



NATURAL RESOURCES DEFENSE COUNCIL

April 18, 2014

VIA FACSIMILE: (703) 440-1551

John Ruhs
Director
Bureau of Land Management Eastern States Office
United States Department of the Interior
7450 Boston Boulevard
Springfield, Virginia 22153

RE: Protest of Parcel Included in the Bureau of Land Management, Eastern States Office Notice of Competitive Oil and Gas Lease Sale, June 19, 2014

Dear Director Ruhs:

The Natural Resources Defense Council (“**NRDC**”) hereby submits this protest letter on behalf of NRDC, Center for Biological Diversity, and Wild South (“**protesting parties**”) in accordance with 43 C.F.R. § 3120.1-3.¹ These parties protest the Bureau of Land Management’s (“**BLM**”) planned offering of lands located in Mississippi at the June 19, 2014 oil and gas lease sale. The lands proposed for lease are publicly owned lands of the Homochitto National Forest in Mississippi, and will hereinafter be referred to as “the parcel” or “the lease.”² Should BLM proceed with the planned sale of this lease, it will violate federal law and BLM policies. For the reasons stated below, the parcel should be withdrawn from this lease sale by BLM.

I. PROTESTING PARTIES AND THEIR INTERESTS

Center for Biological Diversity

The Center for Biological Diversity is a non-profit public interest organization with offices located in Flagstaff and Tucson, Arizona, representing more than 675,000 members and on-line

¹ All materials cited herein, the majority of which are readily available online, are incorporated in full by reference. The protesting parties have included some materials that are not readily available online as exhibits.

² The contested lease is designated: ES-009-06/2014 MSES 057936. A map of the parcel is attached as exhibit 1.

activists nationwide dedicated to the conservation and recovery of species at-risk of extinction and their habitats. Many of our members recreate on or visit National Forests and lands managed by the Bureau of Land Management.

Natural Resources Defense Council

NRDC is a non-profit environmental membership organization with more than 565,000 members throughout the United States. Over 2,000 NRDC members and activists reside in Mississippi. NRDC members use and enjoy national forest lands Mississippi, including specific lands at issue in this protest. NRDC members use these public lands for a variety of purposes, including: recreation, solitude, scientific study, and conservation of natural resources. NRDC has had a longstanding and active interest in the protection of the nation's public lands. For many years, NRDC has worked with both the Bureau of Land Management and the Forest Service to enhance public participation in government decision making and to protect important lands and wildlife.

Wild South

Wild South is regional non-profit organization that has worked throughout the South for over twenty years to inspire people to value, protect, and enjoy the wild character and natural legacy of the South. Our work involves thousands of people working together to protect and restore national forest ecosystems, maintain biodiversity, and promote responsible recreation. Our members routinely use and enjoy the national forests of Mississippi for recreation, solitude, and to connect with their heritage. We are actively engaged in efforts all across the Southeast to preserve the integrity of our last wild places and ensure that our lands, air, water, and wildlife are protected today and for future generations.

II. STATEMENT OF REASONS

Were the BLM to offer the lease for sale, the agency would violate the Federal Onshore Oil and Gas Leasing Reform Act, 30 U.S.C. §§ 181 *et seq.* (“**FOOGLRA**”); the National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.* (“**NEPA**”); the National Forest Management Act, 16 U.S.C. §§ 1600 *et seq.* (“**NFMA**”); the Federal Land Policy and Management Act, 43 U.S.C. §§ 1701 *et seq.* (“**FLPMA**”); and the Endangered Species Act, 16 U.S.C. §§ 1531 *et seq.* (“**ESA**”), because the BLM has (1) Failed to provide adequate information in violation of the Federal Onshore Oil and Gas Leasing Reform Act and BLM policies; (2) Failed to provide an adequate environmental analysis in violation of NEPA; (3) Violated NFMA by failing to conform the lease sale to the Homochitto National Forest Plan; (4) Violated FLPMA by failing to show compliance with an applicable Resource Management Plan; and (5) Violated the ESA by failing to properly consult and/or to reinitiate consultation with the

Fish and Wildlife Service. Accordingly, BLM should withdraw the parcel from the lease sale until the BLM and the Forest Service have fully complied with federal law.

A. BLM has Failed to Provide Adequate Information to the Public Regarding the Proposed Leasing, in Violation of BLM Policies and Federal Law.

BLM has not provided sufficient information to the public regarding the lands involved in this lease sale. As a result, it is extremely difficult for concerned members of the public to understand the impacts of oil and gas leasing and development here and how it would affect them. The failure to provide this information prevents members of the public from exercising their right to file a well-informed, meaningful protest founded on information about potential environmental and public health impacts, the locations of the parcel, and the resources which leasing might impact.

1. BLM has not provided documents demonstrating compliance with the National Environmental Policy Act.

BLM policies require that each lease sale notice must contain a link to the NEPA documentation for that sale.³ Without BLM providing such a link, the public cannot readily determine what documents might provide relevant environmental analysis or gauge whether the agency is in compliance with the law. No such link was provided for the June 2014 Lease Sale Notice and the BLM has not otherwise furnished NEPA documentation or indicated its reliance on any documents.⁴

2. BLM will violate the Federal Onshore Oil and Gas Leasing Reform Act if it proceeds with leasing the parcel because it has not provided adequate maps.

The BLM has not provided maps of “the location of all lands to be leased, and of all leases already issued in the general area,” a requirement of the Federal Onshore Oil and Gas Leasing Reform Act.⁵ In connection with the lease sale, BLM provided links to seven separate maps in

³ See Instruction Memorandum No. 2010-117 Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews part III.G (5/17/2010) available at http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2010/IM_2010-117.html.

⁴ No Record of Decision for the parcel appears to be available, or any other indication of the environmental analysis relied upon for NEPA compliance. No indication is made in the Lease Sale Notice concerning the analysis that BLM has relied on. Likewise, no indication is made on the BLM Eastern States website. BLM Eastern State’s “Oil and Gas Lease Sale Nominated Parcels” provides a heading reading “NEPA documents for parcels scheduled to be offered for the June 19, 2014 lease sale. The public comment period ends on February 5, 2014,” but no analyses are linked for any lands in Mississippi. See http://www.blm.gov/es/st/en/prog/minerals/nominated_parcel.html (last visited April 15, 2014). Likewise, BLM Eastern States’ “Competitive Sale Notices and Results” page provides no link to any NEPA documentation. See http://www.blm.gov/es/st/en/prog/minerals/current_sales_and.html (last visited April 15, 2014).

⁵ See 30 U.S.C. § 226(f).

three Portable Document Format (PDF) files. The maps in these files do not include the Mississippi parcel the BLM proposes to lease. Nor do the maps indicate whether and where land in the general area is already under lease.

The maps provided by BLM for the June 2014 lease sale do not reasonably provide sufficient information for the public to understand where specific lease sale parcels are located. Nor do the maps inform the public about the potential cumulative effects that might be implicated by existing leasing in the area. NRDC staff used Geographic Information Systems (GIS) software in conjunction with the legal land description provided in PLSS format in order to understand more precisely where federal mineral rights are being sold. Yet most members of the public do not have the resources to perform this mapping.

Without adequate maps, the public and protestors, specifically, are unable to determine the cumulative impacts of leasing on human health, important forest resources, and the environment. BLM also cannot realistically comply with its obligations under NEPA to conduct a site-specific environmental analysis or provide sufficient information to allow surface management agencies such as the Forest Service to do so. Moreover, neither the Forest Service nor BLM can meet their legal obligations under the National Forest Management Act to ensure the proposed leasing is consistent with the applicable forest plans without adequate maps indicating the exact boundaries of the lands to be leased. If BLM does not have sufficient resources to map all parcels itself, BLM should require that a map is included with expressions of interest for leasing as a pre-requisite for moving forward with a proposed sale of a parcel.

Without the required NEPA documentation and mapping of the leases, the public cannot adequately participate in the BLM Lease Protest process, nor can BLM or other agencies comply with federal legal requirements. Therefore, at minimum, BLM must postpone leasing of the protested parcel until the legal requirements can be met and the public is given an adequate time to review the necessary information.

B. BLM will Violate NEPA if the Parcel is Included in the Lease Sale.

NEPA requires that where an agency proposes a “major Federal action[] significantly affecting the quality of the human environment,” it must prepare an environmental impact statement (EIS) in which the agency considers the potential impacts of the proposed action on the environment and considers the impact of reasonable alternatives. *See* 42 U.S.C. § 4332(2)(C). To comply with NEPA, an EIS must provide a “full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. The agency must take a “hard look” at the environmental consequences of its proposed

action. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); *Strycker's Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 231 (1980).

This analysis must be performed prior to any irreversible or irretrievable commitment of resources in order to ensure that agencies and the public are informed about the “disruptive environmental effects that may flow from their decisions at a time when they “retain [] a maximum range of options.” *Conner v. Burford*, 848 F.2d 1441, 1446 (9th Cir. 1998) quoting *Sierra Club v. Peterson*, 717 F.2d 1409, 1414 (D.C.Cir.1983). Leasing represents that critical stage of agency decisionmaking which results in an irreversible and irretrievable commitment of resources. See *Sierra Club v. Peterson*, 717 F.2d at 1414. BLM may defer a full NEPA analysis only if it disallows all surface disturbing activities by placing a “No Surface Occupancy” (NSO) stipulation on all lands leased. However, without an NSO requirement, BLM relinquishes the right to preclude all surface-disturbing activities by leasing a parcel. Therefore, unless the BLM proceeds to lease the contested parcel with a complete NSO stipulation, a NEPA review must be undertaken before leasing.⁶

1. BLM will violate NEPA if it proceeds with leasing because a site-specific analysis has not been performed.

A site-specific environmental analysis must be performed before parcels are leased by the BLM. See *Sierra Club v. Peterson*, 717 F.2d at 1415. This is necessary to ensure that assessment of all reasonably foreseeable impacts occurs at the earliest practicable point.⁷

The BLM’s own NEPA Handbook states that NEPA is triggered by proposals to develop subsurface minerals where, as here, BLM manages the subsurface rights and another agency manages the surface. See BLM, *National Environmental Policy Act Handbook H-1790-1* at 16 (2008). BLM may “tier” to an existing environmental analysis, if the existing analysis provides the requisite “hard look” at site-specific impacts. See *Id.* at 22. However, if BLM relies on past analyses, it must, at minimum, develop a Determination of NEPA Adequacy (DNA) which identifies the relevant documents provide this information to the public for review. See *Id.* As noted above, no such documentation has been provided.

⁶ See *Southern Utah Wilderness Alliance*, IBLA No. 2000-358, 159 IBLA 220, 241 (Jun. 16, 2003) (“BLM regulations, the courts and our precedent proceed under the notion that the issuance of a lease without an NSO stipulation conveys to the lessee an interest and a right so secure that full NEPA review must be conducted prior to the decision to lease.”). See also *Pennaco Energy, Inc. v. U.S. Dep’t of the Interior*, 377 F.3d 1147 (10th Cir. 2004); *Conner v. Burford*, 848 F.2d 1441 (9th Cir. 1988); *Sierra Club v. Peterson*, 717 F.2d 1409 (D.C. Cir. 1983).

⁷ See *New Mexico ex rel. Richardson v. Bureau of Land Management*, 565 F.3d 683, 717-20 (10th Cir. 2009) (holding that where “any environmental impacts [are] reasonably foreseeable at the leasing stage,” NEPA requires an analysis of the site-specific impacts of leasing).

If no map has even been created for the parcel, as discussed above, it is difficult to imagine how the BLM or the Forest Service could possibly have undertaken an adequate site-specific analysis. Moreover, no such analysis has been provided to the public, which undermines the purposes of NEPA to allow public participation in agency decisionmaking and to ensure that the agency considers the full range of environmental impacts.

- a. The Mississippi National Forests Plan and EIS do not provide the requisite site-specific analysis for leasing the lands at issue.
 - i. *The Mississippi Forests Plan EIS and Subsequent Oil and Gas Leasing EA do not provide the requisite analysis*

The Mississippi Plan and EIS⁸ do not provide a site-specific analysis on which BLM can rely to lease the lands in Mississippi. The Mississippi Forest Plan EIS was drafted in 1985. The alternatives considered all represented the same level of oil and gas leasing. *See* Mississippi EIS at Table 2-1, page 2-40. The EIS did not provide a hard look (or any look) at the site-specific impacts of leasing the lands at issue here for oil and gas development. It provided only a very short, general discussion of potential environmental harms from oil and gas development.⁹ It does not analyze the effects of potential development on the particular lands at issue in the protest, nor does it even attempt to discuss the impacts likely to occur on the Homochitto National Forest as a whole.

The Mississippi EIS was supplemented with an Environmental Assessment related to Oil and Gas Leasing in 2010.¹⁰ The Mississippi Oil and Gas EA also does not provide the site-specific analysis required by NEPA. While the EA provides some analysis concerning the effects of oil and gas development, it does not analyze the effects of potential development on any particular lands, including the particular lands at issue in the protest. Instead the EA provides a generalized analysis of effects from oil and gas development that may occur on National Forest lands in Mississippi. The EA does provide some general estimates of the cumulative impacts that oil and gas development may have on the forests, including some which provide estimates for each of

⁸ U.S. Forest Service, *Land and Resource Management Plan, National Forests in Mississippi* (Sept. 1985) (“Mississippi Forests Plan”); U.S. Forest Service, *Final Environmental Impact Statement, National Forests in Mississippi Land and Resource Management Plant* (Sept. 1985) (“Mississippi EIS”).

⁹ *See* Mississippi EIS at 2-78, 4-29 (providing a few sentences on the environmental risks of oil and gas development under a heading characterizing these impacts as “unavoidable”); *Id.* at 3-27 (providing a discussion of oil and gas developments’ impacts on water uses by stating only that “Oil and gas mineral activities have the greatest potential to reduce water quality on the National Forests. Continued water quality monitoring at these sites, and increased monitoring associated with timber harvesting and site preparation, will help prevent future potential problems.”); *Id.* at 3-31 to 3-34, 4-5 to 4-6 (providing a brief and general discussion of potential environmental impacts of mineral development, including oil and gas, and the prevalence of certain activities on the different Mississippi forests but nothing that could be considered a site-specific look at impacts).

¹⁰ U.S. Forest Service, *Lands Available for Oil and Gas Leasing, Environmental Assessment* (Aug, 2010) (“Mississippi Oil and Gas EA”).

the national forests in the state. *See, e.g.*, Mississippi Oil and Gas EA at 29 (providing estimates of surface disturbance from oil and gas operations on each forest). However, this does not qualify as a site-specific analysis. Now that specific lands are proposed for lease, such a site-specific analysis must be conducted.

The analysis provided in the EIS and EA is not sufficient to satisfy NEPA, which mandates the completion of a site-specific analysis before leasing can go forward. A site-specific analysis must be performed before leasing can proceed.

b. BLM has provided no other documents which include a site-specific analysis.

BLM has furnished no other documents which could be deemed to fulfill the legal requirement for site-specific analysis. Because BLM has not provided documentation to indicate that it has fulfilled the legal requirements of the National Environmental Policy Act, we assume that no such documentation exists. However, even if it is BLM's position that such documentation does exist, the public has not been provided with the documents nor given an opportunity to review them during the protest period. Therefore, BLM should withdraw the parcel from the June 2014 Lease Sale until such time as the legal requirements of NEPA can be fulfilled and the public is given an adequate opportunity to review the documentation indicating compliance with the law.

2. ***BLM will violate NEPA if it proceeds with leasing because it has not taken a "hard look" at the effects of unconventional oil and gas development.***

NEPA requires that an agency supplement its original analysis when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." *See* 40 C.F.R. § 1502.9(c)(1)(ii). "The standard for determining when [a supplemental EIS (SEIS)] is required is essentially the same as the standard for determining when an EIS is required." *Sierra Club v. U.S. Army Corps of Eng'rs*, 295 F.3d 1209, 1215-16 (11th Cir. 2002) (quotation marks and citation omitted). A supplemental EIS must be prepared if there remains major federal action to occur, and if the new information is sufficient to show that the remaining action will affect the quality of the human environment in a significant manner or to a significant extent not already considered. *Sierra Club v. Bosworth*, 465 F. Supp. 2d 931, 937 (N.D. Cal. 2006) (citations and quotations omitted).

The agency must "take a 'hard look' at the new information to assess whether supplementation might be necessary." *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 72-73 (2004). Whether new circumstances are significant depends on a number of factors, including "[t]he degree to which the proposed action affects public health or safety," "[u]nique characteristics of the geographic area," such as proximity to historic or cultural resources, park lands, wild and scenic rivers, or ecologically critical areas, "[t]he degree to which the effects on the quality of the

human environment are likely to be highly controversial,” “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks,” “[t]he degree to which the action . . . may cause loss or destruction” of significant resources, “[t]he degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act,” and “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. § 1508.27(b). As is discussed below, an analysis of these factors demonstrates that supplementation under NEPA is warranted here. The emergence of commercially economical shale gas drilling is exactly the sort of new circumstance that requires supplementation under NEPA. The BLM and the Forest Service have not considered the environmental and health impacts that may arise from the drilling and hydraulic fracturing of potential new wells within the boundaries of the National Forests in Mississippi. A hard look at the impacts from unconventional oil and gas development and high volume hydraulic fracturing is required by NEPA before BLM proceeds with leasing this parcel.

a. Failure to analyze the effects of unconventional oil and gas development

A full analysis of the effects of potential unconventional oil and gas development must be done in order to comply with NEPA. This analysis must take a hard look at the effects of unconventional extraction techniques which are now widely used, especially horizontal drilling and hydraulic fracturing or “fracking”.

Hydraulic fracturing, which was not widely used in the United States until around 2005, involves the extraction of natural gas from shale formations deep below the surface, and is one of the fastest growing trends in American on-shore domestic oil and gas production.¹¹ Large scale production of shale gas has become widespread in the past several years due to these advances in horizontal drilling and hydraulic fracturing, which have significantly improved the industry’s ability to produce natural gas in shale basins around the country, including the Barnett, Hayessville, Fayetteville, Woodford, Utica, and Marcellus shale formations.¹² In 2009, 63 billion cubic meters of gas were produced from deep shale formations. In 2012, this production doubled

¹¹ Ground Water Protection Council and ALL Consulting, *Modern Shale Gas Development in the United States: A Primer*. Prepared for U.S. Dep’t of Energy, Office of Fossil Energy and National Energy Technology Laboratory (Apr. 2009), available at http://www.rrc.state.tx.us/does shale/Shale_Gas_Primer_2009.pdf. See also Energy Information Administration, *Review of Emerging Resources: U.S. Shale Gas and Shale Oil Plays* (July 2011), available at <http://www.eia.gov/analysis/studies/usshalegas/pdf/usshaleplays.pdf>; Secretary of Energy Advisory Board Shale Gas Production Subcommittee, *90-Day Report* (Aug. 18, 2011), available at http://www.shalegas.energy.gov/resources/081811_90_day_report_final.pdf (noting that “it was only around 2008 that the significance of shale gas began to be widely recognized”).

¹² Robert B. Jackson *et al.*, Duke University, *Research and Policy Recommendations for Hydraulic Fracturing and Shale-Gas Extraction*, Center on Global Change (2011), available at <http://www.nicholas.duke.edu/cgc/HydraulicFracturingWhitepaper2011.pdf>.

to 137.8 billion cubic meters, and the U.S. Energy Information Administration projects that by 2035, production will increase to 340 billion cubic meters per year.¹³

This process of natural gas drilling differs significantly from conventional oil and gas drilling. Fracking typically involves millions of gallons of fluid that are pumped into a well at high pressure to create fractures in shale or other rock containing hydrocarbon deposits.¹⁴ This pressure exceeds the rock strength, and the fluid enlarges fractures in the rock, allowing gas to flow from the fractures and up into the wellbore.¹⁵ Wells may extend to depths greater than 8,000 feet, and horizontal drilling may extend several thousand feet away from the location of the drill pad on the surface.¹⁶

It is now clear that unconventional oil and gas development, using horizontal drilling and hydraulic fracturing is undergoing a boom in relevant areas of Mississippi. *See, e.g. Series on Fracking to Begin Sunday*, McComb Enterprise-Journal (May 17, 2012) (describing the “apparent fracking boom” beginning in southwest Mississippi). *See also* exhibit 2 (showing data from the Energy Information Administration, which has determined that the Texas-Louisiana-Mississippi Salt Basin, a significant shale resource, and specific accumulations that are currently of interest to the oil and gas industry, underlie the lands at issue here in the Homochitto National Forest).

The Mississippi Oil and Gas Leasing EA was drafted in 2010, but relied on a Reasonably Foreseeable Development (RFD) scenario developed in 2005. *See* Oil and Gas EA at 23. Hydraulic fracturing is mentioned only once in the EA, as one item in a list of possible aspects of the “site construction and drilling phase” of well development. Mississippi Oil and Gas Leasing EA at 74. Horizontal drilling is not mentioned in the EA. Directional drilling is mentioned, but only in the context of accessing reserves under parcels with no surface occupancy stipulations. But no analysis of the environmental and health effects of unconventional oil and gas extraction techniques is provided. The EA provides very general discussions of the impacts from oil and gas development and potential mitigation measures on mineral, soil and water resources, air quality, vegetation, wildlife, cultural resources, visual resources, recreation, and the economy.

Because the Mississippi EA does not analyze effects of unconventional oil and gas development, NEPA requires that it be supplemented.

¹³ U.S. Energy Information Administration, Annual Energy Outlook 2011 with Projections to 2035 (Dec. 2010), available at <http://www.eia.doe.gov/oiaf/aeo/electricity.html>.

¹⁴ Jackson *et al.*, *supra* note 12, at 1.

¹⁵ U.S. Env'tl. Prot. Agency, Office of Research and Development, *Hydraulic Fracturing Research Study* (June 2010), available at <http://www.epa.gov/safewater/uic/pdfs/hfresearchstudyfs.pdf>.

¹⁶ *Id.*

- i. *Changes to the level of reasonably foreseeable development within the forests*

The development of horizontal drilling and high-volume hydraulic fracturing have allowed economic oil and gas extraction in many areas where it was not previously feasible. In Mississippi there was a 61.9% increase in the number of producing oil and gas wells from 1999-2009.¹⁷ Thus it is reasonably foreseeable that significant new drilling will occur on the lands at issue if leasing goes forward, beyond the level of development contemplated by previous analyses. BLM must supplement existing analyses to take account of the increased number of wells likely to occur from leasing because of new techniques like horizontal drilling and hydraulic fracturing and the presence of relevant resources, like the shale basins, under the forests.

- ii. *No hard look at the impacts of unconventional oil and gas development on water resources*

Hydraulic fracturing entails the use of large quantities of water. Estimates vary depending on the size and depth of the well, but two to four million gallons of water per well is an often-used figure, and water use can be as high as five million gallons or more.¹⁸ In addition, wells are often “fracked” multiple times in order to maximize the resources extracted. The vast amount of water needed to drill these wells must come from somewhere, likely either from the streams and rivers of the National Forests or from local groundwater resources. Water withdrawals in other parts of the country for hydraulic fracturing have had significant effects on lakes, streams, rivers and reservoirs, impacting aquatic life and local residents.¹⁹ The lowering of water levels can also impact water quality, depleting aquifers and causing chemical changes in the water, affecting solubility and mobility; stimulating bacterial growth; and lowering surface water resources, causing changes in flow depth, velocity, and temperature and reducing the dilution effect on contaminants.²⁰ The BLM has provided no analysis of the local area-specific impacts of such water withdrawals on the National Forests or on the nearby communities that rely on these forests as drinking water sources, making it unclear how large volume water withdrawals may impact this region.

¹⁷ Data from: Energy Information Administration, *Distribution and Production of Oil and Gas Wells by State*, available at http://205.254.135.7/pub/oil_gas/petrosystem/petrosysog.html.

¹⁸ See U.S. Env'tl. Prot. Agency, Office of Research and Development, *Draft Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources*, pp. 19 (Feb. 7, 2011), available at http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/upload/HFStudyPlanDraft_SAB_020711-08.pdf. See also 2011 Draft Environmental Impact Statement for the Revised Land and Resource Management Plan, George Washington National Forest (Apr. 2011) at 3-311, available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5297825.pdf.

¹⁹ Donald Gilliland, *The Patriot-News*, *SRBC suspends water withdrawal permits for drilling due to low stream flows* (July 19, 2011), available at http://www.pennlive.com/midstate/index.ssf/2011/07/srbc_suspends_water_withdrawal.html.

²⁰ See Drinking Water Study Draft Plan, *supra* at note 18, at 21.

These huge volumes of water are mixed with large amounts of chemicals and sand and then forced under high pressure down a well in order to blow out underground seams and increase the volume of gas extracted. The volume of chemicals can differ, but for a well that uses 3 million gallons of fracturing fluids, there will potentially be up to 60,000 gallons of chemicals used.²¹ These chemicals are typically stored in tanks on-site and blended with water and proppant prior to injection.²² Due to a loophole in the federal Safe Drinking Water Act, the exact chemicals, amounts, and combinations are not required to be disclosed, despite reports that many of these chemicals are harmful and potentially cancer-causing. For example, the EPA has found that chronic toxicity has been associated with some identified “fracking” chemicals, such as ethylene glycol, glutaraldehyde, and n,n-dimethyl formamide.²³

After fracturing, the pressure is decreased and the direction of fluid flow is reversed, allowing the fracturing fluid and naturally occurring substances to return to the surface.²⁴ These returning fluids, known as *flowback*, may be highly contaminated with heavy metals, carcinogens, and naturally occurring radioactive materials,²⁵ including mercury, lead, arsenic, radium, uranium, and volatile and semi-volatile organic compounds.²⁶

Flowback, which comprises as much as 60-80 percent of the fracturing fluid injected into the well, can be contaminated with tens of thousands of pounds of chemicals, salt, and sand, posing difficulties for disposal.²⁷ Initially, flowback fluids can amount to as much as 100,000 gallons per day for several days, which is generally stored on-site in storage tanks and waste impoundment pits prior to treatment or disposal.²⁸ One method of disposal is to discharge water into surface waters after treatment at a wastewater treatment facility. However, flowback water can pose challenges for treatment facilities that are generally unable to remove radioactive and other harmful materials found deep underground, as well as large amounts of sodium, chloride

²¹ See *Id.* at 24.

²² *Id.*

²³ *Id.* at 25.

²⁴ *Id.* at 35.

²⁵ For example, the West Virginia Department of Environmental Protection found arsenic, lead and hexavalent chromium in wastewaters. See Letter from West Virginia Department of Environmental Protection to William Goodwin, Superintendent, Clarksburg Sanitary Board (July 23, 2009). New York State’s Department of Environmental Conservation has reported levels of radium 226 in flowback water from the Marcellus Shale in amounts over 250 times the limit for safe drinking water. See N.Y. Dep’t of Env’tl. Conservation, Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program 13 (2009), available at <ftp://ftp.dec.state.ny.us/dmn/download/OGdSGEISFull.pdf>. The known carcinogen benzene has also been found in flowback waters from Pennsylvania and West Virginia at average concentrations nearly 100 times the maximum acceptable contaminant levels. *Id.* at 5-104.

²⁶ See Drinking Water Draft Plan, *supra* note 18, at 30.

²⁷ See *Hydraulic Fracturing Research Study*, *supra* note 15. See also Rebecca Hammer & Jeanne VanBriesen, *In Fracking’s Wake: New Rules are Needed to Protect Our Health and Environment from Contaminated Wastewater* (May 2012) available at <http://www.nrdc.org/energy/fracking-wastewater.asp>.

²⁸ See Drinking Water Study Draft Plan, *supra* note 18, at 36.

and bromide.²⁹ As an alternative, flowback water is sometimes disposed through land application, which involves spraying of the wastewater onto the forest floor. This method has been known to kill trees and foliage in the area, and deposit high levels of chloride, calcium and sodium in the soil.³⁰ Flowback water may also be returned underground using a permitted underground injection well.³¹ Research has shown that currently available methods of wastewater disposal are inadequate and that improper handling, treatment, and disposal of shale gas wastewater can expose people, fish, and wildlife to toxic, radioactive, or carcinogenic chemicals.³²

It is unclear what the potential impacts would be to the waters of Mississippi from releases of fracturing fluids or wastewater through accidental spills, land application, surface water discharges or groundwater contamination, or whether such releases could violate state and federal water quality standards. A number of water bodies are near the lands to be leased and could be affected by a spill, leak, or blowout. *See* exhibit 3. The EIS and EA do not assess the ability of local wastewater injection or treatment facilities to manage the wastewater likely to be generated or analyze land application's impacts. Nor do the lease stipulations require disclosure of fracking chemicals or prevent the discharge of wastewater into surface waters of the National Forests.

Those fracturing fluids that remain (or are later injected) underground have the potential to impact groundwater resources. For example, there have been numerous reports from homeowners of contamination of drinking water wells in areas of extensive shale gas drilling.³³ These fluids also have the potential to migrate into aquifers, as appears to be the case in Pavilion, Wyoming, where EPA has made a preliminary determination that hydraulic fracturing fluids

²⁹ *See* Ian Urbina, N.Y. Times, *Regulation Lax As Gas Wells' Tainted Water Hits Rivers* (Feb. 26, 2011), at A1 ("Yet sewage treatment plant operators say they are far less capable of removing radioactive contaminants than most other toxic substances. Indeed, most of these facilities cannot remove enough of the radioactive material to meet federal drinking-water standards before discharging the wastewater into rivers, sometimes just miles upstream from drinking-water intake plants.") It is unclear whether local wastewater treatment facilities in the vicinity of the Homochitto National Forest have the capacity to treat flowback waters.

³⁰ *See* Adams *et al.*, U.S.D.A., *Effects of Development of a Natural Gas Well and Associated Pipeline on the Natural and Scientific Resources of the Fernow Experimental Forest* (June 2010), available at http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs76.pdf. *See also* Nicholas Kusnetz, ProPublica, *Anatomy of a Gas Well: What Happened When a Well Was Drilled in a National Forest* (Feb. 4, 2011), available at <http://www.propublica.org/article/anatomy-of-a-gas-well-what-happened-when-a-well-was-drilled-in-a-national-f>.

³¹ *See* Hydraulic Fracturing Study, *supra* at note 15. A new study performed by scientists at the U.S. Geological Survey concluded that the increased rate of earthquakes in the mid-continental U.S. is almost certainly manmade, and potentially is linked to oil and gas extraction, particularly to deep waste disposal injection wells. *See* W.L. Ellsworth, US Geological Survey, *et al.*, *Abstract: Are Seismicity Rate Changes in the Midcontinent Natural or Manmade?*, to be presented at Seismological Society of America 2012 Annual Meeting, available at <http://www.seismosoc.org/meetings/2012/app/#12-137> (April 2012).

³² *See* Hammer & VanBriesen, *supra* note 27. <http://www.nrdc.org/energy/fracking-wastewater.asp>

³³ *See* Jackson *et al.*, *supra* note 12, at 2.

have contaminated groundwater.³⁴ Contamination of groundwater may also originate from spills or leaks of fracturing fluids at the surface.

Gas may also migrate up through fractures in the overlying rock layers into groundwater. This shale gas is typically comprised of over 90 percent methane.³⁵ This form of methane contamination of drinking water wells is another clear and well documented potential risk of hydraulic fracturing, as demonstrated by a recent Duke University study. The study found that methane concentrations were on average 17 times higher in drinking water wells located near natural gas drilling and fracking sites in Pennsylvania and New York than in drinking water wells not located within 1 km of a gas well.³⁶ The average concentration in gas areas was high enough to be a potential explosion hazard. This migration can occur through corroded well casings, failures in the integrity of cement surrounding the casing, or even potentially through direct movement of methane or flowback water upwards from underground following hydraulic fracturing.³⁷ State environmental agencies also have reported incidents of drinking water contamination resulting from methane leaks from fracked gas wells.³⁸

But the EIS and EA provide virtually no analysis of the potential impacts on surface or groundwater, private water wells, or other drinking water supplies, except to say that they are not expected to occur.³⁹ Yet the National Forests provide the source of water for many communities in or near the forests.⁴⁰ And the Forest Service's own classification system rates the lands to be leased very highly in terms of their importance to surface drinking water supplies. *See* exhibit 4. Before leasing goes forward, the BLM must take a hard look at the environmental and health consequences of potential impacts on nearby drinking water resources, including possible contamination of aquifers, private drinking wells, groundwater and surface waters, from such drilling practices.

³⁴ Natural Resources Defense Council, *Comments on Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program* (Dec. 31, 2009) (submitted to the New York State DEC); *see also* U.S. Env'tl. Prot. Agency, Office of Research and Development, *Draft Investigation of Ground Water Contamination near Pavilion, Wyoming* (2011), available at www.epa.gov/region8/superfund/wy/EPA_ReportOnPavilion_Dec-8-2011.pdf.

³⁵ *See* Jackson *et al.*, *supra* note 12, at 2.

³⁶ Stephen G. Osborn, *et al.*, *Methane Contamination of Drinking Water Accompanying Gas-Well Drilling and Hydraulic Fracturing*, 108 PNAS 8172 (2011), available at <http://www.nicholas.duke.edu/cgc/pnas2011.pdf>.

³⁷ Pennsylvania State College of Agricultural Sciences Cooperative Extension, *Water Facts 28: Gas Well Drilling and Your Private Water Supply* at 2 (Mar. 2010), available at http://www.eesi.psu.edu/news_events/EarthTalks/2009Spring/materials2009spr/gasdrilling.pdf.

³⁸ For example, the Pennsylvania DEP has brought a series of enforcement actions against Cabot Oil & Gas for drinking water well contamination. *See* Abraham Lustgarten, ProPublica, *Cabot Oil & Gas's Marcellus Drilling to Slow After PA Environment Officials Order Wells Closed* (Apr. 16, 2010), available at <http://www.propublica.org/article/cabotoil-and-gas-ordered-to-shut-down-problem-wells-and-pay-massive-fine-a>. *See also* Ohio Dept. of Natural Resources, *Report on the Investigation of the Natural Gas Invasion of Aquifers in Bainbridge Township of Geauga County, Ohio* (2008), available at http://s3.amazonaws.com/propublica/assets/natural_gas/ohio_methane_report_080901.pdf.

³⁹ *See* Mississippi Oil and Gas Leasing EA at 39-40.

⁴⁰ *See* <http://apps.msdh.ms.gov/DWW/>.

BLM has not provided an environmental analysis of the full lifecycle of the horizontal drilling and high volume hydraulic fracturing process, from the impact on water sources from sedimentation, to the potential contamination from fracking fluids used to extract natural gas, to the proper treatment and disposal of these fluids at the end of the process. Therefore, without providing such an analysis, leasing of the parcel at issue violates NEPA.

iii. *No hard look at the surface impacts of unconventional oil and gas development*

During site preparation for a shale well, an area must be cleared to provide space for one or more wellheads, pits or tanks for holding water, used drilling fluids, and other materials; and space for trucks and other large equipment. The average size of a single high-volume hydraulic fracturing operation is significantly larger than that of a conventional drill pad. The Mississippi Oil and Gas Leasing EA estimated that, on the high end, each well drilled on the Homochitto NF would lead to approximately 6.6 acres of disturbance.⁴¹ However, an analysis of surface impacts of unconventional wells in the Marcellus shale found that approximately 30 acres of surface disturbance could be expected for each well. This surface disturbance destroys and indirectly degrades forests and forest habitat, and this level of ground disturbance can increase sedimentation in streams, such as those discussed above, adversely affecting water quality. Because unconventional wells may lead to a disturbance of 30 acres, the surface impacts from unconventional development could be four and a half times greater than those analyzed in the EA.⁴²

Truck traffic associated with horizontal natural gas wells is also significantly heavier than traffic associated with conventional drilling operations. For example, the National Park Service estimates that in Marcellus Shale production areas, between 300 and 1,300 truck trips would occur per well.⁴³ Other documents have estimated that between 2,920 and 4,445 truck trips are necessary for a three well multi-well pad.⁴⁴ Narrow dirt roads may need to be widened or paved to accommodate this high volume of traffic, increasing surface impacts and stormwater runoff. Additionally, the increase in the number of truck trips required for each well also increases the risk of chemical transportation accidents.⁴⁵

Additionally, many horizontal hydraulic fracturing operations use open storage pits to hold brine and flowback. These pits can have impacts on bird and bat species, which can mistake the pits

⁴¹ See Mississippi Oil and Gas Leasing EA at 29, Table 8.

⁴² At 30 acres per well, the acreage disturbed would be 4.5 times greater than the high case analyzed by the EA of 6.6 acres per well.

⁴³ See Drinking Water Draft Plan, *supra* note 18, at 55.

⁴⁴ See George Washington DEIS, *supra* note 18, at 3-338.

⁴⁵ See Drinking Water Draft Plan, *supra* note 18, at 14.

for bodies of water.⁴⁶ These pits can also impact the environment from leaks and spills. For example, in Ohio, a fracturing flowback storage pit was cut with a track hoe in 2010, causing more than 1.5 million gallons of fluid to spill into the environment.⁴⁷

There is also no substantive environmental analysis related to the potential impacts of solids disposal. The total volume of drill cuttings from drilling a horizontal well may be one-third greater than from the drilling of a conventional well.⁴⁸ This may necessitate the use of a larger reserve pit, and increase the amount of heavy metals and naturally occurring radioactive materials on the site. Prior to offering the parcel for lease, BLM or the Forest Service must supplement the NEPA analysis to consider the potential effects from all these surface impacts.

iv. *No hard look at the impacts of unconventional oil and gas development on recreation*

The EIS and EA provide virtually no analysis of the effects of oil and gas development on recreation. The EA recognizes that “major provider of developed and dispersed outdoor recreation in the state.” Mississippi Oil and Gas Leasing EA at 59. However, the EA states that “[t]he decision to lease would not have any direct, indirect, or cumulative impacts on recreation users.” This is simply not the case. As discussed in section II.B.1, without an NSO stipulation, the decision to lease can lead to surface disturbing impacts and an analysis of the effects of these impacts must be conducted on a site-specific basis at the leasing stage. Leasing can have significant effects on recreation within the Mississippi forests via noise and light pollution from 24-hour drilling operations, air emissions from truck traffic, drilling equipment and the wells themselves, and the closures of certain areas of the forest near drilling activity.

BLM must provide a site-specific analysis of the effects of leasing on recreational opportunities before proceeding with leasing.

v. *No hard look at the impacts of unconventional oil and gas development on human health*

Oil and gas drilling and hydraulic fracturing have the potential to affect human health in multiple ways. Potential impacts to drinking water supplies, discussed above, could lead to exposure to toxic substances. Additionally, air emissions from natural gas development have been found at

⁴⁶ See U.S. Fish and Wildlife Service, Region 6, Env'tl. Contaminants Program, *Reserve Pit Management: Risks to Migratory Birds*, at i (2009), available at <http://westernenergyalliance.org/wp-content/uploads/2009/09/Reserve-Pits.pdf>.

⁴⁷ Ohio Dep't of Natural Resources, Notice of Violation No. 1278508985 (June 21, 2010).

⁴⁸ See N.Y. D.E.C. Draft Supplemental GEIS, *supra* note 25, at 6-63.

levels that pose increased risks of cancer and other health threats to those living near gas wells.⁴⁹ Noise and light produced by round-the-clock drilling operations also have the potential to affect health, potentially contributing to hypertension, psychological symptoms, loss of sleep, and fatigue.⁵⁰

BLM has provided no analysis of the potential impacts to human health from oil and gas drilling and hydraulic fracturing. Such an analysis is legally required before leasing of the parcel can proceed.

- vi. *No hard look at the impacts of unconventional oil and gas development on wildlife, including threatened and endangered species*

Oil and gas drilling operations can impact wildlife by killing and harming animals that cannot leave habitats affected by construction of access roads, clearing and leveling of drill pad sites, or construction of pipelines and facilities. Wildlife and their habitat will be affected to a greater extent because of the increased footprint of unconventional drilling operations compared to conventional drilling and because of the greater interest in oil and gas development that unconventional extraction techniques have given rise to. There are also potential adverse impacts from the creation of forest edge from construction activities, with research demonstrating that measurable impacts often extend at least 330 feet into the forest area adjacent to the edge.⁵¹

Multiple threatened and endangered species could also be impacted by development of the parcel. The red-cockaded woodpecker and the Louisiana Black Bear both occur on the Homochitto National Forest.⁵² Additionally, water contamination or sedimentation could affect species downstream from development on the forest. The existing analysis does not fulfill the requirements of NEPA to assess the impacts of oil and gas leasing on wildlife, including threatened and endangered species, or its habitat. Site-specific analysis is necessary to understand these effects before leasing proceeds.

C. Leasing of the Parcel Would Conflict with the Mississippi National Forests Plan, a Violation of the National Forest Management Act.

⁴⁹ See, e.g., Lisa M. McKenzie et al., *Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources* (2012) available at <http://www.ncbi.nlm.nih.gov/pubmed/22444058>.

⁵⁰ See Colorado School of Public Health, *Battlement Mesa Health Impact Assessment*, Draft 2 at 52-54 available at <http://www.garfield-county.com/environmental-health/battlement-mesa-health-impact-assessment-draft2.aspx>.

⁵¹ See Neal Johnson et al., *The Nature Conservancy, Pennsylvania Energy Impacts Assessment, Report 1: Marcellus Shale Natural Gas and Wind* (Nov. 15, 2010) at 10, available at http://www.nature.org/media/pa/tnc_energy_analysis.pdf.

⁵² See USDA, *Threatened and Endangered Species Report, National Forests in Mississippi* (May 2013).

The Forest Service and BLM will violate the National Forest Management Act (NFMA) if they offer the parcel for sale. Under the NFMA, the Forest Service's land management plans must achieve several goals, including: (1) insuring consideration of the economic and environmental aspects of renewable resource management, "including the related systems of silviculture and protection of forest resources, to provide for outdoor recreation (including wilderness), range, timber, watershed, wildlife, and fish"; (2) providing for diversity of plant and animal communities; and (3) insuring research on and evaluation of the effects of each management system to ensure that it will not produce substantial and permanent impairment of the productivity of the land, among other goals. 16 U.S.C. § 1604(g). In addition, NFMA requires that "[r]esource plans and permits, contracts and other instruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans." 16 U.S.C. § 1604(i).

Essentially, this means that the Forest Service, in its Plan, must provide for certain resources such as outdoor recreation, watershed integrity, fish and wildlife, plant and animal diversity, and soil productivity, and all oil and gas development activities must be consistent with the Forest Plan. *See Northwoods Wilderness Recovery, Inc. v. U.S. Forest Service*, 323 F.3d 405, 407 (6th Cir. 2003) ("Implementation of the forest plan is achieved through individual site-specific projects, and all projects must be consistent with the forest plan."); *see also Cherokee Forest Voices v. U.S. Forest Service*, 2006 U.S. App. LEXIS 13214 at *11-12 (6th Cir. May 25, 2006); *Sierra Club v. Martin*, 168 F.3d 1, 4-5 (11th Cir. 1999); *Friends of Southeast's Future v. Morrison*, 153 F.3d 1059, 1068 (9th Cir. 1998); *National Audubon Soc'y v. Hoffman*, 132 F.3d 7, 19 (2nd Cir. 1997).

Both the Forest Service and BLM then have a duty to ensure that the amount of drilling permitted by this lease sale does not conflict with the varying objectives set forth in the Forest Plan. This the agencies have not done. Rather, the leasing appears to violate the NFMA by placing oil and gas development above other management prescriptions and other natural resources and by failing to ensure that lease stipulations for oil and gas development activities are sufficient to enforce all applicable Forest Plan standards.

It should be noted that the Forest Service is required by its own regulations to determine that "operations and development could be allowed somewhere on each proposed lease" for any lease offered without a No Surface Occupancy stipulation. *See* 36 CFR § 228.102 (e). Given the wide range of potential impacts from unconventional oil and gas development and their potential to frustrate other forest management goals, it is essential that a site-specific analysis be performed. Otherwise, the Forest Service cannot ensure that development could go forward on each parcel, consistent with the forest plan.

The lack of a map for the lands proposed for lease also prevents the Forest Service and BLM from fulfilling their legal obligations to ensure that leasing on the forest is consistent with the Forest Plan. If neither the BLM nor the Forest Service has created a map of the parcel, it is difficult to imagine that the agencies can determine exactly what effects leasing might have. They also cannot adequately evaluate whether forest resources or other uses of the forest may be affected. Nor can BLM and the Forest Service ensure that leasing is consistent with the forest management plan, as required by NFMA.

D. BLM has Not Provided Documentation of Compliance with an Applicable Resource Management Plan, in Violation of the Federal Land Policy and Management Act

FLPMA requires that BLM develop Resource Management Plans (“RMP”) for lands and minerals it manages. *See* 43 U.S.C. § 1712 (“The Secretary shall, with public involvement and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans . . .”). Federal law and BLM’s regulations prohibit agency action that is inconsistent with the RMP. 43 U.S.C. § 1732(a) (mandating that the Secretary “shall manage the public lands . . . in accordance with the land use plans”); 43 C.F.R. § 1610.5-3(a) (“resource management authorizations and actions” must conform to the applicable resource management plan). *See also Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 69 (2004) (“The statutory directive that BLM manage ‘in accordance with’ land use plans, and the regulatory requirement that authorizations and actions ‘conform to’ those plans, prevent BLM from taking actions inconsistent with the provisions of a land use plan.”).

BLM’s NEPA Handbook states that “the BLM includes within all its NEPA documents a statement about the conformance of the proposed action and alternatives with the existing land use plan (LUP).” *See* BLM, *National Environmental Policy Act Handbook H-1790-1* at 6 (2008). Yet, BLM has not done so in this case. BLM has not met even the first step of its legal obligations. The agency has not identified an applicable resource management plan for the minerals it proposes to lease. Without such plan, BLM cannot meet its obligation under FLPMA to ensure compliance with its land use plans. BLM must withdraw the lease from the sale, ensure that future leasing is consistent with any existing RMP, and provide documentation to the public of such consistency before proposing further leasing.⁵³ In the event that no applicable RMP exists, BLM must complete one before proceeding with leasing.

E. BLM and the Forest Service Will Violate The ESA If They Offer This Parcel For Sale.

⁵³ Protesting parties reserve the right to challenge any such consistency determination at the time that it is made or that documentation of such a decision is provided.

BLM and the Forest Service must consult with the U.S. Fish and Wildlife Service (“FWS”) on the impacts to listed species and critical habitat from oil and gas development prior to issuing oil and gas leases. As noted on page 16, above, threatened and endangered species may be impacted by oil and gas activities on the forest. Some of these impacts, such as surface disturbance, noise, and erosion and sedimentation of waterways are likely to be difficult or impossible to avoid. Oil and gas leasing and development seem likely to adversely affect listed species including the Red-Cockaded Woodpecker and potentially downstream aquatic species.

The ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service regarding the impacts of proposed federal actions on threatened and endangered species. 16 U.S.C. § 1536(a)(2). Agencies, in consultation with FWS, must insure that their actions are not likely to jeopardize the existence of listed species or to destroy or adversely modify any designated critical habitat. *Id.* Further, ESA’s implementing regulations mandate that “[e]ach federal agency shall review its actions at the *earliest possible time*” to determine whether an action may affect protected species and, if so, to engage in the appropriate consultation. 50 C.F.R. § 402.14(a) (emphasis added); *see also Wilderness Soc’y v. Wisely*, 524 F. Supp. 2d 1285, 1301 (D. Colo. 2007) (“[T]he BLM’s duty to confer with the FWS arises as of the time that it was possible for the two agencies to engage in meaningful conference regarding the decision to be made”). If a proposed action “may affect listed species or critical habitat,” then the agency must formally consult with FWS, unless, as a result of informal consultation, the agency determines that the action “is not likely to adversely affect listed species or critical habitat,” and the FWS concurs in writing. 50 C.F.R. §§ 402.13(a), 402.14(a)-(b).

In addition, the ESA’s regulations mandate that federal agencies reinitiate consultation when a new species is listed or critical habitat is designated and those agencies’ actions may affect it. *See* 50 C.F.R. § 402.16(d). Further, these regulations also mandate that federal agencies reinitiate consultation when “new information reveals effects that may affect listed species or critical habitat in a manner or to an extent not previously considered.” *Id.* at 402.16(b).

Contrary to this requirement, there is no indication that either the Forest Service or BLM have consulted with FWS on this lease sale. Consultation on the Forest Plan is not adequate to cover this lease sale. First, new information regarding the extent and type of drilling here require the initiation of consultation prior to any lease sale. Second, the consultation on the Forest Plan did not consider the site-specific impacts of leasing and gas development here. Third, the BLM must determine whether new listings or critical habitat designations have been made that would be affected by leasing. Fourth, such leasing and gas development here obviously are likely to adversely affect listed species and critical habitat, necessitating *formal consultation* prior to the sale of any leases. To the parties’ knowledge, formal consultation has never occurred. To the extent that the agencies may contemplate delaying any further consultation until *after* the parcel has already been auctioned off at the lease sale, this would be impermissible, because NEPA

analysis and ESA consultation must occur *prior* to the irretrievable commitment of the sale of leases. The Forest Service and BLM must consult with the Fish and Wildlife Service over impacts to listed species and critical habitat prior to issuing leases. Their failure to initiate consultation violates the ESA.

III. REQUEST FOR RELIEF

The protesting parties request that BLM withdraw the protested parcels from the June 2014 Competitive Oil and Gas Lease Sale until such time as BLM and the Forest Service have complied with federal laws and regulations, including NEPA, FOOGLRA, FLPMA, NFMA, and the ESA. In conducting its NEPA supplementation, BLM and the Forest Service should consider whether sensitive lands may be inappropriate for oil and gas development due to the presence of nearby wilderness, aquatic resources, listed or sensitive species, important recreational features, or other characteristics. The protesting parties further request that BLM suspend the offering of the parcel while the agency considers this protest.

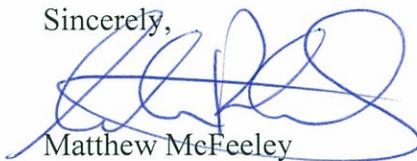
Thank you for your consideration of this protest letter. For your records, the names and contact information for each of the protesting parties NRDC is representing (in addition to itself) are:

Center for Biological Diversity
Randi Spivak, Director, Public Lands Program
1411 K Street NW Suite 1300
Washington, DC 20006
310.779.4894

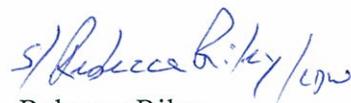
Wild South
Ben Prater, Director of Conservation
16 Eagle Street, Suite 200
Asheville, NC 28801
828-258-2667

Should you have any questions, please contact Matthew McFeeley at the Natural Resources Defense Council.

Sincerely,



Matthew McFeeley
Attorney
Natural Resources Defense Council
Tel: (202) 513-6250
mmcfeeley@nrdc.org



Rebecca Riley
Attorney
Natural Resources Defense Council
Tel: (312) 651-7913
rriley@nrdc.org

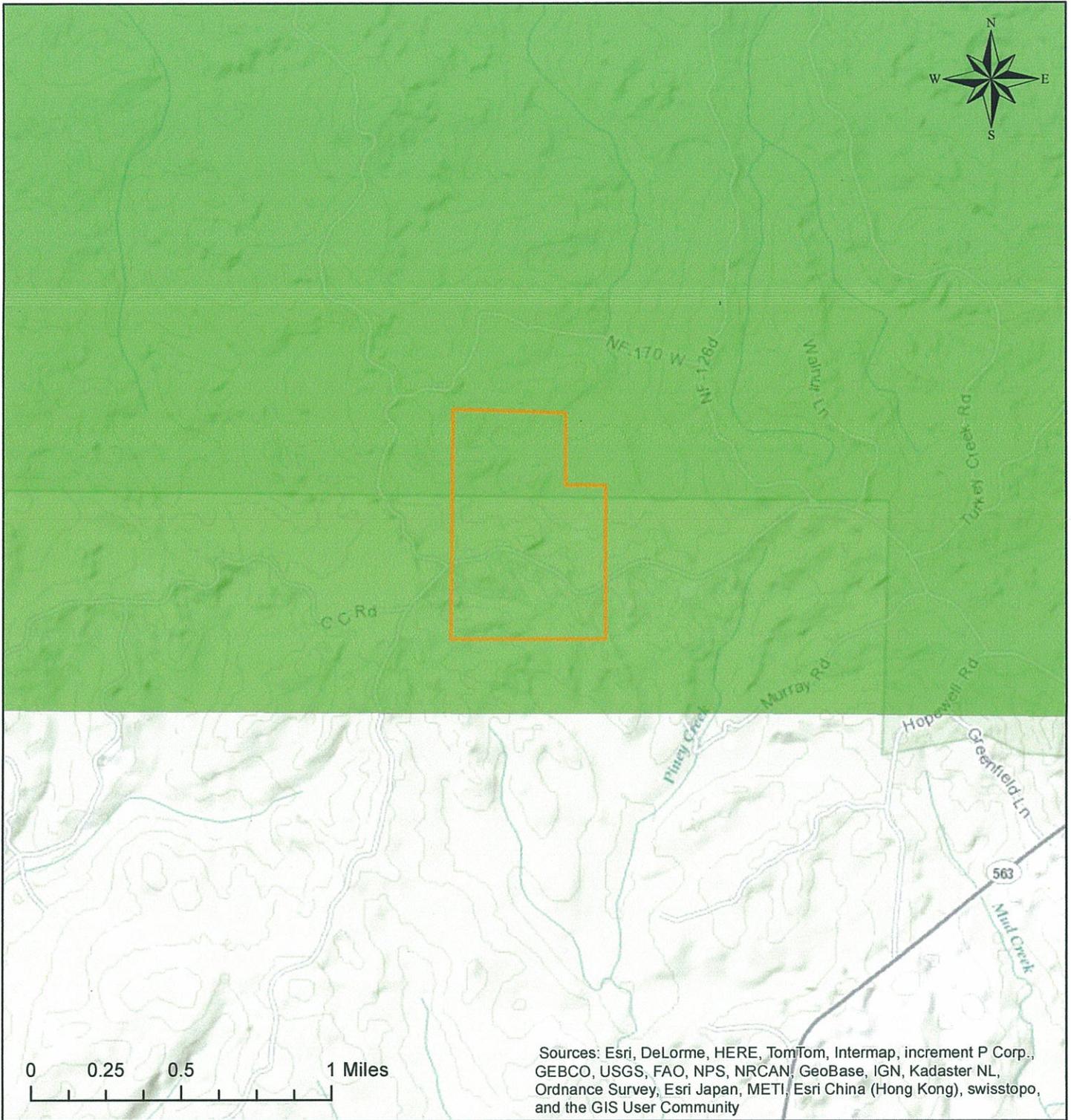
cc: Elizabeth Agpaoa, Regional Forester, U.S. Forest Service Southern Region
Margrett Boley, Mississippi National Forests Supervisor

Exhibit List

- Exhibit 1- NRDC Map: Lease Sale Parcel ES-009-06/2014, Homochitto National Forest
 - Exhibit 2- NRDC map: Shale Resources in the Homochitto National Forest.
 - Exhibit 3- NRDC Map: Surface Water Bodies near Parcel ES-009-06/2014
 - Exhibit 4- NRDC map: Surface Drinking Water Importance of Parcel ES-009-06/2014
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Exhibit 1

Lease Sale Parcel ES-009-06/2014



Projected Coordinate System: NAD 1983 HARN Mississippi West

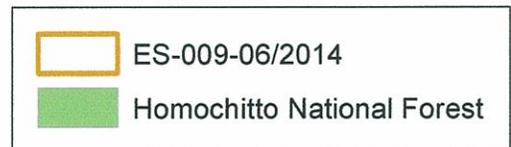
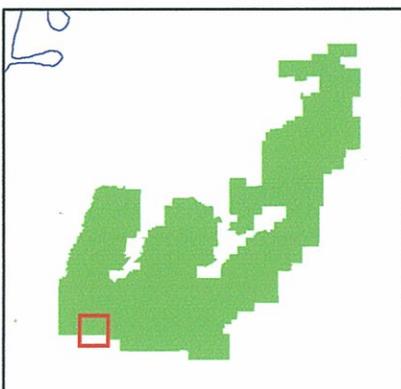
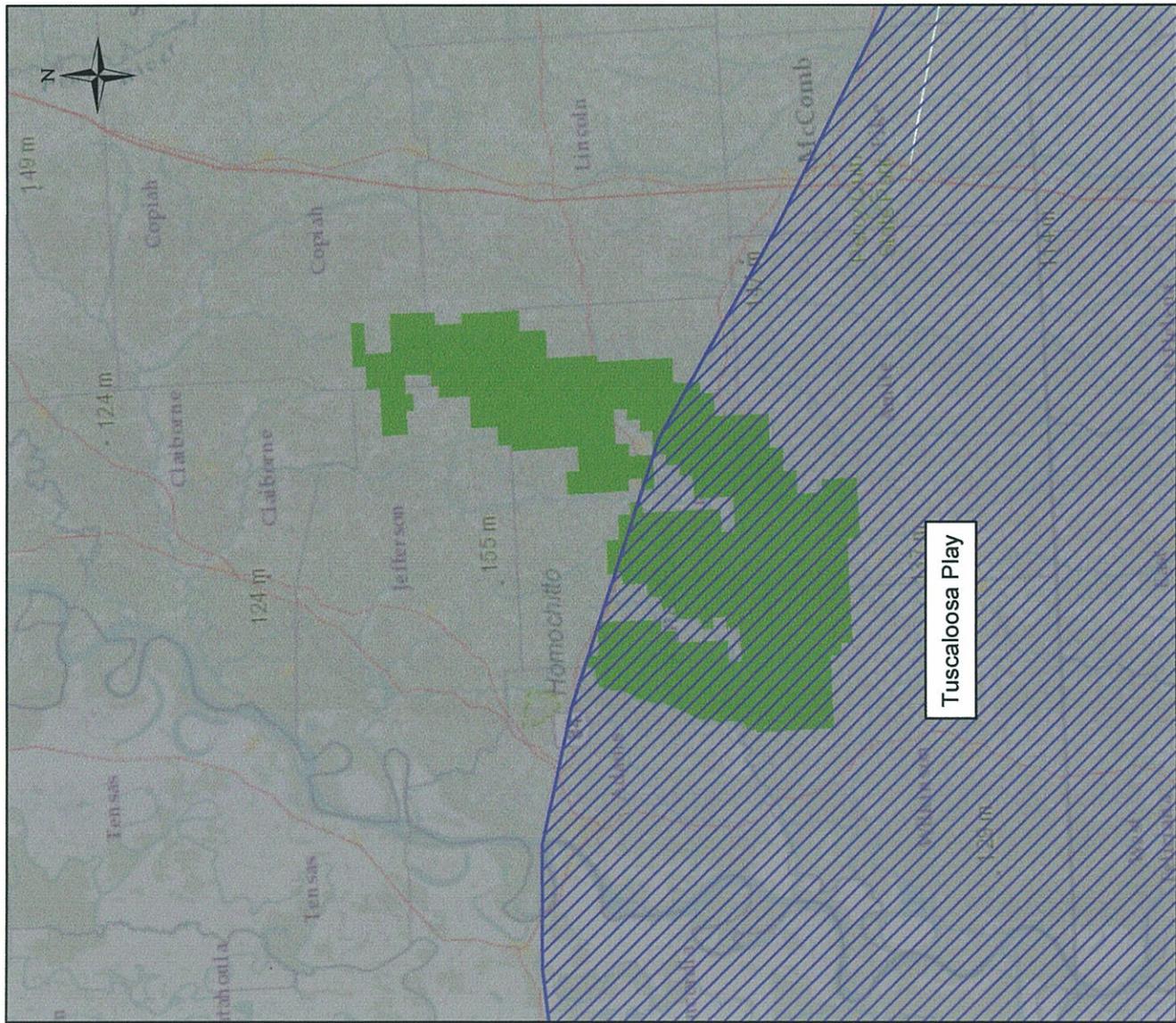
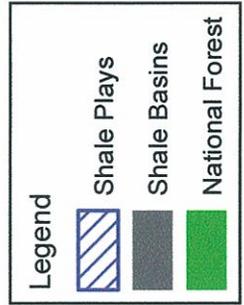
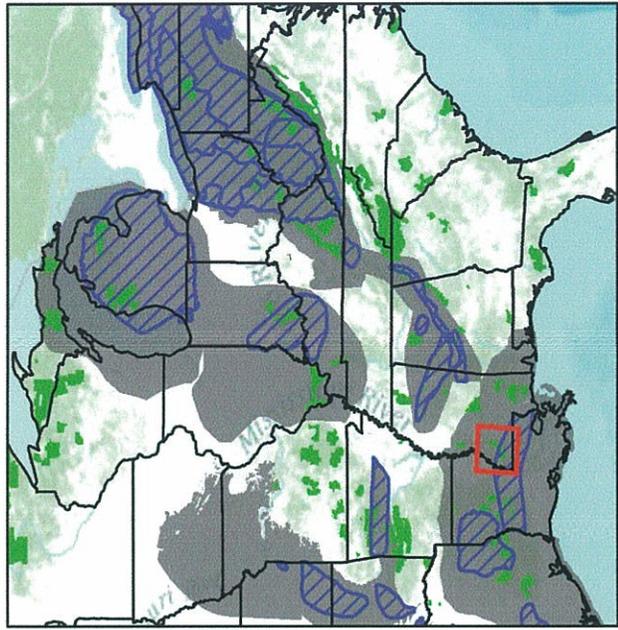


Exhibit 2

Shale Resources in the Homochitto National Forest



* Entire area of inset map is within the TX-LA-MS Salt Basin



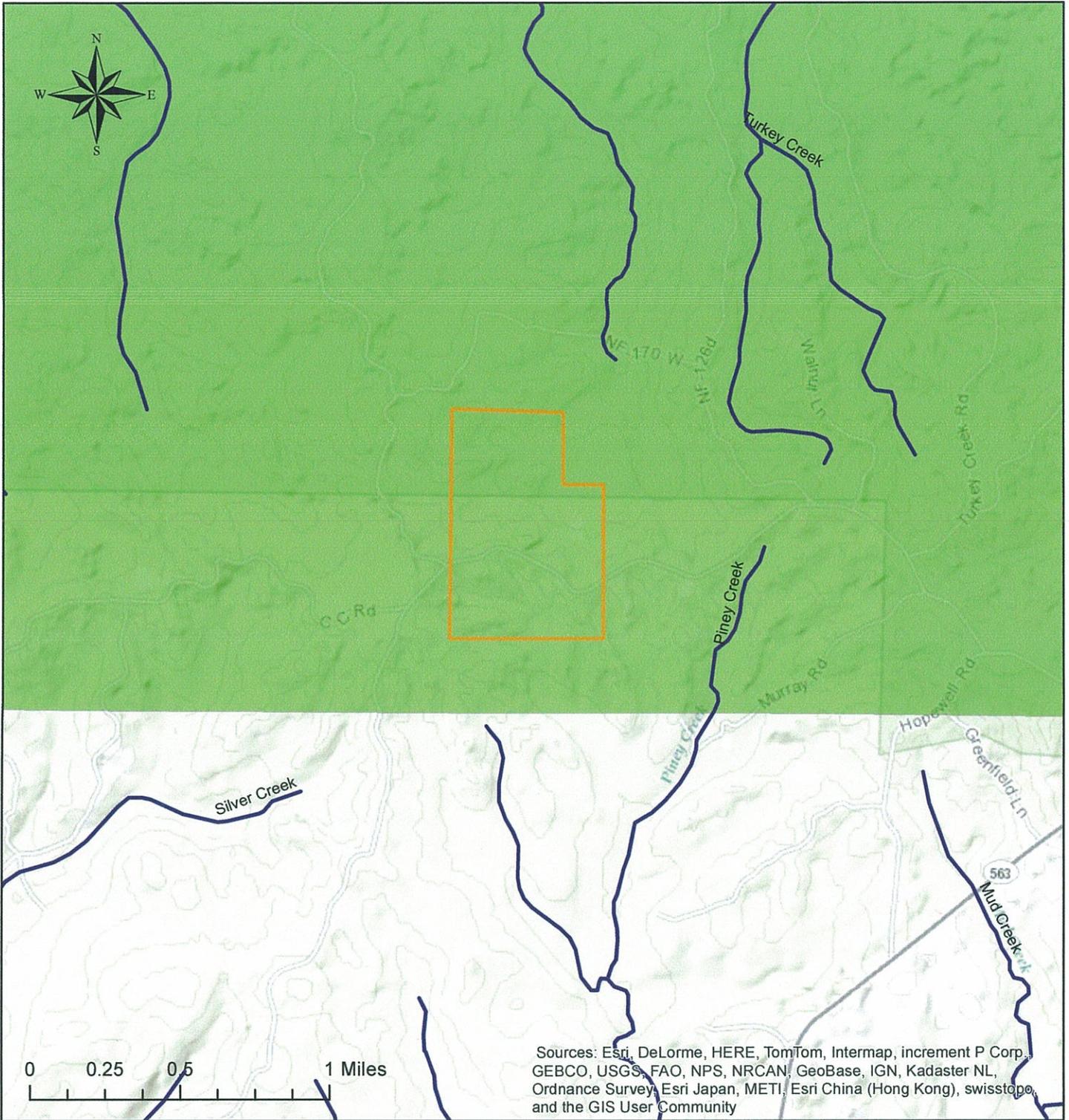
Data from U.S. Energy Information Administration (EIA)



NATURAL RESOURCES DEFENSE COUNCIL

Exhibit 3

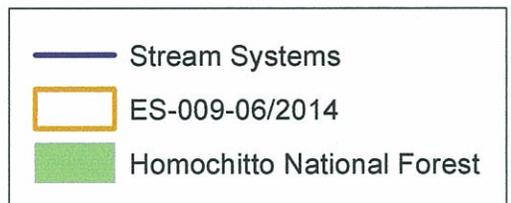
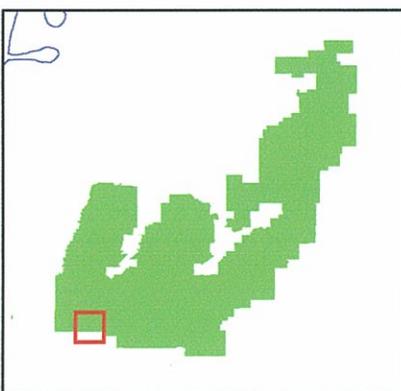
Water Bodies Near Lease ES-009-06/2014



Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

Projected Coordinate System: NAD 1983 HARN Mississippi West

Source: Mississippi Geospatial Clearinghouse



NATURAL RESOURCES DEFENSE COUNCIL
THE EARTH'S BEST DEFENSE

Exhibit 4

Surface Drinking Water importance of Lease ES-009-06/2014

