

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

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OTAY MESA PROPERTY, L.P., <i>et al.</i> ,)	
)	
PLAINTIFFS,)	
)	
v.)	Civil Action No. 13-cv-0240 (KBJ)
)	
UNITED STATES DEPARTMENT OF)	
THE INTERIOR, <i>et al.</i> ,)	
)	
DEFENDANTS.)	
_____)	

MEMORANDUM OPINION

Plaintiffs Otay Mesa Property, L.P., Rancho Vista Del Mar, and Otay International, LLC (collectively “Otay Mesa” or “Plaintiffs”) own land that is located in San Diego County, California, near the border between the United States and Mexico. In 2012, the United States Fish and Wildlife Service (“the FWS”) promulgated a rule that designates 57 acres of Otay Mesa’s land as a “critical habit” for the endangered Riverside fairy shrimp. *See* 50 C.F.R. § 17.95. Otay Mesa has plans to build a recycling facility and landfill on a portion of the designated property, and it has filed the instant action against the U.S. Department of the Interior and its Secretary, the FWS and its Director, and the Assistant Secretary of the Interior for Fish, Wildlife, and Parks (collectively “Defendants”), seeking a court order that declares unlawful and sets aside the portion of the FWS rule that designates the property as a critical habitat. Otay Mesa’s one-count complaint asserts that the FWS’s critical habitat determination, which will likely result in various restrictions on Plaintiffs’ use of the land, violates the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 701–706, because it is arbitrary,

capricious, and contrary to the provisions of the Endangered Species Act (“ESA”), 16 U.S.C §§ 1531–1544, and the National Environmental Policy Act (“NEPA”), 42 U.S.C §§ 4321–4347.

Before this Court at present are the parties’ cross-motions for summary judgment. Otay Mesa maintains that it is entitled to judgment as a matter of law because the record clearly demonstrates that the process that the FWS used to determine whether or not Otay Mesa’s property should be declared a critical habit for the Riverside fairy shrimp was flawed, and thus the agency reached the wrong conclusion. Specifically, Otay Mesa maintains that the FWS (1) wrongly designated the property as a critical habitat even though it does not qualify as such under the ESA; (2) conducted a faulty economic analysis with respect to the critical habitat designation; (3) improperly neglected to perform a NEPA analysis of possible environmental impacts of the critical habitat designation; and (4) failed to articulate its reasons for determining that preservation of all 57 acres is essential to conservation of the species. (Pls.’ Mem. in Supp. of Summ. J. (“Pls.’ Mem.”), ECF No. 9-1, at 9–10, 13–14.)¹ Defendants assert that they are entitled to summary judgment because Otay Mesa does not have standing to sue (Defs.’ Combined Opp’n to Pls.’ Mot. for Summ. J. & Mem. in Supp. of Cross-Mot. for Summ. J. (“Defs.’ Mem.”), ECF No. 14-1, at 10), and with respect to the merits of Otay Mesa’s APA claim, Defendants argue that the FWS’s critical habitat determination was not arbitrary or capricious in violation of the APA because the agency conducted a proper economic analysis, reasonably determined that a NEPA analysis was not warranted, and has articulated rational and well-supported reasons for

¹ Page numbers herein refer to those that the Court’s electronic case filing system automatically assigns.

concluding that Otay Mesa's property qualifies a critical habitat for ESA purposes (*id.* at 10–11).

On September 30, 2015, this Court issued an order that **DENIED** both parties' cross motions for summary judgment **WITHOUT PREJUDICE**. (ECF No. 29.) This Memorandum Opinion explains the reasons for that order. In short, this Court finds that Otay Mesa has standing to bring this action and that the FWS did not act arbitrarily or capriciously with respect to its economic analysis and NEPA determination. In addition, this Court concludes that the FWS made a rational determination that the watershed area surrounding the pond on Otay Mesa's property where the Riverside fairy shrimp live is essential to the conservation of the species, and thus, at least some portion of the land at issue qualifies as a critical habitat under the ESA. However, this Court cannot determine on the record before it whether the FWS has acted arbitrarily in concluding that 56 acres of land surrounding the one-acre pond is, in fact, watershed, because the portion of the administrative record that was submitted to the Court does not explain how the FWS determined that all of the geographic area that it designated as critical habitat qualifies as such. Consequently, and as set forth in the order this Court previously issued, each side will have an opportunity to augment the Administrative Record Appendix and to file supplemental briefs that are limited to this factual issue.

I. BACKGROUND

A. Statutory And Regulatory Framework

1. The FWS's Role In Implementing The Endangered Species Act

Congress enacted the Endangered Species Act in 1973 with the aim of conserving and protecting endangered and threatened species and the ecosystems on

which those species depend. *See* 16 U.S.C. § 1531(b). A species is “endangered” under the ESA if it is “in danger of extinction throughout all or a significant portion of its range[,]” and a species is “threatened” under the ESA if it is “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* § 1532(6), (20). The Department of the Interior administers the ESA for non-marine species and has delegated to the Fish and Wildlife Service (an agency within the Interior Department) the authority to list such species as “endangered” or “threatened” through rulemaking. *See* 50 C.F.R. § 402.01 (2015); *see also Bangor Hydro-Elec. Co. v. FERC*, 78 F.3d 659, 661 (D.C. Cir. 1996) (noting that the FWS is “an arm of the Department of Interior”).²

Species that the FWS lists as endangered or threatened receive certain protections under Federal, State, and local law, which the FWS refers to as “baseline” protections. For example, Section 7 of the ESA requires federal agencies to consult with the FWS to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species[.]” 16 U.S.C. § 1536(a)(2). Section 9 of the ESA prohibits the “take” of endangered wildlife, where “take” means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such

² Under the ESA, the FWS makes a determination regarding whether or not a species should be listed based on a number of factors affecting its continuing existence, including the current status of the species’ habitat, overutilization of the species, disease or predation impacting the species, and whether existing regulations are adequate to protect the species. 16 U.S.C. § 1533(a)(1). Whereas prior environmental statutes prohibited the listing of a species “if it was still flourishing anywhere[,]” Frank F. Grad, *Treatise on Env’tl Law* Ch. 12, § 12.04[7][b], the ESA now permits the FWS to list a species that is threatened or endangered throughout “a significant portion of its range,” where “range” is defined as “the general geographical area within which the species is currently found, including those areas used throughout all or part of the species’ life cycle, even if not used on a regular basis.” 79 Fed. Reg. 37578, 37579, 37583 (July 1, 2014).

conduct.” 16 U.S.C. §§ 1532(19), 1538(a)(1); 50 C.F.R. § 17.21(c). And Section 10(a)(1)(B) authorizes landowners and local governments who desire to engage in activities or projects that may incidentally result in the take of a protected species to apply for a permit by demonstrating, among other things, that “the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking [and that] the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild[.]” 16 U.S.C. § 1539(a)(1)(B), (2)(A)–(B). Similar protections for endangered and threatened species exist on the state level; for example, California requires state government entities that are responsible for project approval under the California Environmental Quality Act to consider the environmental effects of certain proposed projects. *See* Cal. Pub. Res. Code §§ 21000–21189.3; *see also id.* § 21002.1.

Pursuant to the ESA, the FWS is required to employ the best available scientific and commercial data when it makes the initial determination regarding whether or not a particular species should be listed as endangered or threatened. *See* 16 U.S.C. § 1533(a)–(b). Moreover, the agency’s decision to list a species as fitting within one of these protected categories “must be made *without* reference to economic costs or private property impacts.” *Safari Club Int’l v. Jewell*, 960 F. Supp. 2d 17, 30 (D.D.C. 2013) (emphasis added) (internal quotation marks and citations omitted); *see also* 16 U.S.C. § 1533(b)(1)(A) (stating that listing determinations must be made “solely on the basis of the best scientific and commercial data available”). The FWS is also required to utilize standard administrative rulemaking processes when it makes the listing decision: it must provide public notice of its proposed listing determination through the issuance

of a proposed rule, and thereafter receive public comment, followed by the promulgation of a final rule that lists the species. 16 U.S.C § 1533(b)(5)–(6).

Notably, the ESA specifically states that, “to the maximum extent prudent and determinable[,]” the FWS should publish a rule that designates the “critical habit” for a listed species at the same time the agency publishes the final rule that lists the species as endangered or threatened. *Id.* § 1533(a)(3)(A). In practice, the FWS often “put[s] off” this critical habitat designation. *See N.M. Cattle Growers Ass’n v. U.S. Fish & Wildlife Serv.*, 248 F.3d 1277, 1283 (10th Cir. 2001) (explaining that, because the FWS has long believed that critical habitat designations “are unhelpful, duplicative and unnecessary[,]” the agency often fails to makes such designation “until forced to do so by court order” (citation omitted)). However, when the FWS does undertake to engage in the critical habitat assessment, its exercise of discretion regarding the designation of an area as a critical habitat for a listed species is governed by a specific set of statutory and regulatory criteria.

First, the ESA defines a “critical habitat” as:

(i) the specific areas within the geographical area occupied by the species, at the time it is listed [as endangered or threatened under the statute], on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . , upon a determination by the Secretary that such areas are essential for the conservation of the species.

16 U.S.C. § 1532(5)(A). Consistent with this statutory definition, in order to reach the conclusion that a particular geographic area fulfills this definition and is thus a critical habitat for ESA purposes, the FWS must determine the “primary constituent elements”

or “PCEs” of the habitat, which are “those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection.” 50 C.F.R. § 424.12 (2015). In addition, as with the decision to list a species in the first place, the agency must make the critical habitat determination by relying on the best scientific data available. *See* 16 U.S.C. § 1533(b)(2).

However, and significantly for present purposes, in stark contrast to the ESA’s *prohibition* against considering the economic impact of a listing determination, when the FWS decides whether or not to designate a geographical area as a critical habitat for a listed species, the agency *must* “tak[e] into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat.” 16 U.S.C. § 1533(b)(2). Furthermore, except when extinction is at issue, the agency has discretion both to (1) exclude any area from a critical habitat designation based on a determination “that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat,” *id.*, and (2) determine the weight to be afforded to various exclusion factors when deciding the scope of a critical habitat designation, *see id.*

Finally, it is important to acknowledge (as a historical matter) that the FWS has actually employed different methodologies to assess the economic impact of a critical habitat determination over the years. Prior to 2002, the FWS utilized the “baseline” or “incremental” approach, which requires the agency to consider only those impacts “that would not otherwise occur without the designation” of the critical habitat. Endangered and Threatened Wildlife and Plants; Revisions to the Regulations for Impact Analyses

of Critical Habitat (“2012 Critical Habitat Revisions”), 77 Fed. Reg. 51,503, 51,506 (Aug. 24, 2012). “Under [the baseline] approach, any economic impacts of protecting the [species] that will occur regardless of the critical habitat designation—in particular, the burdens imposed by listing the [species in and of itself]—are treated as part of the regulatory ‘baseline’ and are not factored into the economic analysis of the effects of the critical habitat designation.” *Ariz. Cattle Growers’ Ass’n v. Salazar*, 606 F.3d 1160, 1172 (9th Cir. 2010). So, for example, the various costs that arise from the mere fact that a species has been labeled endangered or threatened—*e.g.*, the costs associated with engaging in Section 7 consultations to ensure that federal actions will not likely jeopardize the species’ continued existence, and the costs arising from compliance with Section 9’s prohibition against “taking” the species, and the costs of complying with state and local laws that protect the species—are considered part of the baseline and are excluded from the calculation of costs. (Final Rule: Revised Critical Habitat for the Riverside Fairy Shrimp (Dec. 4, 2012) (“2012 Final Rule”), Admin. R. App., ECF Nos. 7-1 & 7-2 (“AR”) 045115.) What is left are the incremental costs attributable only to the designation of critical habitat; under the baseline methodology, only such incremental costs are counted when the impact of the critical habitat designation is assessed. (*Cf.* *Econ. Analysis of Critical Habitat Designation for Riverside Fairy Shrimp* (Aug. 30, 2012) (“Econ. Analysis”), AR 050659 (“Incremental costs are limited to administrative efforts of new and reinitiated consultations to consider adverse modification of critical habitat . . . , administrative costs of complying with [state law], and time delays resulting from both processes.”).)

Between 2002 and 2008, the FWS eschewed the baseline approach and conducted its critical habitat economic analyses using the “co-extensive” methodology. *See* 2012 Critical Habitat Revisions, 77 Fed. Reg. at 51507. Pursuant to this methodology, the FWS considered “all of the economic impacts of a critical habitat designation, regardless of whether those impacts are attributable co-extensively to other causes.” *N.M. Cattlegrowers Ass’n*, 248 F.3d at 1285. Under this approach, the aforementioned costs of conducting Section 7 consultations, adhering to Section 9’s prohibition against taking protected species, and complying with state laws would be included in the calculation of the cost of the critical habitat designation, along with the additional incremental costs that are attributable to designating the critical habitat. Thus, this methodology is “co-extensive”—*i.e.*, it includes costs attributable *both* to listing the species as endangered or threatened *and* to designating its critical habitat—and this approach will, at a minimum, equal (and will almost always exceed) the cost calculation under the baseline approach.

In 2008, the FWS reverted back to using the baseline methodology when conducting economic analyses with respect to the designation of critical habitats. 2012 Critical Habitat Revisions, 77 Fed. Reg. at 51506–08. The agency has apparently continued to use that approach to date.

2. The Preparation Of Environmental Impact Statements Under The National Environmental Policy Act

NEPA is, in essence, a “procedural statute” that is designed to ensure that federal agencies make fully informed and well-considered decisions. *New York v. Nuclear Regulatory Comm’n*, 681 F.3d 471, 476 (D.C. Cir. 2012) (quoting *Vermont Yankee Nuclear Power Corp. v. Nat’l Res. Def. Council, Inc.*, 435 U.S. 519, 558 (1978))

(internal quotation marks omitted)). To this end, before any federal agency undertakes a “major Federal action[] significantly affecting the quality of the human environment,” 42 U.S.C. § 4332(2)(C), NEPA requires the agency to evaluate the environmental consequences of that proposed action. The required evaluation involves preparing a detailed environmental impact statement (“EIS”) that describes the impact of the proposed action on the environment and any alternatives to the proposed action, which the agency must publish for public review and comment. *Id.*³ The agency may also opt to prepare a less-detailed environmental assessment in order to assist it in determining whether a particular agency action will have a significant effect on the human environment such that an EIS is required—an environmental assessment is a “concise public document” that briefly provides evidence and analysis to assist an agency in deciding whether the action in question requires an EIS. *See* 40 C.F.R. § 1501.4(a)–(c); *id.* § 1508.9 (defining an environmental assessment). Based on the information contained in the assessment, the agency may proceed to prepare an EIS; alternatively, the agency may conclude that an EIS is not warranted. 40 C.F.R. § 1501.4(e).

The NEPA statute does not contain a private right of action against the government; rather, a plaintiff alleging a NEPA violation “must rest its claim for judicial review on the Administrative Procedure Act.” *Public Citizen v. U.S. Trade Representative*, 5 F.3d 549, 551 (D.C. Cir. 1993). In the context of such actions, the

³ An EIS details both the adverse environmental consequences of the proposed project and alternatives to the project, and it also address the extent to which the project’s adverse effects can be mitigated. 42 U.S.C. § 4332(2)(C)(i)–(iii). An agency’s preparation of an EIS is an extensive undertaking, insofar as it generally involves both a draft and a final document. The agency must invite comments on the draft statement before preparing the final EIS, *see* 40 C.F.R. § 1502.9 (2015); 40 C.F.R. § 1503.1, and it must consult with other federal agencies that may have special expertise with respect to the environmental effects of the project, among other things, *see* 42 U.S.C. § 4332(2)(C).

FWS has taken the position that “outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA in connection with designating critical habitat under the Act.” (2012 Final Rule, AR 045141 (citing *Douglas Cty. v. Babbitt*, 48 F.3d 1495 (9th Cir. 1994)).)⁴

B. Background Facts Underlying Otay Mesa’s Complaint

1. Riverside Fairy Shrimp

The Riverside fairy shrimp is a small freshwater crustacean—generally measuring 0.56 to 0.92 inches long—that was identified as a new species in 1985 and listed as “endangered” on August 3, 1993. (*See* Final Rule: Determination of Endangered Status for Three Vernal Pool Plants and the Riverside Fairy Shrimp (Aug. 3, 1993) (“Listing Decision”), AR 000695; Proposed Rule: Revised Critical Habitat for the Riverside Fairy Shrimp (June 1, 2011) (“2011 Proposed Rule”), AR 055615.) This shrimp is a filter feeder; its diet consists mostly of algae, bacteria, and other microorganisms. (2012 Final Rule, AR 045094.) Moreover, Riverside fairy shrimp “are relatively sedentary[,]” and the species typically does not actively migrate. (*Id.* 045098.)⁵

Notably, in order to grow and reproduce, Riverside fairy shrimp rely upon “vernal pool” hydrology—*i.e.*, pools that fill with water during fall and winter rains and

⁴ This geographically-based distinction in agency policy has resulted from a split in the U.S. Courts of Appeals on the question of whether an EIS is required for critical habitat designations. In *Catron County*, the Tenth Circuit Court of Appeals held that the FWS must comply with NEPA when designating critical habitat under the ESA. 75 F.3d at 1436. By contrast, the Ninth Circuit, in *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), held that FWS does not have to comply with NEPA when designating critical habitat. *Id.* at 1502–07.

⁵ Passive relocation of these shrimp can occur as the result of weather conditions such as rain or wind, or when animals or vehicle tires pick up and transport mud that contains Riverside fairy shrimp egg cysts. (2012 Final Rule, AR 045094–95) The cysts can also survive passage through the digestive tracts of animals, which provides for another means of movement. (*Id.* 045139.)

evaporate in the spring. (*Id.* 045092–94.) Generally speaking, this species of shrimp mates and reproduces when the vernal pool is full, and the offspring lay dormant—encased in hard cysts at the bottom of the pool—when the pool is dry. The lifecycle of a Riverside fairy shrimp begins when a vernal pool fills with water and the shrimp mature, mate, and reproduce. The female shrimp carry the fertilized eggs in a pouch, but before the embryos reach full maturity, they stop developing and enter a dormant state. (*Id.* 045094.) A hard protective coating develops, and the embryos turn into cysts that eventually fall to the bottom of the vernal pool. (*Id.*)

“By the time the pool dries out, the numbers of dormant cysts within each pool basin can reach tens of thousands to millions, depending on pool size, volume, and depth[.]” (Final Rule: Designation of Critical Habitat for the Riverside Fairy Shrimp (2005) (“2005 Final Rule”), AR 019548.) The protective coating that forms around the cysts allows the cysts to remain dormant at the bottom of a dried-out vernal pool for decades, and possibly even centuries, and protects the shrimp through extreme weather conditions. (*Id.* 019549.) When conditions are favorable and the vernal pool fills, a portion of the dormant cysts at the bottom of the pool will hatch. (*Id.* 019550.) But once the pool dries out again, many more cysts remain dormant in the soil and may hatch during a future filling. (*See id.*)

2. Vernal Pool Networks And Watersheds

Only vernal pools with certain characteristics provide an appropriate habitat for survival of the Riverside fairy shrimp. For example, “Riverside fairy shrimp will not hatch in pools that receive cool waters from early winter rains”; rather, they exist only in pools that “retain water through the warmer weather of late spring[.]” (Listing

Decision, AR 000699 (citations omitted).) Moreover, because it takes the cysts approximately eight weeks to hatch, mature, and reproduce in the water of the pool (*see* 2012 Final Rule, AR 045094), the pool conditions must be such that the pool will not dry out completely in less than eight weeks. This means that the habitat of this species is limited to vernal pools that are at least moderately deep and thus take longer to evaporate. (*Id.*) In addition, the vernal pools that comprise the Riverside fairy shrimp habitat must have “nearly impermeable surface or subsurface soil layers and flat or gently sloping topography” (Final Rule: Final Designation of Critical Habitat for the Riverside Fairy Shrimp (May 30, 2001) (“2001 Final Rule”), AR 053047), because hard soil layers prevent water from seeping when the pond fills. (*Id.* (explaining that “[i]n southern California, these impervious layers are typically alluvial materials with clay or clay loam subsoils, and they often form a distinctive micro-relief known as Gilgai or mima mound topography”).)

As a general matter, vernal pools that have the necessary physical characteristics to support Riverside fairy shrimp are those that fill with water during fall and winter rains, that evaporate in the spring (2012 Final Rule, AR 045093), and that typically occur in pool complexes—that is, “two or more vernal pools in the context of a larger vernal pool watershed[,]” where the pools are connected by flowing water either on or below the surface. (*Id.*)⁶ Vernal pool complexes and their associated watersheds are often located “in areas with Mediterranean climates where slight depressions become seasonally wet or inundated following fall or winter rains.” (Listing Decision, AR 000695.) Most of the vernal pool habitats in Southern California have been lost over

⁶ The term “watershed” refers to the area upland of and adjacent to a vernal pool. (Listing Decision, AR 000700.)

time due to a variety of factors including commercial growth, and only “a very small percentage remain from the U.S./Mexico borderlands north, and those that remain are found in a disturbed and artificially fragmented landscape.” (Bauder & McMillan—Current Distribution and Historical Extent of Vernal Pools in Southern California and Northern Baja California, Mexico (1998), AR 046148; *see also* Environmental Assessment & Land Protection Plan: Vernal Pools Stewardship Project, AR 000002 (“Due to historical and ongoing agricultural activities, 78 percent of the vernal pools once located on [the southernmost mesa of California] have been lost” (citation omitted)); Vernal Pools of Southern California Recovery Plan—Bauder (Sep. 3, 1998), AR 052857 (“On much of the coastal terrace, habitat losses have resulted in a severe reduction of the geographic range of pools and the species found in them. These losses, coupled with fragmentation of the habitat, have accentuated the naturally patchy, discontinuous distribution patterns of most vernal pool species.”).)

3. Subunit 5c

Otay Mesa owns land in San Diego County, California, including the 57 acres that the FWS has designated as critical habitat for the Riverside fairy shrimp and which is referred to throughout this Opinion as “Subunit 5c” or “the Property.” Otay Mesa plans to develop a part of Subunit 5c into a recycling center and landfill, which it claims is essential to address projected landfill capacity issues in San Diego County. (*See* Otay Mesa Comments to Proposed Rule to Revise the Critical Habitat Determination for the Riverside Fairy Shrimp and Notice of Draft Economic Analysis (April 2, 2012) (“Otay Mesa Comments”), AR 037643, 037649. Otay Mesa claims that the “land underlying Subunit 5C is zoned as a landfill, and the area surrounding the western boundary of the project has been designated as a landfill buffer zone, allowing

only uses consistent with the future recycling center and landfill operations.” (*Id.* 037648.) Otay Mesa also asserts that “this facility could take more than 10 years to permit and construct” due to the number of agencies with which it must consult and the nature of the approvals that it must obtain. (*Id.* 037649 (explaining in its comment letter on the proposed rule that the planned recycling facility “will need environmental review as well as permits from the Army Corps of Engineers, [the] FWS, the California Department of Fish and Game, the State Water Resources Control Board, the Regional Water Quality Control Board, and the California Integrated Waste Management Board[,]” and that “all sensitive species and habitat impacted by the Project will be mitigated in accordance with requirements imposed by the FWS as part of the Section 7 consultation”).)

Subunit 5c contains at least one vernal pool, which is approximately one acre in size—the pool was formerly a cattle stock pond. (2012 Final Rule, AR 045109.) According to the FWS, Subunit 5c “also contains a small stream as well as the downward slope and mima mound topography that make up the watershed associated with the [] vernal pool.” (*Id.*)

In designating Subunit 5c as a critical habitat for the Riverside fairy shrimp, the FWS relied on three environmental surveys that contractors performed on this pool: one in 2000 (Large Branchiopod Dry Survey at Otay Mesa, Generating Project (Jun. 19, 2000) (“2000 Survey”), AR 003806–11), one in 2001 (Wet Season Survey Report for RFS at East Otay Mesa SPA (Sep. 19, 2001) (“2001 Survey”), AR 004784–817), and one in 2011 (Survey Report for Fairy Shrimp at Proposed East Otay Mesa Landfill Project (Dec. 23, 2011) (“2011 Survey”), AR 037261–76). During the 2000 survey,

which was conducted when the stock pond was dry, the contractor gathered 10 soil samples from the dried-out pond bed, each of which contained Riverside fairy shrimp cysts. (2000 Survey, AR 003807–08.) The next survey began on January 23, 2001, when the stock pond was inundated with water, and ended on May 16, 2001, after the pond had dried out. “[O]n February 7, 2001, unidentified larval fairy shrimp thought to be Riverside fairy shrimp . . . were observed” in the stock pond. (2001 Survey, AR 004788, 004792.) “Later, during the March 15, 2001 sampling session, adult Riverside fairy shrimp were positively identified” in the stock pond, numbering in the tens of thousands. (*Id.* 004788, 004795.) During the 2011 survey, which was conducted when the stock pond was dry, the contractor again gathered 10 soil samples. Each of these samples contained Riverside fairy shrimp cysts, in numbers “ranging from over 25 to more than 100 cysts per soil sample.” (2011 Survey, AR 037261, 37263.) There is no dispute that the stock pond itself is the only location within Subunit 5c where cysts and/or shrimp have been found.

C. The Critical Habit Rulemaking Proceedings For The Riverside Fairy Shrimp

1. Prior Rulemaking Proceedings

The FWS did not designate any critical habitat for the Riverside fairy shrimp when it listed the species as endangered in 1993, despite its statutory obligation to do so. Instead, the agency published its first rule designating a critical habitat for the Riverside fairy shrimp on May 30, 2001. (2001 Final Rule, AR 53046–77.) Several construction industry groups filed a lawsuit to challenge this rule in federal court, *see Bldg. Indus. Legal Def. Found. v. Norton*, 231 F. Supp. 2d 100, 102 (D.D.C. 2002), which led to a settlement agreement pursuant to which the FWS published a revised

critical habitat designation for the Riverside fairy shrimp in March of 2005. (2005 Final Rule, AR 019536–757.)

In 2005, the FWS made specific findings that Subunit 5c contained the necessary primary constituent elements (“PCEs”) to meet the statutory definition of critical habitat for the Riverside fairy shrimp. (*See* 2005 Final Rule, AR 019625.) However, the agency exercised its discretion to exclude Subunit 5c from the ultimate critical habitat designation, finding that the benefits of exclusion exceeded the benefits of inclusion. (*Id.* 019711–14.) Specifically, the Secretary employed the co-extensive methodology to evaluate the economic impact of the critical habitat designation and found that inclusion of Subunit 5c would result in minimal benefits to the species because the Riverside fairy shrimp currently occupied Subunit 5c, and therefore, anyone who proposed to engage in an activity that “might adversely impact the species, including possibly significant habitat modification[,]” would already be required to consult with the FWS, even without a critical habitat designation. (*Id.* 019711; *see also id.* 019712 (“[W]e believe that this proposed unit as critical habitat would provide little additional Federal regulatory benefits for the species.”).) With respect to the benefits of exclusion, the Secretary found “that the costs associated with designating Subunit 5c as critical habitat would range from \$5 million to \$31 million, largely as loss of land value and increased costs to private landowners[,]” (*id.* 019712–13,) and thus were relatively high, leading to the conclusion that the costs outweighed the benefits and, as a result, Subunit 5c should be excluded.

Taking into account all of the exclusions, the FWS’s 2005 rule ultimately designated approximately 306 acres as critical habitat for the Riverside fairy shrimp.

(*Id.* at 019536.) The 2005 rule was challenged in court, *see Ctr. for Bio. Diversity v. Salazar*, No. 3:09-cv-0051 (JM) (JMA) (S.D. Cal. 2009), which led to another settlement agreement, pursuant to which the FWS conducted the rulemaking proceedings that are the subject of the instant lawsuit. (2012 Final Rule, AR 045087.)

2. The 2011-2012 Rulemaking Proceedings

a. *The 2011 Proposed Rule*

On June 1, 2011, the FWS published in the Federal Register its revised proposed designation of critical habitat for the Riverside fairy shrimp (the “2011 Proposed Rule”). The 2011 Proposed Rule detailed the process that the FWS undertook in order to identify the critical habitat for the species. (2011 Proposed Rule, AR 055614–75.) As an initial matter, the FWS explained that the areas the Riverside fairy shrimp occupied in 1993, when the species was listed as endangered, included “Orange, Riverside, and San Diego Counties, as well as Baja, Mexico”—where there were documented sightings in 1993—as well as certain “additional areas [that] were occupied at the time of listing but were not identified at the time of listing.” (*Id.* 055626). The FWS then identified three PCEs of a Riverside fairy shrimp habitat—these “physical and biological features essential to the conservation of the Riverside fairy shrimp” (*id.* 055623, 055628) were specified as follows: first, a vernal pool wetland, with pools that have suitable chemistry, that are filled 2 to 8 months during the winter and spring (though not necessarily every year), and that dry out in late spring or summer; second, adjacent areas that function as the local watershed, which may range in size from a few acres to more than 100 acres and which facilitate the filling of the pools in the winter and spring; and third, underlying soils that have an impermeable layer such that the pool can fill during the winter and spring months. (*See id.* 055623; *see also id.* 055645

(“Subunit 5c contains the physical and biological features that are essential to the conservation of Riverside fairy shrimp, including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and the topography and soils that support ponding during winter and spring months (PCE 3).”)

The next step that the FWS undertook was to “compile[] all available observational data on Riverside fairy shrimp into a GIS database” in order to ensure that it had an accurate map of all instances where the species was observed or collected. (*Id.* 055628.) Using this information and the known characteristics of the species, the agency evaluated “which occurrences were extant at the time of listing based on the listing rule as well as information that has become available since listing[,]” and it ultimately concluded that all areas, except for one that is not at issue in this case, “were occupied prior to the time the species was listed.” (*Id.* 055628–29; *see also id.* 055618 (“We believe occurrences documented since the 1993 listing do not represent an expansion of the species’ distribution and range into previously unoccupied areas (with the exception of Johnson Ranch Created Pools), but rather a better understanding of the historical distribution and range of the species[.]”).) The FWS then purportedly reviewed these maps and removed all of the geographic areas that did not contain the PCEs it had identified and, subsequently, further refined those maps based on relevant scientific information and statutory requirements. (*See id.* 055629.)⁷

⁷ In the proposed rule, the FWS describes its map-development process this way:

We first mapped the ephemeral wetland habitat in the occupied area using occurrence data, aerial imagery, and 1:24,000 topographic maps. We then mapped the intermixed wetland and upland habitats that function as the local watersheds and the topography and soils that support the occupied ephemeral wetland habitat. We mapped these areas to identify the gently sloping area associated with ephemeral wetland habitat and any adjacent areas that slope

As a result of this analysis, the FWS “propose[d] to designate 2,984 ac[res] . . . in 5 units, containing 25 subunits, as critical habitat for the Riverside fairy shrimp.” (*Id.* 055635.) In making this designation, the FWS specifically determined that Subunit 5c—the one-acre stock pond and 56 surrounding acres that the FWS characterizes as watershed for the stock pond—is essential to the conservation of the species and requires special management considerations and protections. (*See id.* 055645 (stating, among other things, that “[t]his subunit is considered essential for the recovery of Riverside fairy shrimp because it includes one or more pools essential to maintain habitat function, genetic diversity, and species viability” and that “this subunit may require special management considerations or protection to address threats from nonnative plant species and anthropogenic activities (*e.g.*, development, OHV use, water run-off, and grazing)” (internal citation omitted).) Consequently, the FWS proposed to include Subunit 5c in the final critical habitat designation, and sought comments regarding this proposal, especially “[s]pecific information regarding the presence or absence of the physical and biological features essential to the conservation of the species within proposed Subunit 5c, and whether this area is essential to the conservation of the species and why[.]” (*Id.* 055614.)⁸

directly into the ephemeral wetland habitat, which contribute to the hydrology of the ephemeral wetland habitat. We delineated the border of the proposed revised critical habitat around the occupied ephemeral wetlands and associated local watershed areas to follow natural breaks in the terrain such as ridgelines, mesa edges, and steep canyon slopes.

(2011 Proposed Rule, AR 055629.)

⁸ With respect to the other parcels of land that the FWS proposed to designate as critical habitat for the Riverside fairy shrimp, the FWS proposed to exclude under 16 U.S.C. § 1533(a)(3)(A) certain military-owned land that is covered by an approved integrated natural resource management plan. It further proposed to exclude under 16 U.S.C. § 1533(b)(2) several additional areas, including areas that were subject to finalized or draft “habitat conservation plans” under Section 10 of the ESA. Subunit 5c is

At least two peer reviewers commented on the 2011 Proposed Rule, both of whom agreed with the FWS’s approach of including the watershed area in the critical habitat designation for the Riverside fairy shrimp. (*See* Marie A. Simovich, Peer Review of the Proposed Revised Critical Habitat for the Riverside Fairy Shrimp (July 22, 2011) (“Simovich Comment”), AR 031959 (“It is good that you are considering the watershed critical, especially for a species needing lasting pools.”); Ellen Bauder, Peer Review Response to Proposed Revised Critical Habitat for Riverside Fairy Shrimp (“Bauder Peer Review”), AR 032302 (“I was pleased to see a discussion—in both documents—of the importance and complexity of watersheds and their relevance to the designation of critical habitat in vernal pool ecosystems.”).) One of these reviewers went on to explain how alteration of the watershed area surrounding vernal pools would negatively affect Riverside fairy shrimp:

[The species] is sensitive both to the length of the ponding period and to water chemistry. Since this species requires longer periods of ponding to hatch and mature, it is found in ponds that are usually the deepest in a complex, and if in a network, at the bottom of the network. Loss of shallower headwater and flow through pools higher up in the network, as well as loss of upland habitat within the watershed, alters both the surface and subsurface flow paths. This would impact the rate of movement of water, the storage of water (location and length of time), and water chemistry.

(Bauder Peer Review, AR 032302 (internal citations omitted).) However, this same reviewer was not able to verify whether the maps that the FWS had provided properly captured vernal pool networks and watersheds because the maps did not contain “topographical lines and precise pool locations[.]” (*Id.*)

not the subject of any such plan, and the FWS did not propose to exclude it for economic reasons under 16 U.S.C. § 1533(b)(2), as it had done in 2005. (2011 Proposed Rule, AR 055621.)

The FWS did not publish an economic analysis of the impact of the critical habitat designation contemporaneously with the 2011 Proposed Rule. Rather, the agency indicated that it was preparing a new economic analysis on which it would seek public comment and review. (2011 Proposed Rule, AR 055651.) Moreover, in the 2011 Proposed Rule, the FWS placed the public on notice that, instead of employing the co-extensive analysis that the agency had used to evaluate the critical habitat designation for the Riverside fairy shrimp in 2005, the new economic analysis would “focus on the specific costs attributable to designating the areas proposed in this proposed rule as critical habitat” under the baseline approach. (*Id.*) In the interim, the FWS sought “[i]nformation on any quantifiable economic costs or benefits of the proposed revised designation of critical habitat.” (*Id.* 055614–15.)

b. *The 2012 Proposed Rule And Economic Analysis*

On March 1, 2012, the FWS published an amended version of the 2011 Proposed Rule—hereinafter referred to as the “2012 Proposed Rule”—in order “to clarify that certain subunits that we originally proposed for revised critical habitat designation [as occupied areas], are now also being proposed [as unoccupied areas.]” (Proposed Rule: Revised Critical Habitat for Riverside Fairy Shrimp, 77 Fed. Reg. 12,543 (March 1, 2012) (“2012 Proposed Rule”), AR 037610.) Subunit 5c is one of these re-designated units. (*Id.* 037613.)⁹ The FWS explained that it had made this change because it had only “limited surveys verifying occupancy of many specific pools prior to listing”; therefore, an “occupied”-only designation of critical habitat might be vulnerable to

⁹ In articulating alternative bases for its designation decision, the FWS did not change the total number of acres (2984) that it proposed to designate as critical habitat. (*See* 2012 Proposed Rule, AR 037610; 2011 Proposed Rule, AR 055614.)

challenge based on the statutory requirement that the FWS must determine occupation status as of the time the species was listed. (*Id.* 037612.) *See also* 16 U.S.C § 1532(5)(A)(i). The 2012 Proposed Rule also reaffirmed that the FWS had abandoned the co-extensive economic analysis in favor of a baseline analysis of the critical habitat designation, which, as explained above, limits consideration of economic impacts to those “stemming solely from the critical habitat rulemaking.” (*Id.* 037617.)

With respect to Subunit 5c in particular, the FWS found that Subunit 5c was “occupied” at the time of listing for the purpose of the ESA, based on survey results dating as early as 2000, as well as the presence of the PCEs on the property at the time of listing. (*Id.* 037615.)¹⁰ Alternatively, the FWS found that, even if Subunit 5c was “unoccupied” at the time of listing, it is now occupied and essential for the conservation of Riverside fairy shrimp because the area contains the requisite “physical and biological features” necessary to ensure the conservation of the species. (*Id.*)

The FWS also hired a contractor, Industrial Economics, Inc., to produce the statutorily required economic analysis of the proposed critical habitat designation (“the 2012 Proposed Rule Economic Analysis”). Industrial Economics released a draft version of the economic analysis on March 14, 2012, and a final version on August 30, 2012. (*See* Indus. Econ., Inc., Economic Analysis of Critical Habitat Designation for Riverside Fairy Shrimp (2012) (“2012 Proposed Rule Econ. Analysis”), AR 050651–771.) The 2012 Proposed Rule Economic Analysis utilized the baseline methodology and, thus, sought to quantify the “incremental impacts of this rulemaking[,]”—*i.e.*, the

¹⁰ In the context of critical habitat designation, “presence” and “occupation” are not synonymous. Rather, “presence” indicates where the species is physically found (the one-acre stock pond in this case), while “occupation” encompasses both those areas where the species is physically found and those areas necessary to support the species (the watershed in this case). (Defs.’ Mem. at 23.)

“administrative efforts of new and reinitiated consultations to consider adverse modification of critical habitat for Riverside fairy shrimp, administrative costs of complying with the California Environmental Quality Act (CEQA), and time delays resulting from both processes.” (*See id.* 050659, 050680). The analysis acknowledged that “[a]lthough minimal economic activity on private lands is anticipated, of the impacts quantified, the greatest impacts are expected to be concentrated in Units 2 and 5 within Orange and San Diego Counties, respectively[,]” (*id.* 050660), and that Subunit 5c is one of three that would shoulder most of the incremental costs associated with the proposed critical habitat designation (*id.* 050719).

In modeling the projected costs associated with the critical habitat designation, the 2012 Proposed Rule Economic Analysis generally “relie[d] on local planning authorities for estimates of the number of housing units projected to be built by 2035 in the census tracts encompassing the study area[,]” and, using this data, quantified the incremental impacts on that projected residential development. (*See id.* 050704–06.) In addition to this residential projection, the analysis also mentioned Otay Mesa’s specific plans to build a landfill and recycling center on the Property, and found that the proposed designation was unlikely to impose any incremental costs on the construction of such a facility. (*See id.* 050719 n.94 (pointing out that “plans are currently in place to develop the East Otay Mesa Recycling Collection Center and Landfill project in vicinity of Subunit 5C[,]” but “[b]ecause this subunit is known to be occupied by the Riverside fairy shrimp, if a consultation were to occur, the Service would evaluate the effects of the Project on individuals in the pool, regardless of the presence of critical habitat”). As a result, the analysis concluded that “the low and high-end ranges of

incremental effects of all economic activities in proposed revised critical habitat are estimated to be \$1.77 million to \$2.85 million[.]” (*Id.* 050659.)¹¹

c. *Otay Mesa’s Comments On The 2012 Proposed Rule And Economic Analysis*

On April 2, 2012, Otay Mesa submitted comments to the FWS regarding the 2012 Proposed Rule and the Economic Analysis, asserting its position that Subunit 5c does not meet the statutory and regulatory requirements for inclusion in the critical habitat designation for the Riverside fairy shrimp, and, alternatively, explaining why Subunit 5c should be excluded from the final critical habitat designation under 16 U.S.C. § 1533(b)(2). (*Otay Mesa Comments*, AR 037643–58.) Otay Mesa argued that designating Subunit 5c as “occupied” critical habitat is inappropriate because “[t]here is no evidence that Riverside fairy shrimp were present on Subunit 5C in 1993, when the species was listed as endangered.” (*Id.* 037644.) Moreover, Otay Mesa asserted that “in the 19 years since the Riverside fairy shrimp was listed, only a handful of Riverside fairy shrimp have been found[.]” and that “this stock pond normally is only wet for 2–3 weeks per year[.]” which is an insufficient period of time for the shrimp to mature and reproduce. (*Id.* 037646.) Otay Mesa likewise argued that designating Subunit 5c as “unoccupied” critical habitat would be improper because the property does not “possess the physical and biological characteristics necessary for success of the species” in that the one-acre stock pond is an “isolated pool” and the remaining 56 acres contain neither vernal pools nor shrimp. (*Id.* 037646–47.)

¹¹ Approximately 90% of these costs were attributed to “time delays to development activities; the remaining portion results from administrative costs of considering adverse modification in section 7 consultations, and conducting environmental assessments to comply with [applicable state regulations].” (2012 Proposed Rule Econ. Analysis, AR 050659–60.) For the entirety of Unit 5, the projected costs ranged from \$431,670-\$1,032,600. (*Id.* 050661.)

Assuming *arguendo* that Subunit 5c does, in fact, meet the statutory criteria for designation as a critical habitat, Otay Mesa also mentioned that the Secretary of the Interior should exercise the discretion afforded to him under § 1533(b)(2) to exclude areas that would otherwise be designated as critical habitat because the benefits of exclusion outweigh the benefits of inclusion in light of the recycling center and landfill it proposed to build on the Property. (*See id.* 037647–48.) In this regard, Otay Mesa argued that “the Riverside fairy shrimp will not become extinct if Subunit 5C is excluded, because any potential habitat on the property is poor, and characterized as being heavily disturbed—there is only one artificial stock pond that could support the species, and it is not connected to any vernal pool complex.” (*Id.* 037648.) Moreover, Otay Mesa asserted that landfills in the San Diego area are close to reaching their capacity threshold, creating a “critical need” for the proposed facility, and that “[d]elay is not an option, because this facility could take more than 10 years to permit and construct.” (*Id.* 037649; *see also id.* (asserting further that “[i]dentifying appropriate land as a landfill site can be extremely challenging, so impairing land that has already been zoned for this use would be a loss for San Diego County”).)

The final argument in Otay Mesa’s comment letter with respect to the proposed designation was that, because the FWS did not prepare an environmental impact statement in compliance with NEPA, any final designation of critical habitat would be arbitrary and capricious. (*Id.* 037650.) Otay Mesa also challenged the validity of the Economic Analysis on a number of grounds, including the agency’s decision to use the baseline methodology rather than the co-extensive methodology, and the contractor’s

use of model inputs that assumed that residential development would occur on Subunit 5c, despite its exclusive zoning for landfill use. (*Id.* 037653–58.)

d. *The 2012 Final Rule*

On December 4, 2012, the FWS published a final rule designating 1,724 acres as critical habitat for the Riverside fairy shrimp (the “2012 Final Rule”). (2012 Final Rule, AR 045086–157.) This final rule, which is the subject of this litigation, underscored the FWS’s oft-stated belief that the critical habitat of the Riverside fairy shrimp includes upland watershed areas for vernal pools. Specifically, the FWS stated that “[t]o maintain high-quality vernal pool ecosystems, the vernal pool basin (a specific vernal pool and surrounding landscape) or complex and its upslope watershed (adjacent vegetation and upland habitat) must be available and functional.” (*See id.* 045093 (internal citation omitted).) The agency further explained that “[a]djacent upland habitat supplies important hydrological inputs to sustain vernal pool ecosystems[,]” and that “[p]rotection of the upland habitat between vernal pools within the watershed is essential to maintain the space needs of Riverside fairy shrimp and to buffer the vernal pools from edge effects.” (*Id.*) The FWS also described the process that it had used to map and define the critical habitat, and restated its conclusion that preservation of Subunit 5c, in particular, is necessary for the conservation of the species

because its occupied pool and surrounding watershed are essential to maintain habitat function, genetic diversity, and species viability. Further, it is essential because the basin contains the appropriate depth and ponding duration, soils, elevation, and water chemistry (pH, temperature, salinity, etc.) to fulfill Riverside fairy shrimp’s life-history needs. The vernal pool in this subunit has been impacted by OHV use, cattle grazing, development, and nonnative grasses. Subunit 5c contains the physical or biological features essential to the conservation of Riverside fairy shrimp, including ephemeral wetland habitat (PCE 1), intermixed

wetland and upland habitats that act as the local watershed (PCE 2), and topography and soils that support ponding during winter and spring months (PCE 3).

(*Id.* 045109 (internal citation omitted).)

Although the FWS acknowledged that it “lack[ed] specific documentation of Riverside fairy shrimp occupancy in Subunit 5c at the time of listing” (*id.*), its conclusion that Subunit 5c was “occupied” at the time the Riverside fairy shrimp was listed as endangered was based on the physical and biological features of the property, the sedentary nature of the shrimp, and the fact that shrimp have been observed in Subunit 5c’s vernal pool relatively recently. (*Id.*; *see also id.* 045138–39 (responding to Otay Mesa’s comment regarding the lack of surveys showing that Subunit 5c was occupied at the time of listing).)¹² Alternatively, the FWS found that Subunit 5c met the criteria for designation as “unoccupied” critical habitat “because we consider the subunit to be essential for the conservation of Riverside fairy shrimp, regardless of occupancy data at the time of listing.” (*Id.* 045109.) In response to the reviewer’s comment about the inability to verify the scope of the area that purportedly constitutes the vernal pool watershed, the FWS explained that “[t]he printing standards of the Federal Register are not compatible with topographical maps or other detailed features that would show vernal pool networks and watersheds. However, the GIS files we used to delineate critical habitat are available by request from the Carlsbad Fish and Wildlife Office[,]” and “[t]he shapefiles can be laid over other layers (aerial photography, roads) for users to view the vernal pool networks and watersheds”). In the Final Rule, the

¹² At the hearing this Court held on the parties’ cross-motions, counsel for Otay Mesa appeared to waive this particular occupancy argument, stating that Otay Mesa was “not pressing with the Court” the question of whether the stock pond was occupied at the time of listing. (June 26, 2014 Hr’g Tr. at 17:14.)

FWS also provided responses to each point that Otay Mesa had raised in its comment letter. (*Id.* 045138–43.)

Otay Mesa timely filed a complaint challenging the 2012 Final Rule, and the parties’ cross motions for summary judgment regarding the validity of the rule are ripe for review.

II. LEGAL STANDARDS

A. Summary Judgment

In general, a court will grant summary judgment “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247 (1986); *Moore v. Hartman*, 571 F.3d 62, 66 (D.C. Cir. 2009). “Summary judgment is the proper mechanism for deciding, as a matter of law, whether an agency action is supported by the administrative record and consistent with the APA standard of review.” *Loma Linda Univ. Med. Ctr. v. Sebelius*, 684 F. Supp. 2d 42, 52 (D.D.C. 2010) (citing *Stuttering Found. of Am. v. Springer*, 498 F. Supp. 2d 203, 207 (D.D.C. 2007)); *see also Richards v. INS*, 554 F.2d 1173, 1177 & n.28 (D.C. Cir. 1977). However, due to the limited role that a court plays in reviewing the administrative record, the typical summary judgment standards set forth in Rule 56(c) are not applicable. *Stuttering*, 498 F. Supp. 2d at 207. Rather, “[u]nder the APA, it is the role of the agency to resolve factual issues to arrive at a decision that is supported by the administrative record, whereas ‘the function of the district court is to determine whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did.’” *Id.* (quoting *Occidental Eng’g Co. v. INS*, 753 F.2d 766, 769 (9th Cir. 1985)). In other words, “when a party seeks review of agency action

under the APA, the district judge sits as an appellate tribunal[.]” and “[t]he ‘entire case’ on review is a question of law.” *Am. Bioscience, Inc. v. Thompson*, 269 F.3d 1077, 1083 (D.C. Cir. 2001) (footnote and citations omitted).

B. The Administrative Procedure Act

As noted above, Otay Mesa has brought this action under the Administrative Procedure Act alleging that the FWS’s implementation of the 2012 Final Rule is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law[.]” 5 U.S.C. § 706(2)(A). In reviewing agency action under the APA, a court must be mindful of the division of labor between the court and the agency, remembering that “it is the role of the agency to resolve factual issues to arrive at a decision that is supported by the administrative record, whereas the function of the district court is to determine whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did.” *Hi-Tech Pharmacal Co. v. FDA*, 587 F. Supp. 2d 13, 18 (D.D.C. 2008) (internal quotation marks and citation omitted). Accordingly, a reviewing court cannot “substitute its judgment for that of the agency.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Moreover, given that “[t]he scope of review under the ‘arbitrary and capricious’ standard is narrow[.]” *id.* at 43, the agency action under review is “entitled to a presumption of regularity[.]” *see Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415 (1971), *overruled on other grounds, Califano v. Sanders*, 430 U.S. 99 (1977). Accordingly, a court’s role in reviewing agency action is limited to determining “whether the [agency’s] decision was based on a consideration of the relevant factors and whether there was a clear error of judgment.” *State Farm*, 463 U.S. at 31–32. In particular, a reviewing court must evaluate whether the agency considered

relevant data and articulated an explanation that establishes a “rational connection between the facts found and the choice made.” *Id.* at 43.

Notably, if the agency has acted in an area where there is scientific and technological uncertainty, courts “must proceed with particular caution, avoiding all temptation to direct the agency in a choice between rational alternatives.” *Alliance for Bio-Integrity v. Shalala*, 116 F. Supp. 2d 166, 177 (D.D.C. 2000). This is because, where a matter involves scientific or technical decisions within the agency’s area of expertise, a reviewing court must afford the agency a “high level of deference.” *Serono Labs., Inc. v. Shalala*, 158 F.3d 1313, 1320 (D.C. Cir. 1998) (quotation marks and citation omitted). Moreover, “[w]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.” *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989).

To the extent that Otay Mesa’s APA claim involves questions of statutory interpretation, this Court must utilize the two-step process laid out in *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 104 (1984). The *Chevron* analysis first requires the reviewing court to determine “whether Congress has directly spoken to the precise question at issue.” *Chevron*, 467 U.S. at 842. To resolve whether “the intent of Congress is clear” under this first step, *id.*, the court must exhaust the “traditional tools of statutory construction,” including textual analysis, structural analysis, and (when appropriate) legislative history, *id.* at 843 n.9; *Bell Atl. Tel. Cos. v. FCC*, 131 F.3d 1044, 1047 (D.C. Cir. 1997). “If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect

to the unambiguously expressed intent of Congress.” *Chevron*, 467 U.S. at 842–43. However, if the Court concludes that the statute is silent or ambiguous on the specific issue after employing these tools, the Court moves on to step two and defers to the agency’s interpretation, so long as it is based on a permissible construction of the statute. *See id.* at 843. Put another way, if Congress is silent, the Court must defer to the agency’s construction “unless it is arbitrary or capricious in substance, or manifestly contrary to the statute.” *Mayo Found. for Med. Educ. & Research v. United States*, 562 U.S. 44, 53 (2011) (citations and internal quotation marks omitted). Indeed, “the whole point of *Chevron* is to leave the discretion provided by the ambiguities of a statute with the implementing agency.” *Ass’n of Private Sector Colls. & Univs. v. Duncan*, 681 F.3d 427, 441 (D.C. Cir. 2012) (citations and internal quotation marks omitted).

III. ANALYSIS

Otay Mesa maintains that it is entitled to summary judgment because the record establishes that the FWS’s final rule designating Subunit 5c as a critical habitat for the Riverside fairy shrimp is arbitrary and capricious in three respects. First, Otay Mesa contends that the FWS mistakenly determined that its property meets the criteria in the ESA for designation as critical habitat (Pls.’ Mem. at 23–29); second, Otay Mesa argues that the FWS did not properly account for the economic consequences of this particular critical habitat designation (*id.* at 30–42); and third, Otay Mesa argues that the FWS improperly failed to conduct a NEPA analysis to assess the environmental impacts of the critical habitat determination (*id.* at 42–48). The FWS bases its cross-motion for summary judgment on the contentions that, as a threshold matter, Otay Mesa does not

have standing to challenge the critical habitat designation, and that, with respect to the merits, the FWS's designation of Subunit 5c as a critical habitat for the Riverside fairy shrimp was not arbitrary or capricious in violation of the APA because the agency conducted a proper economic analysis, reasonably determined that it need not undertake a NEPA analysis, and has articulated rational and well-supported reasons for concluding that the 57 acres at issue qualifies a critical habitat within the meaning of the ESA. (Defs.' Mem. at 10–11.)

For the reasons explained below, and as reflected in the Order issued on September 30, 2015 (*see* ECF No. 29), this Court has reached the following conclusions: (1) Otay Mesa has standing to challenge the 2012 Final Rule; (2) the FWS did not act arbitrarily or capriciously in concluding that the stock pond on Subunit 5c and the watershed area that feeds into the stock pond qualifies as either occupied or unoccupied critical habitat for the purpose of the ESA; (3) the FWS conducted an economic analysis of the critical habitat designation that was not inconsistent with the ESA or otherwise improper; and (4) the FWS did not violate NEPA. However, because the submitted portions of the administrative record do not contain any topographical maps or other sources of data upon which the FWS purportedly relied in designating Subunit 5c as critical habitat, this Court is not able to determine whether the FWS acted rationally in concluding that the 56 acres of land surrounding the vernal pool where the shrimp are present is watershed for the one-acre stock pond. Accordingly, the Court will order the parties to supplement the Administrative Record Appendix and submit supplemental briefing limited to the issue of the proper scope of the watershed for Subunit 5c's vernal pool.

A. Otay Mesa Has Standing To Challenge The Critical Habitat Designation

Before turning to the merits of Otay Mesa’s APA claim regarding the critical habitat designation, this Court must address the threshold issue of whether Otay Mesa has established, by a preponderance of the evidence, Article III standing to bring its complaint. *See Haase v. Sessions*, 835 F.2d 902, 906 (D.C. Cir. 1987) (“[T]he defect of standing is a defect in subject matter jurisdiction.”); *Moran v. U.S. Capitol Police Bd.*, 820 F. Supp. 2d 48, 53 (D.D.C. 2011) (holding that the plaintiff bears the burden of establishing jurisdiction by a preponderance of the evidence) (citing *Lujan*, 504 U.S. at 561). Defendants argue broadly that Otay Mesa has failed “to set forth specific facts demonstrating that they have suffered a concrete, imminent injury that is traceable to the Riverside fairy shrimp critical habitat rule and that will likely be redressed by a favorable decision in this case” (Defs.’ Mem. at 20), and in particular, Defendants fault Otay Mesa for not “provid[ing] declarations or other evidence demonstrating that they have standing to raise their claim for relief.” (*Id.*; *see also id.* (criticizing Plaintiffs for “alleg[ing] that they plan to build a recycling center and landfill on their property, [and] citing their own comment letter in support of this statement” (internal citation omitted)).)

Defendant’s Article III standing argument is puzzling, given the legal standards for constitutional standing, which are well established. When addressing questions of constitutional standing at the summary judgment stage of a case, courts consider whether the record adequately demonstrates the following three requirements:

First, the plaintiff must have suffered an injury[-]in[-]fact— an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical. Second, there must be a causal

connection between the injury and the conduct complained of—the injury has to be fairly traceable to the challenged action of the defendant, and not the result of the independent action of some third party not before the court. Third, it must be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Lujan v. Defenders of Wildlife, 504 U.S. 555, 560–61 (1992) (internal quotation marks, footnote, alterations, and citations omitted). Thus, generally speaking, “the standing question is whether the plaintiff has ‘alleged such a personal stake in the outcome of the controversy’ as to warrant his invocation of federal-court jurisdiction and to justify exercise of the court’s remedial powers on his behalf.” *Warth v. Seldin*, 422 U.S. 490, 498–99 (1975) (quoting *Baker v. Carr*, 369 U.S. 186, 204 (1962)). And a plaintiff can satisfy this burden by showing “a ‘substantial probability’ that it has been [or will be] injured, that the defendant caused its injury, and that the court could redress that injury.” *Sierra Club v. E.P.A.*, 292 F.3d 895, 899 (D.C. Cir. 2002) (citation omitted); *see also Ams. for Safe Access v. DEA*, 706 F.3d 438, 443 (D.C. Cir. 2013) (explaining that, when assessing standing, a court “must assume [plaintiffs] will prevail on the merits of their claims” (citation and internal quotation marks omitted)).

In the present case, this Court concludes that it is self-evident from a review of the administrative record that Otay Mesa has a personal stake in this matter and, thus, has constitutional standing to seek review of the 2012 Final Rule. *Cf. City of Waukesha v. E.P.A.*, 320 F.3d 228, 233 (D.C. Cir. 2003) (explaining that it is “unnecessary” for a petitioner to submit additional evidence in support of its standing with respect to a case on appeal if the “standing to seek review of administrative action is self-evident” (citation omitted)). It is undisputed that Otay Mesa participated in the underlying rule-making proceedings by submitting, through counsel, comments objecting to the FWS’s

proposal to designate Subunit 5c as a critical habitat for the Riverside fairy shrimp. (Otay Mesa Comments, AR 037643–58.) In these comments, Otay Mesa identified itself as the owner of Subunit 5c and explained its plans to develop the Property into a recycling center and landfill for San Diego County. (*Id.* 037643–48.) Otay Mesa also explained how the FWS’s rule designating its property as critical habitat would impact its ability to proceed with the landfill project (*id.* 037647–48), and the FWS has acknowledged that the critical habitat designation will impose additional costs on the project beyond the baseline costs Otay Mesa would incur as the result of the FWS listing the Riverside fairy shrimp as endangered (*see id.* 050661). It is likewise undisputed that Otay Mesa could proceed with construction of the landfill and recycling facility without incurring these additional costs if this Court were to invalidate the critical habitat designation. Thus, the administrative record on its face establishes the necessary injury, causation, and redressability. *See Lujan*, 504 U.S. at 560–61.

Furthermore, even if Otay Mesa’s standing in this matter was not evident from the administrative record, Otay Mesa has clearly cured any evidence-related deficiency by submitting a declaration from David Wick, who has managed Subunit 5c since 1992. (Decl. of David Wick, Ex. B. to Pls.’ Reply, ECF No. 17-2 (“Wick Decl.”), ¶ 7.) Mr. Wick describes Otay Mesa’s plans to build a recycling facility and landfill on the Property and declares that, “[w]ith the inclusion of the property sited for the recycling center and landfill as critical habitat, the cost of developing that recycling center has sharply increased—and may cause the project to be stopped altogether.” (*Id.*) This additional information also suffices to establish constitutional standing under *Lujan*. *See* 504 U.S. at 560–61; *see also Otay Mesa Prop. L.P. v. U.S. Dept. of Interior*, 714 F.

Supp. 2d 73, 80–81 (D.D.C. 2010) (holding that a declaration from Mr. Wick was sufficient to establish standing in a prior proceeding challenging the designation of Otay Mesa’s property as critical habitat for the San Diego fairy shrimp), *rev’d on other grounds*, 646 F.3d 914 (D.C. Cir. 2011).

Defendants’ only retort is to resort to a “zone of interest” argument (*see* Defs.’ Mem. at 20–22) that, as Otay Mesa has indicated, might not even be properly characterized as a standing principle. (*See* Pls.’ Not. of Recent Authority, ECF No. 20, at 1–2 (quoting *Lexmark Int’l v. Static Control Components, Inc.*, 134 S. Ct. 1377, 1387 (2014) (“[P]rudential standing is a misnomer as applied to the zone-of-interests analysis[.]” (internal quotation marks and citation omitted))).) Even so—and even if Otay Mesa can be considered to have brought the instant APA claim “*under* NEPA[.]” (Defs.’ Mem. at 20 (emphasis added))—Defendant has failed to convince the Court that Otay Mesa falls outside the zone of interests that NEPA was enacted to protect. In *Lexmark*, the Supreme Court emphasized that “[w]hether a plaintiff comes within the zone of interests is an issue that requires [a court] to determine, using traditional tools of statutory interpretation, whether a legislatively conferred cause of action encompasses a particular plaintiff’s claim.” 134 S. Ct. at 1387 (citations omitted). Furthermore, it is well established that the zone of interests test “is not meant to be especially demanding[.]” and that the benefit of any doubt goes to the plaintiff. *Clarke v. Secs. Industry Assn.*, 479 U.S. 388, 399 (1987) (citation and footnote omitted). “The test forecloses suit only when a plaintiff’s ‘interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot reasonably be assumed that Congress intended to permit the suit.’” *Match-E-Be-Nash-She-Wish Band*

of Pottawatomí Indians v. Patchak, 132 S. Ct. 2199, 2210 (2012) (quoting *Clarke*, 479 U.S. at 399). And the zone of interests standard is particularly generous as applied to plaintiffs who bring suit under the APA, in light of the need to “preserv[e] the flexibility of the APA’s omnibus judicial-review provision, which permits suit for violations of numerous statutes of varying character that do not themselves include causes of action for judicial review.” *Lexmark Int’l*, 134 S. Ct. at 1389. In the context of a NEPA challenge under the APA, for example, the zone of interests test turns on whether the plaintiff is among the class of people Congress authorized to sue as “adversely affected or aggrieved by agency action within the meaning of [the] relevant statute.” 5 U.S.C. § 702.

Here, although Defendants assert that Otay Mesa is not within NEPA’s zone of interest because their injuries are “purely economic” rather than environmental (Defs.’ Mem. at 20 (citations omitted)), Defendants give short shrift to NEPA’s focus—which, properly understood, is the “quality of the human environment[.]” 42 U.S.C. § 4332(2)(C). NEPA’s implementing regulations broadly define the “human environment” as “the natural and physical environment and the relationship of people with that environment[.]” 40 C.F.R. § 1508.14, and the construction of Otay Mesa’s planned recycling and landfill facility undeniably touches upon the relationship between the people and the environment. Thus, it is clear to this Court that Otay Mesa is within the zone of interests of NEPA, and therefore has prudential standing, even under the law governing standing as Defendants’ interpret it. *See, e.g., Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2756 (2010) (concluding that plaintiffs were within

NEPA's zone of interests where their alleged injury had both an economic and environmental component).

B. The FWS's Conclusion That The Vernal Pool And Watershed Area In Subunit 5c Satisfy The ESA's Critical Habitat Criterion Was Not Arbitrary And Capricious

As explained above, the ESA authorizes the FWS to designate two types of critical habitat for endangered or threatened species: "occupied" critical habitat—defined as "the specific areas within the geographical area occupied by the species, at the time it is listed [as endangered or threatened under the statute], on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection[.]" 16 U.S.C. § 1532(5)(A)(i)—and "unoccupied" critical habitat, which are "specific areas outside the geographical area occupied by the species at the time it is listed . . . , upon a determination by the Secretary that such areas are essential for the conservation of the species[.]" 16 U.S.C. § 1532(5)(A)(ii). Here, the FWS decided that the Riverside fairy shrimp "occupied" the stock pond and the watershed area surrounding the stock pond at the time of listing, insofar as a sizable number of shrimp cysts were found in the stock pond in 2001 and this vernal pool and its surrounding area are "essential to maintain habitat function, genetic diversity, and species viability[.]" (2012 Final Rule, AR 045109.) Alternatively, the FWS concluded that Subunit 5c qualified as "unoccupied" critical habitat because it was "essential for the conservation of Riverside fairy shrimp, regardless of occupancy data at the time of listing[.]" (*Id.*) Otay Mesa challenges this critical habitat determination as inconsistent with the ESA and record evidence, asserting that the statute does not authorize alternative findings regarding occupancy (Pls.' Opp. to Cross-Mot. & Reply in Supp. of Pls.' Mot. for Summ. J., ECF No. 17, at

8–9), and that the evidence regarding the occupancy of Riverside fairy shrimp and the physical and biological characteristics of the surrounding area does not establish that preserving Subunit 5c is essential to the conservation of the species (Pls.’ Mem. at 24–29). However, this Court concludes that the FWS’s determinations regarding the vernal pool and watershed area in Subunit 5c—*i.e.*, its finding that these geographic areas satisfy the statutory criteria for being designated a critical habitat for the Riverside fairy shrimp—was rational and fully explained, and thus, that the agency’s critical habitat conclusion was not arbitrary or capricious in violation of the APA, for several reasons.

First of all, the record evidence amply supports the agency’s conclusion that Riverside fairy shrimp occupied the vernal pool that exists on Subunit 5c at the time the species was listed, and the FWS rationally determined that the watershed area surrounding that pool is part of the occupied critical habitat for that endangered species. Specifically, and as noted above, surveys taken in 2000, 2001, and 2011 showed that thousands of adult Riverside fairy shrimp were identified in the stock pond during the wet season, and that dry season soil samples consistently contained multiple desiccated cysts. (*See* 2000 Survey, AR 003808; 2001 Survey, AR 004788, 004792; 2011 Survey, AR 037263.) Given the limited migration potential of this species (2012 Final Rule, AR 045098), the FWS reasonably explained in the 2012 Final Rule that these “occurrences documented since the 1993 listing do not represent an expansion of the species’ distribution and range into previously unoccupied areas, but rather a better

understanding of the historical distribution and range of the species.” (2012 Final Rule, AR 045138.)¹³

Furthermore, the environment surveys upon which the FWS relied confirm that the stock pond and surrounding area in Subunit 5c contain the identified PCEs. During the wet season, the stock pond can be inundated for up to 4 months—much longer than the 8-week inundation minimum needed to support Riverside fairy shrimp reproduction. (2001 Survey, AR 004787, 004788, 004792.) Moreover, the record supports the agency’s determination that “[t]he watershed is an essential component of the vernal pool ecosystem” and that “[t]he disturbance and/or loss of watersheds can result in greatly reduced volume and duration of water supply in vernal pools.” (Listing Decision, AR 000700; *see also* Simovich Comment, AR 032302 (“I was pleased to see a discussion—in both documents—of the importance and complexity of watersheds and their relevance to the designation of critical habitat in vernal pool ecosystems.”); Bauder Peer Review, AR 032302 (noting that watershed surrounding a vernal pool is crucial to both pool filling and chemistry).) Indeed, according to the agency, there is evidence that the geographic area in question contains the potential for development of a vernal pool complex, as the surveys show that “[d]uring periods of extreme inundation, the overflow from [the stock pond] is able to flow into pool #5 and the

¹³ Otay Mesa appears to have conceded the occupancy point, after having initially challenged whether the stock pond was actually occupied in 1993, at the time the Riverside fairy shrimp was listed as endangered. (*See* Pls.’ Mem. at 24–25 (citing *Otay Mesa Prop.*, 646 F.3d at 916, which held—with respect to the San Diego fairy shrimp—that a single sighting of one shrimp in 2001 was insufficient to support agency’s finding that property at issue was occupied in 1997 and continued to be occupied in 2007.) Counsel for Otay Mesa largely abandoned this argument at the motions hearing, stating that Otay Mesa was “not pressing with the Court” the question of whether the stock pond was occupied at the time of listing. (June 26, 2014 Hr’g Tr. at 17:14.) But even if counsel had not retreated from its initial position, it is clear that the record contains substantial evidence to support the FWS’s determination that the stock pond was occupied in 1993.

connectivity between the pools may allow for transfer of branchiopods from [the stock pond] to pool #5.” (AR004788.) And the FWS regulations that implement the ESA expressly contemplate and authorize the inclusion of watershed in a critical habitat determination. *See* 50 C.F.R. § 424.12(d) (referencing as an example that, where there are “[s]everal dozen or more small pools, lakes, and springs are found in a small local area[, t]he entire area could be designated critical habitat if it were determined that the upland areas were essential to the conservation of an aquatic species located in the ponds and lakes”). It is also clear from the record that, contrary to Otay Mesa’s assertions, the fact that the stock pond in Subunit 5c is an *artificial* depression is irrelevant to whether it qualifies as a vernal pool or occupied habitat (*see* 2012 Final Rule, AR 045093 (“Habitats include natural and created pools[;] some of these habitats are artificial pools (cattle watering holes and road embankments)[.]”).) Thus, this Court concludes based on the evidence in the record and the existing regulatory scheme, that it was entirely reasonable for the FWS to reach the conclusion that the stock pond and some portion of the area around it (*i.e.*, “the watershed”) satisfied the definition of “occupied” critical habitat that required preservation under the ESA.

Second, even if the record was such that the FWS’s “occupied” critical habitat finding was not warranted, the agency reached an alternative conclusion that fully supports its critical habitat designation: that Subunit 5c qualifies as “unoccupied” critical habitat because preservation of the stock pond and watershed is essential to the conservation of the shrimp that indisputably exist there at present. After considering a variety of scientific evidence, the FWS made the unequivocal finding that “Subunit 5c contains the physical or biological features essential to the conservation of the species

including ephemeral wetland habitat (PCE 1), intermixed wetland and upland habitats that act as the local watershed (PCE 2), and topography and soils that support ponding during spring months (PCE 3).” (2012 Final Rule, AR 045139.) To reach this conclusion, the agency conducted a detailed, scientific assessment of the physical and biological features of the pond and the surrounding area, and it is clear beyond cavil that the FWS’s judgment regarding the highly technical and scientific matter of whether or not a geographic area has the requisite PCEs is entitled to substantial deference. *See Huls Am. Inc. v. Browner*, 83 F.3d 445, 452 (D.C. Cir. 1996) (court must “give an extreme degree of deference to the agency when it ‘is evaluating scientific data within its technical expertise’” (quoting *Int’l Fabricare Inst. v. U.S. EPA*, 972 F.2d 384, 389 (D.C. Cir. 1992))); *see also Marsh v. Ore. Nat. Res. Council*, 490 U.S. 360, 377 (1989) (where agency’s decision “requires a high level of technical expertise,” reviewing courts must defer to “the informed discretion of the responsible federal agencies.”). What is more, “[w]ith regard to FWS decisions in particular, ‘[g]iven the expertise of the [Service] in the area of wildlife conservation and management and the deferential standard of review, the Court begins with a strong presumption in favor of upholding decisions of the [Service].’” *Am. Wildland v. Kempthorne*, 478 F. Supp. 2d 92, 96 (D.D.C. 2007) (alterations in the original) (quoting *Carlton v. Babbitt*, 900 F. Supp. 526, 530 (D.D.C. 1995)). Indeed, in a prior case involving this same property, the D.C. Circuit expressly stated that the courts must respect the FWS’s judgment regarding whether to designate land as unoccupied critical habitat, so long as the agency “sa[id] so in its agency decision and justif[ied] that determination.” *Otay Mesa Prop.*, 646 F.3d at 918 (citation omitted).

Otay Mesa’s suggestion here that the FWS was not entitled to conclude in the alternative that Subunit 5c was either “occupied” or “unoccupied” as a matter of law (Pls.’ Opp’n to Cross-Mot. & Reply in Supp. of Pls.’ Mot. for Summ. J., ECF No. 17, at 8–9) finds no support in the ESA or in D.C. Circuit case law, and in any event, is seemingly immaterial to the APA claim at hand. Nowhere does the statute state that the “occupied” and “unoccupied” determinations are mutually exclusive when the agency is assessing a geographic area, and one could imagine a scenario—such as the one presented in this case—in which either definition could reasonably be deemed applicable. *See Home Builders Ass’n of N. Cal. v. U.S. Fish & Wildlife Serv.*, 616 F.3d 983, 990 (9th Cir. 2010) (“There is no requirement that every area be classified as one or the other, and, in the case of vernal pool complexes, which may change dramatically from year to year, such a classification may be impossible.”). Furthermore, both definitions require the agency to make a reasoned determination regarding the same critical factual issue: whether preservation of the area that is under consideration is essential to the conservation of the listed species. In other words, regardless of whether the area at issue is itself “occupied” by the species, or is not presently occupied but is nevertheless essential to the species’ conservation, the agency has clear statutory authority to designate that area a “critical habitat” under the ESA.

The bottom line is this: the critical habitat designation “is a highly contextual and fact-dependent inquiry[,]” *Ariz. Cattle Growers’ Ass’n*, 606 F.3d at 1164, and this Court has concluded that it was entirely reasonable for the FWS to apply its scientific expertise to the known facts regarding Subunit 5c and thereby deem the vernal pool and surrounding watershed area “critical habitat” for the Riverside fairy shrimp. As

explained in Part III.E, *infra*, the FWS has not provided the Court with the topographical maps and other record evidence that purportedly justifies its conclusion that the entirety of the 56 acres that surround the vernal pool on Subunit 5c is watershed, and thus this Court is presently unable to determine whether the agency acted rationally with respect to the specific “critical habitat” boundaries that the agency has designated; however, this Court sees nothing arbitrary or capricious about the FWS’s foundational determinations that (1) there are endangered Riverside fairy shrimp in Subunit 5c’s vernal pool and, thus, at the very least, the pool itself is a critical habitat entitled to protection, and (2) the watershed area around the pool is also essential to preservation of the species and is therefore properly subject to protection under the ESA.

C. The FWS’s Economic Analysis Was Not Inconsistent With The ESA Or Otherwise Improper

Otay Mesa’s challenge to the FWS’s economic analysis in this case is multi-faceted. First, Otay Mesa asserts that the FWS’s economic analysis is flawed because Subunit 5C has been zoned and approved for the building of a recycling center and a landfill, but the FWS failed to account for the “enormous social impacts” of scuttling that project, and its economic analysis assumed mere future residential development for the property at issue. (Pls.’ Mem. at 31.) Otay Mesa also asserts that the FWS improperly utilizes the “discredited” baseline method, as opposed to the co-extensive method, when the agency undertakes to conduct economic analyses of critical habitat designations, in violation of the ESA’s mandates. (*Id.* at 38.) And assuming *arguendo* that the ESA permits the FWS to use the baseline methodology, Otay Mesa also maintains that the FWS’s application of the methodology in *this* case was improper

because the agency had used the co-extensive analysis when it previously analyzed the critical habitat, and therefore should have used that methodology in this rulemaking proceeding as well. Finally, Otay Mesa claims that the FWS “misapplied” the baseline methodology, because it failed to consider the costs related to the first critical habitat designation (the one made pursuant to the 2005 rulemaking process, in which Subunit 5c was excluded), when it made the calculations at issue here. (*See* Pls. Mem. at 42 (“FWS’s 2012 economic analysis does not even attempt to measure th[e] change between the critical habitat that existed through 2005 and the critical habitat that existed after promulgation of the 2012 designation and thus does not utilize the baseline method as FWS claims.”).)

None of these arguments persuades this Court that the FWS acted arbitrarily or capriciously in violation of the APA with respect to the economic analysis it employed in this case.

1. The FWS’s Analysis Of The Cost Of The Critical Habitat Designation Was Rational And Adequately Explained

As noted previously, the FWS released the statutorily-required economic analysis of the critical habitat determination on August 30, 2012. (2012 Proposed Rule Econ. Analysis, AR 050651–771.) The 2012 Proposed Rule Economic Analysis employed the baseline methodology to measure the incremental costs associated with the critical habitat designation, which the agency found were largely the costs associated with administrative efforts to comply with regulatory requirements that arose as a result of the critical habitat designation, as well as costs associated with the resulting time delays. (*Id.* 050680). For the purpose of its calculations, the Economic Analysis “relie[d] on local planning authorities for estimates of the number of housing units

projected to be built by 2035 in the census tracts encompassing the study area.” (*Id.* 050704.) However, the analysis also noted that the “plans are currently in place to develop the East Otay Mesa Recycling Collection Center and Landfill project in [the] vicinity of Subunit 5C[,]” and in any event, the agency ultimately concluded it is “unlikely that critical habitat designation would impose any incremental costs on this project” because Riverside fairy shrimp occupied the area, and the FWS would therefore have to evaluate the effects of any proposed project, regardless of whether or not the area is designated as critical habitat. (*Id.* 050719 n.94.) The analysis also acknowledged that, while the overall incremental costs would be minimal, Subunit 5c would shoulder a significant portion of these costs. (*Id.* 050660, 050719–80.) Nevertheless, the Secretary decided not to exclude Subunit 5c from the critical habitat designation because “designation of critical habitat would not meaningfully influence whether a landfill can be constructed in Subunit 5c as there are existing constraints on development of these lands due to the presence of Riverside fairy shrimp and [another listed species.]” (2012 Final Rule, AR 045140.) The agency has provided a clear and cogent explanation of the analysis it employed, and thus, this Court has little trouble concluding that the FWS has satisfied its statutory obligation to evaluate the economic impact of its critical habitat designation.

Otay Mesa’s primary argument with respect to the 2012 Proposed Rule Economic Analysis is that the analysis was improper because the FWS did not add into its calculus the “public and private benefit to be achieved” through the completion of the landfill and recycling center project (Pls.’ Mem. at 34–36); instead, it “hired a consultant to prepare a generic economic analysis that treats all unimproved private property pretty

much the same[.]” and that consultant “assume[d] all private property will be developed into housing units—a use entirely incompatible with Otay Mesa’s property.” (Pls.’ Mem. at 39–37.) But this argument provides no basis for the Court to invalidate the critical habitat determination as arbitrary and capricious, for several reasons.

First of all, to the extent that Otay Mesa emphasized to the FWS that “Otay Mesa’s property will provide a social service to San Diego County because Otay Mesa plans to build a new, state-of-the-art, much-needed recycling center and landfill” (Pls.’ Mem. at 31), it has not demonstrated here that the agency was required to include the “social” impact of the missed opportunity to undertake a planned land-use project—no matter how beneficial—in its economic analysis, nor has Otay Mesa shown that the standard baseline methodology permits consideration of such costs. Indeed, as the agency explained, the baseline methodology requires *exclusion* of all costs that would have been incurred anyway as a result of the presence of Riverside fairy shrimp on the premises or otherwise, and the agency reasonably determined that, because “the costs associated with avoiding adverse modification of critical habitat are likely to mirror those necessary to avoid jeopardy to the species[.]” few if any “incremental” costs would be incurred as a result of the critical habitat designation. (2012 Final Rule, AR 045140.) Moreover, while Otay Mesa’s brief goes on at length about “the enormous social benefits of the landfill for the millions of residents of San Diego County” and how “extremely challenging” it is to find land appropriate for a recycling center and landfill (Pls.’ Mem. at 35), it fails to cite a single case in which the FWS was found to have violated the APA when it employed the baseline methodology but did not include

the “social” costs of preserving the critical habitat as one of the incremental, above-the-baseline variables.

Nor can Otay Mesa insist that the critical habitat designation at issue here violated the APA because the FWS decided not to exercise its discretion to exclude Subunit 5c. It is clear beyond cavil that this Court lacks the authority under the APA to review agency action where the action “is committed to agency discretion by law.” 5 U.S.C. § 701(a). The Supreme Court has explained that an action is committed to agency discretion “if the statute is drawn so that a court would have no meaningful standard against which to judge the agency’s exercise of discretion.” *Heckler v. Chaney*, 470 U.S. 821, 830 (1985). Here, the ESA empowers the FWS to “exclude any area from critical habitat if [it] determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless [it] determines [that] the failure to designate such area as critical habitat will result in the extinction of the species concerned.” 16 U.S.C. § 1533(b)(2). “The plain reading of the statute fails to provide a standard by which to judge the Service’s decision not to exclude an area from critical habitat[,]” which means this Court cannot review the FWS’s exclusion—or non-exclusion—decisions. *Cape Hatteras Access Pres. Alliance v. U.S. Dep’t of the Interior*, 731 F. Supp. 2d 15, 29 (D.D.C. 2010); *see also Aina Nui Corp. v. Jewell*, 52 F. Supp. 3d 1110, 1132 n.4 (D. Haw. 2014) (“The Court does not review the Service’s ultimate decision not to exclude LDU–8 from designation, which is committed to the agency’s discretion.”).

To the extent that Otay Mesa challenges the “generic” nature of the FWS’s economic analysis and the fact that it “treats all unimproved private property pretty

much the same—regardless of its highest and best use or whether it has substantial economic value that will be taken by the regulation” (Pls. Mem. at 36), it appears that Otay Mesa has actually waived this argument. *Nat’l Wildlife Fed’n v. EPA*, 286 F.3d 554, 562 (D.C. Cir. 2002) (“It is well established that issues not raised in comments before the agency are waived and this Court will not consider them.”); *see also Advocates for Highway & Auto Safety v. Fed. Motor Carrier Safety Admin.*, 429 F.3d 1136, 1150 (D.C. Cir. 2005) (“[A] party will normally forfeit an opportunity to challenge an agency rulemaking on a ground that was not first presented to the agency for its initial consideration.”). The reasoning behind application of this waiver principle is two-fold. “First, the courts are not authorized to second-guess agency rulemaking decisions; rather, the role of the court is to determine whether the agency’s decision is arbitrary and capricious for want of reasoned decision making.” *Advocates for Highway & Auto Safety*, 429 F.3d at 1150 (citing *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43). Second, “[s]imple fairness . . . requires as a general rule that courts should not topple over administrative decisions unless the administrative body . . . has erred against objection made at the time appropriate under its practice.” *United States v. L.A. Tucker Truck Lines, Inc.*, 344 U.S. 33, 37 (1952). Here, Otay Mesa submitted a detailed comment letter to the FWS challenging the critical habitat designation and draft economic analysis on numerous bases, and nowhere in this letter did Otay Mesa challenge the FWS’s assumption of residential development for the proposed critical habitat. (*See* AR 037657–58 (challenging assumptions of even development and mean project size of 13.5 housing units, but not residential development assumption).) In

light of this failure at the rule-making stage, it would be improper for this Court to rule on the propriety of the FWS's assumption.

But even if the Court were to reach the merits of Otay Mesa's argument that the FWS improperly used residential housing assumptions in the 2012 Proposed Rule Economic Analysis, this Court still would find no basis on which to invalidate the 2012 Proposed Rule. This is because, first and foremost, the text of 2012 Proposed Rule Economic Analysis belies Otay Mesa's argument that the FWS did not take into account the fact that Subunit 5c might ultimately be used as a recycling center and landfill. The economic analysis both acknowledges this proposed use and expressly analyzes the incremental costs that would follow from the critical habitat designation. (*Id.* 050719 n.94.) In addition, it is clear beyond cavil that the FWS is entitled to a presumption of regularity—that is, a presumption that it properly discharged its duties—with respect to its analysis of the economic consequences of the critical habitat designation. *See Latif v. Obama*, 677 F.3d 1175, 1178 (D.C. Cir. 2012). To overcome this presumption with respect to the contractor's reliance on residential housing assumptions, Otay Mesa must point to superior data that the FWS could have used but did not. *See Bldg. Indus. Ass'n v. Norton*, 247 F.3d 1241, 1246-47 (D.C. Cir. 2001). Otay Mesa's motion does no such thing; instead, it makes the bald contention that the FWS prepared a "generic" analysis of costs that "failed to provide any useful information to the decision-maker concerning the economic impact of designating Otay Mesa's land as critical habitat." (Pls.' Mem. at 37.) In light of the relevant standards and as far as the APA claim is concerned, this Court concludes that the failure here is on Otay Mesa's part, and not the agency's.

2. The FWS's Decision To Evaluate The Economic Effects Using The Baseline Methodology Is Entitled To *Chevron* Deference

In addition to challenging what it perceives to be the FWS's undervaluing of the costs of including Subunit 5c in the critical habitat designation, Otay Mesa also attacks the agency's choice of methodology for assessing economic effects. As explained above, Congress has required the FWS to measure and consider the economic impact of making a critical habit designation, and there are two common approaches to measuring such economic impacts: the baseline approach, pursuant to which the FWS removes from the economic calculus those protections afforded to a species as the result of the FWS listing a species as endangered or threatened, and the co-extensive approach, which requires the FWS to consider both the costs associated with the FWS listing the species as endangered or threatened and the additional incremental costs of designating land as critical habitat. The FWS has alternated between these two approaches over time, 77 Fed. Reg. 51508, and the agency is quite candid that these changes have partly resulted from evolving case law on the proper approach to conducting the economic analysis that the ESA requires. *Compare N.M. Cattlegrowers Ass'n*, 248 F.3d at 1285 ("expressly reject[ing]" the baseline approach), *with Ariz. Cattle Growers' Ass'n*, 606 F.3d at 1173–74 (rejecting the co-extensive approach). Otay Mesa characterizes this shift in methodology as a "repeated flip-flop" regarding what the ESA requires with respect to the prescribed economic analysis that is not entitled to *Chevron* deference. (Pls.' Mem. at 40 (arguing that "the *Chevron* doctrine of deference has no application where, as here, the agency's repeated flip-flop on whether the ESA requires a baseline or a coextensive analysis leaves the court little or no reliable agency interpretation to which it can defer").)

This Court disagrees. Although the ESA expressly requires that the FWS consider the economic effects of a critical habitat designation, the statute does not “directly speak” to the precise methodology that the Service must use to accomplish this mandate. *Chevron*, 467 U.S. at 842. Given the ESA’s silence on this issue, the Court must move to step two of the *Chevron* analysis, and thereby defer to the FWS’s construction of the ESA “unless it is arbitrary or capricious in substance, or manifestly contrary to the statute.” *Mayo Found.*, 564 U.S. at 52. After nearly two decades of litigation regarding critical habitat determinations, it is fairly well established that the FWS’s decision to employ the baseline method when it evaluates economic effects is not substantively arbitrary and capricious, or so inconsistent with the statutory framework, that *Chevron* deference is not due. *See Cape Hatteras Access Pres. Alliance v. U.S. Dep’t of Interior*, 344 F. Supp. 2d 108, 130 (D.D.C. 2004) (“The baseline approach is a reasonable method for assessing the actual costs of a particular critical habitat designation.”); *see also, e.g., Home Builders Ass’n*, 616 F.3d 983, 992–93; *Ariz. Cattle Growers’ Ass’n*, 606 F.3d at 1173–74; *Alaska Oil & Gas Ass’n v. Salazar*, 916 F. Supp. 2d 974 (D. Alaska 2013).

What is more, it is also quite clear that an agency can change its mind about the proper interpretation of a statute, so long as it provides a rational explanation for the change. *See Inv. Co. Inst. v. Commodity Futures Trading Comm’n*, 720 F.3d 370, 377 (D.C. Cir. 2013) (agency faces a “low bar” in justifying a change in approach); *Anna Jaques Hosp. v. Sebelius*, 583 F.3d 1, 6 (D.C. Cir. 2009); *Nat. Res. Def. Council v. Nat’l Marine Fisheries Serv.*, No. 12cv0938 (KBJ), 2014 WL 5148407, at *17 (D.D.C. Oct. 14, 2014). Here, the FWS provided such a rational explanation: it stated that the

agency “developed [its] current [baseline] methodology in response to conflicting court decisions” and that its current use of the baseline methodology “addresses the divergent opinion of the courts and provides a thorough review for policymakers that enables them to consider the true costs of critical habitat designation, by comparing the costs that would occur solely as a result of designation to those costs that would occur in the absence of designation.” (2012 Final Rule, AR 045141.) And while it may be the case that the FWS’s current interpretation is “entitled to considerably *less* deference than a consistently held agency view” (Pls.’ Mem. at 41 (quoting *I.N.S. v. Cardoza-Fonseca*, 480 U.S. 421, 488 (1987) (emphasis added and internal quotation marks omitted))), “less” deference does not mean none; and furthermore, Otay Mesa’s characterization of the agency’s present position as a “convenient litigating position” and its suggestion that the FWS has flouted a direct court order to use the co-extensive approach (Pls.’ Mem. at 41) find no support in the record.

To be sure, Otay Mesa is correct to point out that the method the FWS must utilize to conduct an economic analysis under the ESA is a question of law (June 26, 2014 Hr’g Tr. at 19:3–17), but the relevant question is whether or not this Court must defer to the FWS’s interpretation when considering that legal question. Otay Mesa has not demonstrated that the mere fact that the FWS has changed its mind regarding the appropriate interpretation of the ESA economic analysis requirement somehow divests the FWS of all of the *Chevron* deference to which it is otherwise due. *See Ala. Educ. Ass’n v. Chao*, 455 F.3d 386, 396 (D.C. Cir. 2006) (“[A]n agency’s interpretation of a statute is entitled to no less deference . . . simply because it has changed over time. Rather, the question . . . is whether the [agency] has supported its new reading of [the

statute] with a reasoned analysis sufficient to command our deference under *Chevron*.” (internal quotation marks and citation omitted)). And after affording the agency’s reasoned decision making the deference that it is due, this Court cannot conclude that the FWS’s decision to calculate costs using the baseline methodology—a change that the agency specifically addressed in the 2012 Final Rule—was arbitrary and capricious.

3. The Agency’s Application Of The Baseline Methodology In This Case Was Neither Arbitrary And Capricious Nor Erroneous

To the extent that Otoy Mesa suggests that the agency acted arbitrarily when it applied the baseline methodology in *this* case because it had previously employed the co-extensive methodology in prior rulemaking proceedings regarding the critical habitat of the Riverside fairy shrimp, it is mistaken. The FWS consistently and clearly explained how and why its reading of the law changed (and changed back again) as the result of developments in case law at numerous instances in the rulemaking proceedings, and it provided this explanation in the 2011 Proposed Rule, in the 2012 Proposed Rule, in the 2012 Proposed Rule Economic Analysis, and in the 2012 Final Rule at issue here. (*See, e.g.*, AR 037617 (stating that, in the time since the FWS finalized the 2005 economic analysis, “courts . . . have held that an incremental analysis of impacts stemming solely from the critical habitat rulemaking is proper, and as such, is the current [draft economic analysis] framework approach used by the Service”).) There is nothing irrational about this evolution, and thus, the FWS has satisfied the requirements of the APA. *See Nat. Res. Def. Council*, 2014 WL 5148407, at *18; *cf. Citizens to Preserve Overton Park*, 401 U.S. at 416 (explaining that, when evaluating whether an agency has acted in violation of the APA’s standards, a court only “consider[s] whether the [agency’s] decision was based on a consideration of the

relevant factors and whether there has been a clear error of judgment[,]” and the court “is not empowered to substitute its judgment for that of the agency”).

Moreover, Otay Mesa’s contention that the FWS misapplied the baseline method because it did not consider its prior 2005 cost calculation related to the initial designation of 306 acres *to be* the relevant baseline (*see* Pls. Mem. at 41 (asserting that “[t]he regulatory baseline in this case is the original critical habitat designation that FWS made in 2005 and that was replaced by the 2012 designation under review in this case”)) is incomprehensible, and thus entirely unpersuasive. Otay Mesa appears to suggest that the FWS should have used the 2005 critical habitat designation as the baseline for the instant rulemaking proceedings, and not the 1993 listing decision, but this contention misunderstands the entire premise of the baseline approach, which is to remove from the economic calculus those costs that are associated with the protections that a species receives as a result of the FWS’s decision to list that species as endangered or threatened. *See Ariz. Cattle Growers’ Ass’n*, 606 F.3d at 1172–73 (“[T]he economic analysis of the critical habitat designation . . . is not intended to incorporate the burdens imposed by listing the species.”). Thus, the baseline is *necessarily* tied to the listing date, rather than some other date that arose as a result of litigation, and the relevant costs are only those incremental costs that are incurred above and beyond the costs that have been imposed due to the listing of the species.

In the final analysis, then, this Court finds that Otay Mesa has not provided any reason to conclude that the FWS acted arbitrarily and capriciously or in violation of the ESA when it utilized the baseline method to evaluate the incremental costs of its listing

decision, and when it ultimately decided that such costs did not outweigh the benefits of designating Subunit 5c as part of the critical habitat for the Riverside fairy shrimp.

D. The FWS Was Not Obligated To Conduct A NEPA Analysis In Connection With Its Critical Habitat Determination

Otay Mesa’s argument that the FWS violated NEPA when it designated Subunit 5c as critical habitat for the Riverside fairy shrimp also fails. The FWS has taken the position that “outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA in connection with designating critical habitat under the [ESA].” (2012 Final Rule, 045140.) “[W]here an agency concludes that NEPA does not apply to its actions at all, the agency’s decision is ‘not entitled to the deference that courts must accord to an agency’s interpretation of its governing statute and is instead a question of law, subject to de novo review.’” *Sierra Club v. U.S. Army Corps of Eng’rs*, 990 F. Supp. 2d 9, 22–23 (D.D.C. 2013) (quoting *Sierra Club v. U.S. Dep’t of Agric.*, 777 F. Supp. 2d 44, 54 (D.D.C. 2011)). The parties acknowledge that there is a Circuit split on this issue, with the primary cases coming from the Tenth Circuit—which has held that the FWS must conduct a NEPA analysis when designating critical habitat—and the Ninth Circuit—which has held that NEPA is inapplicable to a critical habitat designation. *Compare Catron Cty.*, 75 F.3d at 1436, *with Douglas Cty.*, 48 F.3d at 1502–05. As explained below, this Court believes that the Ninth Circuit has the better of the argument.

In *Catron County*, the Tenth Circuit held that the FWS must comply with NEPA when designating critical habitat under the ESA for three independent reasons. First, it found that ESA procedures have not replaced NEPA requirements “given the focus of the ESA together with the rather cursory directive that the Secretary is to take into

account economic and other relevant impacts[.]” *Catron Cty.*, 75 F.3d at 1436 (internal quotation mark omitted). Second, the court found that “actual impact flows from the critical habitat designation[.]” and thus it was necessary to determine the nature and scope of those impacts. *Id.* And third, the court found that “compliance with NEPA will further the goals of the ESA.” *Id.*

In *Douglas County*, the Ninth Circuit reached the opposite conclusion on each of these questions and held that NEPA was inapplicable to critical habitat determinations. First, the court found, based on the ESA’s legislative history, that “Congress intended that the ESA procedures for designating a critical habitat [would] replace the NEPA requirements.” *Id.* at 1503. Second, the court found that “NEPA procedures do not apply to federal actions that do nothing to alter the natural physical environment[.]” and that a critical habitat designation protects the environment, and does not interfere with or change it. *Id.* at 1505–06. Finally, the court found that “the ESA furthers the goals of NEPA without demanding an EIS. . . . [because b]y designating critical habitats for endangered or threatened species, the Secretary ‘is working to preserve the environment and prevent the irretrievable loss of a natural resource.’” *Id.* at 1506 (quoting *Pac. Legal Found. v. Andrus*, 657 F.2d 829, 837 (6th Cir. 1981)). This is in accord with NEPA’s aim of “provid[ing] a mechanism to enhance or improve the environment and prevent further irreparable damage.” *Pac. Legal Found.*, 657 F.2d at 837.

This Court agrees with the Ninth Circuit on each of the three independent grounds that it identified and discussed in *Douglas County*, and adopts its reasoning. Thus, the Court concludes that the FWS did not act arbitrarily or in violation of the law

when it declined to prepare and EIS in connection with its designation of a critical habitat for the Riverside fairy shrimp.

E. The Current Appendix Is Insufficient To Permit This Court To Evaluate The Scope Of The Designated Area

To recap what has been explained above, this Court has concluded that the FWS did not act arbitrarily or capriciously when it determined that endangered Riverside fairy shrimp occupy the vernal pool on Subunit 5c and that the pool and the surrounding watershed area are “critical habitat” for that listed species within the meaning of the ESA, nor did the agency’s economic analysis and its refusal to prepare an EIS under NEPA violate the law or otherwise constitute arbitrary or capricious action on the part of the agency. Nevertheless, Otay Mesa has asserted that “the administrative record in this case contains no factual support for the Secretary’s finding that the 56 unoccupied acres of Otay Mesa’s property is essential to the conservation of the Riverside fairy shrimp” (Pls.’ Opp’n. at 14), and indeed, the portions of the administrative record that have been submitted to this Court fall short of clearly establishing that the 56 acres of land surrounding the one-acre stock pond is all watershed and thus is essential to the conservation of the endangered shrimp. (*See* Defs.’ Reply in Supp. of Cross-Mot. for Summ. J., ECF No. 19, at 14 (“The rest of the acreage included in subunit 5c is the surrounding watershed that is necessary to support the Riverside fairy shrimp in the stock pond.”).) To be sure, the FWS has provided a detailed explanation of *the methodology* that the Service purportedly utilized in determining that the 56 acres is watershed (*see, e.g.*, 2011 Proposed Rule, AR 055614–48), and it has also touted the existence of topographical maps that show precisely how that methodology has been applied by the agency to the land at issue in this case. (*See* 2012 Final Rule, AR

045139–40.) But the Appendix does not contain these maps, and the record that has been submitted is otherwise completely silent regarding the specific hydrology of the 56 acres of land that the FWS contends is watershed—for example, it does not address with specificity how rain flow and subsurface flow contribute to inundation of the stock pond.

Given this omission and in light of the FWS’s own admission that “watersheds vary in size and cannot be generalized” (AR 045095), this Court is in no position to assess the rationality of the FWS’s decision that the 56 acres of Subunit 5c that surround the one-acre stock pond constitutes watershed for the vernal pool on the property. (*See* Pls.’ Opp’n at 14–15; *see also* 2012 Final Rule, AR 045095 (explaining, with respect to vernal pools, that “[t]he size of associated watersheds likely varies from a few acres to greater than 100 ac[res]” and “are affected by factors including surface and underground hydrology, the topography of the area surrounding the pool or pools, the vegetative coverage, and the soil substrates in the area”).) No less an authority than the Supreme Court has made clear that it is the role of this Court to ensure that the Service has “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action[.]” *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43, and in the absence of any evidence showing what specific data the FWS considered in concluding that the 56 acres around the admittedly-occupied stock pond are watershed for that vernal pool, this Court cannot determine whether “the record belies the agency’s conclusion[.]” *Cty. of Los Angeles v. Shalala*, 192 F.3d 1005, 1021 (D.C. Cir. 1999) (internal quotation marks and citation omitted). (*See also* Bauder Peer Review, AR 032302 (commenting that the

state of the record was such that the vernal pool networks and watersheds underlying the critical habitat designation at issue here could not be verified).)

IV. CONCLUSION

As explained above, this Court finds that Otay Mesa has standing to challenge the FWS's designation of its property as critical habitat for the Riverside fairy shrimp; that it was not arbitrary or capricious for the FWS to conclude that a watershed surrounding the stock pond qualifies as critical habitat; that the FWS's economic analysis of the critical habitat designation was not inconsistent with the ESA or otherwise improper; and that it was not arbitrary or capricious for the FWS to conclude that it need not comply with NEPA requirements when designating critical habitat for a protected species. However, because the current Appendix of documents from the administrative record does not contain the factual basis for the agency's determination that the 56 acres that surround the vernal pool in Subunit 5c is watershed, the Court cannot determine if Defendants have acted arbitrarily in designating the entire area referred to as Subunit 5c as critical habitat. Because Defendants have indicated that the portions of the administrative record not currently before this Court may, in fact, contain sufficient facts to support the FWS's determinations regarding the scope of the designated area, this Court has not vacated the critical habitat determination or remanded this matter to the FWS at this time. Rather, as noted in the Order of September 30, 2015, and explained further in the Supplemental Order that will issue along with this Memorandum Opinion, the Court will require the parties to file

supplemental briefing and submit additional materials from the administrative record on this limited factual question.

Date: November 13, 2015

Ketaji Brown Jackson
KETANJI BROWN JACKSON
United States District Judge