July 14, 2017

VIA ELECTRONIC MAIL AND CERTIFIED MAIL, RETURN RECEIPT REQUESTED

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

Ryan Zinke, Secretary of the Interior
Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

Benjamin Friedman, Acting NOAA Administrator
National Oceanic and Atmospheric Administration
1401 Constitution Avenue, N.W.
Room 5128
Washington, DC 20230

Chris Oliver, Assistant Administrator for NOAA Fisheries
1315 East-West Highway
Silver Spring, MD 20910

Greg Sheehan, Acting Director
U.S. Fish and Wildlife Service
1849 C Street, N.W.
Washington, DC 20240

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

Dear Sirs/Madams:

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 taking several actions under the Energy Independence and Security Act's (EISA) Renewable Fuel Standard (RFS), including but not limited to: 1) setting annual volumetric standards for renewable fuels; 2) reviewing and approving new pathways for renewable fuels using new feedstocks and advanced technologies; and/or 3) exercising, or failing to exercise, its waiver authority, 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 RFS 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.

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 district 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).

"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.*

---

[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.

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.

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, 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, Envtl. 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).

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).[3] Each fuel is subject to biomass feedstock criteria as well as a minimum lifecycle greenhouse gas emission reduction threshold as compared to the

[3] EPA conducts public notice and comment with each of these agency actions.

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 GHG emissions by at least 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, the volume of corn-starch ethanol included in the RFS 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. A subcomponent of the total renewable fuels mandate. Corn-starch ethanol is expressly excluded from this category. 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 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 mandate requires 100 million gallons in 2010 and grows to 16 billion gallons in 2022, however, EPA has subsequently lowered the RFS 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.[4]

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 new pathways for fuels using new feedstocks and advanced technologies to meet the RFS2. 40 C.F.R. 80 § 1416. Regulated parties must demonstrate compliance with the Program on an annual basis by obtaining sufficient "renewable identification numbers" (RINs), which are the credits generated when fuel is produced that reflect the volume and renewable composition of each gallon of renewable fuel. 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 specific 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 waiver authority based on an insufficient domestic supply.[5]

[4] 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).

[5] 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).

The following table shows Congressional renewable fuel volume targets set out in EISA through 2022.[6]

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

[6] 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**
2017	5.5	*	9.0	24.0	15.0
2018	7.0	*	11.0	26.0	15.0
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 2017, and the 2018 standard set for biomass-based diesel.[7] 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**
Cellulosic biofuel (million gallons)	33	123	230	311	**n/a**
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	**n/a**
Renewable fuel (billion gallons)	**16.28**	**16.93**	**18.11**	**19.28**	**n/a**

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 most recent 2017 volumetric standards set ethanol volumes at 15 billion gallons. 81 Fed. Reg. 89746 (Dec. 12, 2016). 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

[7] 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.

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.[8]

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.[9] 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).[10] At more than 90 million acres, corn production dominates the agricultural landscape.[11]

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.[12]

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.[13] 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.[14] 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.[15] 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,

---

[8] 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).

[9] *Id*. at 6.

[10] *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.

[11] *Id*.

[12] *Id*. at 3.

[13] Lark, T.J., Salmon, J.M. & Gibbs, H.K. Cropland expansion outpaces agricultural and biofuel polices 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."

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

[15] 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).

Eastern Oklahoma, and parts of the Appalachians experienced conversion along forest boundaries. A recent study on land conversion in Michigan, Minnesota and Wisconsin between 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.[16]

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.[17] 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.[18]

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.[19] In addition, forest lands comprised three percent of new cropland while wetlands comprised two percent of new cropland.[20] 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.[21] 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.[22]

Corn production's expansion, in large part, can be attributed to the RFS's Congressionally-mandated use of corn ethanol in transportation fuels.[23] 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

---

[16] 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).
[17] DeGennaro at 3.
[18] Johnston, C.A. Agricultural expansion: land use shell game in the US Northern Plains. *Landscape ecology*, Vol. 29, 81-95 (2014).
[19] Tyler J Lark *et al* 2015 *Environ. Res. Lett.* Vol. 10, 044003 (2015).
[20] *Id.*
[21] 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).
[22] DeGennaro at 4.
[23] *Id*.

and critical natural areas and ecosystems.[24] Despite clear documentation, EPA has refused to implement land conversion protections built into the law. EPA does not directly request information from ethanol producers to verify that their feedstock originated on eligible land. EPA instead has established an "aggregate compliance" approach that compares total cropland each year to the total that existed in 2007 and if a certain threshold is exceeded, the agency would investigate and determine if additional measures are necessary. However, 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.[25]

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

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.[26] 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.[27] The expansion of corn agriculture in particular also has significantly affected waterfowl, grassland birds, monarch butterflies, bees, other native pollinators, and mammals.[28] Adding to the loss of habitat for diverse species is the push toward intensively managed monocultures under the RFS rather than a diversity of vegetation.[29]

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.[30] Corn, as opposed to other biofuel crops, requires the highest level of fertilizer and pesticide application resulting in higher runoff

---

[24] *Id.*
[25] *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.)
[26] DeGennaro at 13.
[27] *Id*.
[28] *Id*. at 14.
[29] *Id*. at 15.
[30] DeGennaro at 16.

from fields into waterways.[31] 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.[32] Recent land conversion studies demonstrate that conversion from pasture to corn leads to increased sediments yields of up to 127 percent.[33]

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." [34] Located at the mouth of the Mississippi in the Gulf, the Dead Zone threatens marine habitat on an enormous scale.[35] In fact, studies show that addressing the annual Dead Zone to improve conditions for marine life is practically impossible under the current RFS volume mandates, without huge shifts in food production.[36]

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.

---

[31] 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).

[32] 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).

[33] 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).

[34] 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.

[35] 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).

[36] 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)

> 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 GulfofMexico/MississippiRiverWatershedNutrientTaskForce (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.[37]

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.
>
> 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

---

[37] 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

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.[38]

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

[38] 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.

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.[39] 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.[40] 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:

Pipingplover *(Charadrius melodus)*:

The piping plover is a small shorebird that nests in the three separate geographic populations in the U.S.: the Great Plains states, the shores of the Great Lakes, and the shores of the Atlantic coast. Birds from all populations winter on the southern Atlantic and Gulf coasts in the U.S. The Piping plover is listed as endangered in the Great Lakes region and threatened elsewhere.[41] Critical habitat for the bird located in North Dakota may be directly or indirectly impacted by land conversion.

WhoopingCrane *(Grus Americana)*:

The Whooping Crane, named for its whooping sound, is the tallest North American species of bird. It has a lifespan of 22 to 24 years in the wild. It is endangered. By 1941, the bird was pushed to the brink of extinction to just 21 wild birds due to unregulated hunting and loss of habitat. In 2003, there were about 153 pairs of whooping cranes. Conservation efforts have led to limited recovery.[42] Recent land conversion has likely occurred within the Whooping Crane's critical habitat.

---

[39] 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.

[40] 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.

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

[42] 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.

Topekashiner (*Notropis topeka*):

The Topeka shiner is a small minnow that can be found in prairie streams in parts of Iowa, Kansas, Minnesota, Missouri, and Nebraska. The fish is listed as endangered. Its survival is threatened by habitat destruction, sedimentation, and changes in water quality likely associated with increased agricultural activity.[43] It is likely that land conversion for ethanol production has occurred within or near critical habitat zones in southwest Minnesota and northwest Iowa.

DakotaSkipper (*Hesperia dacotae*):

The Dakota skipper is a small butterfly that lives in high-quality mixed and tallgrass prairie. 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. The Dakota skipper is listed as threatened.[44] Land conversion likely has occurred directly adjacent to critical habitat.

Purplebankclimber *(Elliptoideus sloatianus)*:

The Purple bankclimber is a large fresh water mussel that can reach 4-5.5 inches. It has a rhomboidal shell that transitions from grey to black on the exterior and white to purple on its inner shell. The mussel is a filter feeder that feeds on plankton and detritus. It inhabits rivers with moderate currents and sandy floors. The species is found in Georgia and Florida rivers. Sedimentation and pesticide application pose a significant threat to the species. The Purple bankclimber is listed as threatened and is a target species in a 7-species Federal Recovery Plan.[45] 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.

Fatthreeridge *(Amblema neislerii)*:

The Fat threeridge is a fresh water mussel found in small to large rivers of moderate current and sandy or silty bottoms. It is native to rivers of southern Georgia and Florida. They eat earthworms and other invertebrates. Sedimentation due to inadequate riparian buffer zones is a significant threat to the species. The species is listed as endangered.[46] Significant land conversion has likely occurred in areas surrounding the species designated critical habitat, leading to potential alteration of the species' aquatic environment.

---

[43] 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

[44] U.S. Fish and Wildlife Service, *Dakota Skipper,* October 2014, https://www.fws.gov/midwest/Endangered/insects/dask/pdf/DakotaSkipperFactSheet22Oct2014.pdf

[45] Florida Fish & Wildlife Conservation Commission, Purple bankclimber, http://myfwc.com/wildlifehabitats/imperiled/profiles/invertebrates/purple-bankclimber/

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

Ovalpigtoe *(Pleurobema pyriforme)*:

The Oval pigtoe is a small freshwater mussel that can reach a length of 2.4 inches. It has a flattened oval-shaped shell that is yellow to brown on the exterior and white or salmon colored on the interior shell. It is a filter feeder that feeds on plankton and detritus. The mussel inhabits medium-sized rivers and small creeks with slow to moderate currents and a sandy silt to gravel floor. It is found in Georgia and Florida rivers and streams. The Oval pigtoe is listed as endangered. Sedimentation, pesticide and other chemical pollution pose a direct threat to the species. It is a target species in a 7-species Federal Recovery Plan.[47] It is likely that significant land conversion has occurred in areas surrounding the species' designated critical habitat located in rivers of southwest Georgia.

Gulfsturgeon *(Acipenser oxyrinchus desotoi):*

The 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. Sturgeon are characterized by bony plates, a hard extended snout, and an asymmetrical tail. The fish can grow between four and eight feet in length and weigh up to 200 pounds. Its average lifespan is 20 to 25 years but it can live up to 60 years.

The Gulf sturgeon is a bottom feeder and its diet is comprised of macroinvertebrates including worms, mollusks, crustaceans and brachiopods. The sturgeon forages in the Gulf of Mexico's brackish and marine waters during the winter months only. Sturgeon do not forage in the riverine environment during spawning season. Sturgeon require a clean, rocky substrate for spawning.[48]

The Gulf sturgeon is a federally listed threatened species throughout its range. Its designated 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.

Loggerheadturtle *(Caretta caretta):*

Named for their larger heads, the loggerhead turtle has powerful jaws enabling them to feed on hard shelled animals. They have reddish-brown top shells and pale yellow bottom shells. The loggerhead 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.

---

[47] Florida Fish and Wildlife Conservation Commission, Oval pigtoe, http://myfwc.com/media/2211676/Oval-pigtoe.pdf.
[48] NOAA Fisheries, Gulf Sturgeon, http://www.fisheries.noaa.gov/pr/species/fish/gulf-sturgeon.html

Federally listed as a threatened species, the loggerhead turtle's critical habitat encompasses waters and beaches of the Gulf of Mexico directly impacted by dead zone hypoxic conditions.

Spermwhale (*Physeter microcephalus*):

Sperm whales are the largest of the toothed whales and are distinguished by their extremely large heads comprising 25 to 35 percent of its total body length. Adult females will grow up to lengths of 36 feet and weigh 15 tons while adult males will reach 52 feet and weigh up to 45 tons. It is the only cetacean that has an asymmetrically left situated single blowhole. Sperm whales have the largest brain of any animal. The sperm whales diet is comprised mostly of large organisms, including large squid, sharks, skates and other fish. At the age of 9 years, females reach sexual maturity at which point they produce a calf approximately every 5 years. Sperm whales generally inhabit waters of almost 2000 feet depth or more. Sperm whale migration is unpredictable. While in some mid-latitudes there appears to be a trend to migrate north and south depending on the seasons, in tropical and temperate areas, like the Gulf of Mexico, there appears to be no seasonal migration.[49]

Sperm whales are federally listed as endangered, initially depleted by more than two centuries of unregulated whaling. However, currently they are 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. There appears to be a resident population of sperm whales in the Gulf of Mexico because of its year-round presence in the region. 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.[50]

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 waiver authority permits EPA to waive RFS volumes "when implementation of the requirements would severely harm the environment."

---

[49] NOAA Fisheries, Sperm Whale, http://www.fisheries.noaa.gov/pr/species/mammals/whales/sperm-whale.html.

[50] "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.

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 NFMS, 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.

A. EPA Violated Section 7(a)(2) by Failing to Initiate Consultation Before Taking Action under the Renewable Fuel Standard

The foregoing responses indicate that EPA did not conduct the required Section 7 consultation or initiate such 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. Envtl. Prot. Agency*, 413 F.3d 1024, 1034-35 (9th Cir. 2005).

EPA's violations of ESA Section 7(a)(2) in connection with setting annual renewable fuel volumes, determining whether to exercise its authority to waive renewable fuel volumes, and/or 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.

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 use conversion resulting from renewable fuel mandates is having on listed species and designated critical habitats, EPA's annual promulgation of renewable fuel standards that 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 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.

B. 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*, *Envtl. 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
Staff Attorney
Sierra Club Environmental Law Program
2101 Webster Street, Suite 1300
Oakland, California 94612
Phone: (415) 977-5721
Email: devorah.ancel@sierraclub.org

Cyn Sarthou
Executive Director
Gulf Restoration Network
PO Box 2245
New Orleans, Louisiana 70176
Phone: (504) 525-1528
Email: cyn@healthygulf.org

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 district 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
Eric Huber
Attorneys for the
Sierra Club and Gulf Restoration Network

Sierra Club Environmental Law Program
2101 Webster Street, Suite 1300
Oakland, California 94612
Phone: (415) 977-5721
Email: devorah.ancel@sierraclub.org

Cc: Jeff Sessions, Department of Justice Attorney General of the United States
Channing D. Phillips, United States Attorney for the District of Columbia
Kevin Minoli, USEPA Acting General Counsel
Daniel Jorjani, Department of the Interior Acting Solicitor
Kristen L. Gustafson, NOAA Acting General Counsel
Jeffrey S. Dillen, NOAA Acting General Counsel