

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge Christine M. Arguello**

Civil Action No. 15-cv-00286-CMA-STV

THE STATE OF COLORADO by and through the Colorado Department of Natural Resource, the Division of Parks and Wildlife, and the Parks and Wildlife Commission,

Plaintiff,

BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF GUNNISON,
COLORADO, and
GUNNISON COUNTY STOCKGROWERS' ASSOCIATION, INC.,

Plaintiff-Intervenors, and

THE STATE OF UTAH, and
SAN JUAN COUNTY, UTAH,

Plaintiff-Intervenors,

v.

UNITED STATES FISH AND WILDLIFE SERVICE,
JAMES KURTH, in his official capacity as acting Director of the United States Fish and Wildlife Service, and
RYAN ZINKE, in his official capacity as Secretary of the United States Department of the Interior,

Defendants,

WILDEARTH GUARDIANS, and
DR. CLAIT E. BRAUN,

Defendant-Intervenors, and

CENTER FOR BIOLOGICAL DIVERSITY, and
WESTERN WATERSHEDS PROJECT,

Defendant-Intervenors.

**ORDER AFFIRMING THE NOVEMBER 14, 2014 FINAL LISTING DECISION
AND FINAL CRITICAL HABITAT DESIGNATION ISSUED BY
THE UNITED STATES FISH AND WILDLIFE SERVICE**

The protagonist in this case is the Gunnison sage-grouse, a native North American bird, known for its elaborate mating rituals and expansive use of sagebrush country. At issue is the degree of protection required to ensure the species' long-term conservation—a topic on which the Parties vehemently disagree and from which this federal action stems. This appeal follows the November 14, 2014 issuance by the United States Fish and Wildlife Service (the “Service”)¹ of Final Rules adding the Gunnison sage-grouse to the List of Endangered and Threatened Wildlife (“Final Rule”).² (AR at 199346–199518.)³ Specifically, the Service listed the Gunnison sage-grouse species as “threatened” under the Endangered Species Act, 16 U.S.C. §§ 1531–1541, and designated 1.4 million acres in Colorado and Utah as “critical habitat” for the bird. (*Id.*) Numerous entities now challenge that Final Rule. Among them are the State of Colorado; the Board of County Commissioners for the County of Gunnison, Colorado and the Gunnison County Stockgrowers' Association, Inc.; and the State of Utah and

¹ The Defendants in this appeal are the Service, James Kurth (the acting Director of the Service), and Ryan Zinke (the Secretary of the Department of the Interior) (“Federal Defendants,” collectively).

² The Court recognizes that the Service separately published the final “threatened” listing decision and the final “critical” habitat designation. Throughout this Order, the Court nonetheless refers to each publication as Final Rule.

³ The Administrative Record (“AR”), (Doc. # 108), in this case is comprised of 4 DVDs, totaling nearly 300,000 pages. The Court cites to the bates number associated with each document, without reference to the particular DVD containing it or the type of document being referenced.

San Juan County, Utah (Plaintiffs collectively).⁴ (Doc. ## 143, 147, 148.)⁵ Plaintiffs contend that the Service erred in numerous ways—procedurally and substantively—and request that this Court vacate the Final Rule.⁶ Having thoroughly considered Plaintiffs’ arguments; Federal Defendants’ and Defendant-Intervenors’ responses; the entire Administrative Record; and the applicable law, the Court affirms the Service’s determinations and denies Plaintiffs’ request to vacate the Final Listing Rule.

I. BACKGROUND

Gunnison sage-grouse are ground-dwelling birds considered obligate users of a sagebrush landscape and thereby historically located in southwestern Colorado, southeastern Utah, northwestern New Mexico, and northeastern Arizona. (AR at 199412.) At the time of the Final Rule, the range of the Gunnison sage-grouse included only southwestern Colorado and southeastern Utah (Doc. ## 156 at 8; 143 at 13–14) and the rangewide population of the species was estimated at 4,705 birds (AR at

⁴ The Center for Biological Diversity, Western Watersheds Project, WildEarth Guardians, and Clait E. Braun also challenge the Final Rule and have likewise initiated federal litigation, Civil Case Nos. 15-cv-00130 and 15-cv-00128. The Federal Defendants and those entities have stipulated to a 30-month stay of that litigation to allow the Service to complete a Recovery Plan for the Gunnison sage-grouse. (Doc. # 175-1.) In this litigation, the Plaintiffs in the stayed litigation will be collectively referred to as “Defendant Intervenors” because, for the most part, they disagree with Plaintiffs’ arguments here and filed briefing accordingly. The Court also notes that Markle Interests, LLC, and P&F Lumber Company 2000, LLC filed an amicus curiae brief supporting Plaintiffs’ position, which the Court has fully reviewed and considered.

⁵ Unless otherwise stated, Doc. # citations refer to the docket contained in Case No. 15-cv-00130, which was consolidated with this action until April 30, 2018, when that litigation was stayed.

⁶ As a preliminary matter, the Court disagrees with Defendants that Plaintiffs have improperly incorporated by reference (and thereby waived) one another’s arguments. Indeed, this Court ordered Plaintiffs to do just that: “[Plaintiff] shall coordinate with each other in order to avoid unnecessary duplication of arguments.” (Doc. # 68 at 5.) The Court would look with disfavor on the filing of duplicative briefs, particularly in a case this large, with over 300 pages of briefing.

199404–408) grouped into seven populations. Gunnison Basin (Unit 6)⁷ population contains most of the species, nearly 4,000 birds. The remaining birds are isolated in six smaller “satellite” populations (ranging from 10 to 206 birds) identified as Monticello-Dove Creek (Unit 1), Piñon Mesa (Unit 2), San Miguel Basin (Unit 3), Cerro Summit-Cimarron-Simms Mesa (Unit 4), Crawford (Unit 5), and Poncha Pass. (AR at 199401–406.) All populations are located in Colorado, with the exception of Units 1 and 2, which extend into Utah.

In January 2013, the Service published a rule (“Proposed Rule”) proposing to list the Gunnison sage-grouse as “endangered” throughout its range and designating 1,704,227 acres as critical habitat. (AR at 69984–70037.) Over the course of the next year, the Service opened four public comment periods, held three public hearings, and elicited evaluation by five peer reviewers. (Doc. # 1156 at 9; AR at 199400–401.) After reviewing the comments and evaluations, the Service modified the listing to “threatened” and limited the critical habitat to 1,429,551 acres. (AR at 199346–98; 199399–518.)

In the instant litigation, Plaintiffs challenge the rule-making procedures utilized by the Service, arguing primarily that the Service failed to disclose a critical scientific study upon which it relied. Plaintiffs also challenge the merits of the threatened listing and habitat designation, contending that the best available science does not support them. The Court addresses each of these contentions below. But before doing so, the Court

⁷ In the final habitat designation, all of these populations, with the exception of Poncha Pass, are identified as Critical Habitat Units. (AR at 199392–397.)

highlights the laws governing the Service's actions and this Court's review of the Final Rule.

II. GOVERNING LAW

A. ENDANGERED SPECIES ACT

The Endangered Species Act ("ESA") was passed in 1973 to preserve ecosystems upon which threatened and endangered species depend and "to halt and reverse the trend toward species extinction." *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978); 16 U.S.C. § 1531(b). The ESA's "core purpose" is to prevent the extinction of a species by preserving and protecting the habitat upon which it depends from the intrusive activities of humans. *Tennessee Valley Auth.*, 437 U.S. at 184. The Service is one of the two agencies tasked with implementing the ESA. The ESA obligates the Service to list any species that qualifies as an "endangered" or "threatened" species and to designate areas considered to be the species' critical habitat. 16 U.S.C. § 1533(a)(1), (3). Enumerated statutory criteria govern these determinations, which must be made according to the "best scientific and commercial data available." *Id.* at § 1533(b)(1)(A).

B. NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act ("NEPA") is the centerpiece of environmental regulation in the United States. It complements the ESA, *Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1230 (10th Cir. 2002), and requires federal agencies to pause before committing to a project and consider the likely environmental impacts of and reasonable alternatives to a preferred course of action.

See 42 U.S.C. § 4331(b) (congressional declaration of national environmental policy); *U.S. Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756–57 (2004); *Forest Guardians v. U.S. Forest Serv.*, 495 F.3d 1162, 1172 (10th Cir. 2007). Agencies must take a “hard look” at environmental consequences and satisfy various procedural and substantive requirements before acting. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350–51 (1989). By focusing both agency and public attention on the environmental effects of proposed actions, NEPA facilitates informed decision-making by agencies and allows the political process to check those decisions. *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989); *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983).

C. ADMINISTRATIVE PROCEDURES ACT

The Administrative Procedures Act (“APA”) sets forth the required procedures that the Service must follow before listing a species under the ESA. Section 553 requires that an agency give notice of a proposed listing under the ESA. The notice must set forth “either the terms or substance of the proposed rule or a description of the subjects and issues involved,” 5 U.S.C. § 553(b), and “give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments,” *id.* at § 553(c).

The APA also gives this Court jurisdiction to review the Service’s determinations. *Biodiversity Legal Found. v. Babbitt*, 146 F.3d 1249 (10th Cir.1998). The Court determines whether the agency “examined the relevant data and articulated a rational connection between the facts found and the decision made.” *Olenhouse v. Commodity*

Credit Corp., 42 F.3d 1560, 1576 (10th Cir. 1994) (citing *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983)).

The Court will set aside an ESA determination only if the Court finds it to be arbitrary, capricious, an abuse of discretion, without observance of procedure required by law, or otherwise not in accordance with law pursuant to 5 U.S.C. § 706(2)(A). *Citizens' Comm. to Save Our Canyons v. U.S. Forest Serv.*, 297 F.3d 1012, 1023 (10th Cir. 2002).

While the standard of review is deferential to agencies, it does not “shield [agency actions] from a thorough, probing, in-depth review.” *Citizens to Pres. Overton Park v. Volpe*, 401 U.S. 402, 415 (1971), *abrogated on other grounds by Califano v. Sanders*, 430 U.S. 99 (1977). Agency actions can be set aside as arbitrary and capricious for several reasons: the agency relied on factors Congress did not intend for it to consider; the agency completely failed to consider pertinent aspects of the problem; or the agency’s explanation for its action is counter to the evidence before it or is so implausible that it can be neither a difference of opinion nor a product of agency expertise. *State Farm*, 463 U.S. at 43.

However, “[t]he ultimate standard of review is a narrow one. The Court is not empowered to substitute its judgment for that of the agency.” *Volpe*, 401 U.S. at 416. The Court, moreover, grants controlling weight to the agency’s application and interpretation of its own regulations, unless plainly erroneous. *Thomas Jefferson v. Shalala*, 512 U.S. 504, 512 (1994). So long as the agency articulated a rational basis for its interpretation and application, and considered all the relevant factors, the Court will

uphold the agency's action. *Copart, Inc. v. Admin. Review Bd., U.S. Dep't of Labor*, 495 F.3d 1197, 1202 (10th Cir. 2007).

III. STANDING

Before turning to the merits of Plaintiffs' challenges, the Court must address a preliminary issue: Plaintiffs' standing to pursue this case. Defendant-Intervenors argue that the Plaintiffs lack Article III standing because they allege only "vague" and hypothetical claims of injury. They also argue that Plaintiffs lack prudential standing under NEPA because their requests would undermine NEPA's purpose of protection, not promote it. For the following reasons, the Court disagrees that Plaintiffs lack standing to pursue their claims in this case.

A. LAW

Under Article III of the Constitution, which limits federal courts to deciding "cases" or "controversies," a party must suffer an "injury in fact" from a governmental action.

The party invoking federal jurisdiction bears the burden of establishing an actual or imminent injury that is concrete and particularized rather than conjectural or hypothetical; a causal connection that is "fairly traceable" to the conduct complained of; and a likelihood of redressability in the event of a favorable decision.

Catron Cty. Bd. of Comm'rs v. U.S. Fish and Wildlife Serv., 75 F.3d 1429, 1433 (10th Cir. 1996), citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 559 (1992). The party invoking federal jurisdiction bears the burden of establishing these elements. See *FW/PBS, Inc. v. Dallas*, 493 U.S. 215, 231 (1990). When a plaintiff is itself an object of the federal action being challenged, "there is ordinarily little question that the action or inaction has caused him injury." *Lujan*, 504 U.S. at 561–62. Counties and states, like

Plaintiffs, are often deemed the object of federal action or inaction under the ESA, NEPA, and APA. *E.g.*, *Catron Cty. Bd. of Comm'rs.*, 75 F.3d at 1433 (county).

When the plaintiff is an association, the same three elements apply. *Warth v. Seldin*, 422 U.S. 490, 511 (1975). An association has standing to sue even if it has not been injured itself, so long as the association's members satisfy the constitutional minimum of Article III. An association has standing to bring suit on behalf of its members when:

(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization's purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

Hunt v. Washington State Apple Adver. Comm'n, 432 U.S. 333, 343 (1977), (quoted by *Committee to Save Rio Hondo v. Lucero*, 102 F.3d 445, 447 n.3 (10th Cir.1996)).

Because NEPA does not contain a private right of action for those seeking to enforce its procedural requirements and a plaintiff must rely on the APA to bring such an action, a plaintiff must establish prudential standing in addition to Article III standing by showing that it has “suffer [ed] legal wrong” or that it is “adversely affected or aggrieved . . . within the meaning of a relevant statute” by some final agency action. *Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 883 (1990). To establish such an adverse effect under NEPA, Plaintiffs must establish they have suffered an injury in fact that falls within NEPA's “zone of interests.” *United States v. Students Challenging Regulatory Agency Procedures*, 412 U.S. 669, 686 (1973).

B. ANALYSIS

The Court finds that Plaintiffs have met their burden to establish Article III and prudential standing under NEPA.

Beginning with Article III standing, Plaintiffs have sufficiently alleged a concrete and particularized injury in fact “fairly traceable” to the Final Rule that would likely be redressed by a favorable decision. Each state and county Plaintiff (Colorado, Utah, San Juan County, and Gunnison County) alleged specific facts highlighting impediments to their sovereign and proprietary interests attributable to the Final Rule. *See Illinois Dep’t of Transp. v. Hinson*, 122 F.3d 370, 372 (7th Cir. 1997); *see also Maine v. Taylor*, 477 U.S. 131, 137 (1986) (“a State clearly has a legitimate interest in the continued enforceability of its own statutes”); *Massachusetts v. E.P.A.*, 549 U.S. 497, 518-19 (2007) (noting it is “of considerable relevance [when] the party seeking review is a sovereign State and not ... a private individual.”); *see also Otter v. Salazar*, 2012 WL 3257843 at *11 (D. Idaho, 2012) (finding state had standing to challenge listing in part because of special status of states in the standing context). Plaintiffs have alleged an increased risk of economic, environmental, and regulatory injury to government-owned property and other proprietary interests, such as local governments’ ability to manage and control land use, enforce health regulations, and protect natural resources. Each Plaintiff set forth consequences of restricted land use imposed by the Final Rule as well as the curtailment of county and state planning efforts, conservation programs, and general governance. Plaintiffs have, therefore, sufficiently demonstrated standing.

Plaintiff Gunnison County Stockgrowers' Association (the "Association") (the only non-government Plaintiff) also has Article III standing in this case. The Association is comprised of "over 100 members of the local ranching community and is the primary land-use organizational interest in the Gunnison Basin." (Doc. ## 161 at 16; 23-1; 23-3; 23-4; 23-6.) The objectives and purpose of the Association include the protection of range privileges and other interests of the stock-raising industry. Members of the Association hold federal grazing leases on lands designated as critical habitat under the Final Rule. (AR at 20357–58.) The Final Rule imposes new procedural and substantive requirements on the maintenance and renewal of those leases and, more importantly, the Association's members' land use and participation in certain conservation programs. 16 U.S.C. § 1536(a)(2). The Service's own assessment revealed an economic impact of \$16,000 to grazing interests. (AR at 198278.) Members are also subject to civil and criminal penalties for disregarding new restrictions. Based on these and other allegations, the Association's claimed harm, flowing from the Final Rule, is sufficient to support Article III standing in this case.

With respect to prudential standing, the Court also finds that Plaintiffs have met their burden to show that their injuries fall within the "zone of interests" protected by NEPA. The Defendant-Intervenors' only argument against prudential standing is that, because Plaintiffs request that the Listing Rule be vacated, i.e. eliminating its environmental protections, they cannot, as a matter of law, be furthering NEPA's protections. This argument is misplaced, and the Supreme Court has squarely rejected it. In *Bennett v. Spear*, 520 U.S. 154, 166 (1997), the Court found "no textual basis for

saying that [NEPA's] expans[ive] standing requirements appl[y] to environmentalists alone." The Court instead concluded that standing exists for plaintiffs "seeking to prevent application of environmental restrictions" in addition to plaintiffs seeking "to implement them." *Id.* (extending prudential standing "not only to actions against the Secretary asserting underenforcement under § 1533, but also to actions against the Secretary asserting overenforcement under § 1533."). Because plaintiffs who are opposed to, and injured by, environmental regulation are permitted to challenge it under well-established precedent, the Court finds that Plaintiffs have standing under NEPA.

Ultimately, under the ESA, Congress has conferred the "widest possible standing" and authorizes suits with a "remarkable breadth." *Bennett*, 520 U.S. at 164; *Sw. Ctr. for Biological Diversity v. Clark*, 90 F. Supp. 2d 1300, 1307 (D.N.M. 1999). Plaintiffs in this case clearly fall within that wide scope, and Defendant-Intervenors' arguments are accordingly without merit.

Having determined that Plaintiffs' standing is not an issue in this proceeding, the Court moves to discuss the merits of Plaintiffs' challenges to the Final Rule. The Court begins by addressing Plaintiffs' concerns with the Service's rule-making procedures, thereafter moving to the substantive, science-based challenges to the listing decision and habitat designation.

II. PROCEDURAL CHALLENGE

Plaintiffs argue that the Service violated the procedural requirements of the APA by failing to provide notice of, and opportunity for public comment on, a Population

Viability Analysis (“PVA”)⁸ conducted by Amy Davis in 2012 (the “Davis 2012 Study” or “Study”). Plaintiffs argue that this failure constitutes reversible error. The Court disagrees.

A. NOTICE REQUIREMENTS

Among the information that must be revealed for public evaluation are the “technical studies and data” upon which the agency relies. *See Solite Corp. v. E.P.A.*, 952 F.2d 473, 484 (D.C. Cir. 1991). If, during the rule-making process, the Agency encounters supplemental data or studies, a new notice and comment period is not always required; “consistent with the APA, an agency may use ‘supplementary’ data, unavailable during the notice and comment period, that ‘expands on and confirms’ information contained in the proposed rulemaking and addresses ‘alleged deficiencies’ in the pre-existing data, so long as no prejudice is shown.” *Solite*, 952 F.2d at 484. Such “supplementary” information is distinct from “provid[ing] entirely new information critical to the [agency]’s determination.” *Chamber of Commerce of U.S. v. S.E.C.*, 443 F.3d 890, 900 (D.C. Cir. 2006) (citations omitted).

Several cases are illustrative. In *Solite*, 952 F.2d at 484, the Environmental Protection Agency (EPA) replaced one report with a later report as the source of data forming the basis for final quantitative measurements in a protective ESA listing. 952 F.2d at 484. The D.C. Circuit held that the EPA had not violated notice and comment provisions because the new data enabled the EPA to respond to concerns and confirm

⁸ A PVA is a species-specific method of risk assessment that is frequently used in conservation biology to determine the relative probability that a population will go extinct within a given number of years. (Doc. # 147 at 5, AR at 199498.)

prior calculations. Further, the methodology used to analyze the data remained constant. *Id.* at 485; see also *Cnty. Nutrition Inst. v. Block*, 749 F.2d 50, 57–58 (D.C. Cir. 1984) (no violation of notice and comment requirements when unavailable supplemental studies were a response to comments which discussed a methodological flaw in prior studies); *In re FCC 11-161*, 753 F.3d 1015, 1140 (10th Cir. 2014) (no violation for addition of over 110 undisclosed documents).

In contrast, in *Idaho Farm Bureau Fed’n v. Babbitt*, 58 F.3d 1392, 1402–04 (9th Cir. 1995), the Ninth Circuit reversed a final listing where an undisclosed study “did not merely supplement or confirm existing data” but provided “unique information that was not duplicated in other reports” and upon which the Service relied in its ultimate listing determination. The Ninth Circuit found that the new study provided the “key analysis” to support the final listing and the opportunity for public comment was particularly crucial because “the accuracy of [the] material . . . [wa]s in question.” *Id.* at 1403.

Ultimately, the cases make clear that, when the agency relies on supplementary evidence without a showing of prejudice by an interested party, the procedural requirements of the APA are satisfied without further opportunity for comment, provided that the agency’s response constitutes a “logical outgrowth” of the rule initially proposed. See *Solite*, 952 F.2d at 484; *Env’tl. Integrity Project v. E.P.A.*, 425 F.3d 992, 996 (D.C. Cir. 2005).

B. THE RELEVANT STUDIES

In the Proposed Rule, the Service placed weight on a 2005 PVA conducted by Dr. Phil Miller when analyzing one of the enumerated listing criteria. (AR at 70029–31.)

The purpose of that PVA was to assist “in evaluating the relative risk of extinction for each [sage-grouse] population under the conditions at that time.” (AR at 70030.) The 2005 PVA predicted the relative probability of extinction under various management scenarios by looking at, among other things, sage-grouse life history, population dynamics, demographic parameters, deterministic forces, reproductive habits, genetics, and more. (AR at 11261, 70030.) The 2005 PVA did not consider several external threats acting on the species, such as habitat loss or fragmentation, and the Service so noted. (*Id.* at 70030.) Based this 2005 PVA, coupled with various other sources, the Service determined, as relevant here, that although “the Gunnison Basin sage-grouse is likely to persist long term in the absence of threats acting on it,” the other six sage-grouse populations “are at a high risk of extirpation due to small population size” which impacts the entire species’ “ability to persist.” (*Id.* at 11261.)

In the Final Rule, the Service turned to the Davis 2012 Study which the Service concedes it did not disclose or reopen for comment. Like the 2005 PVA, the Davis 2012 Study sought to assess the survival and viability rates of the Gunnison sage-grouse. (AR at 69393–95.) Dr. Davis looked at many of the same factors as Dr. Miller, including population dynamics, demographic parameters, and reproductive rates. However, she focused on the Gunnison Basin population rather than the species at large. (AR at 199502.) She also included in her analysis additional years, considered external threats, and assessed more factors affecting the growth or decline of the species, such as juvenile recruitment and bird translocation efforts. (AR at 41440–43.) The Davis 2012 Study ultimately demonstrated to the Service, in pertinent part, that the Gunnison Basin

population was not as stable as previously thought—adding to the conclusion that the entire species is in decline.

C. ANALYSIS

The Court finds no procedural violation for several reasons: (1) the Davis 2012 Study's findings permissibly supplemented previously existing data, i.e. logically outgrew from it; (2) the Study was not the critical basis on which the Service relied to reach its ultimate listing determination, and (3) Plaintiffs were not prejudiced from non-disclosure.

First, the Davis 2012 Study supplemented the data obtained in the 2005 PVA. It had the same general purpose and assessed many similar extinction factors. It also filled in gaps noted by the Service, such as external threats on the species. Plaintiffs nonetheless harp on one main difference between the two studies: that Dr. Miller found the Gunnison Basin population to have a less than a 1% extinction rate over the next 50 years while Dr. Davis found the Gunnison Basis population's mean extinction time to be 58 years. But a mere difference in conclusion does not necessarily mean that the later study could not have supplemented findings in the former one. And, those differing conclusions did not significantly alter the Service's ultimate finding about the Gunnison sage-grouse's overall declining viability, which remained unchanged from the Proposed Rule to the Final Rule. The Service determined both times that the "overall declining trends in the . . . satellite populations" create concern that the species is not stable rangewide. (AR at 70030, 199502.) Thus, the Court finds that Davis 2012 Study

expanded, supplemented, and logically grew from the findings in the Proposed Rule, rendering the failure of the Service to disclose it not erroneous.

Second, the Plaintiffs' overstate the critical nature of the Davis 2012 Study to the Final Rule. Although the Service often deemed it "the most current and best available scientific information regarding the viability of Gunnison sage-grouse," the Service also limited its primary discussion of the Study to Factor E (only one factor in the five-factor analysis), acknowledged various weaknesses and uncertainties in the Study, and expressly stated that it was "also utilizing the [2005] PVA in our consideration of the foreseeable future." (AR at 199502–504, 199511.) Moreover Plaintiffs' "reliance" argument does not make logical sense. The Proposed Rule, which they contend relied on the 2005 PVA Study finding the Gunnison Basin population stable, proposed an *endangered* listing for the species; the Final Rule, which they contend relied on the Davis 2012 Study finding the Gunnison Basin population in slight decline, *reduced* the listing to *threatened*. It makes no logical sense to conclude that a study finding an increased extinction probability caused the Service to lessen the severity of the listing. The Davis 2012 Study was not as critical to the Final Rule as Plaintiffs contend.

Third, and most importantly, even if the Service somehow erred in failing to reopen the comment period to provide notice of the Davis 2012 Study, Plaintiffs fail to demonstrate how this error prejudiced them. To begin, Plaintiffs had access to the study during the notice and comment period. *See Bear Valley Mut. Water Co. v. Jewell*, 790 F.3d 977, 993 (9th Cir. 2015) (noting that appellants were aware of, and therefore able to comment on, the challenged study during notice and comment period). Indeed, the

record reflects that Colorado alerted the Service to the Study in December 2012 (AR at 5855) and several of the Plaintiffs commented on the study to the Service during the notice and comment period. For example, in its second sets of comments to the Service, Gunnison County referenced the Davis 2012 Study numerous times, urged the Service to depend on its findings, and criticized the Service for not considering the Davis 2012 Study in the Proposed Rule. (AR at 91282–413). Gunnison County touted Dr. Davis’s research as the “most current and longest demographic data collected for the [Gunnison sage grouse],” the “best scientific information available,” and “better” than other PVAs presented to the Service. (AR at 91282, 912315–18, 91379–80, 91386.) The Gunnison County Stockgrowers’ Association also urged the Service to consider the Davis 2012 Study, as did Colorado, highlighting errors in the previously considered PVAs as corrected in the Davis 2012 Study. (AR at 73479, 232246.) Plaintiffs can hardly argue that they had no notice of the Study and no opportunity to comment on its findings.

Moreover, Plaintiffs’ arguments with respect to the reliability and accuracy of the Study were expressly considered by the Service before the Final Rule was issued. Plaintiffs’ primary challenge to Dr. Davis’s data is that she improperly included several years of population decline for the Gunnison Basin sage-grouse and that, had she added in a year of population growth or conducted the study at a different time, her results would have showed a trend toward an increasing population rather than a

declining one.⁹ (Doc. # 33–34.) Plaintiff Colorado presented this same argument to the Service during the comment period, stating “it is fundamentally important to note that the [Davis 2012] data used were from a short time period when [Gunnison sage-grouse] numbers were declining slightly after reaching record numbers in the Gunnison Basin.”¹⁰ (AR at 232246.) The Service expressly acknowledged this problem with the research in the Final Rule, recognizing issues with the Davis 2012 Study because it was based on a “time when the population was experiencing slight decline” and adding that “had [the Study] been conducted a few years earlier or a few years later, a different trend across time could have resulted.” (AR at 199500–502.) Moreover, the data Plaintiffs presently present to challenge the viability of the Study is the same data contained in the Davis 2012 Study itself and, therefore, was clearly before the Service at the time of the listing decision. Because Plaintiffs present no new information or challenges to the Davis 2012 Study that were not already presented to and considered by the Service, Plaintiffs fail to demonstrate how another opportunity to comment on the Study would change or affect the outcome of the listing decision. The Court, therefore, finds no prejudice has occurred.

⁹ However, the Court notes that the Davis 2012 Study expressly found that adding a year of population growth to Dr. Davis’s findings about the Gunnison Basin population would still result in a minimum extinction time of 41 years, (AR 41539, 41556), which is sooner than the Service’s 58-year extinction time set forth in the Final Rule.

¹⁰ Plaintiffs also support this argument by emphasizing the findings in a 2014 manuscript by Dr. Davis (“Davis *et al.* (in press)”), which supplemented some of Dr. Davis’s previous findings by highlighting possible issues with examining short-term demographic data. (AR at 199413, 195646–664.) The Final Rule makes clear that the Service examined this 2014 manuscript, thoroughly considering its findings, and took into account Plaintiffs’ comments on it. (AR at 195641, 199496.) Moreover, the 2014 manuscript does not wholly undo the findings in the Davis 2012 Study as Plaintiffs insinuate. That manuscript still states that the Gunnison Basin population is “currently declining” with intervals of “a stable population,” such as between 1996–2012—a “near stable” time frame. (AR at 195649, 195658, 195662.)

Finding no procedural errors, the Court turns to Plaintiffs' substantive challenges to the merits of the Final Rule, beginning with their challenges to the "threatened" listing determination.

III. LISTING DETERMINATION

Plaintiffs challenge the merits of the "threatened" listing on several grounds. They argue that many of the Service's claimed threats to the species are unsupported by science, particularly with respect to the large, stable Gunnison Basin population, which Plaintiffs claim could alone secure the entire Gunnison sage-grouse species. Plaintiffs also object to the Service's conclusion that ongoing and future local conservation efforts were insufficient to prevent listing the bird as threatened. Plaintiffs add that the Service's findings are "speculative," "overstat[ed]," and unreasonable and that the Service's conclusion that the Gunnison sage-grouse is "threatened" is consequently erroneous. To succeed, Plaintiffs must demonstrate that the Service's determinations were arbitrary and capricious, lacking in reason and scientific support. Plaintiffs have not so demonstrated.

A. LAW

The Service utilizes enumerated statutory criteria to determine whether to list a species as "threatened" or "endangered" and, thus, in need of protection. 16 U.S.C. § 1533. A species is "endangered" if it is "in danger of extinction throughout all or a significant portion of its range." *Id.* at §§ 1532(6), (20). A species is "threatened" if it is "likely to become an endangered species within the foreseeable future throughout all or

a significant portion of its range.” *Id.* A species may be deemed endangered or threatened because of any one of the following five factors, or a combination thereof:

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) disease or predation;
- (D) the inadequacy of existing regulatory mechanisms; or
- (E) other natural or manmade factors affecting its continued existence.

16 U.S.C. § 1533(a)(1). Ultimately, the Service must determine which species are threatened or endangered “solely on the basis of the best scientific and commercial data available to [it].” *Id.* at § 1533(b)(1)(A). The Service must also consider “those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species.” *Id.* In 2003, this latter requirement—that the Service consider all conservation efforts—was supplemented by the Policy for Evaluation of Conservation Efforts When Making Listing Decisions (“PECE”). See PECE, 68 Fed. Reg. 15100 (Mar. 28, 2003). The PECE identifies criteria that the Service uses for assessing prospective or nascent conservation efforts that have either not yet been implemented or have not yet proven effective. *Id.*

B. ANALYSIS

Having thoroughly reviewed the issue, the Court finds that the Service’s decision to list the Gunnison sage-grouse as threatened was not arbitrary and capricious. To the contrary, substantial evidence supports that the near-extinction of the six satellite populations, coupled with the declining Gunnison Basin population, causes the entire species to face extinction “in the foreseeable future.”

1. Threats Facing the Gunnison Sage-grouse

The primary threats challenged by Plaintiffs—each of which corresponds to one of the five statutory criteria—are increasing habitat decline and climate change (Factor A), drought (Factor E), West Nile virus (Factor C), and declining genetic health and small population size (Factor E).¹¹ (AR at 199435–513.) The Court discusses each threat and Plaintiffs’ corresponding challenges in turn.

a. Habitat Decline

The Service defines habitat decline as including habitat loss (the reduction or destruction of habitat), degradation (the reduction of habitat quality), and fragmentation (the breaking apart of contiguous habitat). (AR at 199435.) The Service found that all three processes are affecting the Gunnison sage-grouse’s habitat, which consists of large areas of sagebrush. (AR at 199437.) In so concluding, the Service cited numerous studies demonstrating that Gunnison sage-grouse’s current range is 10% of its original size and is decreasing further at a concerning rate. The Service also detailed the following issues contributing to habitat decline in all seven populations:

- Residential and infrastructural development, including roads, utility corridors, and fences;

¹¹ The Final Rule also reflects a reasoned and supported analysis that included many other threats to the species, such as the encroachment of invasive plants, as well as considerations not found to be substantial threats, including, but not limited to, agriculture conversion (Factor A), hunting (Factor B), and nonconsumptive recreational activities (Factor E). (AR at 199470, 199476–477, 199507–508.) In reviewing the Final Rule, however, the Court need not reiterate every finding of the Service, nor review every document in the record. Instead, the Court focuses only on the Plaintiffs’ objections, the Defendants’ responses, and the record relevant to them. *See Mitchell v. City of Moore, Okla.*, 218 F.3d 1190, 1199 (10th Cir. 2000) (A district court is “not obligated to comb the record” to make a party’s argument for him.)

- Substantial increase of human population—“a trend expected to continue into the future”;
- Invasive plants, fire, mineral development, piñon-juniper encroachment, and large-scale water development—the cumulative presence of which constitute a habitat threat; and
- Livestock management inconsistent with local ecological conditions causing the loss of nesting cover, a decrease in native vegetation, and an increased incursion by invasive plants.

(AR at 199435–199476.)

The Service also thoroughly explained that sage-grouse exhibit low adaptability to habitat changes, making habitat loss, degradation, and fragmentation among the more serious threats facing the bird. (AR at 199475.) The Service added that all seven populations are mostly isolated, with limited migration and gene flow between them, increasing the likelihood of extinction associated with habitat decline. (*Id.*) The Service even examined changes to the Gunnison sage-grouse habitat that do not appear threatening, such as the increase in nonrenewable energy. (*Id.*) Overall, the Service concluded that “based on the best scientific information available,” current and anticipated habitat threats and their cumulative effects contribute to the overall decline of the Gunnison sage-grouse and pose a substantial threat to the species “throughout its range.” (*Id.* at 199476.)

This conclusion was not arbitrary and capricious; it was thoroughly reasoned and supported by relevant data. Indeed, the Service referenced more than a dozen scientific studies to support its findings—none of which are challenged by Plaintiffs. Plaintiffs instead highlight several sentences from the Final Rule suggesting that residential development is a small concern. Plaintiffs, however, provide this Court with no studies,

scientific or otherwise, to solidify their contention, nor do they cite to any support for their argument in the record, despite stating that “the only evidence in the record” supports it. (*Id.*) Plaintiffs also assert that, in the Proposed Rule, the Service overestimated human population growth. (Doc. # 143 at 15–17.) Even if true, an error in the Proposed Rule provides no grounds for vacating a Final Rule that is based on accurate population estimates, coupled with numerous other threats to the habitat and supported by a reasonable analysis with a scientific basis. Plaintiffs’ contentions amount to little more than a disagreement with the Service’s ultimate conclusion—which constitutes insufficient grounds to reverse.

b. Climate Change and Drought

In a thorough, lengthy analysis, the Service discussed the concerning increase in temperatures in Colorado, where “warming is occurring more rapidly than elsewhere in the country.” (AR at 199462.) Citing various studies, including projections from the National Center for Atmospheric Research, the Service explained that future projections for western Colorado indicate that “average summer (June through September) temperature could increase by 2.8° C (5.1° F) and average winter (October through March) temperature could increase by 2.2° C (4.0° F) by 2050”—with a corresponding decrease in summer precipitation. (*Id.*) The Service noted that increasing temperatures create drought conditions that negatively impact the late summer brood-rearing habitat of the sage-grouse, which necessarily consists of moist, riparian areas. (*Id.*) The Service found that such changes could “result in a significant long-term reduction in the distribution of sagebrush communities,” including in the Gunnison Basin. (*Id.*) The

Service found that, “because Gunnison sage-grouse are sagebrush obligates, loss of sagebrush would result in a reduction of suitable habitat and negatively impact the species.” (*Id.*) Citing to numerous accredited sources, the Service then discussed various other consequences of increased temperatures and prolonged drought that would affect the Gunnison sage-grouse rangewide, including fire, cheatgrass invasion, and insect reduction. (*Id.*)

Plaintiffs do not dispute that temperatures are rising and precipitation, lessening. Plaintiffs also admit to some climate-and drought-related issues, such as a decrease in riparian systems upon which sage-grouse depend for brood-rearing. Plaintiffs nonetheless contend that these changes do not significantly impact the Gunnison Basin population because of its low elevation and resiliency, as well as the protective conservation efforts in place. (AR at 25222.) Again, Plaintiffs’ arguments amount to little more than a disagreement with the science upon which the Service relied to reach a contrary conclusion and the Service’s assessment of local conservation efforts (which this Court discusses at length below). But this Court may not vacate a listing simply because evidence may support a contrary conclusion, unless the Service’s decision lacked reasonable and substantial support. That is not the case here. See *Custer Cty. Action Ass’n v. Garvey*, 256 F.3d 1024, 1036 (10th Cir. 2001) (“We cannot displace the agencies’ choice between two conflicting views, even if we would have made a different choice had the matter been before us de novo.”); *Wyoming Farm Bureau Fed’n v. Babbitt*, 199 F.3d 1224, 1241 (10th Cir. 2000) (“[T]he mere presence of contradictory evidence does not invalidate the [a]gencies’ actions or decisions.”). To the contrary, the

record demonstrates an affirmative association between past drought conditions in Colorado and reductions to all Gunnison sage-grouse populations, including the Gunnison Basin population which experienced a 30 percent decline during a serious past drought. That the Gunnison Basin population rebounded after this drought does not, by itself, render erroneous or arbitrary the Service's predictions that impending drought may nonetheless cause a decline in that population again. Nor does it necessarily mean that a rebound will occur again, particularly considering the Service's supported findings with respect to other increasing threats facing the species.

Ultimately, the Court finds that the Service's assessment of an increased threat from climate change and drought conditions was not arbitrary and capricious, nor does it support reversal.

c. West Nile Virus

The Court concludes that the Service's findings with respect to West Nile virus are reasonable and supported by the record. The Court, thus, declines to disturb them.

Plaintiffs mischaracterize the Service's conclusion with respect to West Nile virus. The Service did not attribute the entire threatened listing to the presence of this disease. Indeed, the Service assessed West Nile virus to be a future threat, not a present threat. (AR at 199480.) The Service found Gunnison sage-grouse "susceptible" to West Nile but also recognized that the virus "has not been documented in Gunnison sage-grouse." (*Id.*) Furthermore, the Service's analysis of West Nile was a limited portion of the Service's overall discussion as to the general threat of disease and other significant threats to the bird.

The Service found that West Nile virus, which is present across the majority of the sage-grouse range, has resulted in significant mortality in the greater sage-grouse population and other taxonomically related birds; thus, indicating that the sage-grouse is biologically susceptible to the disease. (AR at 199480.) Although the Service recognized that the risk of West Nile was currently less concerning in low-elevation areas, like the Gunnison Basin, referencing its discussion in Factor A, the Service noted that warming temperatures are expected to increase that risk. (*Id.* at 199481, 1999461–63.)

The Service also relied upon studies supporting the position that a “West Nile virus outbreak in any [other] Gunnison sage-grouse population . . . would challenge their survival.” (*Id.*) Plaintiffs’ arguments in no way debunk these findings, nor do they render them unreasonable. The level of deference this Court must accord these findings is especially high because the challenged decision involves technical and scientific matters within the agency’s area of expertise. *See Citizens For Alts. To Radioactive Dumping v. U.S. Dep’t of Energy*, 485 F.3d 1091, 1098 (10th Cir. 2007). The Court accordingly finds no error.

d. Small Population Size

The Court next reviews the Service’s assessment of the risks associated with the small size of Gunnison sage-grouse populations, ultimately finding no error.

The Service defined “effective population size” as the “number of individuals contributing their genes to the next generation.” (AR at 199498.) The Service noted that a decrease in effective population size correlates to a loss in genetic diversity, reduced fitness through inbreeding depression, and reduced adaptive potential. (*Id.*) The Service

then cited to several studies—which Plaintiffs do not challenge—suggesting that a population size of 5,000 sage-grouse may be necessary to avoid these risks. (*Id.*) It is undisputed that the six satellite population sizes at the time of the Final Rule ranged from 10 to 206 birds; the Gunnison Basin population was nearly 4,000 birds.

The Service continued with a lengthy and thorough analysis of three population studies concluding that the six satellite populations are seriously compromised in size and viability. Scientific analysis demonstrated that “small population sizes, declining population trends, low genetic diversity, geographic isolation, and overall low viability . . . indicate that long-term persistence and evolutionary or adaptive potential are compromised in [all] six satellite populations.” (AR at 199503.) Although the Service then found the larger Gunnison Basin population to be more resilient, it also found that this larger population remains in decline due to numerous threats facing the bird. This conclusion was supported in part by the population viability findings of Dr. Davis. The Service also found that the Gunnison Basin population alone could not save the species from foreseeable extinction if all six smaller populations were extirpated. Research showed that a loss of all six satellite populations would cause a loss of more than 700 birds, 24% of the rangewide genetic pool. The Service found that this loss would substantially weaken the entire species because the satellite populations critically increase species abundance and redundancy, minimize the threat of catastrophic events by being widely distributed across the landscape, and provide genetic diversity not found in the Gunnison Basin population. (AR at 199374.) Thus, due to the serious decline of the satellite populations, the increasing threats to the Gunnison Basin

population, and the need for multiple populations across a broad geographic range, the Service found the entire Gunnison sage-grouse species faced a rate of population decline insufficient for long-term viability. (AR at 199504.) In reaching this conclusion, the Service examined the relevant data and articulated a rational connection between the facts found, the studies supporting them, and the decision made. The Service's analysis was not, therefore, arbitrary and capricious.

Plaintiffs nonetheless argue that, in reaching this conclusion, the Service (1) improperly relied on the Davis 2012 Study, which Plaintiffs contend is unreasonable and contradicted by the evidence, and (2) arbitrarily found that the Gunnison Basin could not sustain the entire species. The Court rejects both arguments.

First, the Service provided a lengthy and thorough analysis of three PVAs, including the 2005 PVA, the Davis 2012 Study (as supplemented by the 2014 Davis *et al.* in press), and a 2005 study conducted by Dr. Edward Garton (the "Garton PVA"). (*Id.* at 199498–199503.) The Service recognized the benefits and limitations of each PVA, including, as explained in Part III.C, the limitations of the Davis 2012 Study that Plaintiffs highlight. The Service's finding that the more recent Davis 2012 Study was the most reliable of the three PVAs, is not erroneous. The Davis 2012 Study (as supplemented by the 2014 Davis *et al.* in press) is not only the most recent PVA, but also, the most relevant in that it focuses specifically on Gunnison sage-grouse data and addresses the impact of external threats such as drought and disease. (Doc. # 156 at 35.) Even if this Court were to find the other studies more persuasive, the Court could not reverse on those grounds. See *Custer Cty. Action Ass'n*, 256 F.3d at 1036 ("We cannot displace

the agencies' choice between two conflicting views, even if we would have made a different choice had the matter been before us *de novo*.”)

Plaintiffs' second argument—regarding the perceived strength of the large Gunnison Basin population—also does not support reversal. Plaintiffs cite to several studies, as well as the Service's own conclusions about the stability of that singular population and its ability to sustain the entire species without the satellite birds.¹² As this Court has noted, the presence of dueling or contradictory studies is insufficient to support displacing the Service's listing, provided it was not arbitrary or capricious, an abuse of discretion, or otherwise not in accordance with law. The Service's analysis of serious threats to the entire Gunnison sage-grouse species, including the Gunnison Basin population, was thoroughly reasoned and supported by science. The Service's analysis of the import of the satellite populations to the sustainability of the entire species was likewise well-reasoned and supported. The consequent conclusion that, despite the slower decline of the larger Gunnison Basin population, the species faced extinction in the foreseeable future was, accordingly, not erroneous.

¹² Several other arguments proffered by Plaintiffs mischaracterize the Service's conclusion about the need for redundancy. For example, Plaintiffs argue that redundancy cannot form the sole basis for listing a species. The Federal Defendants agree, as does this Court. However, the Service's listing was not based solely on redundancy. The Service determined that a need for redundancy, combined with myriad other threats to the species, which this Court has found reasonable and supported, contributed to the threatened listing. (AR at 199498–13.) Plaintiffs' myopic redundancy arguments are accordingly misplaced, and the Court summarily rejects them.

2. Insufficient Regulatory Mechanisms

Plaintiffs next argue that the Service acted unreasonably in dismissing the effectiveness of the regulatory mechanisms in place in Gunnison Basin. Analyzing the current and prospective efforts separately, the Court disagrees.

a. Current Efforts

In making the listing decision, the Service is obligated to consider all local conservation efforts being made to protect a species. Plaintiffs challenge the Service's analysis of several ongoing efforts: the Candidate Conservation Agreement with Assurances ("CCAA"), the Candidate Conservation Agreement ("CCA"), and other Gunnison County conservation measures. The Court addresses each in turn.

i. Candidate Conservation Agreement with Assurances ("CCAA") and Candidate Conservation Agreement ("CCA")

In 1999, the Service and National Marine Fisheries Service ("NMFS") established a policy to encourage states and private actors to undertake voluntary efforts to conserve "candidate species," which are those species being considered for an ESA listing. Under the CCAA framework, in return for implementing agreed-upon conservation measures, state and private entities receive "assurances from [the Service] that additional conservation measures will not be required . . . should the species become listed in the future." Final Policy for Candidate Conservation Agreements with Assurances, 64 Fed.Reg. 32,726, 32,727 (June 17, 1999). Although CCAAs are designed to "remov[e] any need to list the covered species," the mere existence of a CCAA will not preclude listing. *Id.* Over time, CCAAs have become a common mechanism for promoting conservation of numerous candidate species. *Id.*

Created in 2006, the Colorado Gunnison sage-grouse CCAA is an agreement between the Service and the Colorado Division of Wildlife (now the CPW) with the relevant goal of reducing threats to Gunnison sage-grouse by protecting, maintaining, and enhancing or restoring non-federally-owned Gunnison sage-grouse habitat in Colorado. (Doc. # 143 at 23; AR at 14195–14230.) As pertinent here, private landowners who enroll in the CCAA are required to engage in specified habitat protection measures on their property in exchange for assurances that, if the species is listed, they will reap the benefits of the CCAA permit and not be required to engage in additional conservation measures. (AR at 14195–98.) Once a species is listed under the ESA, the CCAA is closed to additional enrollees. (AR at 199471.)

Likewise, Colorado Conservation Agreements (“CCAs”) are also encouraged by the federal government. CCAs are formal, voluntary agreements between the Service and one or more parties to address the conservation needs of a candidate species or species likely to become listed in the near future. (AR at 199472.) Like the CCAA, participants voluntarily commit to implement specific actions designed to remove or reduce threats so that a listing may not be necessary. (*Id.*) Unlike CCAAs, however, CCAs do not provide assurances that additional conservation measures will not be required if a species is listed or critical habitat is designated. (*Id.*)

In 2012, federal land management agencies in the Gunnison Basin signed the CCA at issue in this case to promote conservation of the Gunnison Basin sage-grouse

population. (AR at 88471.)¹³ This CCA covers all lands managed by federal agencies in the Gunnison Basin (roughly two-thirds of the occupied habitat); it does not cover areas harboring the satellite populations. (AR at 88474.) The CCA serves as a project screen and requires the implementation of conservation measures associated with three federal land-use programs: Development (roads, transmission lines, etc.), recreation (trails and special recreation permits, etc.), and livestock grazing (permit renewals and operations). (AR at 199472.) Many larger or impact intensive projects, such as the construction of a new transmission line or energy development, are not covered under the CCA. (*Id.*) Nonetheless, the CCA covers the “most common land use authorizations where the Gunnison sage-grouse occur on Federal lands in the Gunnison Basin.” (AR at 88473, 199472.)

In the Final Rule, the Service thoroughly analyzed both the efforts and the impact of the CCAA and the CCA. It lauded the CCAA as “net gain” for the Gunnison sage-grouse and praised it for having made “great strides to enroll landowners, protect habitat, and alleviate threats to the Gunnison sage-grouse.” (AR at 199471–199472.) The Service also commended the members of the CCA for “their efforts in the design of the CCA and implementation of conservation measures to benefit the Gunnison sage-grouse.” (AR at 199472.) The Service found that the CCA would “provide a long-term, net benefit for the Gunnison sage-grouse on a landscape scale.” (*Id.*)

Nonetheless, the Service determined that neither of these agreements was sufficient to overcome the substantial threats facing the survival of species. With respect

¹³ The Service conducted an ESA Section 7 formal conference on the CCA and, in 2013, issued its conference opinion and signed the CCA. (AR at 199472.)

to the CCAA, the Service found problematic the voluntary nature of the program, its limited 20-year duration, and the fact that the Agreement did not address many of the identified threats to the sage-grouse or its habitat. (AR at 13797, 199472.) These findings are not arbitrary and capricious. Indeed, the CCAA is a limited, voluntary conservation measure; it is not legally binding, nor are the incentives sufficient to ensure regulatory certainty. Landowners who enroll can withdraw at any time, and for any reason. The CCAA also does not preclude landowners from selling their property to developers, to whom the assurances, incentives, and promises under the CCAA would not transfer. The CCAA does not take into account climate change, drought, disease, and small population issues—all of which reasonably support the threatened listing.

Likewise, the Court finds no error in the Service's determination that the CCA is not effective at reducing the threats to the species rangewide, such that the listing is not warranted. (AR at 199473.) The Service's conclusion hinged on the fact that the CCA did not apply to the Gunnison sage-grouse rangewide; it was limited to the Gunnison Basin population, neglecting the most critically declining 22% of the species. (AR at 199472–199473.) As this Court has already noted, the Service found numerous threats affecting the six satellite populations that could result in a foreseeable extinction of all the birds. The Service's assessment of these efforts was thorough, providing a clear connection to the record and the facts of this case. Reversal is therefore unwarranted on these grounds.

ii. Other Gunnison County Conservation Measures

Plaintiffs further contend that the Service “erroneously discounted the effectiveness of Gunnison County’s conservation mechanisms,” including:

numerous land use and other police-power regulatory mechanisms to protect Gunnison sage-grouse, including an umbrella land use zoning regime; requirements to review permit applications on any parcel within 0.60 miles of a Gunnison sage-grouse lek or occupied habitat; that oil and gas operations [do] not cause significant degradation of sensitive wildlife habitat; that applications for a road-access permits within sage-grouse habitat must receive special scrutiny and include specific conditions in an approval; and authorizations to temporarily close roads for [the] protection of Gunnison sage-grouse.

(Doc. # 143 at 25–26.) Plaintiffs also highlight the creation and implementation of a “Habitat Prioritization Tool” that identifies and targets the highest priority sage-grouse habitat for protection for consideration in land-use regulations. (*Id.* at 26.)

Contrary to Plaintiffs assertions, the Service did not “discount” these ongoing efforts. The Service discussed the Gunnison County sage-grouse regulations and efforts at length, ultimately commending the County for its “regulatory measures” and recognizing that they have “helped to reduce some of the negative effects of human development and infrastructure on the species and habitat.” (AR at 199487.) The Service nonetheless found that those measures were insufficient to prevent listing the bird as threatened because they do not entirely prevent human development in sage-grouse habitat. The Service consequently found that the current regulations do not “address or require offsetting or mitigation for the habitat loss and fragmentation that cannot be avoided and that occurs as a result of permitted development in the species’

habitat.” (*Id.*) Plaintiffs have not countered these conclusions in this appeal. Plaintiffs’ briefing describes Gunnison County measures as “consider[ing]” the nature of the sage-grouse habitat when assessing applications for construction within that habitat; it also discusses “mitigation measures implemented” to protect “priority habitat” from adverse impacts of construction. (Doc. # 143 at 26.) The Court recognizes that the case study referenced by Plaintiffs details mitigation measures for habitat loss and plans for habitat enhancement that appear to be part of Gunnison County’s review process for construction in or near sage-grouse habitat. (AR at 67772–67784.) But it appears the review process merely reduces the impacts of human development; it does not prevent *all* human development in the habitat range or mitigate habitat loss when human development is *necessary*. All of these are critical, reasonable, and supported concerns of the Service.

Further, even if the Gunnison County measures were seen as sufficient to counter the threat of human population and infrastructure growth, the measures do not address the other documented threats, thoroughly explicated above, to the Gunnison sage-grouse rangewide.

Accordingly, the Court finds that Plaintiffs have not met their burden of showing that the Service’s assessment of the Gunnison County conservation efforts was arbitrary, capricious, or otherwise lacking in reason or support.

b. Prospective Efforts

Pursuant to the Policy for Evaluation of Conservation Efforts When Making Listing Decisions (“PECE”), in addition to reviewing existing conservation efforts, the

Service is also required to evaluate formalized efforts “that have not yet been implemented or have been implemented, but have not yet demonstrated whether they are effective.” (AR at 9123). The PECE sets forth the mechanism for doing so. It specifically identifies criteria the Service uses for evaluating nascent formalized conservation efforts. (*Id.*) “Formalized” efforts mean efforts that are “identified in conservation agreements, conservation plans, management plans, or similar documents developed by Federal agencies, State and local governments, Tribal organizations, businesses, organizations, and individuals.” (AR at 9123.) The Service need not evaluate informal conservation agreements, such as “when a property owner implements conservation measures” simply out of concern “without any specific intent to affect a listing decision.” (*Id.*)

In conducting a PECE analysis, the Service must first determine whether a formalized conservation effort is “sufficiently certain” to be implemented and effective. (AR 9124.). If so, then the Service evaluates whether the effort contributes to the listing decision (positively or negatively). If not, then the Service need not consider the effort in making its listing decision. To determine whether a formalized conservation effort is “sufficiently certain” to be implemented, the Service considers, among other things, the following nine criteria:

- Identification of the conservation effort, the party(ies) to the agreement or plan who will implement the effort, and the staffing, funding level, funding source, and other resources necessary to implement the effort;
- Description of the legal authority of the party(ies) to the agreement or plan to implement the formalized conservation effort, and the commitment to proceed with the conservation effort;

- Description of the legal procedural requirements (e.g., environmental review) necessary to implement the effort, and provision of information indicating that fulfillment of these requirements does not preclude commitment to the effort;
- Identification of authorizations (e.g., permits, landowner permission) necessary to implement the conservation effort, and provision of a high level of certainty that the party(ies) to the agreement or plan who will implement the effort will obtain these authorizations;
- Identification of the type and level of voluntary participation (e.g., number of landowners allowing entry to their land, or number of participants agreeing to change management practices and acreage involved) necessary to implement the conservation effort, and provision of a high level of certainty is provided that the party(ies) to the agreement or plan who will implement the conservation effort will obtain that level of voluntary participation (e.g., an explanation of how incentives to be provided will result in the necessary level of voluntary participation);
- In-place regulatory mechanisms (e.g., laws, regulations, ordinances) necessary to implement the conservation effort;
- Provision of a high level of certainty that the party(ies) to the agreement or plan who will implement the conservation effort will obtain the necessary funding;
- Provision of an implementation schedule (including incremental completion dates) for the conservation effort; and
- Approved-of conservation agreement or plan that includes the conservation effort by all parties to the agreement or plan.

(AR at 9125.) To determine whether a conservation effort is “sufficiently certain” to be effective, the Service considers, among other things, the following six criteria:

- Description of the nature and extent of threats being addressed by the conservation effort are described, and how the conservation effort reduces the threats is described;
- Whether explicit incremental objectives for the conservation effort and dates for achieving them are stated;

- Detailed identification of the steps necessary to implement the conservation effort;
- Identification of quantifiable, scientifically valid parameters that will demonstrate achievement of objectives and standards for these parameters by which progress will be measured;
- Identification of provisions for monitoring and reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness (based on evaluation of quantifiable parameters) of the conservation effort; and
- Incorporation of principles of adaptive management.

(*Id.*) To the extent that a conservation agreement contains numerous conservation efforts that are not sufficiently certain to be implemented and effective, these efforts “cannot contribute to a determination that a listing is unnecessary or a determination to list as threatened, rather than endangered.” (*Id.*)

The Service’s PECE evaluation is entitled to “some deference” by this Court. *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944).

Plaintiffs’ objections to the Service’s PECE evaluation can be boiled down to the following three concerns: that the Service failed to properly evaluate: (1) the 2013 Conservation Agreement executed by the Governors of Colorado and Utah and all counties comprising the sage-grouse range; (2) other conservation efforts presented to the Service during the comment period, including a list of 118 local efforts provided by the Director of Colorado Parks and Wildlife (the “CPW”); and (3) prospective land enrollments under the CCAA. In addition, Plaintiffs contend that the Service improperly reviewed these Agreements in a “perfunctory” and “conclusive” manner, without conducting a PECE evaluation of each discrete conservation effort contained therein or

presenting its findings to the public. (Doc. # 147 at 20.) The Court addresses each challenge in turn, ultimately finding no error.

i. 2013 Conservation Agreement

Plaintiff argues that the Service should have conducted a separate PECE evaluation for each of the alleged conservation efforts described “in the body of the [Conservation Agreement] . . . and in its appendix.” (Doc. # 161 at 3.) The Court disagrees. The Court finds that Conservation Agreement does not describe formalized conservation efforts in need of separate PECE analyses and, consequently, the Service properly evaluated the Conservation Agreement as a whole.

The stated purpose of the Conservation Agreement is to

identify and implement measures and strategies to help reach the goal of increasing the current abundance and vitality of Gunnison sage-grouse and their habitat by providing coordinated guidance, [R]ecommendations, and a rangewide perspective as well as analysis of threats, and specific Rangewide and local assessments goals, strategy goals, implementation tools, and targets.

(AR at 67655.) The Conservation Agreement itself does not detail any new conservation efforts or plans; it appears to be little more than a general agreement to foster “cooperation, collaboration, and partnership” in the monitoring of other programs already in existence. (*Id.* at 67654.) Eleven counties are then listed as having programs in place, but the Agreement does not name those programs, much less describe them.¹⁴ (*Id.* at 67659.) It would hardly be logical to call these unnamed, unlisted programs “formalized conservation efforts” subject to an individual PECE evaluation.

¹⁴ Of note, the Conservation Agreement references appendices that allegedly describe each of

With respect to the formalized conservation efforts that *were* referenced in the Conservation Agreement—those contained in a 2005 Rangewide Conservation Plan, the CCAA, and the CCA¹⁵—except for the prospective enrollment section of the CCAA (which is discussed below), none of those agreements (and the efforts therein) were new or recently implemented at the time of the listing. And a PECE evaluation applies only to efforts “that have not yet been implemented” or have been recently implemented “but have not yet demonstrated whether they are effective.” (AR at 9123.) The Service did not therefore need to conduct an individual PECE evaluation on the efforts contained on those agreements. The Service, however, was required to address those efforts, and it did—at length—in the “Conservation Programs and Efforts” section as well as under “Factor A” and “Factor D” of the Final Rule. (AR at 199470–199496.)

Moreover, the Conservation Agreement, as a whole, does not describe the information necessary to meet many of the PECE criteria for substantial certainty of “implementation” and “effectiveness,” including funding sources, staffing needs,

these programs. The Court has reviewed the record in search of these appendices (A–N) but cannot locate them. Nor has Plaintiff provided any citations to the record where these appendices might be located. *See Mitchell*, 218 F.3d at 1199 (A district court is “not obligated to comb the record” to make a party’s argument for him.)

¹⁵ The Conservation Agreement also references a Gunnison Basic Strategic Committee, a Memorandum of Understanding (MOU), and a Gunnison Sage Grouse Conservation Trust. None of those, however, warrant a PECE evaluation because none is a formalized conservation effort. The first is a committee or working group, not a plan, agreement, or conservation effort. The second, the MOU, is likewise bereft of any formalized efforts, instead stating intentions to “continue informal[] . . . discussions,” “take coordinated actions,” and “when reasonable . . . enter into formal intergovernmental agreements.” The Trust is simply a reserve of money; the Trust’s mission statement contains an intention to “develop pilot projects” but none of those projects are listed, much less described. To the extent Plaintiffs believe otherwise—that these three “joint efforts” should have received a PECE evaluation, they have not so stated or submitted any argument in support thereof. Instead, their arguments are vague and general, mentioning none of these programs by name.

implementation schedule, incremental objectives and dates for achieving them, and provisions for monitoring and reporting implementation progress. (AR at 121825.) The Conservation Agreement also fails to address many threats affecting the Gunnison sage-grouse, including human disturbance, climate change, drought, fire, and disease. (AR at 199234.) The desire to reduce or eliminate the nature and severity “of threats to a species” are a prerequisite to any PECE analysis. (AR at 9124.)

Accordingly, the Service’s approach to evaluating the Conservation Agreement was not erroneous, and Plaintiffs’ contrary arguments are misplaced.

ii. Other Conservation Efforts Identified During Comment Period

Plaintiffs next argue that the Service should have conducted an individual PECE analysis of the conservation efforts described in “three detailed comment letters” during the rule making process as well as the 118 efforts listed in a letter sent from the Director of CPW to the Regional Director of the Service. The Court disagrees that an individual PECE evaluation was required for each of the conservation efforts alluded to in this correspondence.

With respect to the “three detailed comment letters,” Plaintiffs’ arguments are vague, conclusory, and generalized. Plaintiffs point this Court to three documents in the record, totaling over 400 pages, and argue that the Service should have evaluated the “many” conservation efforts contained therein, including “efforts such as mandatory local government land-use control mechanisms, employment of a species conservation coordinator, habitat enhancement research projects, establishment of a ‘Wildlife Conservation Society Climate Adaptation Fund,’ updated numbers reflecting growing

enrollments under the CCAA, and an array of other rangewide conservation efforts.” (Doc. # 161 at 7–8.) Aside from enrollments under the CCAA, it is unclear to this Court whether any of these efforts were “formalized conservation efforts” set forth in a formal agreement, plan, or other similar document. To the extent Plaintiffs contend that the three comment letters satisfy the “agreement” requirement, the Court disagrees; such an expansive definition would erode the limited application of the PECE and create an inordinate burden on the Service.

A similar analysis applies to the letter from the CPW to the Service. That letter is not a formal agreement or plan. And neither was the “chart and list identifying 118 separate local” conservation efforts attached to the letter. Indeed, Plaintiffs have made no argument to support the position that any of these 118 efforts—which are merely listed and nowhere described—were set forth in a “conservation agreement[], conservation plan[], management plan[], or similar document[] developed by Federal agencies, State and local governments, Tribal organizations, businesses, organizations, and individuals” containing “formalized conservation efforts.” (AR at 9110.) And this Court does not so find. Without some showing that these 118 “actions” constitute “formalized conservation efforts” subject to evaluation under PECE, Plaintiffs argument that the Service was required to individually evaluate them lacks merit.

iii. Prospective Land Enrollments under the CCAA

Finally, the Court rejects Plaintiffs’ challenge the Service’s failure to conduct a PECE analysis of prospective land enrollments under the CCAA. Citing to *Permian Basin Petroleum Ass’n v. Dep’t of the Interior*, Plaintiffs argue that the Service was

required to conduct a PECE evaluation on the impact of future enrollments to the 756,562 acres of lands that remained un-enrolled under the CCAA. 127 F. Supp. 3d 700, 705–06 (W.D. Tex. 2015).

Permian Basin Petroleum, however, is distinguishable from this case because the Service in *Permian Basin*, which was presented with an entirely new CCAA that had not yet been implemented, was provided with future “enrollment numbers” and “pending applications for enrollment.” *Id.* at 705, 714, 716–717 (repeatedly highlighting the importance of these materials). The District Court vacated the final listing because the Service summarily rejected the value of the CCAA without making any projections as to the number of landowners anticipated to enroll. *Id.*

In contrast to *Permian Basin Petroleum*, the Service in this case, had before it a CCAA that had been in existence for nearly a decade. Moreover, Plaintiffs presented the Service with no information regarding the number of prospective enrollees and what conservation efforts those landowners would choose to implement on their respective properties, which can differ substantially by landowner. (Doc. # 156 at 43.) Without some indication of who would enroll and the measures they would select, there were no numbers, projections, or proposed efforts for the Service to evaluate.¹⁶ (*Id.*) The Service cannot be expected to make an “educated forecast” on future enrollees and their effect

¹⁶ Even on appeal, Plaintiffs fail to provide any indication of how many future enrollees to expect and what sort of conservation selections they might choose. There is no evidence in the record of pending applications or enrollment projections. Nor is there evidence of any studies attempting to hypothesize those numbers based on the frequency of past enrollments and their level of participation.

on a listing decision without *any* information being supplied. The Court therefore finds no error in the Service's evaluation of prospective enrollment under the CCAA.

C. CONCLUSION AS TO "THREATENED" LISTING

In sum, based on all the reasons set forth above, the Court finds that the Service's final listing decision was not arbitrary, capricious, or lacking in a strong scientific basis. The Service thoughtfully progressed through the required analysis under the ESA, supporting its findings with scientific analyses and data. Affording it the highest deference, the Court finds that the Service's ultimate conclusion that the Gunnison sage-grouse is "threatened" under the ESA was supported by reason and not arbitrarily drawn, nor was it contrary to law. The Court, therefore, affirms the final listing decision. (AR at 199399–517.)

The Court next turns to address Plaintiffs' challenges to the critical habitat designation.

IV. CRITICAL HABITAT DESIGNATION

Plaintiffs present three main challenges to the critical habitat designation: they argue that the Service (1) "vastly over-designated critical habitat"; (2) conducted a "sham" analysis under NEPA; and (3) failed to consider all economic impacts of the designation. (Doc. # 148 at 6, 11, 16.) Again, to succeed on these challenges, Plaintiffs must demonstrate that the Service's decisions and actions were lacking in reason and scientific support and, thus, arbitrary and capricious. For the following reasons, Plaintiffs do not prevail.

A. LAW

The ESA gives designation of critical habitat the same priority as the listing. It requires that critical habitat, specified to the maximum extent prudent and determinable, “shall” be made concurrently with listing the species as endangered or threatened. 16 U.S.C. § 1533(3)(A); 50 C.F.R. § 424.12(a). The Act compels the habitat designation despite other methods of protecting the species the Secretary might consider more beneficial. 16 U.S.C. § 1533(3)(A).

The ESA expressly envisions two types of critical habitat: areas occupied by the endangered species at the time it is listed as endangered and areas not occupied by the species at the time of listing. See 16 U.S.C. § 1532(5)(A)(i)–(ii). To designate an occupied area as critical habitat, the Service must demonstrate that the area contains “those physical or biological features . . . essential to the conservation of the species,” i.e. it must contain the species’ primary constituent elements (“PCEs”). *Id.* at § 1532(5)(A)(i). To designate unoccupied areas, the Service must determine that (1) the occupied areas are inadequate, and (2) designated unoccupied areas are “essential for the conservation of the species.” *Id.* at § 1532(5)(A)(ii). “Congress did not define ‘essential’ but, rather, delegated to the Secretary the authority to make that determination.” *Markle Interests, L.L.C. v. United States Fish & Wildlife Serv.*, 827 F.3d 452, 464 (5th Cir. 2016), *cert. granted sub nom. Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv.*, 138 S. Ct. 924 (2018).

The Service must designate critical habitat based on “the best scientific data available and after taking 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). “When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential.” *Balt. Gas & Elec. Co.*, 462 U.S. at 103; *Medina Cty. Envtl. Action Ass’n v. Surface Transp. Bd.*, 602 F.3d 687, 699 (5th Cir. 2010) (“Where an agency’s particular technical expertise is involved, we are at our most deferential in reviewing the agency’s findings.”).

B. HABITAT DESIGNATION

In a thorough and well-reasoned rule, the Service designated as critical habitat for the Gunnison sage-grouse an estimated 1,621,008 acres in southwestern Colorado and southeastern Utah, comprised of 923,314 acres of occupied habitat (57 percent) and 697,994 acres unoccupied land (43 percent). In reaching this designation, the Service cited numerous, varied, and peer-reviewed studies; provided a detailed explanation of the physical and biological features of the sage-grouse; and identified all primary constituent elements (“PCEs”) essential for the conservation of the species.

Specifically, the Service explained that the Gunnison sage-grouse requires the following physical and biological features:

- Space for Individual and Population Growth and For Normal Behavior. Sage-grouse depend on large, interconnected expanses of sagebrush plant communities that contain a herbaceous understory. The birds also require a variety of habitat types, driven in part by breeding activities, but the use of any non-sagebrush habitats is dependent on sagebrush habitats being nearby. (AR at 199364–199365.) Moreover, Gunnison sage-grouse make “relatively large movements on an annual basis due to the need for a diverse range of seasonal habitat types.” (*Id.*) Maximum reported movements have ranged from 17.3 km to 18.5 km. Ultimately, the bird requires a “large scale annual habitat.” (*Id.*)

- Food, Water, Air, Light, Minerals, or Other Nutritional or Physical Requirements: Although food resources used by the Gunnison sage-grouse vary throughout the year, the birds' diet is still "composed of nearly 100 percent sagebrush in the winter", while forbs, insects, and grasses are "important dietary components during the remainder of the year." (AR at 199365.) Areas rich in forbs and insects are particularly important for female reproductive success and chick survival—which are "essential to the persistence of Gunnison sage-grouse populations." (*Id.*) In summer through late fall, the herbaceous understory of the sagebrush typically dries out and the Gunnison sage-grouse must forage in more mesic habitats, such as springs and meadows, located adjacent to sagebrush plant communities. (*Id.* at 199365–199366.)
- Cover or Shelter: Predation, including from raptor and nest predators, such as golden eagles, red foxes, bobcats, weasels, badgers, and coyotes, is a common cause of sage-grouse mortality. (AR at 199366.) Gunnison sage-grouse therefore require "adequate shrub and herbaceous structure to provide year-round escape and hiding cover, as well as areas that provide concealment of nests and broods during the breeding season." (*Id.*) Sage-grouse also require protection from severe colds and depend "nearly exclusively" on sage-brush communities for thermal cover during the winter season. (*Id.*)
- Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring: Unlike the protective areas discussed above, lek sites (areas where sage-grouse gather during the breeding season) can be located in relatively open areas with good visibility and low vegetation structure. (AR at 199367.) Nesting success, however, usually requires higher shrub density and forb and grass cover. (*Id.*) Early brood-rearing habitats are typically found close to nesting sites, but can also be located in mesic or riparian areas. (*Id.*)

The Service also discussed the historical diminution of the Gunnison sage-grouse range, which at the time of the listing, constituted a mere 8.5 percent of the historical range.¹⁷

Based on this information, the Service determined that the PCEs for the Gunnison sage-grouse are:

¹⁷ The Service's critical habitat range increases that percentage to 12 percent.

PCE 1: Extensive sage-brush landscape capable of supporting an entire population of Gunnison sage-grouse.

PCE 2: Breeding habitat with varying levels of coverage from sagebrush, other shrubs, grasses, and forbs.

PCE 3: Summer to late fall habitat containing different levels of sagebrush, other shrubs, grasses, and forbs as well as riparian-type areas.

PCE 4: Winter habitat comprised of at least 30 to 40 percent sagebrush canopy cover.

PCE 5: Alternative, mesic habitats such as riparian communities, springs, seeps, and meadows.

(AR at 199368–69.) The Service then used these PCEs to identify occupied habitat areas at the time of the listing that contained the features essential to the conservation of the species. (AR at 199369–70.) Relying heavily on maps submitted by the CPW and Utah Division of Wildlife Resources (UDWR), containing information derived from sage-grouse sightings, biological expertise, and other data sources, the Service delineated occupied habitat that met the landscape specific PCE 1 and one or more of the seasonally specific PCEs 2–5. (*Id.*) This resulted in a designation of 923,314 occupied habitat acres.

Although Plaintiffs broadly challenge this designation, they provide no argument or authority (scientific or otherwise) to support a reversal. Plaintiffs also fail to specify what portion of the occupied acreage they believe was improperly designated. It is not this Court's responsibility to comb through the Burj Khalifa of agency records searching for flaws in the Service's reasoning. The Court instead finds that the Service's designation—which was accompanied by significant scientific explanation supported by

numerous unchallenged studies, the ESA, and the record—was not arbitrary or capricious.

The Service then turned to examine whether unoccupied habitat also needed to be designated as critical, ultimately deciding in the affirmative because the occupied acreage alone was “inadequate for the conservation of the species.” (AR at 199371.) Plaintiffs object to this finding, arguing that it makes no “logical sense” and is supported by “absolutely no scientific evidence.” (Doc. # 148 at 7.) The Court finds these objections without merit. The Service supported its conclusion with several scientific studies, finding that populations of 500 birds or more are considered viable and “a habitat area in excess of 100,000 acres is needed to support a population of 500 birds.” (AR 11473, 11565, 199371.) The Service added that “several of the satellite populations remain in decline and all remain at population size estimates that indicate concern for their viability.” (AR at 199406; 199371–72.) And even if they are viable, three out of six (ranging from 35,015 to 44,678 acres) contain significantly less acreage than the minimal acreage required to sustain a long-term viable population; two others barely cross the minimal threshold (containing 101,750 acres and 112,543 acres). (AR at 199371–72.) This issue is compounded by the habitat threats detailed in Part III.B.1 above, which could render the occupied habitat of these satellite populations even smaller. Although the Gunnison Basin acreage is significantly larger (592,168 acres), as this Court has already concluded, the Gunnison Basin population alone is insufficient to support the longevity of the species rangewide; the satellite species are critical to the long-term viability of the species and their already-insufficient habitats are in decline.

Based on this and other information detailed by the Service, the Court finds no error in the Service's conclusion that occupied habitat alone is inadequate for the conservation of the species.

Turning next to the delineation of critical unoccupied habitat, the Service considered four criteria: (1) distribution and species range; (2) potential occupancy of the species; (3) proximity and potential connectivity to occupied habitats; and (4) habitat suitability. (AR at 199370–199372.) Applying the first criteria, the Service limited unoccupied land designations to those within the species' historical range. (AR at 199370.) Second, using habitat maps supplied by CPW and UDWR, the Service considered whether unoccupied land could serve as a potential habitat. (*Id.*) The Service then added and subtracted from this potential habitat based on the third criteria, considering only unoccupied land within 18.5 km of occupied habitat, which several studies found to be the bird's maximum rangewide seasonal movement. (*Id.* at 199370–199371.) The Service discussed the importance of designating nearby unoccupied lands to serve as corridors or movement areas between populations and to increase gene flow, connectivity, and expansion of otherwise isolated populations of birds. (*Id.*) Applying the fourth criteria, the Service determined that, based on numerous scientific studies, Gunnison sage-grouse “habitat suitability is dependent on large landscapes (18- to 30-km radius area) where 25 percent or greater of the area is dominated by sagebrush cover.” (AR at 199371.) At finer scales (a 1.5-km radius area) and during breeding and nesting seasons, the bird requires at least 5 percent to be dominated by sage brush. (*Id.*)

Using these criteria, the Service designated unoccupied lands rangewide. The Service found much of the designated unoccupied land potentially suitable as habitat for the sage-grouse. Some of the designated unoccupied land, however, was determined to be “locally unsuitable as habitat” for the Gunnison sage-grouse. The Service nonetheless designated those unsuitable lands as “essential” for the bird for several reasons, including that they (1) fell within the critical habitat large landscape scale and therefore part of the larger, indivisible sage-grouse habitat; (2) would facilitate bird movements and dispersal because they were located adjacent to or between critical surrounding sage-grouse populations, reducing population isolation and increasing genetic exchange; and/or (3) could be re-worked to enhance needed sagebrush communities and other PCEs, making them suitable for habitation in the future. (AR at 199375–199379.) Ultimately, the Service designated 697,994 acres of unoccupied land rangewide.

Plaintiffs challenge this designation of unoccupied lands, specifically the portions of the designated areas presently found unsuitable as sage-grouse habitat. Plaintiffs’ arguments are premised on their general belief that the Service is prohibited from designating, as critical habitat, lands that are unsuitable as habitat, i.e. contain no PCEs, because those lands could not logically qualify as “essential” to sage-grouse conservation pursuant to 16 U.S.C. § 1532(5)(A)(ii). The Court disagrees with Plaintiffs’ reading of the statute. The statute does not require that the designated unoccupied land be habitable; the plain language of the statute reads that unoccupied land be “essential to the conservation of the species.” *Id.* Congress has likewise not defined essential to

mean “habitable.” Indeed, there is no habitability requirement in the text of the ESA or in its implementing regulations. Nor has any Circuit Court interpreted it to so require. *C.f. Bear Valley*, 790 F.3d at 994 (upholding the designation of unoccupied critical habitat, even though the area was not habitable by the endangered species). The Fifth Circuit has expressly decided that “the plain text of the ESA does not require [unoccupied land] to be habitable.” In *Markle Interests*, the Fifth Circuit held that “the plain text of the ESA does not require [unoccupied land] to be habitable.” *Markle Interests, L.L.C. v. United States Fish & Wildlife Serv.*, 827 F.3d 452, 467 (5th Cir. 2016).¹⁸ The panel reasoned that imputing a habitability requirement onto unoccupied lands would “effectively conflate[] the standard for designating *unoccupied* land with the standard for designating *occupied* land.” *Id.* (emphasis in original). The Court finds the Fifth Circuit’s reasoning persuasive. Indeed, to require habitability or PCEs to necessarily exist on unoccupied land before designation, would “equate what Congress plainly differentiates: the ESA defines two distinct types of critical habitat, occupied and unoccupied; only occupied habitat must contain all of the relevant [physical and biological features.]” *Id.* (alternations in original). See *Dep’t of Homeland Sec. v. MacLean*, 135 S. Ct. 913, 919 (2015) (“Congress generally acts intentionally when it uses particular language in one section of a statute but omits it in another.”). To avoid a result contrary to the plain language of the statute, the Court rejects Plaintiffs’ argument that unoccupied areas

¹⁸ Plaintiffs assert that the Supreme Court’s decision to grant certiorari “casts doubt on the validity of the majority opinion in *Markle Interests* and other precedent relied on by Federal Defendants.” (Doc. # 164 at 2.) Not necessarily. Plaintiffs provide no legal authority to support the argument that granting certiorari implies a pending reversal. It is equally possible that the Supreme Court granted certiorari on the issue to affirm the *Markle Interests* decision, rendering it binding precedent throughout the country.

presently unsuitable as habitat for the Gunnison sage-grouse may not be designated as essential for its conservation.¹⁹ Here, the Service provided scientific data, as set forth above, to support its finding that unoccupied areas are essential for conservation of the Gunnison sage-grouse. The Court accordingly concludes that the Service did not over-designate such land.

In sum, because the Service's critical habitat designation was supported with reason and significant scientific and evidentiary support, the Court finds that it was not arbitrary and capricious and reversal is not warranted.

C. NEPA ANALYSIS

Plaintiffs next argue that the Service's NEPA analysis was a sham process which unlawfully excluded reasonable alternatives with the goal of inexorably leading to a predetermined outcome. Plaintiffs add that these flaws are fatal to the critical habitat designation. (Doc. # 148 at 11–17.) Having thoroughly reviewed this issue, the Court disagrees that the Service's NEPA analysis was erroneous.

¹⁹ The Amicus Curiae brief argues that allowing unsuitable habitat to be considered "essential" for the species makes the standard for unoccupied habitat less onerous or demanding than the standard for designating occupied habitat, which, they contend, flies in the face of substantial case law. *Arizona Cattle Growers' Ass'n v. Salazar*, 606 F.3d 1160, 1163 (9th Cir. 2010) ("The statute . . . impos[es] a more onerous procedure on the designation of unoccupied areas by requiring . . . a showing that unoccupied areas are essential."). The Court disagrees with that argument. As the Final Rule in this case indicates, designating unoccupied habitat remains demanding. To designate occupied habitat, the Service reviewed where the sage-grouse resided and assessed the necessary elements for their prolonged survival there. But, to designate unoccupied habitat "essential" for the species, the Service first had to determine that the occupied land was insufficient; it then had to look beyond the obvious, inhabited lands; wade through four scientifically-driven criteria; delineate, using the best available science, obscure landscape required to sustain the species long term; and then support that delineation by demonstrating that land is essential for the conservation of the bird. This was no small task, and certainly one worthy of the descriptor, "onerous."

1. Law

For proposed actions the environmental effects of which are uncertain, NEPA requires an agency to prepare an Environmental Assessment (“EA”) to determine whether a significant effect will result from the proposed action. 42 U.S.C. § 4332(2)(E); see also 40 C.F.R. § 1508.9; *Oregon Nat. Res. Council v. Lyng*, 882 F.2d 1417, 1421–22 (9th Cir.1989). Based upon the EA, the agency must either make a “finding of no significant impact” (“FONSI”) or determine if a significant environmental impact will result, thus requiring the preparation of a more in-depth Environmental Impact Statement (“EIS”). 40 C.F.R. § 1508.9(a); *Comm. to Preserve Boomer Lake Park v. Dept. of Transp.*, 4 F.3d 1543, 1554 (10th Cir.1993). An EA need only include “brief discussions” of the need for the proposal, alternatives, and environmental impacts of both the proposed action and its alternatives. 40 C.F.R. § 1508.9(b); *Town of Superior v. U.S. Fish & Wildlife Serv.*, 913 F. Supp. 2d 1087, 1112 (D. Colo. 2012), *aff’d sub nom. WildEarth Guardians v. U.S. Fish & Wildlife Serv.*, 784 F.3d 677 (10th Cir. 2015).

Federal agencies must comply with NEPA “to the fullest extent possible.” 42 U.S.C. § 4332. NEPA does not, however, require particular results but merely a particular process. *Robertson*, 490 U.S. at 350; see also 40 C.F.R. 1500.1(c).

2. Analysis

Pursuant to NEPA, the Service produced an EA in this case. (AR at 198238–198292.) In so doing, contrary to Plaintiff’s contention, the Service expressly considered three potential alternatives to its final critical habitat designation. (AR at 198254–198257.) The Service considered designating (1) only on occupied land; (2) only on

public lands; and (3) only in the Gunnison Basin. (*Id.*) The Service thoroughly explained why each alternative was untenable. (*Id.*) With respect to occupied land, the Service reiterated reasoning set forth in the Final Rule and already detailed by this Court in Part IV. (AR at 198254.) With respect to public lands, the Service explained that such lands are “not sufficient to ensure conservation of the species” because much of the public land in the Gunnison sage-grouse range is “either unsuitable habitat such as forested areas, or is at a greater distance from existing habitat than is typically covered during sage-grouse movements.” (AR at 198255.) Examining the third alternative, the Service concluded that relying only on the Gunnison Basin land and population would not preserve the entire species because the satellite populations outside the Gunnison Basin provide necessary redundancy, among other things—as further expounded in the Final Rule and previously addressed in this Order.

Plaintiffs call the Service’s explanations “flimsy and unconvincing.” (Doc. # 148 at 12.) Plaintiffs argue that the Service should have further explained their decisions not to designate only occupied habitat or habitat in the Gunnison Basin. Plaintiffs contentions echo arguments already addressed by this Court previously in this order, and the Court rejects them here for the same reasons. The Court instead finds the Service’s examination of reasonable alternatives, although brief, is sufficient under NEPA.

The Court likewise rejects Plaintiffs’ arguments that the Service’s NEPA analysis was predetermined.

Plaintiffs “must meet a high standard to prove predetermination.” *Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 714 (10th Cir. 2010). They must

show that the Service “irreversibly and irretrievably commit[ed] itself to a plan of action that is dependent upon the NEPA environmental analysis producing a certain outcome” and that this irreversible and irretrievable commitment occurred “before the agency . . . completed th[e] environmental analysis—which of course is supposed to involve an objective, good faith inquiry into the environmental consequences of the agency’s proposed action.” *Id.*; see, e.g., *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 781 n. 2 (10th Cir. 2006) (detecting no predetermination because agency “had no preexisting agreement with any user group”); *Lee v. U.S. Air Force*, 354 F.3d 1229, 1240 (10th Cir. 2004) (concluding that no predetermination occurred, even though the U.S. Air Force had entered into a series of agreements with the German Defense Ministry, because those agreements either were not executed until after the completion of the NEPA requirements or would not take effect until after the completion of those requirements).

Plaintiffs’ only arguments supporting predetermination are that (1) the Service failed to consider proposed alternatives—an argument this Court has already rejected—and (2) the Service received the EA only days before sending the Final Rule for publication, indicating that the Service had its decision made before considering environmental impacts. These challenges fall far short of demonstrating that the Service “irreversibly and irretrievably” committed to an outcome before complying with NEPA. At best, the challenges could demonstrate that the Service had a preferred alternative, not that the Service engaged in predetermination. Because the record contains no evidence that the Service failed to take a hard look at the environmental impacts of the Final Rule

due to bias, the Court concludes that the Service did not act arbitrarily and capriciously in conducting its NEPA analysis.

D. ECONOMIC IMPACTS

Last, Plaintiffs challenge the Service's considerations of the economic impacts stemming from its critical habitat designation. This challenge is also without merit.

Before designating critical habitat, the Service must take "into consideration the economic impact." 16 U.S.C. § 1533(b)(2). The ESA is silent on the method the Service must use when assessing the economic impact of its designation. In *New Mexico Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv.*, 248 F.3d 1277, 1283 (10th Cir. 2001), the Tenth Circuit examined one such method used by the Service: the baseline approach. Under that approach, the Service analyzed the economic impacts that result solely from the critical habitat designation without considering other impacts attributed to the listing decision. The Tenth Circuit disapproved of the method, holding that the Service should apply a broader approach—one that considers "all the economic impacts of a critical habitat designation, regardless of whether those impacts are attributable co-extensively to other causes." *Id.* at 1285. The Parties refer to this approach as the "coextensive impacts" approach. The Tenth Circuit's primary reason for rejecting the baseline approach was that another regulatory provision, 50 C.F.R. § 402.02, rendered the approach "meaningless."

Plaintiffs' argue that the Service improperly used the baseline approach here, rendering the entire habitat designation erroneous under the *New Mexico Cattle Growers Ass'n* holding. The Court disagrees. Since the Tenth Circuit decided *New*

Mexico Cattle Growers Ass'n in 2001, two vital changes have occurred: (1) the applicable provisions of 50 C.F.R. § 402.02 have been invalidated by *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059 (9th Cir. 2004), and (2) the Service has promulgated, following formal rulemaking procedures, a new method for conducting an economic impact analysis—the “incremental impacts” approach—which the Service applied here. Under the incremental impacts approach, the Service assesses economic impacts in part by comparing “the hypothetical world with the designation to the hypothetical world without it.” 78 Fed. Reg. 53,062 (Aug. 28, 2013). The Tenth Circuit has not reviewed this new incremental impacts approach or revisited the application of the old baseline approach following the invalidation of the relevant definitions in 50 C.F.R. § 402.02. Although the new incremental approach closely resembles the admonished baseline approach (indeed, many courts refer to it as the “baseline approach”), the invalidation of 50 C.F.R. § 402.02, which hamstrung the Tenth Circuit’s review of that approach, nonetheless renders the Tenth Circuit’s holding in *New Mexico Cattle Growers Ass'n* outdated and inapplicable to this case. Plaintiffs indeed make no attempt to mold the Tenth Circuit’s 2001 reasoning to the changed situation, regulations, and statutory authority presently binding this Court.

Moreover, even if the Court were to find *New Mexico Cattle Growers Ass'n* prohibitive of the new incremental approach, the Court would still uphold the Service’s conduct in this case because the Service, “recognizing that the designation occurred within the jurisdiction of the Tenth Circuit,” pursued a “co-extensive impacts approach [in addition to an incremental approach] out of an abundance of caution.” (Doc. # 156 at

70; AR at 79126.) In the Final Rule, although the Service expressly disagreed that *New Mexico Cattle Growers Ass'n* binds them, it nonetheless considered impacts attributable co-extensively to other causes to be safe—just as the Tenth Circuit required. (AR at 199382.)²⁰

Accordingly, the Court finds that the Service did not err in its assessment of the economic impacts of its critical habitat designation.

V. CONCLUSION

Having thoroughly considered the Parties' briefing, the administrative record, and the relevant law, the Court finds that the Service's decision to list the Gunnison sage-grouse as threatened and designate land as its critical habitat was not arbitrary, capricious, an abuse of discretion, without observance of the required procedures, or otherwise contrary to law. Both determinations are therefore AFFIRMED.

DATED: September 27, 2018

BY THE COURT:



CHRISTINE M. ARGUELLO
United States District Judge

²⁰ Plaintiffs briefly mention the Service's critical habitat exclusion analysis (which stems from its economic impact assessment), apparently taking issue with the Service's decision not to exclude areas where the Service "did not identify any costs that are concentrated in any geographic area or sector." (Doc. # 148 at 19.) Plaintiffs present no legal argument or authority to support this two-sentence challenge, and the Court declines to address it, except to note that numerous cases have determined the Service's "exclusionary process [to be] discretionary," subject to "no particular methodology." *Bldg. Indus. Ass'n of the Bay Area v. U.S. Dep't of Commerce*, 792 F.3d 1027, 1033 (9th Cir. 2015).