



SIERRA CLUB

Request for Reevaluation of Clean Water Act Section 404 Permit and 60-Day Notice of Intent to Sue

Violations of the Endangered Species Act Related to the Army Corps of Engineers' River and Harbors Act and Clean Water Act Permit to Plains Marketing for the Yorktown, Virginia Oil Terminal

Via Certified Mail with Return Receipt Requested

September 24, 2015

Lt. General Thomas P. Bostick
Chief, U.S. Army Corps of Engineers
441 G Street, NW
Washington, DC 20314-1000

Colonel Jason Kelly
District Engineer, Norfolk District
U.S. Army Corps of Engineers
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Dear Sirs,

This letter requests that the Army Corps of Engineers (“Army Corps” or “ACOE”) reevaluate its permit decision given risks to the public from the Yorktown oil transport facility and serves as a sixty day notice on behalf of the Center for Biological Diversity (“Center”) and the Virginia Chapter of the Sierra Club of intent to sue the Army Corps, and its officers, directors and administrators for ongoing and imminent violations of the Endangered Species Act (“ESA”) (16 U.S.C. §§ 1531-1544) resulting from permits to Plains Marketing for its oil train trans-loading terminal at Yorktown, Virginia.¹ The Army Corps failed to consult with the National Marine Fisheries Service regarding potential effects of the agency action on the endangered Atlantic sturgeon.

The East Coast of the United States is experiencing an unprecedented boom in the transport of oil through the region by rail and barge. Newly shipped oil includes rapidly increasing amounts

¹ This letter is provided pursuant to the 60-day notice requirement of the citizen suit provision of the ESA, to the extent such notice is deemed necessary by a court. See 16 U.S.C. § 1540(g).

of particularly explosive oil produced by hydraulic fracturing (“fracking”) of the North Dakota Bakken shale, and may include heavy tar sands bitumen strip-mined in Alberta, Canada. This increased transport happens in the context of a very recent history of deadly and explosive rail accidents throughout North America, involving oil and petroleum products.

In late 2012 Plains Marketing applied to the Corps for a River and Harbors Section 10 and Clean Water Act Section 404 permit to make modifications to the former oil refinery in Yorktown. The purpose of the project was to allow delivery and trans-loading of crude oil via rail to the Yorktown terminal site. The Corps granted the permit on January 22, 2013.

INTRODUCTION

a. Rail Accidents Have Twice Occurred En Route To Yorktown Loading Terminal.

In early 2014, oil trains began delivery of crude to the Yorktown terminal. Two accidents have occurred since then that demonstrate the dramatic effect the Yorktown terminal has had on increasing the risk of accidents.

First, in April 2014, an oil train derailed and burst into flame in Lynchburg, Virginia, spilling burning crude oil into the James River and threatening human safety and property in the downtown district. The oil spill jeopardized drinking water sources and aquatic species. The CSX rail line that runs through Lynchburg terminates at the Yorktown facility.

Second, in February 2015, a loaded oil train on the same CSX line, bound for the Yorktown terminal, derailed and caught on fire in Mount Carbon, West Virginia. One man barely escaped from his home before it was engulfed in flames. The local community was evacuated. Oil spilled into a tributary of the Kanawha River, which provides habitat for endangered freshwater mussels.

But for the 2013 ACOE permit that allowed the conversion of the former oil refinery at Yorktown to a crude-by-rail trans-loading facility, oil trains would not have been running on the CSX line through Virginia and West Virginia, and the fiery derailments would not have occurred at Lynchburg and Mount Carbon.

To this day, the ongoing shipment of crude oil by rail to the Yorktown terminal threatens public safety as well as vulnerable species and habitats along the rail line, at the terminal site, and in the coastal waters adjacent to the facility.

b. Activities of the Yorktown Oil Transport Facility May Affect Endangered Sturgeon, Kemp’s Ridley and Loggerhead Sea Turtles.

Despite the endangered listing of Chesapeake Bay Atlantic sturgeon effective April 2012, and the presence of endangered Kemp’s ridley and loggerhead sea turtles in the York River, the Army Corps did not consult with the National Marine Fisheries Service (“NMFS”) on effects of the permits on these animals.

Since the listing, scientists have further recognized the biological importance of the York River population of sturgeon. At the time of listing, scientists suspected Chesapeake Bay sturgeon used the York River as a spawning site because of the presence of sub-adult sturgeon. In August 2013,

scientists confirmed a spawning population of 75 federally endangered Atlantic sturgeon existed in the York River. The effective population size, the number of individuals that contributed genetically to produce the sampled adults, is only estimated at 11 individuals (CI of 6-28). These estimates are the smallest abundance and the smallest effective population size of sturgeon along the Atlantic Coast.

The Yorktown oil trans-loading facility is a potential source of two significant threats to the Atlantic sturgeon: water pollution and ship strikes. An oil spill into water from the terminal or a tanker ship or barge laden with oil could severely harm Atlantic sturgeon, especially at embryonic and larval stages when fish are particularly sensitive to impacts of hydrocarbon pollution. Further, increased ship and barge traffic associated with the oil train terminal threatens adult sturgeon; ship strikes are a leading cause of mortality in Atlantic sturgeon.

Federally endangered Atlantic sturgeon also live in the lower James River; the Yorktown oil transport facility increased risk of oil pollution in the James River because the rail line supplying oil to Yorktown runs close to the James River from near its headwaters to just east of Richmond. A train derailment and oil spill upstream of spawning grounds of James River Atlantic sturgeon could severely harm embryonic and larval stages when fish are particularly sensitive to impacts of hydrocarbon pollution.

The presence of Atlantic sturgeon in the York and James Rivers, along with the presence of endangered Kemp's ridley and loggerhead sea turtles in the York River, obligated the Army Corps to consult with NMFS on the effects of the agency action – the permit to allow the operation of an oil train terminal at Yorktown – in order to ensure it did not jeopardize the continued existence of these animals. 16 U.S.C. § 1536(a)(2). Section 7 consultation is required for “any action [that] may affect listed species or critical habitat.” 50 C.F.R. § 402.14. To date, the Army Corps has failed to initiate consultation with NMFS, as required under the ESA.

By this letter, the Center (I) requests that the Army Corps reevaluate the permit decision because of information that was not considered in the original public interest decision and (II) puts the Army Corps on official notice that its actions regarding implementation of the permit for the Yorktown terminal, without sufficient consultation with the Services, is in violation of the ESA, as described further below.

I. REEVALUATION OF PERMIT DECISION NECESSARY

We raise two specific objections to the Army Corps' decision to issue the permit to convert an idled facility into a crude oil transport terminal: (a) the Corps failed to analyze the safety and environmental risks from explosions from trains traveling next to the James River and past Colonial Williamsburg, and (b) the Corps failed to evaluate the impact of the Project on listed species. These are discussed below.

Pursuant to 33 C.F.R. § 320.4(a)(1), before issuing a permit, the Army Corps must engage in a “public interest review.” This review encompasses all factors that may be relevant, and among those are “historic properties, fish and wildlife values, flood hazards, . . . water quality, energy needs, safety . . .” and many others. 33 C.F.R. § 320.4(a)(1). Specifically with respect to fish and wildlife concerns, the Army Corps' district engineer must consult with agencies with expertise in conservation of fish and wildlife, including NMFS, “with a view to the conservation of wildlife

resources by prevention of their direct and indirect loss and damage due to the activity proposed in a permit application.” *Id.* § 320.4(c).

The permit anticipates that reevaluation may result in suspension, modification, and revocation via process in 33 C.F.R. § 325.7. The procedures outlined may be implemented where the “public interest” requires such suspension, modification, or revocation. As defined by 33 C.F.R. § 320.4(a) “public interest review” encompasses “fish and wildlife values.” A court has found that under this regulation, the Army Corps “has retained almost unbound discretion limited to ‘any time the circumstances warrant.’” *Protect Our Water v. Flowers*, 377 F. Supp. 2d 844, 872-873 (E.D. Cal. 2004).

As outlined above, we request the Army Corps reevaluate the permit decision in light of the risk of spills from or explosions of trains en route to the Yorktown oil transport facility and the failure of the Army Corps to consult with NMFS on the impact of the activity on protected species.

a. Significant information on increased crude-by-rail transport and risk of oil spills should be considered in the permit decision.

The amount of crude oil being transported by rail throughout North America, including to terminals along the East Coast of the United States, has increased dramatically in recent years. In 2008, only 9,500 rail cars of oil were transported on America’s Class I railways. In 2013 there were an estimated 400,000 rail cars of oil - a dramatic increase in only six years. This increased transport of crude by rail and two explosive derailments on the Yorktown terminal line has happened in the context of multiple catastrophic accidents involving oil and petroleum products throughout North America. In addition to the Lynchburg and Mount Carbon accidents, fiery derailments have occurred in the last two years in North Dakota, Ontario, Illinois, New Brunswick, Alabama and Quebec. The accident at Lac Mégantic, Quebec, on July 6, 2013, caused the death of 47 people, the evacuation of approximately 2,000 people from the surrounding area, and the incineration of a popular tourist town. Nearly 1.5 million gallons of crude oil were spilled into an adjacent lake and river in the Quebec accident.

The likelihood of an oil spill has also increased recently due to improper handling of the growing amount of oil being shipped by rail. In early 2014, the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) sent violation notices to Hess Corp., Whiting Petroleum Corp. and Marathon Oil Co. for improperly loading rail-bound crude oil using the wrong safety packing categories. More than half of samples tested in unannounced inspections had been assigned incorrect categories. PHMSA said such mistakes “could result in material being shipped in containers that are not designed to safely store it, or could lead first responders to follow the wrong protocol when responding to a spill.”

Over the last two and a half years, the graphic and undeniable danger posed by oil trains to human safety and the environment has prompted a series of pronouncements, orders, and new rules promulgated by federal safety officials.

On January 23, 2014, The National Transportation Safety Board (“NTSB”) acknowledged the unprecedented increase in oil rail shipments and the significant increase in likely oil spills and

spill impacts. *See* Safety Recommendation Letters R-14-001-003 and R-14-004-006. The new NTSB recommendations call for increased scrutiny of rail carriers that may not be taking risks seriously and increased planning for worst-case spill scenarios. The sheer volume of oil that can be moved in a single train was recognized as a particular threat that could result in major environmental consequences.

The United States Department of Transportation (DOT) issued an Emergency Order on May 7, 2014 requiring railroads to provide notification to states regarding the movement of trains carrying one million gallons or more of Bakken crude oil. The order read, in part: “the Secretary of Transportation (Secretary) has found that an unsafe condition or an unsafe practice is causing or otherwise constitutes an imminent hazard to the safe transportation of hazardous materials. Specifically, a pattern of releases and fires involving petroleum crude oil shipments originating from the Bakken and being transported by rail constitute an imminent hazard under 49 U.S.C. 5121(d).” *See* Docket No. DOT-OST-2014-0067 (available at <http://www.dot.gov/briefing-room/emergency-order>).

On May 13, 2014, the Federal Railroad Administration and Pipeline and Hazardous Materials Safety Administration issued recommendations for tank cars used for the transportation of petroleum crude oil by rail. *See* Notice of Safety Advisory 79 Fed. Reg. 27370 (May 13, 2014). The Safety Advisory notes the “recent propensity for rail accidents involving trains transporting Bakken crude oil” due to the “rapid growth in the quantity of petroleum crude oil shipped by rail in recent years,” and that “older ‘legacy’ tank cars ... without more modern construction and design enhancements, continue to be used to transport hazardous materials, including Bakken crude oil.”

On May 1, 2015, the DOT published new rules on crude oil transportation by rail. Among other things, the new standards call for a phase-out over 10 years of the DOT-111 and CPC-1232 tank cars commonly used to transport crude oil and known to puncture and explode during derailments. Unfortunately, not only do communities, waterways, and habitats remain at risk from derailments, fires, and oil spills in the meantime, but in addition the standards fall far short of the safety improvements needed to ensure that no more Lac-Mégantic-scale accidents—or worse—occur again. Thus, until safety rules are upgraded, crude oil shipping by rail will continue to pose a significant danger to people and the environment. *See* Docket No. PHMSA-2012-0082 (HM-251) (available at http://www.transportation.gov/sites/dot.gov/files/docs/final-rule-flammable-liquids-by-rail_0.pdf).

Not just the quantity, but the type of oil transported and inevitably spilled greatly affects the impacts of spills, including impacts to natural resources. The Yorktown terminal receives crude from the Bakken oil formation in North Dakota, but the infrastructure could also be used to export Canadian tar sands oil. Lighter fuels, including light crude oils like that from the Bakken Region of North Dakota, are generally more explosive, more toxic, and can penetrate shorelines more quickly and deeply. *Preliminary Guidance from Operation Classification*, PHMSA) (Jan. 2, 2014). Heavy oils, including the heavy oils and diluted bitumen produced from strip-mined Alberta tar sands, persist longer and can smother shorelines and the biota that live there. This viscous type of oil, once spilled into aquatic environments, creates a nightmare clean up scenario with lasting and perhaps irreversible impacts to water quality and aquatic ecosystems. Tar sands oil is not only dangerous for its inherent corrosive and acidic properties and for its tendency to sink in water bodies, but since it is generally only transported when blended with toxic gas

condensates, tar sands present a one-two punch to the environment in the event of a spill. Tar sands mixed with volatile diluents can be highly flammable and explosive, like Bakken crude, as demonstrated by recent fiery rail accidents in Ontario involving tar sands cargo. Tar sands oil is already traveling by rail in various parts of the United States, including to refineries in the upper Delaware River region, which is an area also served by the crude oil terminal at Yorktown. It is well within the realm of possibility that the Yorktown terminal could become a hub for dense, and highly flammable, tar sands oil, as well as explosive Bakken oil.

Given the unprecedented recent increase in rail transport of oil to the Yorktown terminal, and new knowledge concerning the risks of transporting oil by rail, there is a far greater risk of impacts to listed species from an oil spill than was the case just a few years ago. This new information serves to heighten the need for timely compliance with the ESA provisions designed to protect our most vulnerable wildlife.

Yorktown terminal and crude-by-rail

Crude oil shipments by rail to the Yorktown facility began in January 2014.

http://articles.dailypress.com/2014-04-05/news/dp-nws-oil-shipments-yorktown-20140405_1_bakken-crude-yorktown-refinery-oil-spill. The terminal is a former oil refinery which had been closed for several years. The facility is capable of receiving massive oil trains, with a daily potential throughput of 140,000 barrels per day, or 800 trains per year. The site has a storage capacity of 6 million barrels, distributed among 16 storage tanks repurposed for the crude-by-rail operation. http://articles.dailypress.com/2013-01-06/news/dp-nws-york-oil-terminal-update-20130106_1_harry-pefanis-yorktown-refinery-shuttered-refinery. Crude is loaded on to barges at the terminal, and from there, barges transport the crude oil across the Chesapeake Bay and on to refineries along the eastern seaboard, primarily in the Philadelphia area on the Delaware River. En route to Philadelphia, barges laden with crude must pass by coastal Virginia, Maryland, Delaware, and New Jersey, which include numerous national wildlife refuges, state parks, wildlife management areas, beaches, and popular resort towns, as well as Assateague Island National Seashore, a unit of the National Park Service.

Less than five months after rail shipping of crude to the Yorktown terminal commenced, an eastbound CSX train consisting of 105 tank cars loaded with Bakken crude oil from North Dakota derailed in downtown Lynchburg, Virginia, on April 30, 2014. Seventeen of the train's cars derailed, and one of the tank cars was breached. A petroleum crude oil fire ensued, shooting flames and black smoke into the air. Emergency responders evacuated approximately 350 individuals from the immediate area. Three of the derailed tank cars containing petroleum crude oil came to rest in the adjacent James River, spilling up to 30,000 gallons of petroleum crude oil into the river, and threatening the habitat of listed species such as the Atlantic sturgeon.

Less than a year after the Lynchburg accident, another oil train derailment occurred on the same CSX line, at Mount Carbon, West Virginia. Fourteen tank cars caught on fire, resulting in massive fireballs that surged into the sky and the evacuation of the nearby community. Crude oil spilled into a tributary of the nearby Kanawha River, which is host to several federally protected freshwater mussels.

In Virginia, the CSX line on which oil trains travel to Yorktown is located along nearly the entire length of arguably the most important waterway in the state: the James River. The James River is

home to the endangered James spiny mussel as well as a spawning population of Atlantic sturgeon, and one of the largest populations of bald eagles on the Atlantic coast. The tracks also pass through the heart of two of the most historic cities in the United States, Richmond and Williamsburg, and terminate at the facility, which is within five miles of the American Revolutionary War battlefields at the Colonial National Historic Park.

Rising sea levels – a result of both climate change and subsidence in the mid-Atlantic region – threatens many shoreline industries, but storing oil in the outer coastal plain, where the Yorktown oil transport facility is, carries unique dangers. The infrastructure at the Yorktown oil transport facility – visible from the beachfront in Yorktown – was built in 1956 as a refinery. Water levels in this region have risen more than a foot over the past 80 years and the rate is projected to double in the next 100 years.²

The Yorktown Oil Transport Facility may be particularly vulnerable to sea level rise because it is to the east of what is called the Suffolk Scarp (the geological feature that marks where the Mid-Atlantic's Outer Coastal Plain ends and the Middle Coastal Plain begins).³ These areas in the outer coastal plain are low-lying, poorly drained, and dominated by tidal streams and rivers, making them more susceptible to increased flooding and inundation from sea level rise.⁴ This makes the site particularly unsuitable for oil and gas storage. The Army Corps must take safety and flooding considerations such as these into account in the public interest review.

Plains Marketing and its history of environmental violations

Plains Marketing, the permittee, is a subsidiary of Plains All-American, a company with a long track record of oil spills and safety and environmental violations. Most recently, on July 10, 2015, a pipeline leak at a St-Louis-area pump station owned by Plains All American spilled about 4,200 gallons of crude oil, with some of it reaching a nearby creek and a tributary of Silver Lake, which serves as the water supply for the city of Highland, Illinois. In May, a pipeline operated by Plains All-American ruptured in Santa Barbara, California, leaking over 100,000 gallons of oil into the Pacific Ocean, fouling beaches and killing hundreds of animals. The company has had 175 incidents (mostly oil spills) nationwide since 2006. According to the Pipeline and Hazardous Materials Administration, oil spills attributable to the company total more than 672,000 gallons and have caused more than \$23 million worth of property damage.

Plains Pipeline (another subsidiary of Plains All-American) has had federal enforcement actions initiated against it 20 times since 2006 for its operations across the country. For example, the company was cited for 10 oil spills that violated the Clean Water Act in Texas, Louisiana, Oklahoma and Kansas. Those incidents led to orders by the Environmental Protection Agency and the Justice Department that the company pay over \$40 million, including \$3.2 million in penalties.

Plains Marketing is the owner of a Bakersfield, California crude-by-rail terminal, which is the focal point of a lawsuit against the San Joaquin Valley Air Pollution District for granting an

² Mitchell et al. 2014. *Sea Level Rise: A relentless reality that Virginia Must Continue to Plan Carefully For*. The Virginia News Letter, 90(6):1-9.

³ McFarlane, B.J. 2012. *Climate Change in Hampton Roads, Phase III: Sea Level Rise in Hampton Roads, Virginia*, Hampton Roads Planning District Commission, July 2012.

⁴ *Id.*

invalid Clean Air Act permit to the company. Records of communications between oil terminal management and officials at the air pollution district showed that company representatives gave advice to air district officials on how to sidestep public noticing for the project and pollution controls by segmenting the project into separate, seemingly insignificant actions. The EPA also has charged Plains with ten violations of the Clean Air Act and the agency could impose fines of up to \$37,500 per day, until the proper permits are secured.⁵

This checkered environmental and safety record of Plains All-American and its subsidiaries further underscores the need for ACOE to closely scrutinize any project proposal the company submits. In the case of the Yorktown terminal, it is vital that ACOE review the project as a whole and not just as a matter of a small wetland disturbance. Along with analyzing the direct, onsite impacts of the project, ACOE needs to examine the indirect effects of the project, such as from a possible oil train derailment and spill into the James River, or from a possible barge spill in the York River. Either event could prove highly destructive to sensitive Atlantic sturgeon, and endangered Kemp's ridley and loggerhead sea turtles, not to mention the fish, oysters, and blue crabs that are the basis of the local culture and economy.

b. Atlantic sturgeon and the threat of oil spills and oil transportation

The National Marine Fisheries Service protected the Atlantic sturgeon under the federal Endangered Species Act in early 2012. Five Distinct Population Segments (DPS) were recognized along the eastern seaboard, including the endangered Chesapeake Bay DPS. The final rule acknowledged that spawning was suspected to occur in the York River, and confirmed that spawning occurred in the James River for the Atlantic sturgeon in the Chesapeake Bay DPS. In August 2013 scientists published a paper confirming the reproductive population of Atlantic sturgeon in the York River.⁶ Initial testing of the York River population indicated that it is genetically distinct from other sturgeon in the Chesapeake Bay DPS as well as any other known sturgeon population. The size of the York River spawning population appears to be quite small: approximately 75 adults. The York is unique as a large spawning river for Atlantic sturgeon because it originates below the Appalachian Mountains and is primarily spring fed. The river is thus generally cooler and spawning runs are initiated earlier in the summer than in the nearby James River.

The Atlantic sturgeon is a large, long-lived, anadromous fish that can grow to approximately 14 feet long and weigh up to 800 pounds. Individuals may live to 60 years and don't begin to reproduce until 11-21 years of age. The fish is dependent on clean water, and a mixture of river and ocean-bottom substrates, from mud, to gravels, to cobbles, for successful feeding, migration, and spawning.⁷ Juveniles remain in estuary waters up to several years, while subadults and adults

⁵ Goldberg, K. Law360, May 5, 2015. EPA Says Plains All American's Calif. Oil Terminal Flouts CAA. <http://www.law360.com/articles/651687/epa-says-plains-all-american-s-calif-oil-terminal-flouts-cao>.

⁶ Hager et al. 2014. Evidence of Atlantic sturgeon spawning in the York River system. *Trans. Amer. Fish. Soc.* 143(5): 1217-1219.

⁷ National Oceanic and Atmospheric Administration, "Endangered and Threatened Wildlife and Plants; Proposed Listing Determinations for Three Distinct Population Segments of Atlantic Sturgeon in the Northeast Region," *Federal Register* 75 (193): 61872-61903, 2010 ("NOAA, Proposed listing, Atlantic sturgeon, 2010").

live in shallow coastal waters and estuaries when not spawning. Long distance migrations away from spawning rivers are common.⁸

Historically, once-abundant populations of Atlantic sturgeon were devastated by a commercial fishing industry that peaked in the late 1800s, and river impoundments, which blocked access to spawning grounds. In Chesapeake Bay, the sturgeon catch peaked in the 1890s at greater than 700,000 pounds, but before the fishery was closed in 1998, the sturgeon catch had dropped to less than 2,200 pounds, or 0.3% of peak levels.⁹

Today, habitat degradation, poor water quality, and vessel strikes are among the biggest threats to Atlantic sturgeon in Chesapeake Bay. Prior to the discovery of the small spawning population of Atlantic sturgeon in the York River and one in the Nanticoke River in Maryland, the only spawning population known in the Chesapeake Bay DPS was in the James River, and its size was estimated at only 300 adults.

Atlantic sturgeon are benthic feeders, filtering mud in their quest for food items such as mollusks, gastropods, amphipods, isopods, and fish. They typically feed at depths of 10-50 m. Degradation, pollution, and disturbance of the benthic environment in which the prey of sturgeon live may have harmful effects on sturgeon. NOAA, Proposed listing, Atlantic sturgeon, 2010. Discharges of pollutants can “affect sturgeon at various life stages depending on the extent of the threat and the life stage affected.”¹⁰ Poor water quality has been a particularly acute problem in Chesapeake Bay.¹¹

Research on the effects of oil spills on fish has been ongoing for decades, and it is well-known that many fish are particularly sensitive to contaminants at early life stages, but findings since Deepwater Horizon have revealed particularly devastating, subtle, and long-lasting harm to the developing hearts of embryo and larval life stages. Even very low levels of oil, or to be more specific, PAHs (Polycyclic Aromatic Hydrocarbons), can interfere with cardiac development in fish, as well as possibly other vertebrates.¹²

II. LEGAL BACKGROUND ON THE ESA CONSULTATION REQUIREMENT

a. The ACOE Yorktown permit and ESA Consultation

The ACOE permit to Plains Marketing for the Yorktown Terminal was issued on January 22, 2013. As evident in documents provided to the Center through a Freedom of Information Act request, the National Marine Fisheries Service did not provide comments on the permit with regard to species under its jurisdiction. However, the U.S. Fish and Wildlife Service did provide comments on the small-whorled pogonia and loggerhead turtle. Dept. of the Army, Norfolk District, Corps of Engineers, Responsive Records FOIA No. 14-F0077, June 17, 2014.

⁸ National Oceanic and Atmospheric Administration, Atlantic Sturgeon.
<http://www.nmfs.noaa.gov/pr/species/fish/atlanticsturgeon.htm>.

⁹ U.S. Fish and Wildlife Service. Atlantic Sturgeon (*Acipenser oxyrinchus*).
<http://www.fws.gov/chesapeakebay/sturgeon.html>.

¹⁰ NOAA, Proposed listing, Atlantic sturgeon, 2010, p. 61882.

¹¹ *Id.* 61897.

¹² Northwest Fisheries Science Center, NOAA. Heart failure in fish exposed to oil spills. Feb. 2014.
http://www.nwfsc.noaa.gov/news/features/heart_failure/index.cfm.

At the time the permit was issued, a spawning population of Atlantic sturgeon was known to exist in the James River and juveniles and adults were documented in the York River; NMFS should have been consulted at that time on potential effects to the species. The CSX line to the Yorktown terminal is located along the river shore of the James for much of the railroad's route through Virginia. But for the terminal at Yorktown, oil trains would not be traveling along the James, placing sturgeon at risk of a catastrophic oil spill from a derailed train. The permit to Plains Marketing not only allowed activities with potential to affect species and habitats at the terminal site; it also opened the door for transportation of a hazardous cargo—crude oil—and placed species at risk wherever oil trains pass through en route to Yorktown.

Once Atlantic sturgeon were discovered to spawn in the York River, the ACOE had even more pressing responsibility to consult with NMFS on the Yorktown terminal permit, because of the direct threat posed to the species by the oil train terminal on a separate York River population of sturgeon. Wetlands at the site drain into the York, and any oil spills at the terminal could flow into the river. Barges and tanker vessels transporting oil from the terminal could spill oil into the York River if there were an accident at the loading dock, or once the vessels were en route. In addition, increased shipping activity to and from the terminal heightens the risk of ship strikes that could injure or kill adult sturgeon.

Until consultation with NMFS is complete, there is no way to be certain that sensitive areas in the James and York Rivers that are important for the Atlantic sturgeon have been identified and will be protected.

b. The Duty to Ensure No Jeopardy to Listed Species Under Section 7(a)(2) of the 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. 16 U.S.C. §§ 1531, 1532. The ESA imposes substantive and procedural obligations on all federal agencies and persons with regard to listed species and their critical habitats. *See id.* §§ 1536(a)(1), (a)(2) and 1538(a); 50 C.F.R. § 402.10.

Each federal agency has a duty to consult with the Services to ensure that “any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species . . .” 16 U.S.C. § 1536(a)(2). The definition of agency “action” is broad and includes “all activities or programs of any kind authorized, funded, or carried out, in whole or in part” including “the granting of licenses, contracts, leases, easements, rights-of-way, [or] permits” and any “actions directly or indirectly causing modifications to the land, water, or air.” 50 C.F.R. § 402.02.

Each federal agency must review its actions at “the earliest possible time” to determine whether any action “may affect” listed species or their critical habitat in the “action area.” 50 C.F.R. § 402.14(a). The “action area” encompasses all areas that would 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. The term “may affect” is broadly construed to include “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character,” and thus is easily triggered.

Interagency Cooperation – Endangered Species Act of 1973, As Amended, 51 Fed. Reg. 19,926 (June 3, 1986). If a “may affect” determination is made, “consultation” is required.

Where an agency retains discretion to act on behalf of listed species and continues to act pursuant to that discretion on an ongoing basis, such ongoing agency action triggers consultation. Examples of agency actions with an ongoing duty to consult include: forest management plans, because an agency has discretion to amend such plans, *Pacific Rivers Council v. Thomas*, 30 F.3d 1050, 1055 (9th Cir. 1994); pesticide registrations, because an agency has discretion to alter or cancel such registrations, *Washington Toxics Coalition v. Env’t Prot. Agency*, 413 F.3d 1024, 1032 (9th Cir. 2005); and fishing permits, because an agency has discretion to condition such permits to benefit species, *Turtle Island Restoration Network v. Nat’l Marine Fisheries Serv.*, 340 F.3d 969, 977 (9th Cir. 2003). Therefore, wherever an agency retains and exercises ongoing discretion under a plan or program to act on behalf of listed species, as is the case here, the duty to consult is also ongoing.

During consultation, agencies must “use the best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2). If the action agency concludes that the proposed action is “not likely to adversely affect” the species, then the Services must concur in writing with this determination in order to avoid formal consultation. 50 C.F.R. §§ 402.13(a) and 402.14(b). If the Services concur in this determination, then consultation is complete. *Id.* § 402.13(a). If the Services’ concurrence in a “not likely to adversely affect” finding is inconsistent with the best available science, however, any such concurrence must be set aside. *See* 5 U.S.C. § 706(2).

If an action agency concludes that the action is “likely to adversely affect” listed species or critical habitat, it must then enter into “formal consultation.” 50 C.F.R. §§ 402.12(k), 402.14(a). The threshold for triggering the formal consultation requirement is “very low;” “any possible effect . . . triggers formal consultation requirements.” 51 Fed. Reg. 19,926. “Formal consultation” commences with the action agency’s written request for consultation and concludes with the Services’ issuance of a “biological opinion.” 50 C.F.R. § 402.02.

The biological opinion issued at the conclusion of formal consultation states the opinion of the Services as to whether the effects of the action are “likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.” *Id.* § 402.14(g)(4). To “jeopardize the continued existence of” means “to engage in an action that 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.* § 402.02.

The “effects of the action” include all direct and indirect effects of the proposed action, plus the effects of actions that are interrelated or interdependent, added to all existing environmental conditions - that is, added to the environmental baseline. “The environmental baseline includes the past and present impacts of all Federal, state, and private actions and other human activities in the action area” “Interrelated actions are those that are part of a larger action and depend on the larger action for their justification.” “Interdependent actions are those that have no independent utility apart from the action under consideration.” The effects of the action must be considered together with “cumulative effects,” which are “those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation.” *Id.* § 402.02.

If jeopardy is likely to occur, the Services must prescribe in the biological opinion “reasonable and prudent alternatives” to avoid “take” of listed species. *Id.* § 402.14(g). If either Service concludes that a project is not likely to jeopardize listed species, it must provide an “incidental take” statement with the biological opinion, specifying the amount or extent of incidental take, “reasonable and prudent measures” necessary or appropriate to minimize such take, and the “terms and conditions” that must be complied with by the action agency to implement any reasonable and prudent measures. 16 U.S.C. § 1536(b)(4), 50 C.F.R. § 402.14(i).

III. VIOLATION: THE ARMY CORPS FAILED TO COMPLY WITH ESA § 7

The ACOE has a duty to ensure that its actions are not likely to jeopardize the continued existence of endangered and threatened species. The ACOE permit granted to Plains Marketing set in motion a variety of actions that are likely to adversely affect listed species, such as the Atlantic sturgeon, Kemp’s ridley and loggerhead sea turtles.

These actions include but are not limited to transportation of oil by train along the James River, which is habitat for the largest known spawning population of Atlantic sturgeon in the Chesapeake Bay DPS; trans-loading of crude oil at the Yorktown terminal site from trains to ships and barges; and transport of crude oil by these ships and barges through Atlantic sturgeon habitat in the York River, Chesapeake Bay, and along the mid-Atlantic coast. Each of these activities poses the threat of oil spills into waters inhabited by Atlantic sturgeon or connected to such waters. Hydrocarbon pollution is particularly devastating to the embryonic and larval stages of sturgeon. Additionally, ships and barges involved in crude oil transport pose a danger of ship strikes to adult Atlantic sturgeon.

Endangered Kemp’s ridley sea turtles and threatened loggerhead sea turtles are also present in the York River, close to the Yorktown terminal. Sea turtle monitoring by the Virginia Aquarium and US Navy Sea Turtle Research Project has produced multiple records of these two species in the York River mouth area in the last two years.¹³ Juvenile loggerheads and Kemp’s ridleys forage and shelter in the lower Chesapeake Bay and York River in spring and summer. Approximately 1,000 to 3,000 individuals take up seasonal residence in the lower Bay each year.¹⁴

¹³ See Virginia Aquarium and US NAVY Sea Turtle Research Project, Virginia Aquarium & Marine Science Center Foundation, OBIS Seemap. Marine Geospatial Ecology Lab, Duke University. Available at: <http://seemap.env.duke.edu/dataset/1018>; and Coyne, M. S., and B. J. Godley. 2005. Satellite Tracking and Analysis Tool (STAT): an integrated system for archiving, analyzing and mapping animal tracking data. Marine Ecology Progress Series. Vol. 301:1-7.

¹⁴ Brown, J. and Erdle, S. 2009. Amphibians, reptiles, birds and mammals of the York River, pp. 107-113 in Moore, K.A. and Reay, W.G., eds. A Site Profile of the Chesapeake Bay National Estuarine Research Reserve in Virginia. Virginia Institute of Marine Science, Gloucester Point, VA. Available at: http://coast.noaa.gov/data/docs/nerrs/Reserves_CBV_SiteProfile.pdf

Sea turtles are vulnerable to oil pollution and ship strikes,¹⁵ both of which are associated with the activities at the Yorktown terminal. Sea turtles are vulnerable to oil spills at all life stages. In juveniles and adults, the effect of oil spills includes direct mortality due to oiling, harm to skin, blood, digestive and immune systems, as well as salt glands. Sea turtles have been known to ingest tar balls and oil, apparently not distinguishing them from normal food items.¹⁶ In 2010, the year of the Deepwater Horizon oil spill in the Gulf of Mexico, counts of Kemp's ridley sea turtles dropped significantly and they continued to drop in 2013 and 2014,¹⁷ a possible indication of this species' acute vulnerability to oil pollution. While the mechanisms by which oil from the Gulf spill may be harming Kemp's ridleys are not clear, the sudden reversal of the species' former upward trend¹⁸ suggest a connection.

Vessel collision injuries are common in sea turtles. They are susceptible to ship collisions because they regularly surface to breathe and rest at or near the surface.¹⁹ Injured and dead loggerhead turtles have been found with wounds from ship strikes. Kemp's ridley sea turtles also have the potential to be injured or killed in vessel collisions.²⁰ Between 1997 and 2001, 12.7% of all stranded turtles bore injuries indicative of propeller wounds or boat collisions.²¹

The ACOE permit is clearly an agency action subject to the ESA's consultation requirement. To fulfill their legal obligations, the ACOE is required, at the earliest possible time, to determine whether the contemplated action is likely to adversely affect any listed species. If so, the agency is required to enter formal consultation with the Services. The ACOE should have determined at the time it first reviewed the permit application from Plains Marketing that consultation with NMFS on Atlantic sturgeon, Kemp's ridley and loggerhead sea turtles was required, due to the potential impacts of the action which would lead to oil train traffic through Virginia along the James River, storage of oil at the mouth of the York River, the transfer of oil to barges on the Chesapeake Bay, and transport of that oil through sturgeon and sea turtle habitat in the Bay and along the Atlantic coast, en route to refineries.

The recent increase in fiery derailments of oil trains and associated oil spills also represents new material information that must be evaluated through consultation to ensure that listed species are

¹⁵ National Marine Fisheries Service, 2012. Endangered Species Act Biological Opinion: Maintenance of Chesapeake Bay Entrance Channels and Use of Sand Borrow Areas for Beach Nourishment, 273 pp., p. 40.

¹⁶ National Marine Fisheries Service, U.S. Fish and Wildlife Service, and SEMARNAT. 2010. Bi-National Recovery Plan for the Kemp's Ridley Sea Turtle (*Lepidochelys kempii*), Second Revision. National Marine Fisheries Service. Silver Spring, Maryland 155 pp. + appendices, p. I-62.

¹⁷ National Oceanic and Atmospheric Administration. 2015. Researchers Continue Investigating Oil Spill Effects on Kemp's Ridley Sea Turtles. Gulf Spill Restoration. Available at: <http://www.gulfspillrestoration.noaa.gov/2015/04/researchers-continue-investigating-oil-spill-effects-on-kemp's-ridley-sea-turtles/>

¹⁸ Heppell, S. 2014. The Fragility of Recovery: Implications of the Dramatic Reduction of the Kemp's Ridley Population Growth Rate Since 2010 (abstract), in Second International Kemps Ridley Sea Turtle Symposium 2014, Brownsville, TX, p. 9. Available at:

http://texasseagrant.org/assets/uploads/resources/14-101_SIKRSTS_program.pdf

¹⁹ National Marine Fisheries Service. 2008. Final Environmental Impact Statement To Implement Vessel Operational Measures to Reduce Ship Strikes to North Atlantic Right Whales. P. 3-15. Silver Spring, MD. Available at: <http://www.nmfs.noaa.gov/pr/pdfs/shipstrike/feis.pdf>

²⁰ Ibid., p. 3-16-3-17.

¹⁶ Bi-national Recovery Plan for the Kemp's Ridley Sea Turtle, p. I-60.

protected. The severity and number of these accidents have compelled the development of emergency DOT, NTSB and PHMSA orders and new rules, as discussed above, but by the government's own admission, the new rules will not substantially reduce the danger of accidents and spills for years to come. Even when fully implemented, the rules will not prevent crude from spilling and catching on fire because tank cars will still not have adequate safety features for their intended use. The drastic increase in rail shipments over the last few years means that more, and larger, crude oil spills are now likely to occur, with potentially devastating impacts on the environment. *See* DOT Emergency Order Docket No. DOT-OST-2014-0067 (Emergency Order necessary "due to the volume of crude oil currently being shipped by railroads, the demonstrated recent propensity for rail accidents involving trains transporting crude oil to occur, and the subsequent releases of large quantities of crude oil into the environment and the imminent hazard those releases present" and noting that "the quantity of petroleum crude oil spilled as a result of those accidents is voluminous in comparison to past precedents"); Notice of Safety Advisory 79 Fed. Reg. 27370 (May 13, 2014) ("the number and type of railroad accidents involving Bakken crude oil that have occurred during the last year has increased, and the quantity of petroleum crude oil released as a result of those accidents is higher than past precedents.").

The clear danger of rail accidents and devastating oil spills, demonstrated both by recent catastrophic derailments and the actions of federal transportation and hazardous materials agencies constitutes changed circumstances requiring section 7 consultation, to ensure that listed species are protected from oil spills.

IV. CONCLUSION

We urge the Army Corps to reevaluate its decision to permit an oil transport facility at the mouth of the York River, at the end of a rail line following the James River. Rail and water-borne transportation of crude oil on the East Coast of the United States has increased at a rapid rate in the last three years. Catastrophic, fiery rail accidents, accompanied by environmentally damaging oil spills, demonstrate the great risk this industrial activity poses to human communities as well as wildlife.

The permit granted by the ACOE to allow the conversion of a closed refinery to a crude oil rail terminal and trans-loading facility at Yorktown, Virginia provided the go-ahead for activities which now threaten federally-protected Kemp's ridley sea turtles, loggerhead sea turtles, and Atlantic sturgeon in the James River as well as the York River. In particular, the extremely small population of Atlantic sturgeon in the York River, only confirmed as a spawning population in mid-2013, is genetically distinct and may be important to the overall genetic diversity of the species. The activities associated with the crude-by-rail terminal threaten harm to the sturgeon because of the potential for oil spills as well as ship strikes. The former places young sturgeon at most risk; the latter threatens adult sturgeon.

To date the ACOE's required consultation and reinitiation of former consultation on effects to endangered and threatened sea turtles and endangered Atlantic sturgeon has not taken place, in clear violation of Section 7 of the ESA.

The ACOE should take immediate steps to come into compliance with the ESA by entering into and completing consultation with NMFS on the Yorktown terminal permit. To that end, we stand

ready to assist in any way we can. Please do not hesitate to contact us if we can provide additional information on this topic or otherwise assist in this matter rather than having to resort to the judicial remedies provided by the ESA. We look forward to your prompt response.

Sincerely,



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Center for Biological Diversity



Catherine Kilduff, Staff Attorney
Center for Biological Diversity



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