

U.S. FISH AND WILDLIFE SERVICE
Ouray National Wildlife Refuge

FINDING OF NO SIGNIFICANT IMPACT

Proposed Oil and Gas Exploration & Development

Uintah County, Utah

BACKGROUND

The Ouray National Wildlife Refuge (Refuge) was authorized and is administered by the U.S. Fish and Wildlife Service (Service) as a unit of the National Wildlife Refuge System. Currently, the Refuge consists of 11,987 acres and includes 12 miles of the Green River. Most of the surface acreage is owned in fee title (5,032 acres), 2,692 acres are leased from the Ute Tribe, and 1,153 acres are leased from the State of Utah. The purpose of the Refuge is for "use as an inviolate sanctuary, or for any other management purpose, for migratory birds." According to the Comprehensive Conservation Plan (CCP) completed in 2000, the Refuge will focus on maintaining, restoring, and enhancing riparian and wetland habitat for waterfowl, other migratory birds, and endangered fish species.

In October 2011, Thurston Energy Operating Company (Thurston) announced its intent to explore for natural gas and/or oil beneath the Refuge. At that time, Thurston provided the Service with a lease document that indicated the State of Utah had leased them a significant acreage of mineral rights in the Leota Bottoms Unit of the Refuge. Thurston has provided sufficient evidence that it is an owner of outstanding / reserved minerals¹ and an environmental assessment (EA) was completed to assist the agency in planning and decision making.²

Alternative A, the proposed action, was selected for implementation because it provides for maximum protection of the Refuge during exploration and development. This alternative requires that in addition to existing Federal, State, and local regulations, a list of conservation measures (attached) that have been mutually agreed upon by the Service and Thurston must be followed during all phases of oil and gas exploration and development. We evaluated additional alternatives, including: (1) a no action alternative in which a Special Use Permit for access to construct and develop the two wells associated with the Proposed Action would be denied; and (2) seven alternatives that were considered but dismissed from analysis, such as a 4-well development, two alternative pipeline routes, directional drilling of both wells from a single pad, seasonal restrictions alternative, land exchange alternative, and a lease buyout alternative (see the final EA for an explanation of why these alternatives were dismissed).

If Thurston discontinues or fails to perform any of the conservation measures that have been mutually agreed upon by the Service and Thurston, and the Refuge Manager believe such failure will lead to unreasonable damages to Refuge resources, the Service may assess penalties pursuant to Code of Federal Regulations.³ The Service may require Thurston to cease exploration and development activities until the risk of damage to Refuge resources has been removed or mitigated at the sole discretion of the Service.

¹ The following document was evaluated by the Service to determine mineral ownership: Utah State Lease for Oil, Gas and Associated Hydrocarbons between the Utah School and Institutional Trust Lands Administration and Thurston Energy LCC, effective September 1, 2011.

² 40 CFR §1501.3(b) states that Agencies may prepare an environmental assessment on any action at any time in order to assist agency planning and decisionmaking.

³ The Service may assess penalties pursuant to 50 CFR Part 28 or any of the following 50 CFR § 25.13; 50 CFR § 25.72; 50 CFR § 26.22; 50 CFR § 27.21; 50 CFR § 27.31; 50 CFR § 27.41; 50 CFR § 27.42; 50 CFR § 27.51; 50 CFR § 27.52; 50 CFR § 27.62; 50 CFR § 27.63; 50 CFR § 27.81; 50 CFR § 27.82; 50 CFR § 27.84; 50 CFR § 27.92; 50 CFR § 27.94; 50 CFR § 27.95; 50 CFR § 28.42; 50 CFR § 28.43; and 50 CFR § 29.32.

ANTICIPATED ENVIRONMENTAL EFFECTS

Under the preferred alternative, the Service will require that all oil and gas exploration and development activities include a monitoring component to determine baseline conditions and quantify any changes from the existing physical environment that may be affected during the construction and drilling operations. Thurston will annually monitor its facilities to ensure that normal operations will be in compliance with: its Special Use Permit (SUP); other rules and regulations that apply to the Proposed Action; the Thurston Reclamation & Monitoring Plan/Noxious Weed Management Plan; commitments presented by Thurston, including protective (conservation) measures (as contained in the EA); and any conditions that may result from approval of the Proposed Action. Summaries of results generated from existing water quality data, cultural resource surveys, biological resource surveys, paleontological surveys, and any other sampling or monitoring will be provided to the Service prior to the onset of construction. Thurston has developed a Reclamation & Monitoring Plan/Noxious Weed Management Plan that will be used to direct reclamation and monitoring operations and to ensure that the results meet acceptable standards. At the discretion of the Service, additional wildlife monitoring or mitigation may be required during the Refuge's sensitive wildlife period (May 1st through August 31st) based on site-specific conditions. As part of Uintah Basin air quality monitoring efforts, a year-round air quality monitoring site was established in summer 2009 near Ouray, Utah (about 1 mile from the Refuge). The monitor was certified as a Federal Reference Monitor in the fall of 2011. For water quality monitoring, Thurston would sample and test any known water wells located within a 0.50 mile radius up-gradient or immediately down-gradient of the oil extraction wells. The testing protocol will be developed jointly by the Service and Thurston.

The following is a summary of anticipated environmental effects from the implementation of the preferred alternative:

1. Construction of roads and drill pads is expected to cause minimal long-term impacts to soils. Prior to interim reclamation, short-term surface disturbance for the proposed pads, pipeline corridors, and new access roads would be approximately 10.9 acres. Those portions of the pads and access road ROWs not needed for production operations would be reclaimed within one to two growing seasons. The remaining surface disturbance would be long-term disturbance of approximately 7.5 acres for the 33- to 43-year life of the project (LOP). Any impacts to geology, mineral, and soil resources of the Refuge would be reduced to negligible short-term and non-significant levels because of the implementation of protective measures required by the Service, in addition to Utah Division of Oil, Gas and Mining (UDOGM) rules.
2. Many aspects of oil and gas exploration and development will affect the air quality of the area. State of Utah and Federal ambient air quality standards exist and set maximum limits for pollutant concentrations. The UDOGM regulations, as well as implementation of protective measures required by the Service, will ensure required limits are not exceeded.
3. The Service will require specific protective measures be followed during exploration and development to reduce impacts to surface waters to less than significant levels. The Service worked closely with Thurston to modify the project design to minimize the chance of water quality impacts by moving the tank battery about 1 mile from the Green River and removing large tanker truck traffic from the main Refuge road. In addition, potential impacts from the proposed exploration and development to surface water quality include sedimentation due to runoff and erosion and contamination of surface water from spills. The Stormwater Pollution Prevention Plan (SWPPP) and Spill Prevention, Control, and Countermeasure (SPCC) Plan for the activities will provide a moderate level of protection for reducing the likelihood of negative impacts. Surface water will be protected from contamination by establishing protective measures such as buffers between surface water and surface activities. Proper handling of hazardous materials in accordance with applicable rules and regulations also would minimize potential impacts. The primary hazardous materials to be used are fuels (diesel and gasoline), drilling mud additives, and cement.
4. To protect water quality on the surface and in the unconfined and confined aquifers, several protective measures will be required by the Service. Impacts to surface water and the unconfined aquifer will be minimized through implementation of the SWPPP and SPCC Plan and Service

protective measures. Usable water quality zones of the aquifers will be isolated to prevent communication between shallow and deeper aquifer layers. Thurston's proposed casing program will be designed and implemented to adequately protect usable quality groundwater such that impacts to groundwater from drilling and production are not anticipated. Cementing the production casing would prevent damage to the wellbore that could potentially occur from targeted formation pressure or retard corrosion, and would prohibit pressure communication or fluid migration between productive zones. This would provide protection to freshwater aquifers within the Project Area.

5. The Service developed a number of protective measures in order to mitigate surface impacts to terrestrial wildlife, aquatic species, and special status species within the project area. However, there may be some unavoidable non-significant direct impacts to wildlife such as a reduction or alteration of vegetation, habitat fragmentation, and animal displacement. Additionally, there may be an increase in non-significant indirect impacts such as noise, human presence in sensitive habitats, and vehicle-related mortalities in areas with special status species. Impacts to wildlife and fisheries resources as a result of the proposed project will be minimized to negligible levels by changes in project design and location, as well as implementation of Service protective measures.
6. Protective measures required by the Service will minimize impacts to special status species. Vehicle traffic would be restricted to the existing main Refuge Road, and new access roads to two well pads (11-31-7-21 and 12-31-7-21) and the tie-in pad where the tank battery will be located, thereby reducing habitat fragmentation and habitat loss by limiting the construction of new roads. Preconstruction surveys for wildlife species including special status species, will occur in areas where access roads and well pads will be built, and sensitive habitat (e.g., wet meadows and riparian areas) will be avoided. Therefore, impacts to special status species will be less than significant.
7. Direct effects to historic properties and traditional Native American lands could occur during oil and gas exploration and development. These effects could include disturbance during road and well pad construction, vandalism, illegal collection, and inadvertent destruction of items by personnel. Section 106 of the National Historic Preservation Act will be followed in conjunction with exploration and development activities on the Refuge. During 2013 and 2014, cultural resource investigations were completed in the project area. To minimize the potential for indirect effects to historic properties, project personnel would be requested to perform contract operations in a careful and conscientious manner and to perform all work in accordance with all laws and regulations. All known historic properties identified within the area of potential effect (APE) would be avoided by project construction. Cultural resource monitors would be present during ground-disturbing activities in the event subsurface materials are discovered.
8. Proposed oil and gas exploration and development will have some impacts to recreation resources within the Refuge. Except for short periods of time associated with the construction of the proposed pads, access roads, and/or pipeline installation, most recreational activities on the Refuge would continue uninhibited in the Project Area. If the wells are productive over the operational life of the project, the presence of the pads, access roads, and surface pipeline likely will diminish the quality of the experience of recreational users in the Leota Bottom area. These potential impacts would occur because the relatively undisturbed character of the area would be altered by the presence of industrial facilities. Certain project design features and protective measures, such as moving the tank battery to an upland area of the Refuge, removing large tanker truck traffic from the main Refuge Road, implementation of noise abatement methods, using standard environmental paint color to blend with the natural landscape background, and artificial lighting control are being required to reduce or minimize impacts and not diminish recreational opportunities on the Refuge.
9. There will likely be a temporary impact to visual and sound resources from construction activities and hauling trucks associated with oil and gas exploration and development that would last about 38 days per well during the construction of the access road and well pads and drilling operations. However, protective measures required by the Service will reduce impacts to both visual and sound resources during drilling operations to less than significant levels.
10. Proposed exploration and development activities are expected to employ varying numbers of personnel on-site at different phases (up to 3 for construction, 15 for drilling, 10 for completion

and testing, 7 for well hook-up and pipeline construction, and 1 for production) for the duration of the project (~38 days per well). The presence of project personnel will generate a small amount of additional income for local businesses; motels, dining establishments, gas stations, etc. However, additional room receipts and other personal expenditures would be of minor beneficial impact.

11. Diminishment of the viewshed may be a concern to local citizens. Implementation of required protective measures will reduce visual impacts to less than significant levels. The Service also will require mitigation measures to reduce the amount of night-time artificial light emitted from the proposed drilling activities to less than significant levels.
12. Noise levels associated with the project will not exceed State and local standards, but there would be a significant increase over ambient conditions without additional protective measures. The Service is requiring specific protective measures to reduce noise levels associated with the proposed exploration activities including noise monitoring during construction and drilling activities. If and when gas-powered engines are used, noise abatement methods (e.g., acoustic barriers and mufflers) will be implemented to reduce noise impacts to levels at or below noise levels of an electrified system.
13. Potential cumulative effects were identified from other current and future oil and gas development in the area; however, the protective measures required by the Service ensure that any impacts to the surface estate of the Refuge and associated cultural, socioeconomic, and aesthetic resources are less than significant.

Refuge officials will conduct an onsite meeting before rig-up with representatives of the Operator, drilling contractor, subcontractors, suppliers, and service companies. The purpose of the meeting is to review and reiterate regulations and conditions that apply to planned activities and work crew conduct on the Refuge. Thurston will be responsible for ensuring that employees, representatives, consultants, contractors, and subconsultants adhere to the Conditions of Approval (COAs), conservation measures, and BMPs identified in the SUP and Decision Record for this EA.

CONTEXT AND INTENSITY

In determining whether this project is a major action significantly⁴ affecting the quality of the human environment, we must consider both the context and intensity of the action (40 CFR § 1508.27, 40 CFR § 1508.14) as required by NEPA. In terms of context, the proposed activity will occur on 10.9 acres in the Uintah Basin located in northeast Utah, but the assessment has evaluated whether it may have effect to the human environment⁵ on a broader scale. The project and this assessment cover oil and gas exploration and development. In evaluating the intensity of the activity, or severity of the impact of the proposed activity, the Service must evaluate the effects of this project as compared to other existing uses within the Uintah Basin. For example, within the Refuge boundary, as of April 2013, there were 7 well pads, 6 active wells, and 2 pending Applications to Drill on State-owned lands, 48 planned wells on SITLA lands, and 9 wells proposed for development under an ongoing EA with the Service. As of 2011, the Bureau of Land Management listed over 9,000 producing wells in the Uintah Basin (Greater Uinta Basin Oil and Gas Cumulative Impacts Technical Support Document 2012). The Service recognizes public concern, but must evaluate the impacts of a project to the Refuge and within the larger context of the Uintah Basin. All beneficial impacts identified are minor and not significant.

⁴ 40 CFR § 1508.27 "Significantly" as used in NEPA requires considerations of both context and intensity: (a) Context. This means that the significance of an action must be analyzed in several contexts such as a society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend on the effects in the locale rather than in the world as a whole. Both short- and long term effects are relevant; and (b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

⁵ 40 CFR § 1508.14 "Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" (40 CFR § 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

PUBLIC PARTICIPATION

Public scoping was an important component of the development of the environmental assessment. The Service conducted public and internal scoping to solicit input from the public, interested organizations, and Federal, State, and local agencies to help inform the Service of concerns associated with the proposed project.

The formal scoping period began on October 22, 2012, with the publication of a press release and a map of the proposed project on the Refuge website (www.ouray.fws.gov). The notice was also posted on the Refuge's information kiosk and published in the Vernal Express, a local weekly newspaper, on October 31, November 7, 14, and 21, 2012. The 30-day public scoping period closed on November 23, 2012. The Service received no response from the general public, special interest groups, or Federal and State agencies in response to the public scoping notice. As such, the resources carried forward for analysis in this EA were determined based on input received during internal scoping with the Service and Ouray NWR managers.

The Service released the draft EA for review and initiated a public comment period on March 10, 2014. The 30-day comment period, which was planned to close on April 8, 2014, was extended 15 days to April 22, 2014, to provide the public more time to formulate comments on the proposed development. The Service received 7 letters during the comment period, which generated 79 substantive comments. Comments were considered for incorporation into the environmental analysis and evaluated for their relevancy. In the environmental assessment, the Service responded to individual comments that are substantive and made appropriate revisions. The Service considered all comments during the preparation of the environmental assessment.

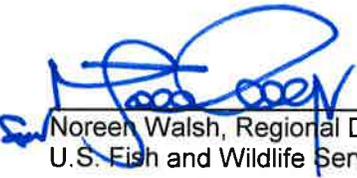
FINDING OF NO SIGNIFICANT IMPACT

On the basis of information contained in the environmental assessment, and other information available to me, my determination is that requiring that specific protective measures and standards be followed during all phases of oil and gas exploration and development, the limited scale and duration (~76 days) of the proposed construction, drilling, and completion, along with implementation of the preferred alternative, will not unreasonably degrade or result in significant impacts to the surface estate (including all surface and subsurface natural resources not considered to be minerals) of the Refuge and associated cultural, socioeconomic, and aesthetic resources. Therefore, I have determined that the two proposed oil and gas wells on Ouray National Wildlife Refuge is not a Federal action that would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969.

The Finding of No Significant Impact (FONSI) and supporting assessment will be made available to the public on the Service's website. Copies of this FONSI and the associated environmental assessment are available upon request.

SUPPORTING REFERENCE

U.S. Fish and Wildlife Service. 2015. Final Environmental Assessment & Biological Assessment for Thurston Energy, LLC Proposed Ouray National Wildlife Refuge 2-Well Development Program in Uintah County, Utah. 207 pp. & appendices.



Noreen Walsh, Regional Director, Region 6
U.S. Fish and Wildlife Service

2.5.15

Date