# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

	)
<b>CENTER FOR BIOLOGICAL</b>	)
DIVERSITY, et al.,	)
	)
Plaintiffs,	)
	)
V.	)
	)
KENNETH SALAZAR, Secretary,	)
U.S. Department of the Interior, et al.,	)
• • • •	Ĵ
Defendants,	)
	)
and	)
	)
MICCOSUKEE TRIBE OF INDIANS	)
OF FLORIDA,	)
	)
Defendant-Intervenor,	)

Civil Action No. 09-1684 (RMC)

## **MEMORANDUM OPINION**

Did the Secretary of the U.S. Department of the Interior appropriately exercise executive discretion when he failed to designate the area containing sub-population A of the Cape Sable seaside sparrow as critical habitat because the designation would most likely interfere with the Comprehensive Everglades Restoration Plan which will return more natural water flows to the Everglades? Balancing these competing interests is complex and difficult but the result is left to the Secretary, defendant Kenneth Salazar, and his designees. As long as his decision will not result in the extinction of the species, the Secretary has broad discretion. The Secretary insists that sub-population A will persist, albeit in far less area, and that the exclusion will not result in the extinction of the bird. Plaintiffs attack his reasoning and conclusions. In the end, it is a judgment call that the

Secretary is empowered to make. As the Secretary has provided a rational basis for his determinations, summary judgment will be granted to the defendants.

#### I. FACTUAL BACKGROUND

## A. The Endangered Species Act

The Endangered Species Act ("ESA") was enacted to conserve and protect endangered and threatened species and the ecosystems on which they depend. 16 U.S.C. § 1531(b) (2011). A species is endangered if it is "in danger of extinction throughout all or a significant portion of its range." *Id.* § 1532(6). The Secretary is responsible for non-marine species and administers the ESA through the U.S. Fish and Wildlife Service ("Service"), to which the Secretary has delegated authority to list animal species as either endangered or threatened. *See id.* §§ 1533(a), 1532(15). The determination of whether a species is endangered or threatened is to be made on the basis of the best available scientific and commercial data. *Id.* § 1533(b).

Concurrent with a final rule listing any species as endangered or threatened, the Service must, "to the maximum extent prudent and determinable," designate "critical habitat" for that species by final regulation. *Id.* § 1533(a)(3)(A). The Service designates critical habitat by rulemaking published in the Federal Register after opportunity for notice and comment. *See* 50 C.F.R. § 424.16 to .18 (2011). Following an initial designation, the Secretary "may, from time-to-time thereafter as appropriate, revise such designation." 16 U.S.C. § 1533(a)(3)(A)(ii). Critical habitat is defined in the ESA as:

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

(ii) specific areas outside the geographical area occupied by the species at the time it is listed [as endangered or threatened under the statute], upon a determination by the Secretary that such areas are essential for the conservation of the species.

*Id.* § 1532(5)(A). The ESA defines conservation as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. *Id.* § 1532(3).

In determining what areas qualify as critical habitat, the "Secretary shall consider those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection." 50 C.F.R. § 424.12(b). These elements essential to the conservation of a species include but are not limited to: "(1) Space for individual and population growth, and for normal behavior; (2) Food, water, air, light, minerals, or other nutritional or physiological requirements; (3) Cover or shelter; and (4) Sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal." *Id.* In considering the designation of critical habitat, the Secretary is to "focus on the principal biological or physical constituent elements within the defined area that are essential to the conservation of the species." *Id.* Primary constituent elements shall be listed with the designation and may include, but are not limited to, the following: "roost sites, nesting grounds, . . . seasonal wetland or dryland, water quality or quantity, . . . geological formation, vegetation type, tide, and specific soil types." *Id.* 

Section 4 of the ESA guides the Secretary in the decision-making process of designating critical habitat for a species. In full, the provision reads:

Thus, not every area that qualifies as critical habitat will necessarily be designated as such.

The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) of this section on the basis of 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. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such critical habitat will result in the extinction of the species concerned.

16 U.S.C. § 1533(b)(2). In other words, the ESA empowers the Secretary to exclude an area that would otherwise qualify as critical habitat if he finds the benefits of excluding the area are greater than the benefits of designating the area. *Id.* However, the Secretary's discretion to exclude critical habitat comes to an end when the failure to designate the area would result in the extinction of the species. *Id.* 

The ESA provides an array of vital protections to listed species and their designated critical habitat. Relevant here, federally backed actions that "may affect" a listed species or its critical habitat invoke the consultation requirements of Section 7 of the ESA. *See* 50 C.F.R.  $\S$  402.14(a). When triggered, Section 7(a)(2) of the ESA requires that "[e]ach Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species." 16 U.S.C. § 1536(a)(2). Formal consultation culminates in a biological opinion from the Service, which determines whether the agency action would jeopardize the species or adversely modify its habitat. *Id.* § 1536(b). "If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives" that the Secretary believes would

avoid the jeopardy or adverse modification. Id. § 1536(b)(3)(A).

### **B.** The Cape Sable Seaside Sparrow

This matter represents the continued involvement of the Court in the Service's efforts to protect the Cape Sable seaside sparrow (*Ammodramus maritimus mirabilis*) ("Sparrow"), which began in December of 2000 when essentially the same parties brought suit to, inter alia, force the Service to revise the Sparrow's critical habitat designation. *See generally Biodiversity Legal Found*. *v. Norton*, 285 F. Supp. 2d 1 (D.D.C. 2003). The Sparrow is endangered and first received federal protection when it was determined to be "threatened with extinction" on March 11, 1967. Critical Habitat Designation for the Cape Sable Seaside Sparrow: Proposed Rule, 71 Fed. Reg. 63,980 (proposed Oct. 31, 2006) [AR Doc. 308] ("Proposed Rule") at 63,984.<sup>1</sup> The Sparrow is restricted to areas in and around the southern tip of the Everglades in Florida.

The Sparrow exists in six distinct sub-populations which live in six spatially distinct regions. *See* Proposed Rule at 63,982. The sub-populations are separated by areas of unsuitable habitat, and although the distances between them range from only two to twenty miles, the birds rarely move between these regions. The flocks are referred to as Sparrow sub-populations A through F. *Id.* Sub-population A ("Sub A") is located west of the Shark River Slough—a free-flowing channel of water serving as the southern Everglades' primary drainage point into the Florida Bay—while the other sub-populations are all farther east, on the other side of the Shark River

<sup>&</sup>lt;sup>1</sup> The Sparrow was determined to be "threatened with extinction" in 1967 pursuant to the Endangered Species Preservation Act of 1966 (Pub. L. 89–669), and was subsequently incorporated into the list of species covered by the Endangered Species Conservation Act of 1969 (Pub. L. 91–135). All species listed as protected under the Conservation Act were adopted by the more expansive Endangered Species Act of 1973 and assigned endangered status. *See* Proposed Rule at 63,984.

Slough. The habitat of Sub A falls within and adjacent to the western portion of Everglades National Park and the southeastern corner of Big Cypress National Preserve.

Sub A is considered critically important to the species as a whole due to its location and separation from the other sub-populations. The detachment of Sub A "might provide the species with a measure of protection against extinction if some calamity were to wipe out the other five subpopulations." *Miccosukee Tribe of Indians v. United States*, 566 F.3d 1257, 1262 (11th Cir. 2009). Although Sub A was one of the largest flocks in 1992, its numbers then declined and have remained relatively low ever since. *See* Biological Opinion on Proposed Continuation of the Interim Operational Plan, U.S. Fish and Wildlife Service (Nov. 17, 2006) [AR Doc. 90] ("2006 BiOp") at 28–29 (estimating Sub A at 2,608 birds in 1992, to a low of 16 birds in 2004, 96 birds in 2005, and 112 birds in 2006). The cumulative Sparrow population in 2006 was estimated at 3,088 birds. *Id*.

The generally sedentary and non-migratory Sparrow has particular habitat requirements which limit its distribution, further complicated by the fact its preferred habitat has been diminished by natural and man-made occurrences. *See, e.g., Biodiversity Legal Found.*, 285 F. Supp. 2d at 4–5 (noting how hurricanes in 1935 and 1960 and man-made changes to the hydrology of the Everglades have altered the Sparrow's habitat and occurrence); *see also* South Florida Multi-Species Recovery Plan, U.S. Fish & Wildlife Service (May 18, 1999) [AR Doc. 69] ("Recovery Plan") at 4-346 to -348. The Sparrow's "distribution is limited to the short-hydroperiod wetlands at the downstream end of the greater Everglades system on the southern tip of mainland Florida." Proposed Rule at 63,981. The birds predominately occur in freshwater wet prairies known as "marl prairies." *Id.* The prairies indulge the Sparrows with areas of clumped grasses with open space allowing the birds to move on the ground and build nests in the grasses, at approximately fourteen

to eighteen centimeters off the ground. See Recovery Plan at 4-347, 4-350.

Under prior natural hydrologic conditions in the Everglades, before the implementation of manmade water controls, water from Lake Okeechobee flowed southward through the Everglades and spilled into Florida Bay, the flow volume depending on the seasonal rains. As the seasonal rains flowed southward, the Shark River Slough would overflow into the surrounding marl prairies leaving them flooded for three to seven months of the year.<sup>2</sup> The timing and extent of marl prairie flooding is now heavily regulated. *See* John L. Curnutt, *et al.*, <u>Population Dynamics of the Endangered Cape Sable seaside-sparrow</u>, 1 Animal Conservation 11 (1998) [AR Doc. 65] at 12.

The Sparrow's breeding season correlates with the dry season when most areas of the marl prairie are either dry or only covered by shallow water. Proposed Rule at 63,981–82. As water levels begin to rise, commonly in the summer months, nesting becomes significantly more likely to fail as the nests become more detectable to predators or are flooded by the rising waters. *Id.* at 63,982. The end of breeding season overlaps the summer rains, as the birds are not prone to initiate nesting if water levels reach a depth greater than ten centimeters. Recovery Plan at 4-350. Due to its habitat requirements, the Sparrow avoids areas with permanent water cover or long-hydroperiod wetlands. Due to this, the hydrology of an area is a crucial component to the Sparrow's survival.

<sup>&</sup>lt;sup>2</sup> "Marl prairie occurs within the zone intermediate between the permanently flooded sloughs and the drier pine-dominated high ground. Marl prairie is . . . dominated by grasses, sedges, and rushes growing on thin lime-stone soils that are seasonally flooded. Prairie occurs where the hydroperiod [or period of seasonal flooding] is four to eight months long. Where hydroperiods are longer, taller marsh grasses and sedges dominate, and where hydroperiods are shorter, prairie persists only where fire eliminates woody plants." Jeffrey R. Walters, *et al.*, <u>The AOU [American Ornithologists' Union] Conservation Committee Review of the Biology, Status, and Management of Cape Sable Seaside Sparrows: Final Report, 117(4) The Auk 1093 (2000) [AR Doc. 70] at 1096.</u>

See Proposed Rule at 63,983.<sup>3</sup>

#### C. Critical Habitat Designation & Prior Litigation

The Service initially designated critical habitat for the Sparrow on August 11, 1977, which was corrected on September 22, 1977. Proposed Rule at 63,984. The Service released a first recovery plan for the Sparrow in April 1983. *Id.* In February 1999, the Service found that certain water projects implemented by the Army Corps of Engineers would jeopardize the Sparrow if continued and thus required the implementation of reasonable and prudent alternatives. *See generally* Biological Opinion on Modified Water Deliveries to Everglades National Park, Experimental Water Deliveries Program, and the Canal 111 Project, U.S. Fish and Wildlife Service (Feb. 19, 1999) [AR Doc. 68]. A revised Recovery Plan for the Sparrow was then issued in May 1999. Proposed Rule at 63,984; *see generally* Recovery Plan. The Service's goal is to reclassify the Sparrow from endangered to threatened:

This objective will be achieved: if the loss of functional Cape Sable seaside sparrow habitat, as a result of current and past water management practices, and the invasion of woody and exotic plant species, is eliminated; if Cape Sable seaside sparrow habitat west of Shark River Slough and in Taylor Slough, which has been degraded by current and past water management practices, is restored . . .

Recovery Plan at 4-363. To accomplish this goal, the 1999 Recovery Plan concluded that, among other actions, the Service needed to "[r]eview and revise the current critical habitat designation based on distribution surveys." Recovery Plan at 4-364 (emphasis omitted). The Service stated that

<sup>&</sup>lt;sup>3</sup> In order to survive, the birds also require a habitat that is suitable for breeding year-by-year. *See* Proposed Rule at 63,981 ("Sparrows are generally short-lived, with an average individual annual survival rate of 66 percent. The average lifespan is probably 2 to 3 years. Consequently, a sparrow population requires favorable breeding conditions in most years to be self-sustaining and cannot persist under poor conditions for extended periods.") (internal citations omitted).

"[c]ritical habitat should, at minimum, include habitat west of Shark River Slough that supports one of the two core subpopulations." *Id.* The Service recognized that protection of the area where Sub A occurs was necessary to the Sparrow's survival but also advocated for the restoration of natural water flows. "Existing short-hydroperiod marl prairie must be protected and enhanced for Cape Sable seaside sparrows if the population is to survive." *Id.* "Current water management practices must be changed to restore more natural timing, volume, and placement of water flows." *Id.* 

Thereafter, Biodiversity Legal Foundation, predecessor to plaintiff Center for Biological Diversity, filed a citizen petition with the Service requesting that a revision of the Sparrow's critical habitat be performed. On July 20, 2000, the Service published a 90-day finding in which it determined that the petition presented substantial information indicating a revision may be warranted. *Id.* On December 20, 2000, Biodiversity Legal Foundation and other plaintiffs filed suit in the United States District Court for the District of Columbia to compel the Service to proceed with the revision to the Sparrow's critical habitat. *See* Proposed Rule at 63,984; *see also Biodiversity Legal Found.*, 285 F. Supp. 2d at 2. As pertinent here, on September 30, 2003, this Court concluded that the Service had not violated the Administrative Procedure Act's prohibition against unreasonable delay in failing to revise the Sparrow's critical habitat, however the Court ordered the Service to submit a schedule by which it would begin work on a critical habitat revision and to provide an estimate of how long the process would take. *Biodiversity Legal Found.*, 285 F. Supp. 2d at 16–17; *see also* Proposed Rule at 63,984.

The Service met its deadline and published the Proposed Rule in the Federal Register on October 31, 2006. The Proposed Rule encompassed seven critical habitat units, comprising approximately 156,350 acres of land. *See* Proposed Rule at 63,990–93. Units 1 and 2, amounting to approximately 71,290 acres, were the only proposed habitat west of the Shark River Slough and the only units to support Sub A.<sup>4</sup> *Id.* at 63,990–91; *see also id.* at 64,000, 64,002 (map 1 and 2 of proposed units). After the period of public comment, the Service published the Final Rule on November 6, 2007, formally revising the Sparrow's designated critical habitat. *See* Critical Habitat Revised Designation for the Cape Sable Seaside Sparrow: Final Rule, 72 Fed. Reg. 62,736 (Nov. 6, 2007) [AR Doc. 627] ("Final Rule"). In the Final Rule, the Secretary excluded Units 1 and 2 from the designation, thus no area west of the Shark River Slough where Sub A occurs is designated critical habitat. *Id.* at 62,750–51.

### **D.** Comprehensive Everglades Restoration Plan

Within the last century the Everglades has endured an unrelenting encroachment as

man pushed back its reach and subjugated its natural flow. The Eleventh Circuit described this

transformation:

For centuries, a broad, shallow sheet of fresh water that covered most of South Florida flowed south from Lake Okeechobee to the Florida Bay. This phenomenon was the 'river of grass' or Everglades, which supported unique and fragile flora and fauna. As so often happens with natural treasures, people sought to control and manipulate the Everglades for their own ends. After the State of Florida's efforts to tame the Everglades failed, in 1948 the Army Corps of Engineers got involved.

The Corps undertook the Central & Southern Florida Flood Project, which it hoped would control flooding, divert water away from developing areas, provide a source for irrigating crops, facilitate recreation, and "enhance" wildlife. In order to bend the water to its will, the Corps created thousands of miles of canals and levees supported by scores of pumps, gates, and dams. This massive

<sup>&</sup>lt;sup>4</sup> References to "Unit 1" and "Unit 2" throughout this decision, unless otherwise noted, will refer to Unit 1 and Unit 2 in the Proposed Rule which corresponds with the area where sub-population A of the Sparrow occurs.

plumbing project drained the northern portion of the original Everglades for agricultural use and diverted water into distinct, deeper Water Conservation Areas for controlled release into the southern part of the original area, which became Everglades National Park.

*Miccosukee Tribe of Indians*, 566 F.3d at 1261 (internal citation omitted). In the 1940's, the U.S. Army Corps of Engineers constructed the Central & South Florida Project ("C&SF Project") as a water supply and flood control system for South Florida. The C&SF Project consists of approximately 1,600 kilometers of canals and levees, 150 water control structures, and 16 major pump stations. Recovery Plan at 4-356.

Under the C&SF Project "water flow into Everglades National Park is controlled by floodgates and levees in Water Conservation Areas 3A and 3B to the north.<sup>5</sup> A series of floodgates (S-12s)... at the north end of Shark River Slough allows managers to release water" from the water conservation areas southward, spilling into the western region of the Everglades National Park where Sub A is found. Jeffrey R. Walters, *et al.*, <u>The AOU [American Ornithologists' Union] Conservation</u> <u>Committee Review of the Biology, Status, and Management of Cape Sable Seaside Sparrows: Final Report</u>, 117(4) The Auk 1093 (2000) [AR Doc. 70] ("AOU Conservation Report") at 1096.

Critically, the "system has disrupted the natural volume, timing, quality and flow of surface and ground water throughout the Everglades" resulting in severe degradation to South Florida's ecosystem. Recovery Plan at 4-356. The Sparrow has particularly suffered from the significant alteration of its habitat's hydrologic conditions caused by the C&SF Project. *Id*.

<sup>&</sup>lt;sup>5</sup> Water Conservation Areas are state and federally managed water retention regions designed to disperse water to the remaining Everglades and to perform water control functions, such as water storage and flood control. Water Conservation Area 3A is the largest of the areas and encompasses 915 square miles. *See* An Assessment of the Interim Operational Plan, U.S. National Park Service (May 2005) [AR Doc. 82] at 3.

Specifically, it appears that the C&SF Project increased the frequency and duration of flooding in the Sparrow's western habitat, adversely affecting Sub A's nesting opportunities, while it overdrained the remaining Sparrow sub-populations' eastern habitat, rendering that area especially susceptible to naturally occurring fires. *See* Curnutt, <u>Population Dynamics</u>, at 12; AOU Conservation Report at 1095; *see also Biodiversity Legal Found.*, 285 F. Supp. 2d at 5.<sup>6</sup>

The Service and other stakeholders implemented several corrective plans to mitigate the disastrous effects that water management practices of the 1990's had on Sub A. Following the Service's February 1999 biological opinion finding certain water projects would likely jeopardize the Sparrow and adversely modify its critical habitat, an Interim Structural and Operational Plan ("ISOP") was implemented in December 1999 to ensure more favorable hydrologic conditions within the Everglades National Park for the Sparrow. *See* An Assessment of the Interim Operational Plan, U.S. National Park Service (May 2005) [AR Doc. 82] ("IOP Assessment") at 10–11. The ISOP called for greater restrictions on the amount of water released from Water Conservation Area

<sup>&</sup>lt;sup>6</sup> "The pre-drainage Everglades system was inundated for longer periods and overland flow occurred across a broader expanse than at present. Currently, nearly all overland flow in the Shark River Slough drainage originates from the four S-l2 gated spillways at the northern boundary of Everglades National Park. In the past, most overland flow occurred toward the eastern edge of Shark River Slough. The S-l2 structures, however, are on the western edge... These changes mean that the eastern prairies are now flooded less often than under natural conditions."

<sup>&</sup>quot;Furthermore, beginning in the late 1940s the federal government constructed an extensive series of canals. These canals permitted the conversion of the eastern portion of prairies to residential and agricultural lands. Much of the remaining prairie, at and around the eastern boundary of Everglades National Park, is subject to over-drainage as a consequence. The consequences of this over-drainage may include woody shrub invasion . . . and an increased frequency of fires. . . ."

<sup>&</sup>quot;Depriving the prairies east of the Slough of its water simultaneously means adding that water to the prairies to the west. These are now subject to the vagaries of water releases from the S-12 structures." Curnutt, <u>Population Dynamics</u>, at 12–13.

3A ("WCA 3A") via the S-12 structures, resulting in decreased water flow into Sub A's habitat, and increased flows into the eastern portions of the Everglades National Park. *See id.* at 11; AOU Conservation Report at 1097. "The net effect of these ISOP structural and operation modifications was to move water away from western Shark Slough, which was too wet for the sparrow nesting, to regions . . . on the east side of [Everglades National Park], which were too dry for maintenance of sparrow habitat." IOP Assessment at 11. A 2002 Interim Operational Plan ("IOP") was also concerned with reducing water flows into the western Shark River Slough area, and increasing water delivery to the eastern portion of the Everglades National Park. *See* Final Rule at 62,757. Yet other plans and projects have been implemented which address the needs of the Sparrow.

Under the grip of the law of unintended consequences, however, these corrective plans produced untoward results. Some argue that the greater retention of water for longer periods of time in WCA 3A, intended for Sparrow conservation, precipitated abnormally high water levels in WCA 3A. The higher water levels in WCA 3A are thought to have imposed adverse effects on other endangered species and on members of the Miccosukee Tribe of Indians of Florida ("Tribe")—who reside on more than 100,000 acres of WCA 3A land—by flooding culturally significant sites. *See* AOU Conservation Report at 1097. Thus, as the flow of water is restrained from certain regions, the diverted excess flow and any accompanying consequences create tensions among the goals and priorities of the various Everglades' stakeholders.

On the immediate horizon, the Comprehensive Everglades Restoration Project ("CERP") promises the most far reaching and transformative alteration to the complicated system of water management that pervades Florida and the Everglades in particular. CERP is composed of a multitude of smaller projects intended to restore the Everglades to its most natural self possible.

The Service explains the goals of CERP:

CERP has been described as the world's largest ecosystem restoration effort and includes more than 60 major components. The overarching objective of CERP is the restoration, preservation and protection of the south Florida ecosystem while providing for other water-related needs of the region. It covers 16 counties over an 18,000-square-mile area, and centers on an update of the Central & Southern Florida (C&SF) Project.

The remaining Everglades no longer exhibit the functions and richness that defined the pre-drainage ecosystem. There has been a substantial reduction in the size of the Everglades. Water volumes, flow patterns, and water quality within the Everglades ecosystem have been substantially altered. The changes that have taken place in the natural system have led to decreases in native animal and plant populations. Compartmentalization caused by construction of physical barriers such as canals, levees, and roads, or even hydrologic barriers (such as the Water Conservation Areas) has fragmented the system by creating a series of poorly connected natural areas. CERP is intended to reverse the course of the declining health of the ecosystem.

Increasing spatial extent and improving habitat quality can provide a base for improving species abundance and diversity. Improving the connectivity of habitats may also improve the range of many animals and their prey-base and provide for a more natural balance of species within the system. The goal of Everglades restoration is to return the pattern, timing, and volume of water flows to the Everglades landscape to conditions similar to those which occurred prior to the first efforts to control the water in the Everglades, which occurred around 1900.

Final Rule at 62,757. The Combined Structural Operation Plan is considered one of the first major

steps in restoration. Ultimately, CERP is intended to improve and supercede the IOP and other water

management plans that have been implemented thus far. Id.

#### **II. LEGAL STANDARD**

Summary judgment should be granted only if the moving party has shown that there are no genuine issues of material fact and that the moving party is entitled to judgment as a matter of law. *See* Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Waterhouse v. District of Columbia*, 298 F.3d 989, 991 (D.C. Cir. 2002). In determining whether a genuine issue of material fact exists, the court must view all facts and draw all justifiable inferences in the nonmoving party's favor and accept the nonmoving party's evidence as true. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

Plaintiffs' challenge to the Secretary's critical habitat designation is subject to review under the Administrative Procedure Act ("APA"). *See Cabinet Mountains Wilderness v. Peterson*, 685 F.2d 678, 685 (D.C. Cir. 1982). The APA requires a reviewing court to set aside an agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *Tourus Records, Inc. v. Drug Enforcement Admin.*, 259 F.3d 731, 736 (D.C. Cir. 2001). In making this inquiry, a reviewing court "must consider whether the [agency's] decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989) (internal quotation marks and citation omitted). At a minimum, the agency must have considered relevant data and articulated a satisfactory explanation establishing a "rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass 'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *see also Pub. Citizen, Inc. v. Fed. Aviation Admin.*, 988 F.2d 186, 197 (D.C. Cir. 1993) ("The requirement that agency action not be arbitrary or capricious includes a requirement that the agency adequately explain its result."). An agency action will usually be found to be arbitrary or capricious if:

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

Motor Vehicle, 463 U.S. at 43; see also County of Los Angeles v. Shalala, 192 F.3d 1005, 1021 (D.C.

Cir. 1999) ("Where the agency has failed to provide a reasoned explanation, or where the record belies the agency's conclusion, [the court] must undo its action."); *PPL Wallingford Energy LLC v. FERC*, 419 F.3d 1194, 1198 (D.C. Cir. 2005) (noting that failure by an agency to "respond meaningfully" to objections and "answer objections that on their face seem legitimate" renders a decision arbitrary and capricious).

As the Supreme Court has explained, "the scope of review under the 'arbitrary and capricious' standard is narrow and a court is not to substitute its judgment for that of the agency." *Motor Vehicle*, 463 U.S. at 43. Rather, a court proceeds under the presumption that the agency action is valid. *Environmental Def. Fund, Inc. v. Costle*, 657 F.2d 275, 283 (D.C. Cir. 1981). In cases involving scientific or technical decisions within the agency's area of expertise, an informed agency decision is entitled to a "high level of deference." *Serono Labs., Inc. v. Shalala*, 158 F.3d 1313, 1320 (D.C. Cir. 1998); *see also Am. Wildlands v. Kempthorne*, 478 F. Supp. 2d 92, 96 (D.D.C. 2007) ("With regard to [U.S. Fish and Wildlife Service] decisions in particular, [g]iven the expertise of the [Service] in the area of wildlife conservation and management and the deferential standard of review, the Court begins with a strong presumption in favor of upholding decisions of the [Service].") (internal quotation marks omitted), *aff* d 530 F.3d 991 (D.C. Cir. 2008).

Further, a court confronted with subject matter characterized by scientific and

technological uncertainty "must proceed with particular caution, avoiding all temptation to direct the agency in a choice between rational alternatives." *Costle*, 578 F.2d at 339; *see also Alliance for Bio-Integrity v. Shalala*, 116 F. Supp. 2d 166, 177 (D.D.C. 2000). "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." *Marsh*, 490 U.S. at 378. Judges are not "scientists independently capable of assessing the validity of the agency's determination;" instead of making an independent assessment, a court must hold the agency to the "standards of rationality required by the [APA]." *Serono Labs.*, 158 F.3d at 1327; *see also Ethyl Corp. v. EPA*, 541 F.2d 1, 36 (D.C. Cir. 1976) (en banc) ("We must look at the [agency] decision not as the chemist, biologist or statistician that we are qualified neither by training nor experience to be, but as a reviewing court exercising our narrowly defined duty of holding agencies to certain minimal standards of rationality.").

A district court reviewing an agency action sits as an appellate judge and the entire case on review is a question of law which the court resolves on the administrative record. *Am. Bioscience, Inc. v. Thompson*, 269 F.3d 1077, 1083 (D.C. Cir. 2001). A court must also review the agency determination on the basis of the record before the agency at the time the decision was made. *IMS, P.C. v. Alvarez*, 129 F.3d 618, 623 (D.C. Cir. 1997).

### **III. ANALYSIS**

The question before the Court is whether the Secretary properly exercised his discretion to exclude Units 1 and 2 from the Sparrow's critical habitat designation. The Secretary concedes that Units 1 and 2 contain the physical constituent elements essential to the Sparrow's conservation and thus would qualify as critical habitat. *See* Proposed Rule at 63,990; Defs.' Mem.

in Supp. of Mot. for Summ. J. & Opp'n to Pls.' Mot. for Summ. J. [Dkt. ## 25, 26] ("Defs.' Mem.") at 3. The Secretary contends he nonetheless appropriately excluded the Units after determining that the benefits of exclusion were greater than the benefits of inclusion and that exclusion would not result in the extinction of the Sparrow.

The Service excluded the Units primarily on the grounds that designation would essentially require that the habitat in, and the current hydrologic regime for, Units 1 and 2 be statically maintained which almost certainly would conflict with the fluid and transformative revitalization that CERP pledges to materialize in the Everglades. Looming in this determination, of course, is the strong possibility that a significant portion of Units 1 and 2 would cease to be suitable habitat for the Sparrow as hydrologic conditions adjust under CERP. The Service explains:

The Service is in a difficult position in this case: the agency is charged with implementing the ESA with respect to <u>all</u> species. Here, there is tension between conservation of sparrow habitat in the short-term, and restoration of the natural hydrologic conditions that will benefit all species in the Everglades in the long-term. The Secretary weighed these competing interests, as envisioned under the ESA, and reasonably exercised his discretion to exclude proposed Units 1 and 2.

Defs.' Mem. at 3–4. The Secretary also assets that exclusion will not result in the extinction of the Sparrow. Plaintiffs counter that the Secretary's basis for omitting Units 1 and 2 from the Sparrow's critical habitat is inconsistent and fails this Court's standard of review and that exclusion would, indeed, lead to the extinction of the Sparrow.

The Service has long recognized that Sparrow sub-population A is critical to survival

of the species.<sup>7</sup> Sub A may provide a bulwark against extinction if some calamity were to befall the

<sup>&</sup>lt;sup>7</sup> The distance of Sub A from other Sparrow sub-populations "and the intervening slough make it unlikely to be affected by any large fire that impacts the subpopulations east of Shark River

eastern sub-populations, whose habitat is often overly-dried as a result of current water controls, and which experience more frequent naturally-occurring fires and human intrusion into their areas. Separated from these populations by the Shark River Slough, Sub A lives in the marl prairie where it can nest in the grasses high enough to protect against water and snakes and low enough to protect against other predators. Yet, the population of Sub A fell from more than 2,600 birds in 1992 to 16 birds in 2004 and approximately 112 birds in 2006, most likely due in large part to the Army Corps of Engineers' system of releasing water into the Everglades directly north of Sub A nesting sites in the 1990's. Final Rule at 62,738 ("concentrated releases of water from the S-12 structures from 1992 to 1995, above and beyond existing water depth and seasonal rainfall, directly led to the deep-water conditions west of Shark River Slough. These in turn probably caused habitat in the range of Population A to be unsuitable for breeding, and we conclude that this likely played a major role in the apparent decline of Population A") (quoting AOU Conservation Report at 1104); see also 2006 BiOp at 28–29. Following the Service's finding of imminent peril to the Sparrow in 1999, various plans have come into effect, beginning in 2000, which have afforded more favorable hydrologic conditions for the birds of Sub A.

In originally proffering the designation of Unit 1 as critical habitat in the Proposed Rule, the Service noted that because of the historic damage caused to Sub A's habitat by water management practices, "special management of hydrologic conditions [would be] necessary" for the Sparrow to continue in that area. Proposed Rule at 63,990. Unit 2 was proposed as critical habitat

Slough, and less likely to be subjected to any local detrimental hydrologic conditions that may affect the eastern subpopulations, either as a result of hydrologic management or meteorological events." Proposed Rule at 63,990. "A 1999 review of sparrow biology conducted by the American Ornithologists' Union concluded that the best available means to reduce the risk of extinction of the sparrow is to retain and recover sparrow subpopulation A." *Id.* (citation omitted).

designation because it "is the only remaining large area of suitable habitat within the cordgrass marsh—marl prairie transitional zone that sparrows historically occupied." *Id.* at 63,991. The area covered by Unit 2 is considered part of Sub A's habitat, but it is "relatively isolated from the rest of the area supporting this subpopulation" and because its vegetation differed from that of the other proposed units, the Service concluded "its condition and suitability is influenced by a different set of factors than in other units." *Id.* 

Public comment on the Proposed Rule illustrates the mixed viewpoints and potential complications associated with the area encompassed by the Sparrow habitat west of the Shark River Slough. To be sure, some commentators applauded the inclusion of Units 1 and 2 and some argued that yet "more innovative and aggressive elements" would be necessary to save the Sparrow. Brian Scherf, *et al.*, Florida Biodiversity Project: Public Comment (Jan. 1, 2007) [AR Doc. 157] at 1 (AR at 1832);<sup>8</sup> *see also* Michael F. Delany, Florida Fish and Wildlife Conservation Commission: Peer Review (Dec. 21, 2006) [AR Doc. 106] at 1 (AR at 1567) (acknowledging that although his comments were strictly from the perspective of Sparrow conservation and would therefore "ignore water management implications and impacts on other species," finding that the Proposed Rule was important because it would cover the "population west of Shark River Slough which is essential for recovery of the subspecies"). One commentator added:

Adding Unit 1 to critical habitat designation is a crucial and well justified step to protect what historically was a major subpopulation (A), the restoration of which recent analyses . . . suggest is essential to recovery. It would be difficult to argue that critical habitat designation is not necessary for this area because current management is sufficient, given that prior water management is implicated in the

<sup>&</sup>lt;sup>8</sup> When a document within the Administrative Record is not internally paginated, the Court will cite to both the page number of the document and its bates number to ensure clarity.

dramatic decline of the subpopulation, and that it has not recovered under current water management. However, it will be essential to integrate management of the area as critical habitat for sparrows with the overall Everglades restoration effort known as CERP, in which hopes for spatially expansive, long-term habitat preservation and restoration reside.

Jeffrey Walters, Virginia Polytechnic Institute and State University: Peer Review (Jan. 2, 2007) [AR

Doc. 121] at 2 (AR at 1630).

Public comment included contentions that designating Units 1 and 2 would prove

incompatible with the goals of CERP. The U.S. Army Corps of Engineers cautioned:

Of particular concern is the statement in the rule that special management of hydrologic conditions is necessary for Unit 1. The weight of the best available, peer-reviewed, scientific information indicates that the area in and around the proposed critical habitat Unit 1 was much wetter historically than the conditions which exist today in the managed system. The hydrologic premise upon which the CERP was designed is to restore a less managed, more free-flowing system through the removal of structures which impound and compartmentalize the ecosystem. The CERP plan recommends removal of the L-28 Levee and the S-12 gate spillway structures upstream of Unit 1 and replacement of the S-12 facilities with a series of bridges to allow for a more natural, free-flowing, rain-driven water regime between the Water Conservation Areas, Big Cypress National Preserve and the Everglades National Park. The requirement for special management considerations and protections to meet the Primary Constituent Element (PCE) for hydrologic regime in Unit 1 is incompatible with the CERP Plan and the restoration targets upon which it is based. The economic analysis did not address the potential costs of wholesale revisions to the CERP plan which may be needed to meet any such PCE hydrologic regime requirements nor did it consider other relevant impacts such as reduction in restoration benefits to the Everglades ecosystem, impacts to other endangered and threatened species, impacts to level of service of flood protection and costs for additional mitigation features that may be required.

Col. Paul L. Grosskruger, U.S. Army Corps of Engineers: State Comment (Sept. 13, 2007) [AR Doc.

184] at 2 (internal citation omitted). Thus, the designation of habitat west of the Slough would

necessitate artificial water management which the Corps and other commentators believed irreconcilable with CERP's pursuit of unshackling, to the greatest extent possible, the water flow in the Everglades from human intervention and structures. Another commentator noted, in the introduction to his peer review, the problems with the water management regime that he believed would be inherent in designating Units 1 and 2:

The Capes [sic] Sable Seaside Sparrow (the sparrow) has existed for centuries in the area of Everglades National Park. Sparrows have weathered extreme flooding and drought, numerous hurricanes, frequent fire, etc. well before people arrived and modified the natural hydrology of the ecosystem. While most look with disdain at the canals, levees, pumps, gates, and other water control structures that lace south Florida, and have embarked upon a multi-billion dollar program, i.e. the Comprehensive Everglades Restoration Plan (CERP) to eliminate as many structures as possible, the Fish and Wildlife Service (FWS) is now proposing a Critical Habitat designation that will require 'special management considerations' (code for institutionalizing in perpetuity the current use of water control structures to artificially manage water flows into western Shark River Slough at lower levels than before human intervention). It would seem to even the most casual of observers that if we move toward restoring the natural flows and levels, under which the sparrows lived for 100s of years, the artificial management of flows that is being proposed ... would be unnecessary. Especially since for 9 years, this artificial management has shown no indications of helping the sparrow, and has caused much damage to other areas of the Everglades. But no, the Fish and Wildlife Service is attempting, via the Endangered Species Act (ESA) provisions for Critical Habitat, to create a perpetual requirement for a very specific hydrologic goal, which is diametrically counter to restoration of the Everglades and, has not proven helpful, but detrimental to the sparrow.

Dr. Terry L. Rice: Peer Review (Sept. 16, 2007) [AR Doc. 125] at 1-2.

Some comments stated that maintaining an artificial water regime for Units 1 and 2

would conflict with the conservation and protection of other species within the Everglades. The

Florida Fish and Wildlife Conservation Commission acknowledged that it was statutorily obligated

to protect the Sparrow but that it also stood strongly in support of CERP and expressed concern about the possible effects of designating Units 1 and 2 on the conservation efforts for other species. *See* Mary Ann Poole, Florida Fish and Wildlife Conservation Commission: State Comment (Sept. 12, 2007) [AR Doc. 135] at 1–3. The Commission expressed its belief that water management practices under the ISOP and IOP plans—which were designed to protect the Sparrow on the west side of the Shark River Slough—had adversely affected species in other areas, such as the snail kite, apple snail, and roseate spoonbills. The Commission predicted the same harmful water management practices would continue if Units 1 and 2 were designated. *Id.* at 2–3. The Commission agreed that Units 1 and 2 would likely become wetter under Everglades restoration and would no longer support Sparrow nesting, but the Commission nonetheless asserted that designation would conflict with the "broad overall ecosystem restoration goals as envisioned under the CERP." *Id.* at 2. The Commission recommended that the Service "continue to give strong and careful consideration to the potential unintended effects that designation of critical habitat in Units 1 and 2 may pose for the restoration of the greater Everglades ecosystem." *Id.* 

The Miccosukee Tribe memorialized its belief that water management practices implemented to secure favorable breeding conditions for Sub A, and which they believed would continue if Units 1 and 2 were designated, were causing negative impacts on Tribal lands. As one example, the Tribe plants corn on tree islands for religious and subsistence purposes. The Tribe commented that as of 2007, about half of the tree islands, approximately 60% of their acreage, had disappeared in WCA 3A due to flooding they believed was caused by water management meant to save Sub A. Col. Terry Rice, Miccosukee Comments Exhibit 26: Tribe Comments (May 9, 2007) [AR Doc. 232] at ¶¶ 7, 17. Once destroyed, tree islands "cannot be replaced except in geologic time

frames or with prohibitively expensive restoration." *Id.* ¶ 17.<sup>9</sup> The Tribe also argued that the flooding of WCA 3A had precipitated a drop in the population of the endangered Everglade Snail Kite. Dr. Ronald D. Jones, Portland State University, Miccosukee Comments Exhibit 37: Tribe Comments (April 23, 2007) [AR Doc. 243] at 2.

The Tribe further rejected the assumption that decreased water flows from the S-12 structures into Sub A's habitat would allow the bird to flourish. The Tribe asserted that this "invalid assumption" had caused severe damage to WCA 3A and its inhabitants yet has "not helped Subpopulation A, which declined in numbers under actions allegedly being taken to protect it." Col. Terry Rice, [AR Doc. 232] at ¶ 19. The Tribe lamented that designation of Units 1 and 2 would necessitate the continuation of water management efforts to unnaturally dry out Sub A's habitat by closing the S-12 structures which would "perpetuate nearly a decade of artificial conditions." Dexter W. Lehtinen: Tribe Comments (Sept. 17, 2007) [AR Doc. 205] at 2. The inclusion of Units 1 and 2 arguably breached the "promise of the Federal government to the Miccosukee Tribe that these

<sup>&</sup>lt;sup>9</sup> Dr. Ronald D. Jones explained his belief that the "continuation of IOP allows unnatural high water levels to be maintained for a longer period of time in WCA-3A. These sustained high water levels result in significant changes in the marsh vegetation patterns, tree island destruction and negative impacts on the wildlife, including impacts on endangered and threatened species, and the designated critical habitat of the endangered snail kite in WCA-3A. Of particular importance is the fact that although the marsh vegetation patterns will re-establish themselves given a reasonable period of time, the tropical hardwood hammocks (tree islands) will not be restored in a reasonable time without a massive replanting effort and in may cases re-establishment of soil surface elevations. Even if the tree islands were artificially replanted, and intensively managed, it will take fifty to a hundred years to re-establish the canopy of tropical hardwoods and other hammock species. It would also be very expensive. A prior Corps [Environmental Impact Statement] estimates it would cost \$50,000 to \$500,000 an acre to restore the tree islands lost. If tree islands that have been degraded are not restored, they will take hundreds of years to re-establish themselves after sheet flow and natural hydroperiods are restored." Dr. Ronald D. Jones, Portland State University, Miccosukee Comments Exhibit 37: Tribe Comments (April 23, 2007) [AR Doc. 243] at 2 (internal citation omitted).

lands would be preserved in their natural state *in perpetuity*, and will prevent the restoration of the Tribe's traditional Everglades homeland." *Id.* at 1–2 (emphasis in original). Ultimately, designation would "create <u>unnatural and artificial</u> conditions for the [Sparrow] that will in all likelihood prevent <u>natural</u> conditions in the Everglades from ever being restored." *Id.* at 2 (emphasis in original).

When the Secretary responded in the Final Rule to all the comments, he informed commentators who favored the designation of proposed Units 1 and 2: "Upon further evaluation of the proposed critical habitat designation, we have found that the benefits of excluding proposed Unit 1 [and Unit 2] outweigh the benefits of inclusion and that such exclusion will not result in the extinction of the species. Therefore, we have excluded Unit 1 [and Unit 2] from critical habitat." *See, e.g.*, Final Rule at 62,737. The Secretary acknowledged that "some habitats currently occupied by sparrows, particularly in the vicinity of sparrow subpopulation A, may have been wetter historically than they are presently, and conditions may become wetter in some portions of this area under restoration. This was a consideration in our decision to exclude these areas from the designation." *Id.* at 62,739; *see also id.* at 62,759.

The Secretary explicitly relied upon Section 4(b)(2) of the ESA to exclude Units 1 and 2 from designation, *see* Final Rule at 62,761, having found the benefits of exclusion to outweigh the benefits of inclusion, and having also determined from the best available scientific information, that exclusion would not result in the extinction of the Sparrow. *See* 16 U.S.C. § 1533(b)(2). Because the issue here is whether the Secretary has exercised his discretion in a reasonable manner, the Court quotes him extensively. The Secretary first explained the benefits of designating Units 1 and 2. He found the principal regulatory benefit of inclusion would be that federally backed activity affecting the habitat would require consultation pursuant to Section 7 of the ESA, *see* 16 U.S.C. § 1536(a)(2), 50 C.F.R. § 402.14(a), to ensure the activity would not destroy or adversely affect the critical habitat. Final Rule at 62,757. The Secretary acknowledged the potential that rising water levels in Units 1 and 2 under CERP would trigger the ESA's adverse modification consultation requirements. "A benefit of inclusion would be that in certain CERP alternative scenarios, . . . the adverse-modification standard may result in a determination of destruction or adverse modification of designated critical habitat . . . and result in implementation of Reasonable and Prudent Alternatives that would protect the sparrow habitat *as it presently exists.*" *Id*. (emphasis added).

The Secretary determined, however, that the benefits of adverse modification consultation under Section 7 were lessened because current management plans already consider the needs of the Sparrow. The Secretary forecast that the Service and other Department of the Interior representatives would be intimately involved in the planning, implementation, and oversight of CERP, and would ensure that the projects considered endangered species. *Id.* The Sparrow also "occurs almost exclusively on public land managed for conservation purposes, which include the protection of listed species." *Id.* at 62,758. The majority of both Units 1 and 2 are subsumed by the Everglades National Park and Big Cypress National Preserve, each of which operates under a general management plan that calls for the maintenance of habitats and protection of threatened and endangered species. *Id.* The management plan for Big Cypress National Preserve specifically addresses the needs of the Sparrow, including efforts to understand the Sparrow's decline in the area and efforts to strengthen the Sparrow's numbers in the Preserve. *Id.* 

The Secretary explained the limitations in this instance of protection afforded by critical habitat designation as compared with broader management plans:

We believe that conservation achieved through implementing

management plans is typically greater than would be achieved through multiple site-by-site, project-by-project, section 7 consultations that consider critical habitat and are conducted at varying points in time. Management plans commit resources consistently to habitat protection, but also to long-term proactive management of habitats for listed species and conservation benefit to other species, and generally ensure consistent consideration of listed species. Section 7 consultations involving critical habitat only commit Federal agencies to prevent destruction and adverse modification to critical habitat caused by a particular project. They do not commit agencies to conservation, long-term management, or providing benefits to critical habitat or sparrow areas not affected by the proposed project. Thus, any management plan that considers enhancement, recovery, or restoration as the management standard, or which explicitly addresses the listed species, may provide more benefits for the conservation of this listed species than result from the prohibition of destruction or adverse modification of critical habitat alone.

*Id.* at 62,759. The Secretary acknowledged that the management plans have no control over hydrologic conditions in the habitat. *See id.* at 62,742.<sup>10</sup>

The Secretary also noted that representatives of the various agencies that manage the properties that contain proposed critical habitat units convene annually for the sole purpose of discussing efforts to bolster the Sparrow population. *Id.* at 62,758. "These protections and management assurances will remain in place regardless of critical habitat designation." *Id.* The

<sup>&</sup>lt;sup>10</sup> "While the existing management plans for [National Park Service] and State lands include provisions and actions intended to maintain the habitat type upon which sparrows depend, the existing plans do not provide sufficient assurances that hydrologic management in these areas will maintain sparrow habitat for the foreseeable future. Neither the [National Park Service] nor the Florida Fish and Wildlife Conservation Commission directly manage the hydrologic conditions on their properties. Inflows into the properties, as well as adjacent hydrologic conditions that affect the lands through groundwater seepage, are regulated by other Federal and State agencies. As such, we are designating critical habitat on NPS and State lands. However, upon further evaluation of the proposed critical habitat designation, we have excluded Units 1 and 2 (subpopulation A) after determining that the benefits of excluding them from the final designation outweigh the benefits of inclusion." Final Rule at 62,742.

Secretary emphasized that the purpose of CERP is to restore "conditions that closely resemble those to which the sparrow adapted before water management changes in the 20<sup>th</sup> century" and that the "hydrologic management plans for the region are developed in conjunction with the Service and are subject to consultation under section 7 of the Act under the jeopardy standard." *Id*. Thus, the Secretary concluded that "the benefits of inclusion in the form of ensuring consideration of sparrow habitat through section 7 consultation and improving awareness of opportunities for sparrow conservation during Everglades restoration are small." Final Rule at 62,757.

The Secretary then enumerated the benefits of exclusion. The Secretary was unequivocal that "[p]ossibly the greatest benefit of exclusion would be the removal of a potential constraint to the CERP and other Everglades restoration projects." Id. at 62,758; see also id. at 62,740 (explaining that "exclusion of critical habitat from the area of subpopulation A is expected to reduce or eliminate potential conflicts between hydrologic restoration efforts, including CERP, and the designated critical habitat"). CERP is intended to restore hydrologic conditions and vegetation that mimic those existing before human hydrologic manipulation. Id. at 62,758. "Consequently, changes in the extent and location of unfavorable and favorable habitat conditions for sparrows are also likely to occur." Id. The Secretary explained that "[t]this expectation is at odds with evaluation of critical habitat under section 7 of the Act." Id. "Critical habitat designation establishes static boundaries on the landscape and requires evaluation of proposed alterations of the habitat within the critical habitat boundaries." Id. at 62,758-59. "In essence, the requirement to prevent changes from occurring within designated critical habitat boundaries may prevent the change that is intended under CERP." Id. at 62,759. Despite the availability of best available scientific evidence suggesting that CERP would benefit the Sparrow, critical habitat designation of proposed

Units 1 and 2 would likely "have the result of limiting the overall environmental benefits of Everglades restoration." *Id.* 

The Secretary also stated that a further potential benefit of exclusion, as CERP comes to fruition, would be less intensive hydrologic management to maintain the Sparrow. Id.; see also id. at 62,761 (noting that exclusion of Units 1 and 2 would "provide for the maintenance of sparrow habitat through restoration of natural processes instead of through intensive hydrologic management that is quite difficult to administer"). As manmade intervention is deconstructed through CERP, another benefit of exclusion would be avoiding the compartmentalization required of designation that which runs counter to ecosystem-wide restoration, in that restoration instead seeks to increase the connectivity of habitats and water flow. See id. 62,757, 62,759. The Secretary also referred to the numerous comments he had received from the public, the Tribe, and "other resource management agencies expressing opposition and concern about the proposed designation because of potential conflicts with restoration." Id. at 62,759. The Secretary explained that since "the process of planning and implementing CERP projects is a multi-agency, multi-stakeholder collaborative process, exclusion of proposed Units 1 and 2 would provide great benefit in terms of completing the collaborative process of Everglades restoration planning with a goal of achieving a broad variety of environmental benefits, including enhancement of listed species habitats and populations." Id.

The Secretary acknowledged that the area where Sub A occurs will likely experience greater water incursion under CERP thereby raising questions about the sustainability of that area to host the Sparrow. *See id.* at 62,759. The Secretary explained there was less concern that changing conditions under CERP would adversely affect the eastern sub-populations. "These issues are less of a concern in the eastern sparrow subpopulations, which currently support most of the sparrow population and the best available information suggests will support a large amount of sparrow habitat after CERP is complete." *Id.* The Secretary determined that "[b]ased on the best available scientific information, we believe that restoration, when complete, will provide habitat that will be sufficient to support a secure sparrow population." *Id.* "In light of this information, exclusion of proposed Units 1 and 2, the areas within sparrow subpopulation A, would be beneficial to achieving full restoration benefits under CERP and other Everglades restoration projects." Exclusion would allow "conservation efforts to focus on activities intended to advance restoration of the broader Everglades ecosystem, which includes sparrow habitat, instead of focusing resources on regulatory compliance with critical habitat." *Id.* 

Based on these considerations, the Secretary determined that the benefits of excluding proposed Units 1 and 2 would outweigh the benefits of including the Units. *See id.* at 62,759–60. The Secretary explained he chose Units 1 and 2 for exclusion as opposed to other units because "there are differences in the degree of benefit among the different areas." *Id.* at 62,760. "The benefits of exclusion are greatest in those areas where there is the greatest degree of uncertainty in the ultimate outcome of restoration and its effects on current sparrow habitat, and the greatest potential impacts in terms of the potential incompatibility with or limitation of the planned restoration of the ecosystem." *Id.* The Secretary found exclusion benefits to be greatest with Units 1 and 2. *Id.* 

Lastly, in amalgamating all the factors previously cited, the Secretary determined that excluding Units 1 and 2 would not result in the extinction of the Sparrow. *See id.* at 62,761. In its motion for summary judgment, the Secretary adds that "excluding proposed Units 1 and 2 from the critical habitat designation will not result in elimination of the subpopulation [A], let alone

extinction of the species." Defs.' Mem. at 33. "The protections in place through consultation under Section 7 of the ESA, combined with existing management plans and the involvement of the Service in the Everglades restoration process, provide a rational basis for the Service's conclusion that exclusion of proposed Units 1 and 2 will not result in extinction of the sparrow." *Id*.

Against this backdrop, Plaintiffs complain that withdrawing the designation of Units 1 and 2 as critical habitat will allow "approximately 50% of the proposed designation to be destroyed as Sparrow habitat in the name of Everglades restoration." Pls.' Reply & Opp'n to Defs.' & Intervenor's Mots. for Summ. J. [Dkt. ## 36, 37] ("Pls.' Opp'n") at 1 (emphasis omitted). Plaintiffs contend that the Service "has excluded this area from critical habitat precisely to ensure that it can be destroyed as viable habitat for the species." *Id.* at 8 (emphasis omitted). Plaintiffs insist the Secretary's juxtaposition of the benefits of inclusion against the benefits of exclusion holds no ground. Further, they argue that the Secretary's determination that exclusion will not result in the extinction of the species is without support and goes against the Secretary's prior positions.

The Secretary counters that Plaintiffs' argument "is based on the incorrect factual premise that the exclusion of proposed Units 1 and 2 will result in the elimination of Subpopulation A." Defs.' Reply [Dkt. #39] at 3. The Service explains that it "found that Subpopulation A would persist, and that the sparrow is likely to benefit from restoration of the natural hydrologic conditions in its habitat." *Id.* This is actually the heart of the matter. Under Section 4(b)(2) of the ESA, the Secretary can exclude recognized critical habitat from that designation if the benefits of exclusion outweigh the benefits of inclusion and the species will not become extinct as a result of the exclusion.

The balance between designating a crucial swath of critical habitat for the Sparrow,

a single species, and greater flexibility for restoration of the Everglades to benefit the entire ecosystem and its many inhabiting species, is left to the Secretary's discretion as long as it does not result in extinction of the species.<sup>11</sup> The Secretary has provided a rational basis for his decision to exclude the Units and the Court defers to his conclusion. *See Ethyl Corp*, 541 F.2d at 36. The Secretary may consider "any . . . relevant impact" when designating critical habitat and can exclude any area (1) if the benefits of exclusion outweigh the benefits of inclusion and (2) exclusion will not result in the species becoming extinct. 16 U.S.C. § 1533(b)(2). In making this determination the Secretary retains the discretion as to the consideration and weight given to any particular impact. *See Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv.*, No. 5-629, 2006 WL 3190518, \*21 (E.D. CA Nov. 2, 2006) (citation omitted).

The Secretary concluded the most significant benefit of exclusion was that designation of Units 1 and 2 could erect a significant roadblock to the implementation of Everglades restoration, a position well-supported by the record. CERP originates from the well-documented

<sup>&</sup>lt;sup>11</sup> The Tribe questions whether Units 1 and 2 should properly qualify as critical habitat in the first instance. The Tribe claims the fact the Units "will contain a hydrologic Primary Constituent Element ("PCE") that must be artificially maintained is proof that the area does not contain a hydrologic PCE that is essential to the Sparrow's survival. Quite the contrary, the natural hydrology will be the antithesis of what Plaintiffs claim the Sparrow needs. The best available science shows the Everglades restoration will make this area wetter." Intervenor's Mem. in Supp. of Mot. for Summ. J. & Opp'n to Pls.' Mot. for Summ. J. [Dkt. ## 33, 34] at 24–25. Thus, the Tribe continues, any designation of this area would be based on mere speculation or surmise since it is unclear the area in its natural state would contain the necessary PCEs and be capable of supporting the Sparrow. Instead, the Tribe argues the Units should not be designated because the best available evidence suggests the area under restoration would not provide hydrologic conditions suitable for the bird. Id. at 25. Accordingly, failure to designate cannot "destroy" any habitat. Id. at 26. The Service accepts that Units 1 and 2 as currently managed provides the PCEs necessary for the bird and does not join in the Tribe's argument on this point. Whether the area is properly considered critical habitat is ultimately mooted by the Court's finding that the Secretary properly exercised his discretion when he excluded the areas from critical habitat designation.

belief that the restoration process will provide a substantial benefit to the entire Everglades ecosystem, including the Sparrow and other endangered species.<sup>12</sup> The Secretary also considered the opposition of the Tribe and state entities to the designation and found exclusion would benefit the collaborative process required of the multi-stakeholder restoration process.<sup>13</sup> *See Ctr. for* 

<sup>13</sup> Plaintiffs argue that the concerns expressed by the Tribe are irrelevant here as the Service did not consider them or has explicitly rejected them in the past. *See* Pls.' Opp'n at 32–33 (citing *America's Comty. Bankers v. FDIC*, 200 F.3d 822, 835 (D.C. Cir 2000) (noting that "a court can only uphold the decision of an administrative agency on those grounds upon which the record discloses that its action was based") (citation omitted)). In the Proposed Rule, the Service first anticipated that the proposed designation would have "no impact" on Tribal lands. Proposed Rule at 63,995. Thereafter, the Tribe submitted numerous comments reflecting their position that the proposed designation would have the tribe and endangered species within WCA 3A.

In the Final Rule, the Service acknowledged that economic consequences accrued from the loss of tree islands caused by water management plans and high water levels in WCA 3A, but the Service maintained that "the relationship between the IOP water management actions and changes in the rate of tree islands is unknown." Final Rule at 62,746. The Service also conceded that higher water levels in WCA 3A had potentially impacted the snail kite's habitat and its foraging opportunities. *Id.* Again, the Service explained that the "magnitude of marginal increases in water levels in WCA-3A attributable to sparrow conservation efforts remains controversial and uncertain" and that the Service and other entities "have not been able to prove or disprove that sparrow management has contributed to the increased water levels in WCA-3A." *Id.* 

The Service did, however, tweak its stated position in the Proposed Rule and this time acknowledged that the final designation "may result in incidental impacts to lands under perpetual lease to the Miccoukee Tribe of Indians of Florida." *Id.* at 62,757. The Service explained that the area of Units 1 and 2, which are proximate to Tribal lands, have been "a primary focus of concern" for the Tribe and that "critical habitat constraints in these areas may have the greatest effect on Tribal resources." *Id.* at 62,760. Therefore, while the Service and the Tribe apparently disagree as to the certainty of any nexus between Sub A conservation efforts and adverse water management practices in WCA 3A, the Secretary at a minimum considered the Tribe's opposition to the proposed designation to be a relevant impact because of the need for collaboration in executing CERP. *Id.* at 62,759. Further, it appears that the Secretary did not simply consider just the mere fact that the Tribe was opposed to the designation, but that the designation could have effects on Tribal lands, some

<sup>&</sup>lt;sup>12</sup> While not explicitly mentioned by the Secretary in the Final Rule, it bears mentioning that the Service and others have in the past concluded that the *long-term* viability of the Sparrow would be best guaranteed by a return to more natural water timing, volume, and flow conditions. *See, e.g.*, Recovery Plan at 4-364.

*Biological Diversity v. Norton*, 240 F. Supp. 2d 1090, 1105 (D. Ariz. 2003) (deferring to the Service's determination that the impacts of a designation on its relationship with the San Carlos Apache Tribe when the exclusion benefitted the species was a "relevant impact" to be considered under 16 U.S.C. § 1533(b)(2)). The Secretary considered the very real benefits of inclusion that would accrue to the Sparrow by securing its habitat as it currently exists on the western side of the Slough. However, the Secretary determined that even absent critical habitat designation, Sub A would still be afforded some protection under management plans that take into consideration its status as an endangered species, the involvement and intervention of the Service in CERP implementation, and the jeopardy consultation requirement of Section 7 of the ESA. That the Secretary decided to avoid potentially severe impediments to a process that promises so much long-term benefit to all the species of the Everglades cannot be called arbitrary or capricious.

Plaintiffs argue that the alleged conflict between CERP and designation of Units 1 and 2 for the Sparrow is not borne out by the record because designating the areas west of the Shark River Slough is, or can be made, compatible with the goal of Everglades restoration. *See* Pls.' Mem. in Supp. of Mot. for Summ. J. [Dkt. # 23] ("Pls.' Mem.") at 20. Plaintiffs also attack the models and beliefs that forecast higher water levels in the Units under CERP to further its point that CERP and designations are compatible. *See* Pls.' Opp'n at 24–28. It may be that ultimately the goals of designation and CERP could be made compatible or that water levels under CERP may not rise in Units 1 and 2 to the degree anticipated by the Secretary, but that is not the critical question before

apparently adverse, even though the exact link between the harm to WCA 3A and Sparrow conservation was unproven. *See id.* at 62,742 ("In the final rule, we considered potential direct and indirect impacts to Tribal lands and resources that might result from designation of critical habitat when weighing the benefits of exclusion and inclusion."); *see also id.* at 62,746, 62,760.

the Court. Of course, if in due time vindication goes to those who predict the water levels in Units 1 and 2 will not rise to the extent forecast by the Secretary, Sub A would be even less affected by non-designation. Here, the Secretary enunciated rational conclusions based on the record before him. The record is replete with evidence that the goals of CERP—envisioning a return to more natural and unmanaged water flows and levels—would be difficult, if not impossible, to square with designation of Units 1 and 2 as mandating a more unyielding and static water management regime for the area.<sup>14</sup>

Moreover, the Secretary readily admits that "there is a large degree of uncertainty that is inherent in planning Everglades restoration." Final Rule at 62,758. The anticipated hydrologic consequences of restoration on Units 1 and 2 are varied and necessarily involve a degree of scientific uncertainty inherent in a predictive and novel comprehensive restoration effort. Yet, the record supports the view that water levels might rise in most of the area comprising Units 1 and 2, *see, e.g.,* Kenneth G. Ammon, South Florida Water Management District: State Comments (Sept. 17, 2007) [AR Doc. 141] at 2–3,<sup>15</sup> and the Court defers to the Secretary's evaluation of the inherent uncertainty. *See American Wildlands v. Kempthorne*, 530 F.3d 991, 1000 (D.C. Cir. 2008) ("[I]n an area characterized by scientific and technological uncertainty[,]... this court must proceed with particular caution, avoiding all temptation to direct the agency in a choice between rational

<sup>&</sup>lt;sup>14</sup> See, e.g., Excerpt of Sustainable Ecosystems Institute Everglades Avian Ecology Forum: Miccosukee Comments Exhibit 1: Tribe Comments (Aug. 13, 2007) [AR Doc. 207] at 76–77 (noting that after considering various ways to reconcile IOP water levels for Sub A with initial Everglades restoration, the simulations revealed that "there were no options that were able to simultaneously achieve the objectives of [Everglades restoration] and returning the sparrow performance measures for Subpopulation A back to the levels they were with IOP").

<sup>&</sup>lt;sup>15</sup> This document can also be located at: Pls.' Notice of Filing of Administrative Record Document [Dkt. # 43].

alternatives.") (citation omitted).

Plaintiffs especially take exception to the Secretary's determination that current management plans will provide some protection for Sub A in the absence of critical habitat designation. Exclusion will allow for rising water levels in Units 1 and 2, Plaintiffs argue that rising water will necessarily render the area unsuitable habitat for the Sparrow. As the management plans lack jurisdiction over hydrologic conditions, Plaintiffs insist the Secretary severely underestimated the benefits of inclusion when it found these benefits to be small in light of the other protections afforded the Sparrow.

To the contrary, the Secretary explained that the benefits of managements plans are holistic and provide "long-term proactive management of habitats for listed species." Final Rule at 62,759. Any "management plan that considers enhancement, recovery, or restoration as the management standard, or which explicitly addresses the listed species, may provide more benefits for the conservation of this listed species," such as the plan in effect at Big Cypress National Preserve. *Id.* The management plan of the Preserve specifically covers the Sparrow and includes "discussion of conducting research to determine the cause of sparrow decline in the Ochopee region, efforts to reestablish sparrow populations in the Ochopee region, and implementing exotic plant control to minimize effects on sparrows." *Id.* at 62,758. The Secretary was also clear that its representatives would be intimately involved in the planning and implementation of CERP, *id.* at 62,757–58, and that stakeholders would continue to meet every year for the sole purpose of "reviewing sparrow monitoring results, identifying opportunities to improve sparrow habitat, and addressing sparrow management issues." *Id.* at 62,758.

The Secretary also considered that any federally-backed actions, including CERP, that

are found to jeopardize the continued existence of the Sparrow would trigger consultation requirements under Section 7 of the ESA and the possible implementation of reasonable and prudent alternatives to avoid the jeopardy. *Id.* at 62,760. The Secretary points to the fact that a jeopardy finding by the Service in 1999 culminated in cooperation with the Corps to implement measures to mitigate adverse water flows into Sub A's habitat even though the area was not designated as critical habitat. *See* Defs.' Mem. at 35. To be sure, given the underlying purpose of exclusion, a future jeopardy determination may be met with alternatives that do not require the imposition of water management controls. However, the manipulation of water levels, while perhaps the most effective short-term guarantee for Sub A, is not the only measure of protection in the Secretary's arsenal.

The Secretary "considered the relevant factors and articulated an explanation establishing a rational connection between the facts found and the choice made" to exclude Units 1 and 2 from critical habitat designation. *See Cape Hatteras Access Pres. Alliance v. United States DOI*, 731 F. Supp. 2d 15, 22 (D.D.C. 2010). Ultimately, the benefits of the other protections cited by the Secretary may not be as effective a safeguard for Sub A as critical habitat designation, but Sub A need not receive the greatest protection possible as a condition precedent to the Secretary's decision. In the end, the Secretary provides a rational basis for his determination that the overall benefits of exclusion—in, inter alia, allowing CERP to proceed uninterrupted which will benefit the Everglades and the Sparrow—outweigh the benefits of inclusion. Reasoned experts can and do disagree on these questions; they represent precisely the kinds of policy decisions that are entrusted to the Secretary. *See Costle*, 578 F.2d at 339; *Alliance for Bio-Integrity*, 116 F. Supp. 2d at 177; *Marsh*, 490 U.S. at 378.

Plaintiffs lastly dispute the Secretary's determination that the destruction of Sub A's

habitat will not result in the Sparrow's extinction. Plaintiffs argue that "to the extent the agency's refusal to designate this area is predicated on preserving the flexibility to gamble with the extinction of the Sparrow – by destroying the critical habitat west of the Slough in order to see whether that experiment [CERP] will someday and in some way help protect habitat elsewhere," his approach is not sanctioned by the ESA. Pls.' Mem. 39. But the Secretary relied sensibly on the combination of the existing management plans, the fact the birds fall within protected lands, and the Section 7 jeopardy consultation process to assure that exclusion will not result in species extinction. Final Rule at 62,760–61. Additionally, Plaintiffs ignore the plethora of contested scientific prognostication about how CERP will affect Sub A. Many commentators acknowledge that Everglades restoration will likely lead to increased water flows at least to parts of Sub A's habitat, which could render the area unsuitable for nesting. The Secretary asserts that some areas of Units 1 and 2 will remain viable habitat for the bird. *See* Defs.' Reply [Dkt. # 39] 2. The Court is ill-equipped to choose between this contested forecast or to declare the Secretary's reasoning arbitary.

Five other sub-populations exist apart from Sub A, and the Service asserts that the best available evidence indicates that CERP will not threaten the eastern sub-populations but may guarantee them a large amount of habitat, *see* Final Rule at 62,759, and that Everglades Restoration will most likely provide a great benefit to the Sparrow, as a whole, in the long-run.<sup>16</sup> That Plaintiffs

<sup>&</sup>lt;sup>16</sup> It is apparent that the prior determinations that Sub A is critical to the survival of the species were, inevitably, based on current and past hydrologic conditions. As the Secretary suggests, changes in water management contemplated under CERP will affect the analyses and might lead to the Sparrow's eastern sub-populations being better situated to "provide habitat that will be sufficient to support a secure sparrow population." Final Rule at 62,759. The Secretary also pointed out that man-regulated water controls reduced Sub A from a flock of 2,608 birds in 1992 to a mere 240 birds in 1995. Proposed Rule at 63,990. The record also shows that the flock fell even further to a population of 16 birds in 2004, but, as of the last count in the record, had inched up to 112 birds in 2006. *See* 2006 BiOp at 28–29. The Secretary expressed concern that despite water management

disagree with the Secretary's conclusion does not provide a basis for the Court to find that the determination to exclude Units 1 and 2 from critical habitat designation was arbitrary and capricious.

To be sure, Plaintiffs might legitimately feel that their victory has been snatched from them, just as they expected to obtain the revised critical habitat sought since 1999. However, the Secretary has fully explained his change in position from the proposed designation to the Final Rule and he cannot be criticized for taking public comments and Everglades restoration into account in revising the designation to exclude Units 1 and 2. *See Northeast Md. Waste Disposal Auth. v. EPA*, 358 F.3d 936, 951 (D.C. Cir. 2004) ("Agencies, are free – indeed, they are encouraged – to modify proposed rules as a result of the comments they receive."); *Arizona Pub. Serv. Co. v. EPA*, 211 F.3d 1280, 1300 (D.C. Cir. 2000) (stating that "the Agency's change of heart . . . only demonstrates the value of the comments it received").

The Service prepared its Proposed Rule in a hurry, forced by court deadlines and possibly with ESA myopia. When evaluating the best available scientific information limited to the Sparrow, it proposed that Units 1 and 2 be designated critical habitat. Push-back from other stakeholders forced a re-evaluation—the exact purpose of public comment and peer review. With a broader view of conservation of the Sparrow, other species in the Everglades, and the Everglades' ecosystem itself, the Service determined that Sub A would persist without designation; that the Sparrow would not become extinct and would, in fact, prosper in a restored Everglades; that designation of Units 1 and 2 would hamper Everglades restoration; and that these considerations rendered exclusion of Units 1 and 2 more beneficial overall than inclusion. In other words, designation of the Units as critical habitat would impose a static restriction on an area that is

efforts in effect Sub A had not recovered. Proposed Rule at 63,990.

beginning a dynamic and somewhat unpredictable revitalization. The Service has been remarkably candid and straightforward about the difficult choices it faced and its reasoning for the Final Rule.

The Court acknowledges the continuing precarious position of the Sparrow. Plaintiffs raise legitimate and pressing concerns inherent in the Secretary's final designation of critical habitat. These are extremely difficult and complex decisions. The brake on the Secretary's discretion in making such a decision is that it cannot result in a species becoming extinct. The record supports the Secretary's finding that exclusion of Units 1 and 2 from critical habitat will not result in the Sparrow's extinction; Sub A may or may not be adversely affected by CERP while sub-populations B–F should enjoy some amelioration of habitat and possibly thrive. The very complexity of these issues shows that more than one reasonable conclusion could be drawn; under such circumstances, the Secretary is entitled to exercise his discretion. *See Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 66 (2004); *Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 103 (1983) (noting that when a court looks to a decision by an agency that "is making predictions, within its area of special expertise, at the frontiers of science . . . this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential").

#### **IV. CONCLUSION**

For the reasons stated above, the Secretary's Motion for Summary Judgment [Dkt. # 26] will be granted as the Court finds the Secretary properly exercised his discretion under Section 4(b)(2) of the Endangered Species Act to exclude proposed Units 1 and 2 from Cape Sable seaside sparrow critical habitat designation. Accordingly, Plaintiffs' Motion for Summary Judgment [Dkt. # 23] will be denied. The Motion for Summary Judgment of the Miccosukee Tribe of Indians of Florida [Dkt. # 34] will be granted to the extent it also moves the Court to uphold the Secretary's final designation of critical habitat. A memorializing Order accompanies this Memorandum Opinion.

Date: March 16, 2011

/s/ ROSEMARY M. COLLYER United States District Judge