



December 1, 2017

VIA CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Scott Pruitt, Administrator
USEPA Headquarters
1101A
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460

RE: NOTICE OF VIOLATIONS OF THE ENDANGERED SPECIES ACT IN CONNECTION WITH THE ENVIRONMENTAL PROTECTION AGENCY'S APPROVAL OF INCREASING VOLUMES OF RENEWABLE FUELS AND OTHER ACTIONS UNDER THE ENERGY INDEPENDENCE AND SECURITY ACT'S RENEWABLE FUELS STANDARD PROGRAM

Dear Administrator Pruitt:

On behalf of Gulf Restoration Network and Sierra Club, I write to provide you with 60 days' notice of the U.S. Environmental Protection Agency's ("EPA") violations of Section 7 of the Endangered Species Act ("ESA"), 16 U.S.C. § 1536, and its implementing regulations, 50 C.F.R. Part 402.

By failing to initiate and complete consultation with the U.S. Fish and Wildlife Service ("FWS") or the National Marine Fisheries Service (NOAA Fisheries or NMFS) in administering the Energy Independence and Security Act's (EISA) Renewable Fuels Standard Program (RFS) and specifically by taking several actions under the Program, including but not limited to: 1) setting annual volumetric standards for renewable fuels; 2) exercising, or failing to exercise, its general waiver authority; and 3) approving new fuel pathways that use new renewable feedstocks and advanced technologies, EPA has violated its procedural and substantive obligations under ESA Section 7(a)(2), 16 U.S.C. § 1536(a)(2), to insure that its action(s) is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat. Also, EPA has not used the best scientific and commercial data available in fulfilling the requirements of that paragraph. In addition, EPA is in violation of ESA §7(a)(1), 16 U.S.C. §1536(a)(1), by not carrying out its Renewable Fuels Standard Program for the conservation of endangered and threatened species. The FWS and NMFS are likewise in violation of these sections of the ESA and its implementing regulations for not consulting with EPA on these matters, as set forth more fully below.

On July 5, 2017, EPA proposed its renewable fuel volumetric standards for 2018. On July 14 by email and by USPS certified mail (confirmed receipt on July 18), Sierra Club and Gulf Restoration sent a 60-day notice of intent to sue EPA for failing to consult wildlife agencies in carrying out its discretionary duties under the Renewable Fuels Standard Program and specifically in setting its annual renewable fuel volume standards and determining whether to exercise its general waiver authority to reduce renewable fuel volumes below the statutory requirements. On October 4, EPA published a “Notice of Availability of Supplemental Information and Request for Further Comment regarding potential reductions in the Volume Requirements for 2018 Renewable Fuel and 2019 Biomass-Based Diesel Under the Renewable Fuels Standard Program.” The supplemental publication did not indicate that EPA had conducted or initiated consultation with wildlife agencies to ensure against jeopardy to federally listed species in considering whether it should exercise its general waiver authority to lower total renewable fuel volumes in its 2017 rulemaking. On November 30, 2017, EPA announced its final renewable fuel standards for 2018 (and 2019 volume for biomass-based diesel) which maintain the current total renewable fuel volume requirements and the statute’s implied maximum conventional renewable fuel volumes. Based on this and other information described below, it appears that EPA has failed to conduct its required Endangered Species Act consultation in taking this and other actions in its administration of the Renewable Fuels Standard Program.

If the statutory violations described herein are not promptly and diligently rectified within the 60-day period commencing with receipt of this letter, Sierra Club and Gulf Restoration Network intend to file suit in federal court to seek appropriate legal and equitable remedies. This notice is provided in fulfillment of the requirements of the citizen suit provision of the ESA, 16 U.S.C. § 1540(g)(2)(A)(i).

I. LEGAL FRAMEWORK

A. THE ENDANGERED SPECIES ACT (ESA)

Congress enacted the Endangered Species Act in 1973 to provide for the conservation of endangered and threatened fish, wildlife, plants, and their natural habitats.¹ The ESA imposes substantive and procedural obligations on all federal agencies with regard to listed and proposed species and their critical habitats.²

Section 7 of the ESA and its implementing regulations require each federal agency, in consultation with the appropriate wildlife agency – here, the FWS and NMFS (hereafter “wildlife agencies”) – to insure that any action authorized, funded, or carried out by the agency is not likely to (1) jeopardize the continued existence of any threatened or endangered species or (2) result in the destruction or adverse modification of the critical habitat of such species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a).

¹ See *id.* § 1531. Congress defined “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 [the Act] are no longer necessary.” *Id.* § 1532(3).

² See *id.* § 1536(a)(1), (a)(2), (a)(4); *id.* § 1538(a); 50 C.F.R. § 402.01.

“Action” is broadly defined to include actions that may directly or indirectly cause modifications to the land, water, or air, and actions that are intended to conserve listed species or their habitat. 50 C.F.R. § 402.02. An action would “jeopardize the continued existence of” a species if it “reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” *Id.* “Destruction or adverse modification” of critical habitat means “a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.” *Id.*

For each federal action, the federal action agency – here, EPA – must request from the wildlife agencies a list of any ESA-listed or proposed species that may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. “Action area” is defined by regulation to be broader than simply the project area: it means “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” 50 C.F.R. § 402.02.

If the action agency determines that its proposed action will not affect listed species or critical habitat, it is not obligated to consult with wildlife agencies. 50 C.F.R. § 402.14. Effects determinations must be based on the sum of the direct, indirect, and cumulative effects of the action, added to the environmental baseline and interrelated and interdependent actions. *Id.* § 402.02 (defining “effects of the action.”). The threshold for triggering consultation is low: if the action agency determines that its proposed action may affect any listed species or critical habitat, it must engage in formal or informal consultation with the wildlife agencies. 50 C.F.R. §§ 402.13, 402.14; *see also Heartwood v. Kempthorne*, 302 Fed. Appx. 394, 395 (6th Cir. 2008).

To complete informal consultation, the action agency must determine, with the written concurrence of the wildlife agencies, that the action is not likely to adversely affect listed species or critical habitat. 50 C.F.R. § 402.13(a). If the action is likely to adversely affect listed species or critical habitat, the action agency and wildlife agencies must engage in formal consultation. *Id.* § 402.14. To complete formal consultation if the agency action is not likely to result in jeopardy or destruction or adverse modification of critical habitat, the wildlife agency must provide the action agency with a biological opinion, explaining how the proposed action will affect the listed species or habitat, together with an incidental take statement and any reasonable and prudent measures necessary to avoid jeopardy. 16 U.S.C. § 1536(b); 50 C.F.R. §§ 402.14(g)-(i). If the relevant wildlife agency, however, determines that the action is likely to jeopardize the species or result in the destruction or adverse modification of critical habitat, the agency “shall suggest those reasonable and prudent alternatives which [it] believes” would not result in jeopardy or adverse modification. 16 U.S.C. § 1536(b)(3).

The action agency also has a mandatory duty to confer with wildlife agencies on any actions that are “likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat.” 50 C.F.R. § 402.10(a). Although prior to final listing or final critical habitat designation, the conference opinion is advisory, not binding, the conference process “is designed to assist the Federal agency and any

applicant in identifying and resolving potential conflicts at an early stage in the planning process.” *Id.*

Throughout the consultation process, the wildlife agencies must use “the best scientific and commercial data available” to evaluate the impacts the action will have on listed species and to provide its “biological opinion” whether, as a result of those impacts, the action is likely to result in jeopardy or destruction of critical habitat. 16 U.S.C. §§ 1536(a)(2) & (b)(3); 50 C.F.R. § 402.14(g). The action agency also has an independent obligation to “use the best scientific and commercial data available” under Section 7. 16 U.S.C. § 1536(a)(2).

Once the action agency has initiated consultation, Section 7(d) prohibits it from making “any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate [ESA Section 7(a)(2)]. 16 U.S.C. § 1536(d); 50 C.F.R. § 402.09.

In addition, an action agency will engage in “programmatic consultation” with wildlife agencies when the action agency carries out a program comprised of multiple actions that have regional or nationwide impacts that may affect a wide variety of listed species over a long period of time. Programmatic consultation is appropriate in situations where it may not be feasible to conduct site specific and species specific effects analyses, or in a rulemaking context because of its programmatic nature and the fact that a rule may not be self-effecting (i.e. it is implemented only through some future action). In the context of a rulemaking, agencies conduct programmatic consultation to examine whether and to what degree the action agency has structured a rule to ensure that its implementation is not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat. Programmatic consultation helps to better assess several factors related to the agency action, including but not limited to: better understanding the scope of its action; reliably estimating the physical, chemical, or biotic stressors that are likely to be produced as a direct or indirect result of their action; minimizing adverse effects of such activities on ESA-listed species and designated critical habitat; continuous monitoring and evaluating of likely adverse effects on listed species and critical habitat; better monitoring and enforcement of program compliance; modifying its action if new information (including inadequate protection for species or low levels of compliance) becomes available. Programmatic consultation helps to ensure the action agency is meeting its section 7(a)(2) obligations when overseeing the implementation of a program and carrying out multiple actions to administer the program.³ Importantly, programmatic consultation does not necessarily mean that individual actions taken under the program would avoid action-specific consultation.

Section 9 of the ESA prohibits any person, including any federal agency, from “taking” any listed species without proper authorization through a valid incidental take permit. 16 U.S.C. § 1538(a)(1)(B); 50 C.F.R. § 17.31(a) (extending the “take” prohibition to threatened species). The term “take” is statutorily defined broadly as “to harass, harm, pursue, hunt, shoot, wound,

³ See “Endangered Species Act Section 7 Consultation Programmatic Biological Opinion on the U.S. Environmental Protection Agency’s Issuance and Implementation of the Final Regulations Section 316(b) of the Clean Water Act,” at 35-36, (May 2014), available at http://www.nmfs.noaa.gov/pr/consultation/opinions/biop_epa_cwa316b_2014.pdf. .

kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19). The definition of “harm” has been defined broadly by regulation as “an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.” 50 C.F.R. § 17.3; *see also Babbitt v. Sweet Home Ch. Of Communities for a Great Oregon*, 515 U.S. 687 (1995) (upholding regulatory definition of harm). Courts have found federal agencies liable for unlawful take of listed species where agency-authorized activities resulted in the killing or harming of such species. *See, e.g., Defenders of Wildlife v. Adm’r, Env’tl. Prot. Agency*, 882 F.2d 1294 (8th Cir. 1989).

B. THE ENERGY INDEPENDENCE AND SECURITY ACT (EISA) AND THE RENEWABLE FUEL STANDARD (RFS)

The Energy Policy Act of 2005 (EPAct), which amended the Clean Air Act, created the national Renewable Fuel Standard Program (RFS1). 42 U.S.C. § 7546. RFS1 required reduction and replacement of petroleum-based transportation fuel, heating oil and jet fuel with a certain volume of renewable fuel. Under the EPAct, Congress mandated the use of a minimum of 4 billion gallons of renewable fuel in the nation’s gasoline supply in 2006, and increased the threshold to 7.5 billion gallons by 2012.

The Energy Independence and Security Act of 2007 (EISA) further amended the Clean Air Act by expanding the RFS Program (RFS2) in several significant ways. 42 U.S.C. § 7545(o). RFS2 increased the long-term volume goals for total renewable fuels to 36 billion gallons by 2022, subdivided the total renewable fuel requirement into four categories – total renewable fuels, advanced biofuels, biomass-based diesel, and cellulosic biofuels – each with explicit qualifying criteria and standards, and established grandfathering allowances exempting existing facilities producing renewable fuels from greenhouse gas reduction requirements. 42 U.S.C. § 7545(o)(2)(B)(i)(I),(II),(III),(IV).

EPA administers the Renewable Fuels Standard Program which is comprised of several ongoing and annual actions and determinations to fulfill its statutory mandates.⁴ Under RFS2, EPA determines whether a fuel qualifies as a renewable fuel based on statutory and regulatory criteria and determines the annual volume mandate for each category of biofuel. 42 U.S.C. § 7545(o)(2)(A)(i).⁵ Each fuel is subject to biomass feedstock criteria as well as a minimum lifecycle greenhouse gas emission reduction threshold as compared to the lifecycle greenhouse gas emissions of the 2005 petroleum based fuels that it replaces. 42 U.S.C. § 7545(o)(1)(C).

The RFS further defines the four categories of renewable fuels as follows:

- Total renewable fuel – These biofuels are required to reduce lifecycle greenhouse gas (“GHG”) emissions by at least

⁴ *See* <https://www.epa.gov/renewable-fuel-standard-program> for an overview of the Renewable Fuels Standard Program.

⁵ EPA conducts public notice and comment with each of these agency actions.

20% relative to conventional fuels to qualify as a renewable fuel. Most biofuels, including corn-starch ethanol from new facilities, qualify for this mandate. However, under the EISA the volume of corn-starch ethanol included in the Renewable Fuel Standard was capped at 13.8 billion gallons in 2013, but grew to 15 billion gallons by 2015 and became fixed thereafter.

- **Advanced biofuels** – Advanced biofuels must reduce lifecycle GHG emissions by 50% to qualify. Advanced biofuels are a subcomponent of the total renewable fuels mandate. Corn-starch ethanol is expressly excluded from this category. Cellulosic biofuel and biomass-based diesel (defined below) are considered advanced biofuels. Potential feedstock sources include grains such as sorghum and wheat. Imported Brazilian sugarcane ethanol, as well as biomass-based biodiesel and biofuels from cellulosic materials (including non-starch parts of the corn plant such as the stalk and cob) also qualify. The total advanced biofuel statutory mandate for 2013 was 2.75 billion gallons (ethanol equivalent) but increases to 21 billion gallons by 2022.
- **Cellulosic and agricultural waste-based biofuel** – Cellulosic biofuels must reduce lifecycle GHG emissions by at least 60% to qualify. Cellulosic biofuels are derived from cellulose, hemicellulose, or lignin. This includes cellulosic biomass ethanol as well as any biomass-to-liquid fuel such as cellulosic gasoline or diesel. The statutory mandate requires 100 million gallons in 2010 and grows to 16 billion gallons in 2022. From 2010 to 2017, EPA lowered the Renewable Fuel Standard mandate for this category using its waiver authority.
- **Biomass-based biodiesel** – Any diesel fuel made from biomass feedstocks (including algae) qualifies, including biodiesel (mono-alkyl esters) and non-ester renewable diesel (e.g., cellulosic diesel). The lifecycle GHG emissions reduction threshold is 50%. EPA established the 2013 mandate at 1.28 billion gallons (actual volume). The mandate grew from 0.5 billion gallons in 2009 to 1 billion gallons in 2012.⁶

⁶ Schnepf & Yacobucci, Congressional Research Service, *Renewable Fuel Standard: Overview and Issues*, available at: <https://www.ifdaonline.org/IFDA/media/IFDA/GR/CRS-RFS-Overview-Issues.pdf> (Mar. 14, 2013).

Importantly, there is no statutory volume requirement for "conventional" biofuel which are the biofuels that do not qualify as "advanced biofuels," i.e., corn-based ethanol, and are included as part of the "total renewable fuels" category. Conventional volumes are calculated by subtracting "advanced biofuels" from "total renewable fuels".

EPA also reviews and approves on an ongoing basis new pathways for fuels using new feedstocks and advanced technologies to meet the RFS2. 40 C.F.R. 80 § 1416. A renewable fuel pathway includes three components: 1) feedstock, 2) production process, and 3) fuel type. Each combination of the three components is a separate fuel pathway which is assigned one or more "D-codes" representing Renewable Fuel Identification Numbers (RINs) that reflect the volume and renewable composition (i.e., renewable fuels, advanced biofuel, biomass-based diesel, cellulosic biofuel or cellulosic diesel) of each gallon of renewable fuel. RINs are the credits generated when fuel is produced. Regulated parties must obtain sufficient quantities of RIN credits on an annual basis to demonstrate compliance with the Program. 40 C.F.R. 80 §§ 1125,1126.

In setting the annual volumetric standard for each biofuel category and corresponding compliance percentages for regulated parties, 42 U.S.C. § 7545(o)(3)(B)(i), EPA is guided by targets set out in the statute. However, EPA has a specific general authority to waive RFS volumes, in whole or in part, (1) if there is inadequate domestic supply, or (2) if "implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States." 42 U.S.C. § 7545(o)(7)(A). To date, EPA has only exercised its general waiver authority based on an insufficient domestic supply.⁷

The following table shows Congressional renewable fuel volume targets set out in EISA through 2022.⁸

Volume Standards as Set Forth in EISA					
Year	Cellulosic Biofuel	Biomass-Based Diesel	Advanced Biofuel	Total Renewable Fuel	"Conventional" Biofuel

⁷ U.S. Environmental Protection Agency Office of Inspector General, "EPA Has Not Met Certain Statutory Requirements to Identify Environmental Impacts of Renewable Fuel Standard," (Aug. 18, 2016) at 2 (hereafter IG Report).

⁸ U.S. Environmental Protection Agency, Renewable Fuel Standard Program, Overview for Renewable Fuel Standard, found at: <https://www.epa.gov/renewable-fuel-standard-program/overview-renewable-fuel-standard>.

Volume Standards as Set Forth in EISA

Year	Cellulosic Biofuel	Biomass-Based Diesel	Advanced Biofuel	Total Renewable Fuel	"Conventional" Biofuel
2009	NA	0.5	0.6	11.1	10.5
2010	0.1	0.65	0.95	12.95	12.0
2011	0.25	0.8	1.35	13.95	12.6
2012	0.5	1.0	2.0	15.2	13.2
2013	1.0	*	2.75	16.55	13.8
2014	1.75	*	3.75	18.15	14.4
2015	3.0	*	5.5	20.5	15.0
2016	4.25	*	7.25	22.25	15.0
2017	5.5	*	9.0	24.0	15.0
2018	7.0	*	11.0	26.0	15.0

Volume Standards as Set Forth in EISA					
Year	Cellulosic Biofuel	Biomass-Based Diesel	Advanced Biofuel	Total Renewable Fuel	"Conventional" Biofuel
2019	8.5	*	13.0	28.0	15.0
2020	10.5	*	15.0	30.0	15.0
2021	13.5	*	18.0	33.0	15.0
2022	16.0	*	21.0	36.0	15.0

*statute sets 1 billion gallons minimum, but EPA may raise requirement

The following table shows EPA’s annual renewable fuel volume requirements promulgated for 2014 through 2018 based on the above statutory targets.⁹ The standards demonstrate an increase of 1.2 billion gallons between 2016 and 2017 alone – a 6% increase.

Renewable Fuel Volume Requirements for 2014-2018					
	2014	2015	2016	2017	2018

⁹ U.S. Environmental Protection Agency, Renewable Fuel Standard Program, Final Renewable Fuel Standards for 2017, and the Biomass-Based Diesel Volume for 2018, found at: <https://www.epa.gov/renewable-fuel-standard-program/final-renewable-fuel-standards-2017-and-biomass-based-diesel-volume>; See U.S. Environmental Protection Agency, Renewable Fuel Standard Program, Final Renewable Fuel Standards for 2018, and the Biomass-Based Diesel Volume of 2019, found at: <https://www.epa.gov/renewable-fuel-standard-program/final-renewable-fuel-standards-2018-and-biomass-based-diesel-volume>.

Renewable Fuel Volume Requirements for 2014-2018

	2014	2015	2016	2017	2018
Cellulosic biofuel (million gallons)	33	123	230	311	288
Biomass-based diesel (billion gallons)	1.63	1.73	1.9	2.0	2.1
Advanced biofuel (billion gallons)	2.67	2.88	3.61	4.28	4.29
Renewable fuel (billion gallons)	16.28	16.93	18.11	19.28	19.29

II. ETHANOL GROWTH RESULTING FROM INCREASED RENEWABLE FUEL VOLUME MANDATES HAVE RESULTED IN SIGNIFICANT LAND CONVERSION AND IMPACTS TO ECOSYSTEMS AND HABITAT

Although the push for renewable fuels in creating the RFS was well intentioned – to secure energy independence, reduced greenhouse gas emissions and other harmful pollution and to spur economic development in rural America – the policy’s drive to increase plant-based fuels has had unanticipated impacts on our land, water, and wildlife habitat. The statutory requirement to increase renewable fuels and EPA’s corresponding annual standards that have steadily increased renewable fuel volumes have led to significant ethanol growth across America’s landscape. By 2015 and continuing through 2022, the law’s renewable fuel targets suggest annual corn ethanol volumes of 15 billion gallons. Accordingly, EPA’s 2017 volumetric standards set ethanol volumes at 15 billion gallons. 81 Fed. Reg. 89746 (Dec. 12, 2016). The recently announced 2018 volumetric standards maintain this same maximum level.¹⁰ In addition, the law sets targets for increasing volumes of “advanced” biofuels derived from other feedstocks to total 21 billion gallons by 2022. 42 U.S.C. § 7545(o). Even though advanced biofuel development has not kept pace with statutory targets, prompting EPA to exercise its waiver authority and set annual advanced biofuel standards at levels below the statutory target, ethanol growth has kept pace with targets. In fact, its growth has gone unchecked, causing significant negative impacts in return for arguably uncertain carbon reduction benefits.¹¹

¹⁰ See <https://www.epa.gov/sites/production/files/2017-11/documents/2018-rfs-annual-rule-firm-2017-11-30.pdf>.

¹¹ David DeGennaro, National Wildlife Federation, *Fueling Destruction: The Unintended Consequences of the Renewable Fuel Standard on Land, Water, and Wildlife*, (2016), available at: http://www.nwf.org/~media/PDFs/Education-Advocacy/Fueling-Destruction_Final.ashx (hereafter DeGennaro).

The policy has propelled historically high levels of corn production for ethanol. Over 97 percent of biofuels produced in the United States are derived from corn and there is little potential to spur growth of new fuels from other feedstocks.¹² To meet federal mandates, approximately 40 percent of the U.S. corn crop is diverted to biorefineries for fuel production (up from 9 percent in 2001).¹³ At more than 90 million acres, corn production dominates the agricultural landscape.¹⁴

Farmers have achieved increased corn productivity for ethanol through various methods. On lands already under cultivation, farmers are changing crop rotations in favor of consecutive years of corn, double-cropping, increasing chemical fertilizer and pesticide application to maximize crop density. In addition, farmers have brought large new swaths of land under cultivation for the first time causing the elimination of valuable ecosystems.¹⁵

A University of Wisconsin study found overall land conversion of 7.3 million acres into crop land from 2008 to 2012, the first four years of the expanded renewable fuel mandate.¹⁶ Much of these lands were comprised of grassland, wetlands and forest that had not been cropland for more than 20 years. The greatest total expansion was concentrated in the Dakotas, along the border of Southern Iowa and Northern Missouri, and in the Western parts of Kansas, Oklahoma, and the Texas panhandle.¹⁷ Studies in the “corn belt” states found conversion of more than 1.3 million acres of grassland into corn or soy crops between 2006 and 2011.¹⁸ Expansion also occurred in the Western Plains from South Dakota to New Mexico, which traditionally have not been locations suitable for agriculture. Northern Minnesota, Wisconsin, Southern Missouri, Eastern Oklahoma, and parts of the Appalachians experienced conversion along forest boundaries. A recent study on land conversion in Michigan, Minnesota and Wisconsin between

¹² *Id.* at 6.

¹³ *Id.* It should be noted that the use of dried distillers grain – a byproduct of ethanol production – as livestock feed reduces ethanol’s overall impact. U.S. Department of Agriculture & Economic Research Service. <http://www.ers.usda.gov/topics/crops/corn/background.aspx>.

¹⁴ *Id.*

¹⁵ *Id.* at 3.

¹⁶ Lark, T.J., Salmon, J.M. & Gibbs, H.K. Cropland expansion outpaces agricultural and biofuel policies in the United States, *Environmental Research Letters*, Vol. 10, 044003 (2015); DeGennaro at 7. “Taking into account other land use fluctuations during that time, the net expansion was 2.9 million acres of cropland – an area larger than the state of Massachusetts. However, this is likely an underestimate since the study evaluated only parcels of land 15 acres or greater in size, leavening out smaller areas converted along the periphery of existing fields.”

¹⁷ Tyler J Lark *et al* 2015 *Environ. Res. Lett.* Vol. 10, 044003 (2015).

¹⁸ Wright, C.K. & Wimberly, M.S. Recent land use change in the Western Corn Belt threatens grasslands and wetlands. *Proceedings of the National Academy of Sciences*, Vol. 110, 4134-4139 (2013).

2008 and 2013 documents a loss of 2 million acres, or a 37% loss of non-agricultural open space. At the same time corn acreage in those states increased by 36 percent.¹⁹

Certain parts of the country identified as “hot spots” due to intense land conversion are of particular concern because they serve as particularly unique and valuable habitat for wildlife, such as the Prairie Pothole Region wetlands of the Upper Midwest which function as the primary North American breeding ground for ducks and other waterfowl.²⁰ In this region land conversion to corn and soy steadily increased between 2006 and 2012, with the region experiencing a 27 percent increase in corn and soy acreage between 2010 and 2012 alone. The total acreage was equivalent to an area larger than the state of Connecticut.²¹

The University of Wisconsin study also determined that the majority of the landscapes lost as a result of the RFS are grasslands, including native prairie, pasture, and federal Conservation Reserve Program lands, accounting for 77 percent of new farmland. One-quarter of these grasslands, which were in grass for more than 20 years are known for their high value for wildlife and carbon sequestration.²² In addition, forest lands comprised three percent of new cropland while wetlands comprised two percent of new cropland.²³ Of particular concern is the loss of grassland immediately surrounding wetlands, which, like wetlands, serve the critical function of providing habitat and food for nesting waterfowl and other species.²⁴ Ethanol production has also wiped out other uniquely important ecosystems, including marginal lands at the edge of existing cropland supporting pollinators like bees and monarch butterflies, and buffer strips along waterways that filter polluted farm runoff before depositing into waterways that serve as drinking water sources and support aquatic species.²⁵

Corn production’s expansion, in large part, can be attributed to the RFS’s Congressionally-mandated use of corn ethanol in transportation fuels.²⁶ There is a body of evidence demonstrating that the RFS mandate, particularly corn-based ethanol and soy-based biodiesel, at increasing rates, has directly contributed to the large scale destruction of sensitive and critical natural areas and ecosystems.²⁷

¹⁹ Mladenoff, D.J., Sahajpal, R., Johnson, C.P. & Rothstein, D.E. Recent Land Use Change to Agriculture in the US Lake States: Impacts on Cellulosic Biomass Potential and Natural Lands. *PloS one*, Vol. 11, e0148566 (2016).

²⁰ DeGennaro at 3.

²¹ Johnston, C.A. Agricultural expansion: land use shell game in the US Northern Plains. *Landscape ecology*, Vol. 29, 81-95 (2014).

²² Tyler J Lark *et al* 2015 *Environ. Res. Lett.* Vol. 10, 044003 (2015).

²³ *Id.*

²⁴ Wright, C.K. & Wimberly, M.S. Recent land use change in the Western Corn Belt threatens grasslands and wetlands. *Proceedings of the National Academy of Sciences*, Vol. 110, 4134-4139 (2013).

²⁵ DeGennaro at 4.

²⁶ *Id.*

²⁷ *Id.*

Despite clear documentation, EPA has refused to implement land conversion protections built into the law. Under the law, renewable biomass is defined to include seven categories of biomass feedstock including feedstock derived from planted crops or crop residue which must be harvested from “agricultural land cleared or cultivated at any time prior to [EISA’s enactment in] December 2007, that is actively managed or fallow, and non-forested.” 42 U.S.C. § 7545(o)(1)(I). EPA further defined “agricultural land” from which crops and crop residue can be harvested to qualify as a renewable fuel to include cropland, pastureland, and land enrolled in the Conservation Reserve Program. 75 Fed. Reg. 58 at 14681 (Mar. 26, 2010). Rather than directly requesting information from ethanol producers to verify that their feedstock originated on eligible land, EPA established an “aggregate compliance” approach that compares total “agricultural land” each year to a baseline level of “agricultural land” production that existed in 2007. Specific recordkeeping and reporting requirements to prevent impermissible land use conversion for fuel producers using plant crops or crop residues would be triggered only if a certain agricultural production threshold is exceeded. *Id.* The “aggregate compliance” method to determining impermissible land use conversion under the law is based on several flawed assumptions and EPA has never taken action or made efforts to reign in producers responsible for land conversion despite clear evidence of land clearing for corn production.²⁸

III. ENDANGERED SPECIES ACT LISTED SPECIES AND DESIGNATED CRITICAL HABITAT MAY BE AFFECTED BY EPA’S POLICY OF UNABATED LAND USE CHANGE UNDER THE RENEWABLE FUEL STANDARD PROGRAM

Dramatic land conversion that has occurred, largely as a result of the RFS ethanol mandate, has had adverse impacts on habitat and the species that depend on these ecosystems. The loss of natural areas to cultivation has resulted in direct mortality to species as well as loss of seasonal habitat provided by grasslands for spring nesting, brooding, fawning cover, loss of winter food and cover.²⁹ Expansion of corn and soybean production has been identified as the greatest source of wetland loss in the North and South Dakota Prairie Pothole Region, which produces more than 60 percent of the country’s total duck population.³⁰ The expansion of corn agriculture in particular also has significantly affected waterfowl, grassland birds, monarch butterflies, bees, other native pollinators, and mammals.³¹ Adding to the loss of habitat for

²⁸ *Id.* at 12; U.S. Department of Agriculture & Farm Service Agency. *Crop Acreage Data*, <https://www.fsa.usda.gov/news-room/efoia/electronic-reading-room/frequently-requested-information/crop-acreage-data/index>. (USDA reported an increase in planted acres of commodity crops from 242.6 million in 2007 to 249 million in 2013, and the conversion of almost 400,000 acres of non-cropland to cropland over between 2011 and 2012. Studies also have confirmed that the dramatic increase in corn production and associated land conversion are the result of the RFS, with conversion rates after passage of the RFS in 2007 at nine times higher than the years prior.)

²⁹ DeGennaro at 13.

³⁰ *Id.*

³¹ *Id.* at 14.

diverse species is the push toward intensively managed monocultures under the RFS rather than a diversity of vegetation.³²

In addition, widespread cultivation of corn for ethanol has significant impacts on water quality and aquatic habitat. Corn production is associated with high levels of nutrient loss and soil erosion, leading to contamination of water supplies.³³ Corn, as opposed to other biofuel crops, requires the highest level of fertilizer and pesticide application resulting in higher runoff from fields into waterways.³⁴ Ethanol production, which is largely sourced by corn grown in the Mississippi River watershed and Great Lakes Basin, places the largest burden of potential water quality impacts on the Great Lakes and the Gulf of Mexico.³⁵ Recent land conversion studies demonstrate that conversion from pasture to corn leads to increased sediments yields of up to 127 percent.³⁶

Excessive nutrient runoff from more intensive agriculture have led to severe algal blooms in water bodies including the Great Lakes. The majority of land in the Mississippi River watershed, which drains into the Gulf of Mexico, is farmland. Massive land based nutrient runoff into rivers and streams that flow into the Mississippi River and ultimately drain into the Gulf of Mexico is the largest contributor to the documented hypoxic area known as the “Dead Zone.”³⁷ Located at the mouth of the Mississippi in the Gulf, the Dead Zone threatens marine habitat on an enormous scale.³⁸ In fact, studies show that addressing the annual Dead Zone to improve

³² *Id.* at 15.

³³ DeGennaro at 16.

³⁴ National Research Council & Committee on Economic and Environmental Impacts of Increasing Biofuels Production. *Renewable fuel standard: potential economic and environmental effects of US biofuel policy.* (National Academies Press, 2011); Housh, M., M. Khanna & Cai, X. Mix of First and Second Generation Biofuels to meet Multiple Environmental Objectives: Implications for Policy as a Watershed Scale. *Water Economics and Policy*, Vol. 1, 26 (2015).

³⁵ Wallander, S., Claassen, R. & Nickerson, C. The ethanol decade: an expansion of US corn production, 2000-09. *USDA-ERS Economic Information Bulletin* (2011); U.S. Congressional Budget Office. *The Renewable Fuel Standard: Issues for 2014 and Beyond.* Report No. 45477, (Congressional Budget Office, Washington, DC, 2014).

³⁶ Shao, Y., Lunetta, R.S. Macpherson, A.J., Luo, J. & Chen, G. Assessing sediment yield for selected watersheds in the Laurentian great lakes basin under future agricultural scenarios, *Environmental management*, Vol. 51, 59-69 (2013).

³⁷ Joyce, Christopher. 2010. “Massive 'Dead Zone' Threatens Gulf Marine Life” (radio report). National Public Radio, Morning Edition Transcript, available at www.npr.org/templates/story/story.php?storyId=128946110.

³⁸ Donner, S.D. & Kucharik, C.J. Corn-based ethanol production compromises goal of reducing nitrogen export by the Mississippi River. *Proceedings of the National Academy of Sciences*, Vol. 2015, 4513-4518 (2008).

conditions for marine life is practically impossible under the current RFS volume mandates, without huge shifts in food production.³⁹

This phenomenon is described by NOAA:

Scientists have found this year's [2015] Gulf of Mexico dead zone — an area of low to no oxygen that can kill fish and marine life — is, at 6,474 square miles, above average in size and larger than forecast by NOAA in June. The larger than expected forecast was caused by heavy June rains throughout the Mississippi River watershed.

The measured size this year — an area about the size of Connecticut and Rhode Island combined — is larger than the 5,052 square miles measured last year, indicating that nutrients from the Mississippi River watershed are continuing to affect the nation's coastal resources and habitats in the Gulf. The size is larger than the Gulf of Mexico / Mississippi River Watershed Nutrient Task Force (Hypoxia Task Force) target of 1,900 square miles.

...

The hypoxic zone off the coast of Louisiana and Texas forms each summer threatening the ecosystem that supports valuable commercial and recreational Gulf fisheries. NOAA-funded research in the past decade shows hypoxia results in habitat loss, displacement of fish (including shrimp and croaker) from their preferred areas, and a decline in reproductive ability in some species.⁴⁰

An article, entitled "Corn boom could expand 'dead zone' in Gulf," summarizes the contribution of corn ethanol production to the Dead Zone:

JEFFERSON, Iowa — Because of rising demand for ethanol, American farmers are growing more corn than at any time since World War II. And sea life in the Gulf of Mexico is paying the price.

The nation's corn crop is fertilized with millions of pounds of nitrogen-based fertilizer. And when that nitrogen runs off fields in Corn Belt states, it makes its way to the Mississippi River and eventually pours into the Gulf, where it contributes to a growing "dead zone" — a 7,900-square-mile patch so depleted of oxygen that fish, crabs and shrimp suffocate.

³⁹ Donner, S. D. & Kucharik, C. J., *Corn-based ethanol production compromises goal of reducing nitrogen export by the Mississippi River*, Proceedings of the National Academy of Sciences, Vol. 105, 4513- 4518 (2008)

⁴⁰ NOAA, "2015 Gulf of Mexico dead zone 'above average'," (Aug. 4, 2015), available at <http://www.noaanews.noaa.gov/stories2015/080415-gulf-of-mexico-dead-zone-above-average.html>

The dead zone was discovered in 1985 and has grown fairly steadily since then, forcing fishermen to venture farther and farther out to sea to find their catch. For decades, fertilizer has been considered the prime cause of the lifeless spot.

With demand for corn booming, some researchers fear the dead zone will expand rapidly, with devastating consequences.

"We might be coming close to a tipping point," said Matt Rota, director of the water resources program for the New Orleans-based Gulf Restoration Network, an environmental group. "The ecosystem might change or collapse as opposed to being just impacted."

Environmentalists had hoped to cut nitrogen runoff by encouraging farmers to apply less fertilizer and establish buffers along waterways. But the demand for the corn-based fuel additive ethanol has driven up the price for the crop, which is selling for about \$4 per bushel, up from a little more than \$2 in 2002.

That enticed American farmers — mostly in Iowa, Illinois, Minnesota, North Dakota and South Dakota — to plant more than 93 million acres of corn in 2007, the most since 1944. They substituted corn for other crops, or made use of land not previously in cultivation.

Corn is more "leaky" than crops such as soybean and alfalfa — that is, it absorbs less nitrogen per acre. The prime reasons are the drainage systems used in corn fields and the timing of when the fertilizer is applied.

The Environmental Protection Agency estimates that up to 210 million pounds of nitrogen fertilizer enter the Gulf of Mexico each year. Scientists had no immediate estimate for 2007, but said they expect the amount of fertilizer going into streams to increase with more acres of corn planted.

"Corn agriculture practices release a lot of nitrogen," said Donald Scavia, a University of Michigan professor who has studied corn fertilizer's effect on the dead zone. "More corn equals more nitrogen pollution."

Farmers realize the connection between their crop and problems downstream, but with the price of corn soaring, it doesn't make sense to grow anything else. And growing corn isn't profitable without nitrogen-based fertilizer.

"I think you have to try to be a good steward of the land," said Jerry Peckumn, who farms corn and soybeans on about 2,000 acres he owns or leases near the Iowa community of Jefferson. "But on the other hand, you can't ignore the price of corn."

Peckumn grows alfalfa and natural grass on the 220 or so acres he owns, but said he cannot afford to experiment on the land he rents.

The dead zone typically begins in the spring and persists into the summer. Its size and location vary each year because of currents, weather and other factors, but it is generally near the mouth of the Mississippi.⁴¹

The Dead Zone impacts endangered and threatened species such as the Gulf sturgeon, Loggerhead turtle and Sperm whale. The huge influx of nutrients such as nitrogen and phosphorous cause massive phytoplankton blooms leading to a large increase in zooplankton that feed on phytoplankton. Large amounts of dead phytoplankton and zooplankton waste then accumulates on the seafloor, burying bottom dwellers and prey for larger fish and mammals that frequent these waters for food, nesting and raising young. The decomposition of plankton matter depletes the oxygen in the area faster than it can be replaced, causing the large hypoxic Dead Zone.⁴² Although the federal government promised to find ways to reduce the flow of nutrients almost 20 years ago, average nutrient loads continue to rise to record levels and the “Dead Zone” becomes more expansive every year, nearly doubling its size since the 1980s.⁴³ The Dead Zone’s inhospitable conditions are threatening federally listed species and may be impairing essential behavioral patterns such as breeding, feeding or sheltering.

Overall, the impacts described above are taking a toll on sensitive and vulnerable species, many of which are federally listed as threatened or endangered under the Endangered Species Act. Specifically, there are numerous listed species with designated critical habitat in regions in which land conversion is taking place due to corn production growth for ethanol. Species that have experienced direct and/or indirect impacts from land conversion occurring in critical habitat areas or in areas near designated critical habitat may include, but are not limited to:

Piping plover (*Charadrius melodus*):

The Piping plover, listed as endangered in the Great Lakes region and threatened elsewhere,⁴⁴ is a small shorebird that nests in the Great Plains states and the shores of the Great Lakes. Critical habitat for the bird located in North Dakota may be directly or indirectly impacted by land conversion.

Whooping Crane (*Grus Americana*):

⁴¹ Environment on NBC News.com, “Corn boom could expand ‘dead zone’ in Gulf,” (Dec. 17, 2007), available at: http://www.nbcnews.com/id/22301669/ns/us_news-environment/t/corn-boom-could-expand-dead-zone-gulf/#.WUrSE7i2aSo.

⁴² National Oceanic and Atmospheric Administration (NOAA). 2009a. “Dead Zones. Hypoxia in the Gulf of Mexico,” (factsheet) at 1-2, available at http://www.noaanews.noaa.gov/stories2009/pdfs/new%20fact%20sheet%20dead%20zones_final.pdf.

⁴³ Joyce, Christopher. 2010. “Massive ‘Dead Zone’ Threatens Gulf Marine Life” (radio report). National Public Radio, Morning Edition Transcript, available at www.npr.org/templates/story/story.php?storyId=128946110.

⁴⁴ U.S. Fish and Wildlife Service, *Piping Plover*, August 2016, <https://www.fws.gov/Midwest/endangered/pipingplover/index.html>.

The endangered Whooping Crane previously pushed to the brink of extinction to just 21 wild birds due to unregulated hunting and loss of habitat. Although conservation efforts have led to limited recovery,⁴⁵ recent land conversion has likely occurred within the Whooping Crane's critical habitat.

Topeka shiner (*Notropis topeka*):

The endangered Topeka shiner is a small minnow that can be found in prairie streams in parts of Iowa, Kansas, Minnesota, Missouri, and Nebraska. Its survival is threatened by habitat destruction, sedimentation, and changes in water quality likely associated with increased agricultural activity.⁴⁶ It is likely that land conversion for ethanol production has occurred within or near critical habitat zones in southwest Minnesota and northwest Iowa.

Dakota Skipper (*Hesperia dacotae*):

The threatened Dakota skipper is a small butterfly that lives in high-quality mixed and tallgrass prairie.⁴⁷ It has been extirpated from Illinois and Iowa and now occurs in remnants of native mixed and tallgrass prairie in Minnesota, the Dakotas and southern Canada. Land conversion likely has occurred directly adjacent to critical habitat.

Purple bankclimber (*Elliptoideus sloatianus*):

The threatened Purple bankclimber, a filter feeder that feeds on plankton and detritus, inhabits Georgia and Florida rivers with moderate currents and sandy floors. Sedimentation and pesticide application pose a significant threat to the species. Although the Purple bankclimber is a target species in a 7-species Federal Recovery Plan,⁴⁸ significant land conversion has likely occurred in areas surrounding the species designated critical habitat in southwest Georgia, leading to potential water quality impacts that could jeopardize the species.

Fat threeridge (*Amblema neislerii*):

⁴⁵ U.S. Fish and Wildlife Service, North Florida Ecological Services Office, *Species Status and Fact Sheet: Whooping Crane*, June 2016,

<https://www.fws.gov/northflorida/whoopingcrane/whoopingcrane-fact-2001.htm>.

⁴⁶ U.S. Fish and Wildlife Service, *Questions and Answers About the Topeka Shiner*, September 2016,

<https://www.fws.gov/midwest/endangered/fishes/pdf/tosh-qas.pdf>

⁴⁷ U.S. Fish and Wildlife Service, *Dakota Skipper*, October 2014,

<https://www.fws.gov/midwest/Endangered/insects/dask/pdf/DakotaSkipperFactSheet22Oct2014.pdf>

⁴⁸ Florida Fish & Wildlife Conservation Commission, Purple bankclimber, <http://myfwc.com/wildlifehabitats/imperiled/profiles/invertebrates/purple-bankclimber/>

The endangered⁴⁹ Fat threeridge is a fresh water mussel found in small to large rivers of southern Georgia and Florida. Sedimentation due to inadequate riparian buffer zones is a significant threat to the species. Significant land conversion has likely occurred in areas surrounding the species designated critical habitat, leading to potential alteration of the species' aquatic environment.

Oval pigtoe (*Pleurobema pyriforme*):

The endangered Oval pigtoe, a small freshwater mussel filter feeder of plankton and detritus, inhabits medium-sized rivers and small creeks. Sedimentation, pesticide and other chemical pollution pose a direct threat to the species. Although it is a target species in a 7-species Federal Recovery Plan,⁵⁰ significant land conversion likely has occurred in areas surrounding the species' designated critical habitat located in rivers of southwest Georgia.

Gulf sturgeon (*Acipenser oxyrinchus desotoi*):

The threatened Gulf sturgeon is an anadromous fish that migrates into coastal rivers from Louisiana to Florida in the spring and summer to spawn, and inhabits the Gulf of Mexico and its estuaries and bay in the winter months. In the winter, the sturgeon forages in the Gulf of Mexico's brackish and marine waters. Sturgeon require a clean, rocky substrate for spawning.⁵¹ The Gulf sturgeon's critical habitat encompasses spawning rivers and adjacent estuarine areas including parts of the Gulf of Mexico around the mouth of the Mississippi River. These areas are directly impacted by eutrophication from agricultural runoff, resulting in low dissolved oxygen levels and hypoxia that contribute to the region's "Dead zone." Gulf sturgeon and the benthic organisms it feeds on are vulnerable to these conditions.

Loggerhead turtle (*Caretta caretta*):

The threatened loggerhead turtle inhabits three different ecosystems during their lives – beaches, open ocean waters, and nearshore coastal areas. The loggerhead nests on ocean beaches. Soon after birth, hatchlings move to the surf and eventually swim or get swept out to open ocean waters. During adolescence, ages 7 to 12 years, the juvenile loggerhead makes its way back to coastal waters where it matures into adulthood. These coastal areas provide important habitat for juveniles, as well as crucial adult habitat for foraging, inter-nesting and migration. The loggerhead turtle's critical habitat encompasses waters and beaches of the Gulf of Mexico directly impacted by the Dead Zone's hypoxic conditions.

Sperm whale (*Physeter microcephalus*):

⁴⁹ Georgia Department of Natural Resources, Wildlife Resources Division, Fat threeridge, http://www.georgiawildlife.org/sites/default/files/uploads/wildlife/nongame/pdf/accounts/invertebrates/amblema_neislerii.pdf.

⁵⁰ Florida Fish and Wildlife Conservation Commission, Oval pigtoe, <http://myfwc.com/media/2211676/Oval-pigtoe.pdf>.

⁵¹ NOAA Fisheries, Gulf Sturgeon, <http://www.fisheries.noaa.gov/pr/species/fish/gulf-sturgeon.html>

There appears to be a resident population of Sperm whales in the Gulf of Mexico that has a year-round presence in the region. The population doesn't migrate like other populations of the endangered species found at mid-latitudes.⁵² The Sperm whale is impacted by a range of threats including poor water quality from nutrient runoff and other pollution. Currently, there is a pending petition before NOAA to separately list the Gulf of Mexico sperm whale as a distinct population segment because it is a discrete population that faces additional unique threats to its survival. Coastal pollution in the region, in particular the uninhabitable hypoxic Dead Zone caused by agricultural run-off from the Mississippi River poses a threat to this distinct sperm whale habitat.⁵³

IV. EPA'S ACTIONS TAKEN UNDER THE RENEWABLE FUEL STANDARD VIOLATE THE ENDANGERED SPECIES ACT

EPA must consult with the FWS and NMFS on any of its agency actions "in which there is discretionary Federal involvement or control." 50 C.F.R. § 402.03. EPA has discretion in setting annual volumetric standards for renewable fuels, in exercising its authority to waive renewable fuel volumes, and in approving new pathways for renewable fuels using new feedstocks and advanced technologies. In fact, EPA's general waiver authority permits EPA to waive RFS volumes "when implementation of the requirements would severely harm the environment."

Over the past five years, EPA has engaged in a number of actions pursuant to the Renewable Fuels Standard Program, including but not limited to:

- 1) Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 77 Fed. Reg. 1320 (Jan. 9 2012);
- 2) Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49794 (Aug. 15, 2013);
- 3) Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 77420 (Dec. 14, 2015). This rulemaking includes EPA's determination to exercise its general waiver authority based on slow development of cellulosic biofuels and marketplace constraints to supplying certain biofuels to consumers. *Id.* at 77422.
- 4) Renewable Fuel Standard Program: Standards for 2017 and Biomass Based Diesel Volume for 2018, 89 Fed. Reg. 89746 (Dec. 12, 2016). This rulemaking includes EPA's determination not to exercise its general waiver authority to reduce total renewable fuels. . *Id.* at 89750.

⁵² NOAA Fisheries, Sperm Whale,

<http://www.fisheries.noaa.gov/pr/species/mammals/whales/sperm-whale.html>.

⁵³ "Petition to list the Gulf of Mexico Distinct Population Segment of Sperm Whale (*Physeter macrocephalus*) Under the U.S. Endangered Species Act," Petition Submitted to the U.S. Secretary of Commerce, Acting through the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service by Wild Earth Guardians, (Dec. 2011), http://www.fisheries.noaa.gov/pr/species/petitions/spermwhale_gom_dps.pdf.

- 5) Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019.⁵⁴ This rulemaking includes EPA’s determination not to exercise its general waiver authority to further reduce renewable fuel volumes below statutory requirements and explicitly maintaining the maximum volumes of conventional fuels implied under the law.

In addition, EPA has approved numerous renewable fuel pathways using new feedstocks and advanced technologies over the past five years and as recently as November 14, 2017. *See* “EPA’s Renewable Fuel Standard Program: Approved Pathways for Renewable Fuel,” available at <https://www.epa.gov/renewable-fuel-standard-program/approved-pathways-renewable-fuel>.

On August 18, 2016, Sierra Club submitted requests under the Freedom of Information Act to the EPA, FWS, and NMFS for all relevant documentation on whether EPA had initiated and conducted consultation with FWS and NMFS in its discretionary activity under the Renewable Fuel Standard. On September 26, September 28, and October 7, 2016 we received responses to our requests from NMFS, EPA, and FWS, respectively. On December 19, 2016, we submitted an appeal of the initial response returned by FWS, as several hundred pages of the produced documents had been redacted without citing an exception as described in the FOIA. In the letter accompanying the initial release of the documents containing the redacted pages, FWS stated only “Because portions of these documents originate with or substantially concern U.S. Environmental Protection Agency (EPA), the unredacted versions of these documents will be provided to EPA so that they can make a release determination on their portions.” On December 30, 2016, EPA released the unredacted versions of the documents via FOIA online.

The FOIA responses reveal that contrary to ESA §7, there has been no consultation by any of these agencies concerning the RFS program or associated land conversions, formal or informal. There have been no biological assessments by EPA, concurrence letters by FWS or NMFS, no biological opinions or jeopardy findings, no reasonable and prudent alternatives and no incidental take statements, all as required by ESA §7. In short, the agencies have not complied with §7 at all.

In addition, on July 14 by email and by USPS certified mail (confirmed receipt on July 18), Sierra Club and Gulf Restoration sent a 60-day notice of intent to sue EPA for failing to consult wildlife agencies in carrying out its discretionary duties under the Renewable Fuels Standard Program and specifically in setting its annual renewable fuel volume standards and determining whether to exercise its general waiver authority to reduce renewable fuel volumes below the statutory requirements. As such, EPA was put on notice of its ESA Section 7 consultation obligations prior to finalizing the 2018 renewable fuel volumetric standards.

⁵⁴ 40 CFR Part 80, available at <https://www.epa.gov/sites/production/files/2017-11/documents/2018-rfs-annual-rule-frm-2017-11-30.pdf>.

A. EPA VIOLATED SECTION 7(A)(1) AND 7(A)(2) BY FAILING TO CARRY OUT THE RENEWABLE FUEL STANDARD PROGRAM TO ENSURE THE CONSERVATION OF FEDERALLY LISTED SPECIES AND BY FAILING TO INITIATE CONSULTATION BEFORE TAKING ACTION UNDER THE RENEWABLE FUEL STANDARD

EPA violated its duty, in consultation with FWS and NMFS, to utilize its authority in furtherance of the purposes of the Endangered Species Act “by carrying out programs for the conservation of endangered species and threatened species.” 16 U.S.C. § 1546 (a)(1). As the above responses indicate, EPA failed to conduct or initiate the required Section 7 consultation for any of its individual actions taken under the Renewable Fuels Standard Program or to initiate programmatic consultation for the program as a whole to assess impacts to federally listed species and to take action to ensure against jeopardy of those species or the destruction or adverse modification of designated critical habitat.

The foregoing responses also indicate that EPA did not even initiate consultation by requesting from the wildlife agencies a list of any ESA-listed or proposed species that may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. Given this information and the foregoing documentation of the expansive land conversion taking place under the RFS impacting ecosystems including critical habitat for federally listed species, EPA has failed to meet its obligations of ensuring against jeopardy to listed species or destruction or adverse modification of critical habitat. As such, EPA has violated its procedural and substantive obligations under ESA Section 7(a)(2), 16 U.S.C. § 1536(a)(2).

“The ESA mandates that defendants place conservation above any of the agency’s competing interests.” *Kentucky Heartwood v. Worthington*, 20 F. Supp. 2d 1076, 1083 (E.D. Ky. 1998). These procedural and substantive violations cannot be separated. Congress established the Section 7(a)(2) consultation procedure explicitly “to ensure compliance with the [ESA’s] substantive provisions.” *Thomas v. Peterson*, 753 F.2d 754, 764 (9th Cir. 1985). “If a project is allowed to proceed without substantial compliance with those procedural requirements, there can be no assurance that a violation of the ESA’s substantive provisions will not result.” *Id.* (citing *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1978)); *see also Conner v. Burford*, 848 F.2d 1441, 1458 (9th Cir. 1988) (the ESA’s “strict substantive provisions . . . justify more stringent enforcement of its procedural requirements, because the procedural requirements are designed to ensure compliance with the substantive provisions.”); *Washington Toxics Coal. v. Env’tl. Prot. Agency*, 413 F.3d 1024, 1034-35 (9th Cir. 2005).

Moreover, in failing to initiate and conduct consultation, EPA ignores significant and relevant peer reviewed research and literature about land conversion and the impacts of the Renewable Fuels Standard Program on listed species and critical habitat. As such, EPA has violated its Section 7(a)(2) requirements to “use the best scientific and commercial data available.”

EPA’s violations of ESA Section 7(a)(2) in connection with the Renewable Fuels Standard Program and specifically in setting annual renewable fuel volumes, determining whether to exercise its general authority to waive renewable fuel volumes, and reviewing and approving fuel pathways using new feedstocks and advanced technologies are actionable under the ESA’s citizen suit provision, 16 U.S.C. § 1540(g)(1)(A). Should EPA fail to remedy these

violations within the 60-day notice period, the undersigned may commence suit to obtain all available judicial remedies.

B. EPA VIOLATED ITS SECTION 7(D) PROHIBITIONS AGAINST ANY IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES THAT WOULD FORECLOSE THE FORMULATION AND IMPLEMENTATION OF REASONABLE AND PRUDENT ALTERNATIVES TO JEOPARDY

Moreover, by taking these actions without first completing consultation with wildlife agencies in accordance with ESA Section 7(a)(2), EPA has violated the ESA's prohibitions against any irreversible and irretrievable commitment of resources that would foreclose the formulation and implementation of reasonable and prudent alternatives to jeopardy. *See* 16 U.S.C. § 1536(d).

Congress specifically enacted Section 7(d) "to prevent Federal agencies from 'steamrolling' activity in order to secure completion of the projects regardless of their impact on endangered species." *Pac. Rivers Council v. Thomas*, 936 F. Supp. 738, 745 (D. Idaho 1996) (quoting *N. Slope Borough v. Andrus*, 486 F. Supp. 332, 356 (D.D.C. 1980), *aff'd in part and rev'd in part on other grounds*, 642 F.2d 589 (D.C. Cir. 1980)). Section 7(d) "clarifies the requirements" of Section 7(a)(2) to "ensur[e] that the status quo will be maintained during the consultation process." *Conner v. Burford*, 836 F.2d 1521, 1536 & n.34 (9th Cir. 1988).

In light of the myriad of harmful effects that land conversion resulting from renewable fuel mandates is having on listed species and designated critical habitats, EPA's annual renewable fuel standard setting, which consistently ramp up biofuel fuel production, in particular ethanol, without obtaining input from FWS and NMFS, constitutes an irreversible and irretrievable commitment of resources that would foreclose the formulation and implementation of reasonable and prudent alternatives to jeopardy. Moreover, EPA's failure to explicitly monitor feedstock origin after each rulemaking allows regulated entities to freely increase biofuel production in a manner that threatens federally listed species.

EPA's violations of ESA Section 7(d) in connection with its administration of the Renewable Fuels Standard Program including its annual renewable fuel volume promulgation and its failure to consider exercising its waiver authority to reduce volumes based on potential severe harm to the environment, are actionable under the ESA's citizen suit provision, 16 U.S.C. § 1540(g)(1)(A). Should EPA fail to remedy these violations within the 60-day notice period, The undersigned may commence suit to obtain all available judicial remedies.

C. EPA'S ACTIONS UNDER THE RENEWABLE FUEL STANDARD ARE CAUSING TAKE OF ESA PROTECTED SPECIES

EPA is in violation of the prohibition on the "take" of listed species in Section 9 of the ESA. 16 U.S.C. § 1538(a)(1)(C) (prohibiting take by any person); *id.* § 1532(13) ("person" includes "any officer, employee, agent, department or instrumentality of the Federal Government"). Federal agencies are liable for take resulting from activities they approve. *Strahan v. Coxe*, 127 F.3d 155, 163 (1st Cir. 1997); *Loggerhead Turtle v. Cty. Council of Volusia*

Cty., 148 F.3d 1231, 1251 (11th Cir. 1998); *Defenders of Wildlife v. Adm’r, Env’tl. Prot. Agency*, 882 F.2d 1294 (8th Cir. 1989). By approving annual renewable fuel volumes and new fuel pathways without initiating and/or completing consultation with FWS and NMFS, EPA is operating without take liability coverage.

EPA’s annual renewable fuel volumes and the attendant increase in feedstock production and land conversion will cause take, including death and injury to ESA-listed species, either from direct impacts or from habitat modification. The approval of new fuel pathways using new feedstocks that take a toll on ecosystems and habitat without consultation could have similar impacts on ESA-listed species. These adverse effects will harass, harm, injure, and even lead to the death of ESA-protected species including, but not limited to, the Piping plover, Whooping crane, Topeka shiner, Dakota skipper, Purple bankclimber, Fat threeridge, Oval pigtoe, Gulf sturgeon, Loggerhead turtle, and Sperm whale.

In order to achieve safe harbor from ESA take liability for its renewable fuel standards and approvals, EPA must have written authorization from the FWS and/or NMFS in the form of an incidental take statement (“ITS”) issued as part of the FWS’s biological opinion at the conclusion of formal consultation under Section 7. Because EPA has failed to carry out its obligations to comply with Section 7 and obtain an ITS from the wildlife agencies as part of a biological opinion, EPA is liable for violations of Section 9 of the ESA.

EPA’s violations of ESA Section 9 in connection with setting renewable fuel standards and approving new renewable fuel pathways are actionable under the ESA’s citizen suit provision, 16 U.S.C. § 1540(g)(1)(A). Should EPA fail to remedy these violations within the 60-day notice period, Sierra Club may commence suit to obtain all available judicial remedies.

V. PERSONS PROVIDING NOTICE

As required by 40 C.F.R. § 54.3, the persons providing this notice are:

Devorah Ancel
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Sierra Club Environmental Law Program
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While EPA regulations require the above notice information, please direct all correspondences and communications regarding this matter to the undersigned counsel.

CONCLUSION

If you believe any of the facts described above are in error or have any information indicating that you have not violated the ESA we urge you to contact the undersigned counsel immediately. If the EPA, FWS and NMFS do not act to remedy these violations within 60 days, Gulf Restoration Network and Sierra Club intend to initiate litigation in federal court against the agencies and the appropriate agency officials concerning these violations to seek declaratory and injunctive relief and reasonable attorneys' fees and costs. Sierra Club and Gulf Restoration Network are interested in obtaining early and prompt resolution of these allegations. If you have any questions or would like to discuss potential remedies prior to the expiration of this notice, please do not hesitate to contact us at the telephone numbers or email addresses below.

Sincerely,



Devorah Ancel
Attorney for the
Sierra Club and Gulf Restoration Network

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cc: Ryan Zinke, Secretary of the Interior
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