify the species' critical habitat.[16] If so, the opinion may specify reasonable and prudent alternatives ("RPAs") that avoid such jeopardy.[17] If FWS concludes that the action or the RPAs will not cause jeopardy, but will result in the take of a listed species, FWS will issue an incidental take statement ("ITS") as part of the biological opinion that specifies "the impact, i.e., the amount or extent, of . . . incidental taking" that may occur, and any measures necessary or appropriate to minimize such impact on the listed species.[18] The take of a listed species in compliance with the terms of a valid ITS is not prohibited under Section 9 of the ESA.[19] However, the issuance of an ITS serves several important purposes over time, one being that the thresholds and measures contained in an ITS ensure that, as a project is implemented, it does not have greater impacts on a species than originally anticipated. Specifically, regulations require consultation to be reinitiated if "the amount or extent of taking specified in the incidental take statement is exceeded,"[20] serving as "a check on the agency's original decision that the incidental take of listed species resulting from the proposed action will not jeopardize the continued existence of the species."[21]

II. FACTUAL BACKGROUND

A. Granting the Proposed Aquifer Exemption Poses Threats to Numerous ESA-Listed Species

The operation and expansion of Class II injection wells in the proposed aquifer exemption area will clearly result in potentially negative impacts on myriad ESA-listed species found on and nearby the exemption area. Activities accompanying the expansion of the injection wells, such as clearing, grading, drilling, injection and disposal of produced water will increase traffic and noise, as well as air and water pollution, resulting in negative impacts to these species. Granting the aquifer exemption permanently sacrifices the aquifer to the whims of the oil industry in operating and expanding the facility, clearing the way for this expansion and injection to occur.[22]

The species that is most likely to suffer direct impacts by the aquifer exemption approval is the federally endangered Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*), whose several populations exist within the boundaries of the proposed aquifer exemption area, as confirmed by population maps in FWS's most recent five-year review of the highly imperiled flower.[23] (*See* Figure 1 for overlap of Pismo clarkia

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[14] 50 C.F.R. § 402.14(a).
[15] 51 Fed. Reg. 19,926 (June 3, 1986).
[16] 16 U.S.C. § 1536(b).
[17] 16 U.S.C. § 1536(b); 50 C.F.R. 402.14(h)(3).
[18] 50 C.F.R. § 402.14(h)(3), (i).
[19] 16 U.S.C. §§ 1536(b)(4), (o)(2); 50 C.F.R. § 402.14(i)(5).
[20] 50 C.F.R. § 402.16(a).
[21] *Ctr. for Biological Diversity v. Salazar*, 695 F.3d 893, 911 (9th Cir. 2012) (*quoting Natural Res. Def. Council, Inc. v. Evans*, 279 F. Supp. 2d 1129, 1182 (N.D. Cal. 2003)).
[22] *See, e.g.,* Sneed, David, "Oil Company Plans to Drill 481 New Wells at Price Canyon Oil Field," *San Luis Obispo Tribune* (March 26, 2016) ("The first step is to get approval from the EPA to expand an area within the oil field into which wastewater containing brine and other liquid byproducts of the oil production process can be injected. The company wants to triple the size of this injection area and says this expansion is crucial to its growth plans."), http://www.sanluisobispo.com/news/local/article68494287.html#storylink=cpy.
[23] U.S. Fish and Wildlife Service, "Clarkia speciosa subsp. immaculate (Pismo Clarkia) – 5-Year Review: Summary and Evaluation" (2009), 5, http://ecos.fws.gov/docs/five_year_review/doc2547.pdf [hereinafter "FWS Pismo Clarkia Review"].

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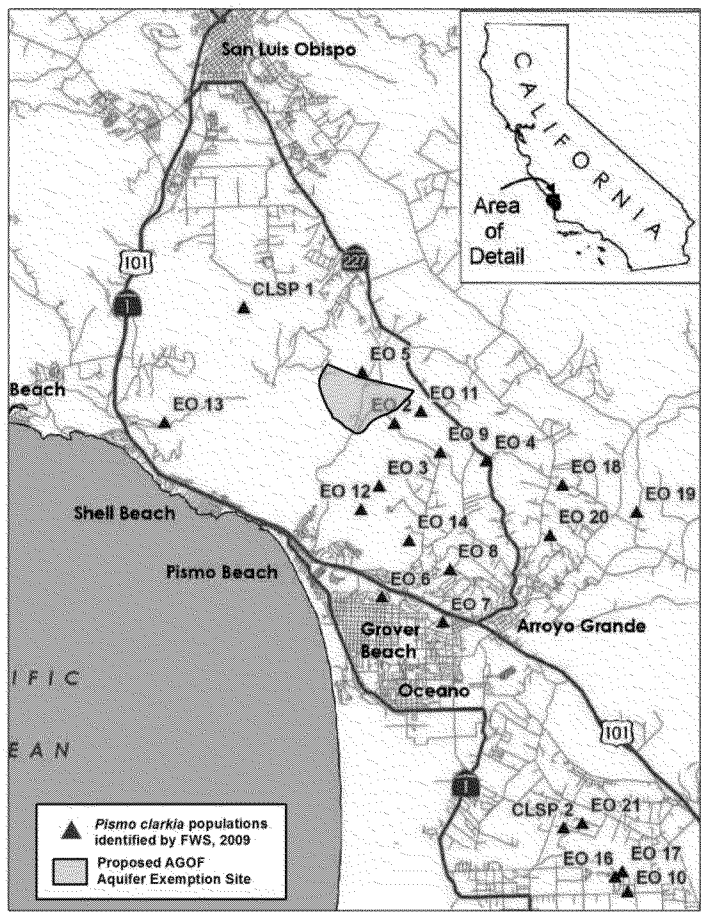
populations and the proposed aquifer exemption site.) Further, the existence of Pismo clarkia populations in the AGOF has been repeatedly confirmed in numerous AGOF environmental documents: the 2005 Final Environmental Impact Statement for the Phase IV project ("Phase IV FEIR"),[24] the 2012 Initial Study for the Phase V project ("Phase V Initial Study"),[25] the 2013 Biological Resources Assessment Report for the Phase V project ("Phase V BRAR"),[26] and the 2015 Sensitive Plant Survey Report for the AGOF Phase IV EIR Area ("Phase V Plant Survey").[27] Critically, the Phase V Initial Study stated that the impact of Phase V operations would be "potentially significant" on the "loss of unique or special status species in their habitats" which includes the Pismo clarkia.[28] Overall, granting the aquifer exemption may both directly destroy the highly imperiled flower's populations and impact its habitat so as to threaten its overall existence.

Figure 1. Intersection of Pismo clarkia populations in San Luis Obispo and Proposed AGOF Aquifer Exemption Site



Source: FWS 5-Year Review of Pismo Clarkia (2009);DOGGR map of Proposed Aquifer Exemption Site (2016).

Additionally, as the proposed aquifer exemption area encompasses a significant portion of Pismo Creek, and FMOG disposes of filtered wastewater into the creek, several ESA-listed species known to live in the water body—either within the boundaries of the aquifer exemption area or downstream—may be impacted should the exemption be granted. Specifically, AGOF operations that use the produced water from the aquifer, filter the water, and finally release such water into Pismo Creek will adversely affect the critical habitat of the federally endangered Tidewater goby (*Eucyclogobius nerberryi*) and the federally threatened South-Central Coast Steel Trout (*Oncorhynchus mykiss*) and California red-legged frog (*Rana aurora draytonii*) occurring in Pismo Creek either within the boundaries of the exemption area or downstream. Significantly, FWS in a response letter

[24] County of San Luis Obispo, "Final Plains Exploration and Production Phase IV Development Plan – Environenmental Impact Report" (2004), http://www.slocounty.ca.gov/Assets/PL/environmental/plains/Historical+Documents/2004+-+Phase+IV+EIR/phpEIR2004.pdf [hereinafter "Phase IV FEIR"].

[25] County of San Luis Opisbo Department of Planning and Building, "Initial Study re: Plains Exploration & Production – Phase V Oil Field Expansion Conditional Use Permit – ED 12 083 (DRC 2012-00035)," 14-15, http://www.slocounty.ca.gov/Assets/PL/environmental/plains/Environmental/initialstudy.pdf [hereinafter "Phase V Initial Study"].

[26] URS, "Biological Resources Assessment Report for the Phase V Development of the Arroyo Grande Oil Field, prepared for Freeport-McMoRan Oil & Gas" (2013), http://www.slocounty.ca.gov/Assets/PL/environmental/plains/Planning/Applicant+Submittals/Bio+Report+URS_12-13.pdf.

[27] Letter from Arcadis to Firma, "Subject: 2015 Sensitive Plant Survey Report, Freeport McMoRan Arroyo Grande Oilfield Phase IV EIR Area," dated Sep. 22, 2015.

[28] Phase V Initial Study, at 13.

recommending ESA consultation for Project V expansion clearly identified this potential negative impact on critical habitat and the overall populations of these three species for Phase V of the project.[29]

Finally, granting the aquifer exemption will affect numerous other federally-listed species occurring near the exemption site, due to the operation and expansion of injection wells themselves, the parallel operation and expansion of oil-producing wells dependent on the existence of such injection wells, and the impact of these operations on the Pismo Creek and other water bodies downstream. Specifically, the environmental documents prepared for Phase IV and Phase V of the AGOF project identify numerous federally-listed species potentially impacted by AGOF operations. Given that the site for the aquifer exemption is within the boundaries of the larger AGOF site and has, as mentioned above, impacts on land and water beyond the exemption area, it is common sense that the impacts of the aquifer exemption decision may potentially affect the myriad of already identified species —triggering the requirement that the EPA perform Section 7 consultation. As an initial matter, the Phase IV FEIR, the Phase V Initial Study, and the FWS letter with respect to Phase V, collectively identified the following federally-listed species potentially impacted by the project activities (in addition to the species discussed above): Chorro creek bog thistle (*Cirsium fontinale* var. *obispoense*), Gambel's watercress (*Rorippa gambellii*), Indian Knob mountain balm (*Eriodictyon altissimum*), La Graciosa thistle (*Cirsium loncholepis*), Marsh sandwort (*Arenaria paludicola*), Morro Manzanita (*Arctostaphylos morroensis*), Nimpomo Mesa Lupine (*Lupinus nipomensis*), Moro shoulderband snail (*Helminthoglypta walkeriana*), and species occurring in the Pismo State Beach area including the Western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), Brown pelican (*Pelecanus occidentalis*), and Southern Sea Otter (*Enhydra lutris nereis*). Moreover, these environmental documents identify numerous federal species of concerns potentially impacted by the project activities. (*See* Exhibit A for list of potentially impacted special-status species excerpted from the Phase IV FEIR.) Overall, that the scope of species that are either federally-listed or of federal special concern impacted by the aquifer exemption site has not been examined is clear reason for the EPA to engage in Section 7 consultation and develop a biological opinion for the project actions.

B. Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*)

While numerous federally-listed species will potentially be impacted by granting the aquifer exemption, the Pismo clarkia is of special concern because it has been confirmed to occur on the aquifer exemption site. The Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*) was listed as a federally endangered species under the ESA in 1994.[30] Under state law, the Pismo clarkia was also classified as a rare species under the California Native Plant Protection Act ("NPPA") in 1978.[31] In addition, the flower has been classified as extremely rare by the California National Plant Society ("CNPS").[32] An annual herb, the Pismo clarkia grows up to 20-inches tall and blooms fan-shaped flowers that are white or cream-colored at the base streaking into pinkish or reddish-lavender at the tips.[33]

The known distribution of the species ranges from San Luis Obispo south to the Nipomo Mesa area, an area approximately 14 miles long by 7 miles wide.[34] The species occurs in pockets of dry sandy

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[29] Letter from U.S. Fish and Wildlife Service to John McKenzie, County of San Luios Obispo, "Subject: Notice of Preparation of a Draft Environmental Impact Report for the Plains Exploration & Production Phase V Oil Expansion Project (DRC2012-00035), San Luis Obispo County, California" (Dated Dec. 27, 2012),

[30] 59 Fed. Reg. 64613 (December 15, 1994).

[31] *See* California State Dept of Fish and Wildlife, "State and Federally Listed Endangered, Threatened, and Rare Plants of California" (last updated April 2016), https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.

[32] CNPS, List 1B, RED 3-3-3.

[33] FWS Pismo Clarkia Review, at 4.

[34] *Id.* at 5.

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soils within grassy openings in chaparral and oak woodlands .[35] Due to the p atchy distribution of these openings, the Pismo clarkia's populations are fragmented by nature.[36]

In the FWS's 2009 five-year status review on the species, as required by Section 4 (c)(2) of the ESA, there were 17 populations of the Pismo clarkia presumed to be extant[37] (*See* Figure 1 to cross-reference populations with the a quifer exemption area). Since the flower's listing in 1994, it is known that at least five populations of the species have been extirpated.[38] As required by the ESA, t he FWS is currently undergoing the next five-year status review of the endangered flower, initiated in 2013.[39] Overall, FWS has concluded that the priority to recover the Pismo clarkia is very high, as the subspecies faces a high degree of threat.[40]

The perilous status of the species is primarily driven by the continued threat from construction and other development projects in areas where the species occurs. Development has been the overriding cause of the loss of all or part of five known population s of this species since li sting, and, in 2009, affected or continued to threaten nine additional populations in part or in whole.[41] Furthermore, development was found t o eliminate habitat that supports populations of pollinators and seed dispersal vectors and habitat that contains a seedbank, in cases where there is no germination in a given year when surveys are conducted.[42]

The Pismo clarkia
© Aaron Schusteff. Artist's permission obtained.

In addition to direct habitat loss, habitat fragmentation driven by development also severely affects the persistence of the flower's populations within such fragments. As infrastructure, commercial, and residential development continue to rapidly increase within areas in close proximity to existing and potential Pismo clarkia populations, these developments have also occurred *between* existing populations which may h ave increased their isolation from each other.[43] While fragmentation does not necessarily lead to the extinction of a species within a habitat patch, small populations in small habitat patches have an increased likelihood of extinction and are increasingly affected by their surroundings .[44] Development eliminates adjacent suitable habitat that otherwise would allow for natural population expansion and movement as suitable microhabitats shift in the landscape.[45] Habitat fragmentation has also been found to lead to a decrease in pollination and reduced

[35] 59 Fed. Reg. 61614 (December 15, 1994).
[36] FWS Pismo Clarkia Review, at 5.
[37] *Id.* Fourteen of the populations presumed to be extant were documented by the California Natural Diversity Database ("CNDDB"), which is maintained by the California Department of Fish & Wildlife.
[38] *Id.*
[39] 78 Fed. Reg. 19510-19514 (April 1, 2013) (*Initiation of 5-Year Review of 56 Species in California and Nevada*).
[40] *Id.* at 3. The recovery priority number for the Pismo clarkia i s 3C based on a 1 -18 ranking system where 1 is the highest-ranked recovery priority and 18 is the lowest. 48 Fed. Reg. 43098 (Sep. 21, 1983) (Endangered and Threatened Species Listing and Recovery Priority Guidelines).
[41] FWS Pismo Clarkia Review, at 6.
[42] *Id.*; California Department of Fish and Game (now California Department of Fish and Wildlife), California Natural Diversity Database, Rare find records for *Clarkia speciosa* ssp. *immaculata*. (2006).
[43] FWS Pismo Clarkia Review, at 7; USDA National Agricultural Image Program, Aerial photography data/imagery of San Luis Obispo County (2005); L. Althouse, Personal communication: Status, threats, and information on *Clarkia speciosa* ssp. *immaculate* (2006).
[44] FWS Pismo Clarkia Review at 7; K. Draeger, Mapping habitat area of *Clarkia speciosa* ssp. *immaculata* (Pismo clarkia), to the Environmental Division of the San Luis Obispo Department of Planning and Building (2002).
[45] FWS Pismo Clarkia Review at 7.

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reproductive success due to the decreased visitation from pollinators to small and isolated populations.[46]

Development aside, the 2009 FWS status review of the Pismo clarkia highlights the inadequacy of both state and federal regulatory mechanisms to protect against threats to the highly imperiled flower's existence. Despite the ESA's Section 7 consultation requirement, no formal consultations had been conducted on effects on the Pismo clarkia since its listing in 1994 to 2009, the most recent date for which the FWS has completed a study on the species .[47] This letter seeks to compel EPA t o comply with the ESA mandate as required for the AGOF aquifer exemption request.

III. THE EPA MUST UNDERGO SECTION 7 ESA CONSULTATION PRIOR TO EXEMPTION APPROVAL

The EPA's potential action to grant the aquifer exemption clearly triggers the agency's requirement to undergo interagency consultati on under Section 7 of the ESA. As explained above, all federal agencies are re quired to consult whenever they take an "action" that "may affect" ESA -listed species or their critical habitat .[48] The "may affect" standard includes "[a]ny possible effect, whether beneficial, benign, adverse or of an undetermined character." [49] Here, the EPA's approval of the aquifer exemption clearly constitutes a federal "action" that meets the broad "may affect" threshold under the ESA and its implementing regulations.[50] The EPA's grant of the aquifer exemption on AGOF is a federal action that will permit FMOG to expand and operate wastewater injection wells in an area documented to contain known populations of severa l ESA -listed species, including, but not limited to, the federally endangered Pismo clarkia. In addition, the operation and expansion of w astewater injection wells is understood to impact water in the Pismo Creek, potentially affecting the habitat and populations of the federally endangered Tidewater goby and the federally t hreatened South-Central steelhead trout and the California red-legged frog, whose populations are documented to occur in the Creek whether within the boundaries of the aquifer exem ption site or downstream. Separately, as articulated in environmental documents prepared for Phase IV and V of the AGOF projects , there are numerous other species that are either federally listed or of special federal concern that are potentially impacted by these projects and, by the nature of the aquifer exemption area lying inside the greater AGOF project site, the proposed aquifer exemption o perations as well. Specifically, granting the aquifer exemption may affect these other federally-listed species occurring on or near the exemption site, due to the operation and expansion of injection wells themselves, the parallel operation and expansion of oil-producing wells dependent on the existence of such injection wells, and the impact of these operations on the Pismo Creek and other bodies of water downstream. Therefore, t hese collective potential impacts of EPA's approval of the aquifer exemption meet the standards affirmatively triggering the agency' s legal obligation to initiate and complete Section 7 consultation to ensure that authorizing the exemption will not jeopardize any listed species or adversely modify their critical habitat.

The EPA's failure to consult prior to approving the aquifer exemption would violate the procedural requirements of Section 7 of the ESA . By failing to engage in consultation, the EPA would also be in violation of its substantive duty to ensure that its action s do not jeopardize the continued existence of threatened and endangered species found within and near the zone of the proposed Class II injection wells under the aquifer exemption . These species include, but are not limited to, the Pismo

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[46] *Id.*; C. Kearns and D. Inouye, "Pollinators, flowering plants, and conservation biology: much remains to be learned about pollinators and plants," *BioScience* 47(5):297-307 (1997).
[47] FWS Pismo Clarkia Review at 9.
[48] 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a) ("Each Federal agency shall review its actions at the earliest possible time to determine whether any acti on may affect listed species or critical habitat. If such a determination is made, formal consultation is required…"); *see Wash. Toxics Coalition v. EPA*, 413 F.3d 1024, 1032 (9th Cir. 2005); Defenders of Wildlife v. Administration, 882 F.2d 1294 (8th Cir. 1989).
[49] 51 Fed. Reg. 19,926 (June 3, 1986).
[50] 50 C.F.R. § 402.02.

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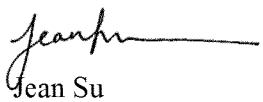
clarkia (*Clarkia speciosa* ssp. *immaculata*), Tidewater goby (*Eucyclogobius nerberryi*), South-Central Coast steel trout (*Oncorhynchus mykiss*), California red-legged frog (*Rana aurora draytonii*), the Chorro creek bog thistle (*Cirsium fontinale* var. *obispoense*), Gambel's watercress (*Rorippa gambellii*), Indian Knob mountain balm (*Eriodictyon altissimum*), La Graciosa thistle (*Cirsium loncholepis*), Marsh sandwort (*Arenaria paludicola*), Morro Manzanita (*Arctostaphylos morroensis*), Nimpomo Mesa Lupine (*Lupinus nipomensis*), Moro shoulderband snail (*Helminthoglypta walkeriana*), and species occurring in the Pismo State Beach area including the Western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), Brown pelican (*Pelecanus occidentalis*), and Southern Sea Otter (*Enhydra lutris nereis*).

IV. Conclusion

As an initial matter, the EPA should immediately deny DOGGR's request for the aquifer exemption because the injection wells undoubtedly fail to meet the Safe Drinking Water Act or California Public Resources Code criteria for aquifer exemptions.[51] However, should the EPA consider granting the exemption, the EPA is statutorily mandated to examine the environmental impacts of its decision under both NEPA and the ESA. As discussed in this letter, the Center urges the EPA to engage in consultation under Section 7 of the ESA so as not to jeopardize the continued existence of several ESA-listed species potentially affected by affirmatively granting the aquifer exemption. If EPA approves the aquifer exemption without complying with Section 7 of the ESA, the Center will be forced to take legal action to enforce compliance.[52]

Please contact me if you have any questions or would like to discuss this matter further.

Sincerely,



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[51] 40 C.F.R. § 146.4; California Pub. Resources Code §3131.
[52] 16 U.S.C. § 1540(g)(1)(A).

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Exhibit A

Excerpts from Phase IV FEIS of Special Status Species Potentially Impacted By AGOF Project

[*See attached.*]

Table 5.5-2
Definitions of Special-Status Plant Species

Special-Status Plant Species
➢ Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
➢ Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 67, No. 114, pp. 40657-4067, June 13, 2002).
➢ Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines,* Section 15380).
➢ Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in California Native Plant Society, 2001).
➢ Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in California Native Plant Society, 2001).
➢ Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
➢ Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
➢ Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies or jurisdictions.
➢ Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (*State CEQA Guidelines*, Appendix G).

Table 5.5-3
Special-Status Plant Species Potentially Occurring in the Project Area

Common Name ***Scientific Name***	**Status**	**Habitat**	**Habitat Present/ Absent**	**Nearest Known Location**
Beach spectaclepod *Dithyrea maritima*	FSC / ST / List 1B	Coastal dunes, coastal scrub	A	Pismo State Beach, 1.5 miles south of Pismo Beach, 3 miles west of Arroyo Grande (CNDDB, 2003).
Black-flowered figwort * *Scrophularia atrata*	FSC / -- / List 1B	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub	P	Species observed on-site during 2003 botanical surveys.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	-- / -- / List 1B	Coastal scrub, coastal bluff scrub, valley and foothill grassland	P	Froom Ranch, west of intersection of Los Osos Valley Road and U.S. 101, just outside city limits of San Luis Obispo (CNDDB, 2003).
Brewer's spineflower *Chorizanthe breweri*	-- / -- / List 1B	Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest	P	Price Canyon Road about 1 mile southwest of Highway 227, south of San Luis Obispo (CNDDB, 2003)
Chorro creek bog thistle *Cirsium fontinale* var. *obispoense*	FE/ SE / List 1B	Chaparral, cismontane woodland, and serpentine seeps	P	Froom Ranch, west of Los Osos Valley Road, South of San Luis Obispo (CNDDB, 2003)

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Common Name ***Scientific Name***	**Status**	**Habitat**	**Habitat Present/ Absent**	**Nearest Known Location**
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	FSC / -- / List 1B	Valley and foothill grassland	P	Laguna Lake, near San Luis Obispo (CNDDB, 2003)
Fuzzy prickly phlox* *Leptodactylon californicum* ssp. *tomentosum*	-- / -- / List 4	Chaparral, coastal dunes and scrub	P	Species observed during botanical surveys conducted on-site (Levine Fricke, 2002)
Gambel's watercress *Rorippa gambellii*	FE / ST / List 1B	Freshwater and brackish marshes	A	Black Canyon, Oceano (CNDDB, 2003).
Hoover's bent grass * *Agrostis hooveri*	-- / -- / List 1B	Chaparral and grassland	P	Species observed during botanical surveys conducted on-site (Levine Fricke, 2002)
Indian knob mountainbalm *Eriodictyon altissimum*	FE / SE / List 1B	Chaparral, cismontane woodland	P	Indian knob, about 4 miles north of Pismo and 3 miles south of San Luis Obispo (CNDDB, 2003).
Jones's layia *Layia jonesii*	FSC / -- / List 1B	Chaparral, valley foothill grassland	P	1.75 mile southwest of San Luis Obispo (CNDDB, 2003)
La Graciosa thistle *Cirsium loncholepis*	FE / ST / List 1B	Coastal dunes, brackish marshes and riparian scrub	A	Callendar dunes, south of Oceano (CNDDB, 2003).
Leafy tarplant *Deinandra increscens* ssp. *foliosa*	-- / -- / List 1B	Valley and foothill grassland	P	Immediately NE of Lopez Reservoir (CNDDB, 2003)
Marsh sandwort *Arenaria paludicola*	FE / SE / List 1B	Marshes and swamps	A	Pismo Beach, San Luis Obispo County (CNDDB, 2003)
Morro manzanita *Arctostaphylos morroensis*	FT / -- / List 1B	Chaparral, cismontane woodland, coastal dunes, coastal scrub	P	Edge of Prefumo Canyon Road in Prefumo Canyon, Southwest of San Luis Obispo (CNDDB, 2003)
Nipomo Mesa lupine *Lupinus nipomensis*	FE / SE / List 1B	Coastal dunes	A	Oceano dunes (CNDDB, 2003)
Obispo Indian paintbrush *Castilleja densiflora* ssp. *obispoensis*	-- / -- / List 1B	Valley and foothill grassland	P	See Canyon, San Luis Obispo (CNDDB, 2003)
Pecho manzanita *Arctostaphylos pechoensis*	FSC / -- / List 1B	Closed cone coniferous forest, chaparral, and coastal scrub	P	Davis Canyon, Irish Hills (CNDDB, 2003)
Pismo clarkia * *Clarkia speciosa* ssp. *immaculata*	FE / SR / List 1B	Chaparral, cismontane woodland, valley and foothill grassland	P	Species observed on-site during 2003 botanical surveys.
Saint's Daisy* *Erigeron sanctarum*	-- / -- / List 4	Chaparral, cismontane woodland and coastal scrub	P	Species observed during botanical surveys conducted on-site (Levine Fricke, 2002)
San Luis mariposa lily *Calochortus obispoensis*	-- / -- / List 1B	Chaparral, coastal scrub, valley and foothill grassland	P	Western ridge of Indian Knob, about 4 miles north of Pismo Beach (CNDDB, 2003)

Common Name ***Scientific Name***	**Status**	**Habitat**	**Habitat Present/ Absent**	**Nearest Known Location**
San Luis Obispo County lupine *Lupinus ludovicianus*	FSC / -- / List 1B	Chaparral, cismontane woodland	P	Hills north of Price Canyon, north of Pismo Creek, NNE of Pismo Beach (CNDDB, 2003).
Santa Lucia manzanita *Arctostaphylos luciana*	FSC / -- / List 1B	Chaparral	P	1.75 miles NNE of Slide Hill, East of San Luis Obispo (CNDDB, 2003)
Santa Margarita manzanita *Arctostaphylos pilosula*	FSC / -- / List 1B	Closed-cone coniferous forest, and chaparral.	P	Vicinity of Indian Knob, about 3.5 miles NNW of Pismo Beach, South of San Luis Obispo (CNDDB, 2003)
Surf thistle *Cirsium rhothophilum*	FSC / ST / List 1B	Coastal dunes, costal bluff scrub	A	Pismo Beach (CNDDB, 2003)
Well's manzanita * *Arctostaphylos wellsii*	-- / -- / List 1B	Chaparral, closed-cone coniferous forest	P	Species observed during botanical surveys conducted on site (Padre, 2003)

Status Codes:

FE	Federal Endangered (U.S. Fish and Wildlife Service [USFWS])
FT	Federal Threatened (USFWS)
List 1B	Plants rare, threatened, or endangered in California and elsewhere (CNPS)
List 4	"Watch list" for plants of limited distribution (CNPS)
SE	State Endangered (CDFG)
ST	State Threatened (CDFG)
SR	State Rare (CDFG)
*	Species observed during recent surveys (Padre 2003, Levine Fricke 2002)

To determine the presence and/or absence of the special-status plant species listed in Table 5.5-3 above, a focused botanical survey of the project site was conducted in May 1 and 8, 2003, during the typical flowering period for the majority of the species listed. In addition, supplemental biological surveys were conducted in August and September 2003 and resulted in the identification of several other "late-blooming" species. For a complete listing of vascular flora observed within the project site, please refer to Appendix E.

Special-status plant species that could potentially occur within the project site based on known occurrences within the vicinity of Price Canyon or adjacent portions of San Luis Obispo County included Blochman's dudleya, Brewer's spineflower, Jones' layia, Obispo Indian paintbrush, San Luis mariposa lily, Chorro creek bog thistle, Congdon's tarplant, and leafy tarplant. However, none of these species were observed during the 2003 botanical surveys conducted within the project area or during past botanical surveys conducted by Levine Fricke in 2000, 2002 and SAIC in 1994.

In addition, Well's manzanita was the only species of *Arctostaphylos* identified in the project area and represents the dominant component of the Central maritime chaparral habitat occurring within the site. Therefore, Morro manzanita, Santa Margarita manzanita, Pecho manzanita, and Santa Lucia manzanita are not expected to occur within the project site. Moreover, special-status plant species associated with specific habitats types such as surf thistle, beach spectaclepod, La Graciosa thistle, Nipomo Mesa lupine, Gambel's watercress, and marsh sandwort were not observed during surveys and are not expected to occur within the site due to the lack of suitable habitat (i.e., require coastal foredune and marsh habitat, which is not present within the project site).

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Table 5.5-4
Definitions of Special-Status Wildlife Species

Special-Status Animal Species
➢ Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
➢ Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 67, No. 114, pp. 40657-4067, June 13, 2002).
➢ Animals that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380).
➢ Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).
➢ Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals).
➢ Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Table 5.5-5
Special-Status Wildlife Species Potentially Occurring within the Project Area

Common Name *Scientific Name*	Status	Nearest Known Occurrence(s)
	Invertebrates	
Morro shoulderband snail *Helminthoglypta walkeriana*	FE	Between Calle Joaquin Road and Highway 101, San Luis Obispo (CNDDB, 2003)
Monarch butterfly *Danaus plexippus*	SA	Pismo Dunes State Vehicular Recreation Area District Office, Grover Beach (CNDDB, 2003)
	Fish	
South-central California coast steelhead *Oncorhynchus mykiss irideus*	FT, CSC	Pismo Creek and West Corral de Piedra Creek, Price Canyon (CNDDB, 2003)
Tidewater goby *Eucyclogobius newberryi*	FE, CSC	Pismo Creek (from mouth to 1.0 mile upstream), Pismo Beach (CNDDB, 2003)
	Reptiles	
California horned lizard *Phrynosoma coronatum frontale*	FSC, CSC	El Chorro Regional Park, San Luis Obispo County (CNDDB, 2003); Guadalupe Dunes, San Luis Obispo County (Unocal, 2000)
Southwestern pond turtle *Clemmys marmorata pallida*	FSC, CSC	Pismo Creek (Morro Group, 2001)
Two striped garter snake *Thamnophis hammondi*	CSC	Cuyama River, Los Padres National Forest (CNDDB, 2003)
	Amphibians	
California tiger salamander *Ambystoma californiense*	FC, CSC	Biddle Regional County Park, Lopez Canyon, southeast of San Luis Obispo (CNDDB, 2003)
California red-legged frog *Rana aurora draytonii*	FT, CSC	Corbett Canyon Creek, Arroyo Grande (CNDDB, 2003)
	Birds	
Western snowy plover *Charadrius alexandrinus nivosus*	FT (nesting), CSC (nesting), M	Pismo State Beach (CNDDB, 2003)
California least tern *Sterna antillarum browni*	FE (nesting colony), SE (nesting colony), M	Pismo State Beach (Padre, 2003)

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Common Name *Scientific Name*	Status	Nearest Known Occurrence(s)
Brown pelican *Pelecanus occidentalis*	FE (nesting colony), SE (nesting colony), M	Pismo State Beach (Padre, 2003)
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	SE (nesting) FC (nesting), M	San Luis Obispo. Last documented occurrence was 1921. (CNDDB, 2003)
Cooper's hawk * *Accipiter cooperii*	CSC (nesting), M	Observed during 2003 surveys conducted on-site.
American peregrine falcon * *Falco peregrinus anatum*	FSC (nesting), SE (nesting), FP, M	Observed during 2003 surveys conducted on-site.
Loggerhead shrike *Lanius ludovicianus*	FSC (nesting), CSC (nesting), M	Observed on site during previous survey (ERCO, 1981)
Northern harrier *Circus cyaneus*	CSC (wintering), M	Known from region; nearest occurrence unknown
Sharp-shinned hawk *Accipiter striatus*	CSC (nesting), M	Known from region; nearest occurrence unknown
Southwestern willow flycatcher *Empidonax trailli extimus*	SE (nesting), M	Known from region; nearest occurrence unknown
Yellow warbler *Dendroica petechia*	CSC (nesting), M	Recorded at Pismo Beach and Oceano (SAIC, 1994)
	Mammals	
San Diego desert woodrat *Neotoma lepida intermedia*	CSC	Green Peak, approximately 1.5 miles southeast of Diablo Canyon (CNDDB, 2003)
Southern sea otter *Enhydra lutris nereis*	FT, FP	Pismo State Beach (Padre, 2003)

Status Codes:

FE	Federal Endangered (USFWS)
FT	Federal Threatened (USFWS)
FSC	Federal Species of Special Concern (USFWS)
FC	Federal Candidate Species (USFWS)
SE	State Endangered (CDFG)
ST	State Threatened (CDFG)
CSC	California Species of Special Concern (CDFG)
FP	Fully Protected under California Fish and Game Code
SA	Special animal (CDFG)
M	Protected under the Migratory Bird Treaty Act of 1918
*	Species observed during recent surveys (Padre 2003)

For the purposes of impact analysis, the following briefly presents the legal status and applicable ecological and range information for those special-status wildlife species identified within the proposed impact areas and/or for those that have a high likelihood of occurrence based on the presence of suitable habitat. Special-status wildlife species associated with coastal and/or marine habitats located west of the project area such as the southern sea otter, least tern, western snowy plover, and brown pelican were not observed during surveys and are not expected to occur within the site due to the lack of suitable habitat.

Invertebrates

Morro shoulderband snail (*Helminthoglypta walkeriana*). The Morro shoulderband snail is a Federally endangered species. This species inhabits the accumulated litter and undersides of low shrub branches that exhibit dense, low growth and ample contact to the ground, particularly mock heather (*Ericameria ericoides*), seaside golden yarrow (*Eriophyllum staechadifolium*), deerweed (*Lotus scoparius*), and dune almond (*Prunus fasciculata* var. *punctata*) (USFWS, 2003). Based on this observation, favorable