



## RECORD OF DECISION

### REVISION OF 9B REGULATIONS GOVERNING NON-FEDERAL OIL AND GAS ACTIVITIES AND FINAL ENVIRONMENTAL IMPACT STATEMENT

The Department of the Interior, National Park Service (NPS) has prepared this Record of Decision (ROD) on the final *Revision of 9B Regulations Governing Non-Federal Oil and Gas Activities / Final Environmental Impact Statement* (EIS) for units of the national park system with non-federal oil and gas production occurring, or likely to occur in the foreseeable future, within their boundaries. This ROD has been prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), its implementing regulations (40 CFR 1500–1508), the Department of the Interior NEPA regulations (43 CFR 46), and NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis and Decision-Making and accompanying handbook. This ROD includes a summary of the purpose and need for action, synopses of alternatives considered and analyzed in detail, a description of the selected alternative, including measures that are included in the rule to minimize environmental harm, the basis for the decision, and a description of the environmentally preferable alternative. This ROD is not the final agency action for those elements of the EIS that require promulgation of regulations to be effective. Promulgation of such regulations will constitute the final agency action for such elements.

## BACKGROUND

The United States does not always possess all ownership rights in all lands within the authorized boundary of national park system units. Within park boundaries, entities other than the United States can own either the surface estate, mineral estate, or both. Some non-federal oil and gas mineral rights are known to exist in at least 77 national park system units.

Currently, active non-federal oil and gas operations are occurring within the boundaries of 12 units, which NPS refers to as category 1 parks. Category 2 parks are those where a park is located within or very near to known petroleum development, and where future oil and gas development is possible based on several factors, primarily economics (currently 30 national park system units). Category 3 parks are those where a park unit is located within or very near a known petroleum resource area, but development activity near the park is low, or nonfederal acreage in the park is likely too low for oil and gas development (currently 35 national park system units).

NPS considers future oil and gas development in category 3 parks to be highly speculative and indefinite, and therefore not "reasonably foreseeable" for the purposes of the DOI NEPA regulations (43 CFR 46.30), given the remote possibility of oil and gas occurring within those units. Accordingly, the NPS did not include category 3 parks within the scope of the DEIS or FEIS; thus, the EIS covers only 12 category 1 park units and 30 category 2 park units (42 total). Should any actual development occur on a mineral right in such a park unit in the future, NEPA (and other associated compliance) would be required for the permit application and plan of operations.

All park units in Alaska are category 3 park units, and for that reason Alaskan park units are not analyzed in the EIS. Furthermore, in light of pending litigation (*Sturgeon v. Frost*, 136 S.Ct. 1061 (2016)), the applicability of the ANILCA Title XI regulations in 43 CFR part 36, and the lack of current oil and gas development proposals and resource threats, NPS has decided to apply this current rule only to operations in national park system units outside of Alaska.

The types of non-federal oil and gas development activities conducted in units of the national park system generally include geophysical (seismic) exploration; exploratory well drilling; field development well drilling; oil and gas well production operations, including installation and operation of well flowlines and gathering lines; well plugging and abandonment; and surface restoration.

The NPS has revised the regulations to reflect current policies, legal requirements, and practices for development of non-federal oil and gas within national park units. The previous regulations are published at 36 CFR Part 9, Subpart B (“9B regulations”). Under authority granted by Congress, the 9B regulations were promulgated in 1978 with an effective date of January 8, 1979. These regulations were promulgated to ensure that all non-federal oil and gas operations in parks are conducted in a manner consistent with the purposes for which the national park system and each affected park unit was created.

Over the last 37 years, implementation of the existing 9B regulations to proposed operations has allowed the NPS and non-federal oil and gas operators to protect park resources and human health and safety while recognizing the exercise of non-federal oil and gas rights in parks. However, during the years of implementing the 9B regulations, the NPS has become increasingly aware of several issues that would require specific changes to the regulations in order to improve understanding, efficiency, enforcement, and resource protection in parks. In addition, the oil and gas exploration and development industry has made significant advances in technology and practices since the 9B regulations were initially promulgated (these include three-dimensional geophysical exploration, extended-reach directional and horizontal drilling capability, and use of containerized drilling fluid systems), and the proposed revisions are designed to reflect such advances, particularly with respect to protection of park natural and cultural resources, and human health and safety.

## PURPOSE AND NEED FOR ACTION

The purpose of the proposed revisions to the Title 36 of the Code of Federal Regulations (CFR) 9B regulations is to protect public health and safety; improve understanding, application and effectiveness of the regulations for the NPS and for industry; and incorporate new requirements that will ensure that all non-federal oil and gas operations conducted in national park system units avoid or minimize, to the greatest possible extent, adverse effects on natural and cultural resources, visitor uses and experiences, park infrastructure and management.

The NPS has identified the following reasons for proposing revisions to the existing 9B regulations:

- The NPS cannot regulate 319 (60 percent) out of 534 non-federal oil and gas wells currently within the authorized boundaries of parks due to exemptions included in the existing regulations (e.g., operations that do not require access across federally owned lands or waters, or “grandfathered operations”).
- The existing regulations limit the ability of the NPS to require adequate financial assurance from operators to ensure that adequate funds are available to properly reclaim operation sites in the event operators fail to fulfill their obligations under an approved plan of operations.

- The NPS has limited means under the existing regulations to address minor violations of an approved plan of operations or the 9B regulations that do not rise to the level of issuing a suspension or revocation order to the operator.
- The existing regulations do not clearly state the scope of NPS jurisdiction for directional oil and gas wells drilled beneath parks from a surface location on lands or waters outside park boundaries.
- The existing regulations are not consistent with practices of other federal agencies and private landowners concerning compensation for privileged access across federally owned lands beyond the boundary of an operator's non-federal oil and gas property interest.
- The existing regulations do not provide a means for the NPS, as appropriate, to recover the costs for processing applications and monitoring non-federal oil and gas operations in parks.
- There is an opportunity to codify a more understandable, contemporary, comprehensive, and enforceable set of operating standards and practices than the NPS currently uses in guidance to operators.

The NPS has identified the following objectives for the revision of the 9B regulations:

- All non-federal oil and gas operations conducted within the authorized boundaries of park units, regardless of ownership and jurisdictional status, are regulated under the 9B regulations in a manner that uses technologically feasible least damaging methods so as to prevent or to minimize damage to national park system resources, visitor values, and management objectives.
- Non-federal oil and gas development in parks is conducted in a manner which ensures, to the maximum extent possible, that all units of the national park system remain unimpaired and resources are conserved for the enjoyment of present and future generations.
- Operating standards are updated to incorporate new scientific findings, technologies, and methods least damaging to park resources and values.
- Both the public and park personnel are protected from health and safety hazards associated with non-federal oil and gas operations.
- Financial assurance provided by non-federal oil and gas operators is adequate to ensure that park resources and values are protected and all operation sites are properly reclaimed.
- The regulations provide a practical and effective means for dealing with minor acts of noncompliance or with illegally conducted operations (unauthorized operations) in parks.
- Operators compensate the United States for use of federally owned land outside the boundary of their non-federal oil and gas property interest.
- The regulations are more understandable to operators, the public, and park staff.
- Regulation of oil and gas wells directionally drilled beneath parks from surface locations outside parks retains the incentive for operators to site such operations outside park boundaries while still maintaining the ability of the NPS to protect park resources and values to the fullest extent practical.

## ALTERNATIVES CONSIDERED

### Alternatives Development Process

Alternatives analyzed in the EIS were developed based on the results of internal and public scoping, agency input, as well as past and ongoing planning efforts. These alternatives meet, to a large degree, the overall purpose of and need for proposed action. Alternatives and actions that were considered but were not technically or economically feasible, did not meet the purpose of and need for the project, and/or created unnecessary or excessive adverse impacts to resources were dismissed from further analysis.

**Alternative A: No Action.** The no-action alternative is the continuation of the 9B regulations as they currently govern the exercise of non-federal oil and gas rights located within units of the national park system. Application of the 9B Regulations would continue to be triggered only when an operator's "access is on, across or through federally owned or controlled lands or waters," and a total of 78 operations that do not require access on, across, or through federally owned or controlled lands or waters would remain exempt from the 9B regulations. Similarly, 241 operations which are currently exempt from the 9B regulations due to "grandfathered" status, would remain exempt from the 9B regulations. Operators who use directional drilling techniques from a surface location outside a unit of the national park system to reach the bottom hole location of their non-federal oil and gas rights located within NPS boundaries would continue to qualify for an exemption from the regulations. Other current regulatory provisions—including, in particular, those pertaining to Transfers of Interest, Information Requirements, Permit Approval Standards, Operating Standards, Financial Assurance, and Penalties for Prohibited Acts—would remain in place.

**Alternative B: Proposed Rule (Preferred Alternative).** Alternative B includes proposed changes to the regulations that address gaps in the existing regulation and proposed reformatting of the regulation to improve its workability for both the NPS and operators. To effect these changes, the NPS must comply with applicable rulemaking provisions of the Administrative Procedures Act, 5 USC 551 – 559. Under alternative B, the 9B regulations would be revised to:

- eliminate the requirement of "access on, across, or through federally owned or controlled lands or waters," and make the 9B Regulations applicable to "all operators conducting non-federal oil or gas operations on lands or waters within an NPS unit, regardless of the ownership or jurisdictional status of those lands or waters" The proposed rule would include a procedure for bringing previously exempt operations into compliance with the 9B regulations.
- add a new section to clarify up front in the regulations that all operators must demonstrate to the NPS that they hold a valid existing right to conduct operations in a unit of the national park system.
- add a new provision that would clarify that an operator must have a temporary access or an operations permit before conducting operations in units of the national park system.
- include a new provision stating that if an operator currently holds an approved plan of operations issued under the existing regulations, the operator may continue to operate subject to applicable provisions of these regulations.
- require all previously grandfathered operations within NPS boundaries to obtain an operations permit.
- identify the basic information necessary for the NPS to evaluate the operator's proposal.

- include a new stand-alone regulatory section that would address operations accessing oil and gas rights inside a park boundary from a surface location outside the park boundary. This section would provide clarification regarding the process to obtain either an operations permit or an exemption from the 9B regulations for these types of operations.
- establish a new two-stage permit application review process; eliminate the dual approval standards; provide more realistic timeframes to provide notice back to an operator regarding a final decision on their application; and clarify the final decisions the NPS can make on an operator's permit application.
- present a new format that makes it easier to identify all applicable operating standards for a particular type of operation.
- include new standards in the regulations to ensure that either existing or newly created surface disturbance is kept to the minimum necessary for safe conduct of operations.
- codify existing practice and standards developed and included in the 2006 Operator's Handbook for Nonfederal Oil and Gas Development in Units of the National Park System.
- supplement the existing regulation by authorizing a fee for newly established privileged access across federal lands outside the boundary of an operator's mineral right.
- make the amount of financial assurance equal to the estimated cost of plugging and reclamation.
- ensure that a previous operator would remain liable to the NPS until such time as the new operator either ratifies an operations permit, submits a new permit application, or submits a plan to plug and reclaim, and provides proof of adequate liability insurance and posts adequate financial assurance.
- establish a well plugging determination procedure that considers the operator's actions with respect to the well after drilling operations cease or after completion of operations.
- The NPS would retain authority to suspend an operation or revoke an operations permit, but the proposed rule would grant the superintendent the discretion to use suspension authority regardless of whether an operator's violation poses an "immediate threat of significant injury."
- add a new provision that lists the prohibited acts under the regulations in order to give operators and NPS staff notice of the acts that would constitute a violation of the 9B regulations.
- would replace the public notice steps currently required with a new subsection which would clarify that the notice required under NEPA is sufficient as public notice for oil and gas permit applications received by the NPS, and no additional notice would be needed.

Under Alternative B, definitions and other regulatory text would be revised, unnecessary language would be eliminated, and new language would be included to clarify the intent of the regulations. Other current regulatory provisions—including, in particular, those pertaining to Transfers of Interest, Information Requirements, Permit Approval Standards, Operating Standards, Financial Assurance, and Penalties for Prohibited Acts—would also be revised.

**Alternative C: Modified Proposed Rule.** Alternative C would include all the proposed changes in alternative B, except as follows:

- The NPS jurisdiction would be expanded under the regulations to encompass surface and subsurface directional drilling operations outside the legislative boundary of the park. Thus, directional drilling operations would be treated the same as new operations.

- The NPS would create a new provision that addresses operations located wholly on non-federally owned lands within a unit of the national park system. This provision would require an operator to submit certain information that would allow the NPS to fully analyze potential impacts on federally owned or administered lands or waters, resources, or visitor health and safety.
- Mineral owners and their lessees would be equally liable for all obligations to comply with the terms and conditions of an approved permit and any other applicable provision under these regulations that accrue while they hold their interests.

## SELECTED ALTERNATIVE

The NPS will implement Alternative B: Proposed Rule (Preferred Alternative). The details of the major provisions of the Selected Alternative are described below. In addition to the sections described below, the revised rule also includes changes to definitions and revisions to other regulatory text to eliminate unclear or unnecessary language and changes to the permit application review process to streamline approvals and provide more realistic review schedules. For a complete description of all parts of the revised regulations, please refer to the Final Rule.

## PURPOSE AND SCOPE

**Interests Protected Under These Regulations.** The purpose of the 9B regulations is to protect federally owned or administered lands, waters, or resources of System units, visitor uses or experiences, and visitor or employee health and safety. The NPS evaluates operators' proposals on a case-by-case basis and applies avoidance and mitigation measures and financial assurance amounts to the extent necessary to protect the interests described above. Depending on the type of activity proposed, environmental factors, visitor use patterns, and land ownership status (activity either on federal or non-federal lands), the NPS will adjust its avoidance and mitigation measures and financial assurance amounts accordingly. This rule replaces the phrase "federally owned or controlled" with the phrase "federally owned or administered" to be consistent with the terminology used in NPS general regulations, at 36 CFR 1.2, and 36 CFR 1.4(a) (definition of "National Park System").

**Operators Subject to the Regulation.** Under § 9.30(a) of the 1978 Regulations, application of the rule was predicated on "access on, across, or through federally owned or controlled lands or waters." This rule at 9.30(b) applies to "all operators conducting non-federal oil or gas operations on lands or waters within an NPS unit, regardless of the ownership or jurisdictional status of those lands or waters."

**Reasonable Regulation of Non-federal Oil and Gas Rights.** Section § 9.30(c) of this rule retains language from § 9.30(a) of the 1978 Regulations stating that the intention of this subpart is to reasonably regulate non-federal oil and gas activities in a System unit, but not to result in a taking of private property.

**Scope of the Regulations.** Section 9.31(a) of this rule changes the scope to cover all nonfederal oil and gas operations within the boundary of an NPS unit. Section 9.31(b) of this rule also covers those operations that become located within a System unit either by statutory boundary expansion or establishment of a new System unit. Section 9.31(c) of this rule covers those operations that access oil and gas rights from a surface location outside the park boundary but due to a boundary expansion or establishment of a new unit, the surface location is now within a System unit. Under § 9.31(b) and (c) such operations follow the same requirements and procedures as those for previously exempt operations at §§ 9.50 through 9.53 of this rule.

**Type of Authorization Required.** 36 CFR 9.32(a) clarifies that an operator must have a temporary access or an operations permit before conducting operations in units of the national park system. The section makes clear that if an operator already has an approved plan of operations, it may continue to operate under that approved plan.

**Demonstration of Valid Existing Right.** The rule clarifies that operators must demonstrate up front that they hold a valid existing right to conduct operations in an NPS unit and that NPS will not undertake formal review of an operator's operations permit application until an operator can demonstrate a valid existing right to conduct all operations described in its operation permit application.

**Operations Authorized Under Previous 9B Regulations.** The rule includes a new provision at 36 CFR 9.33(a) stating that if an operator currently holds an approved plan of operations issued under the existing regulations, the operator may continue to operate subject to applicable provisions of these regulations. In the event that some previously authorized operations do not meet new regulatory requirements, the NPS will use applicable procedures to assist operators in bringing their operations into compliance with new requirements.

**Previously Exempt Operations.** For operations that were previously exempt under existing 36 CFR 9.30(a) and 9.33, the rule contains a new process that will bring these operations into compliance with the 9B regulations (36 CFR 9.50). Under this provision, all operations within NPS boundaries will be required to obtain an operations permit. Under 36 CFR 9.51, within 90 days of the effective date of these regulations, operators must provide the NPS with required information that will enable the NPS to evaluate all aspects of the existing operation to determine whether these operations are being conducted in compliance with NPS operating standards.

Under 36 CFR 9.52 - 9.53(a)(2), once the operator provides all required information to the NPS, the NPS will review the operations permit application under the procedures described in 36 CFR 9.100–9.105 (operations permit: application review process). From the effective date of the new regulations and during the time a previously exempt operator's application is under consideration for approval by the NPS, the continuation of operations will be strictly limited to those methods and the area of disturbance that existed on the effective date of the regulations. Further, prior to obtaining an approved operations permit, existing operations will be subject to general terms and conditions at 36 CFR 9.120 and the prohibitions and penalties at 36 CFR 9.180–9.182. With the exception of emergency situations, the NPS will not take enforcement actions against existing operators under 36 CFR 9.180–9.182 within 90 days from the effective date of the new regulations. Finally, operations that become located within a unit of the national park system as the result of a boundary expansion will be subject to the same regulatory process as a previously exempt operation.

**Temporary Access.** This rule allows an operator to obtain a temporary access permit in order to conduct reconnaissance surveys on NPS administered lands and waters and removes provisions from the 1978 Regulations that allowed the NPS to authorize temporary access for existing operations and for new operations.

**Accessing Oil and Gas Rights from a Surface Location outside the Park Boundary.** 36 CFR 9.70 – 9.73 is a new stand-alone regulatory section that addresses operations accessing oil and gas rights inside a park boundary from a surface location outside the park boundary. This section is largely a clarification of the existing 36 CFR 9.32(e) provision that describes the process to obtain either an operations permit or an exemption from the 9B regulations for these types of operations.

Under 36 CFR 9.71, the NPS clarifies the information an operator is required to submit to the NPS under an exemption application. The NPS will direct operators to the information requirements necessary to obtain an operations permit if an operator is proposing to use hydraulic fracturing techniques.

The NPS will maintain the review standard for exemption applications, “significant threat of damage to federally owned or administered lands, waters or resources of the unit while assuring the protection of park visitor and employee health and safety,” (refer to existing 36 CFR 9.32(e)). Under 36 CFR 9.72, the NPS will update and clarify the process for reviewing exemption applications. Under 36 CFR 9.72, if the NPS provides notice to an operator within 30 days from the date the NPS deems the exemption application complete, then the operator must obtain an operations permit. If the NPS notifies an operator within 30 days that no further action is required by the NPS, then the operator is exempt from the 9B regulations provided that the operator is subject to the General Terms and Conditions and the Compliance Procedure and Penalties for Prohibited Acts provisions.

Finally, the rule eliminates the language at existing 36 CFR 9.32(e) that may convey the misconception that the only causes of damage to surface and subsurface NPS resources are surface subsidence, fracture of geological formations with resultant fresh water aquifer contamination, or natural gas escape.

### **Operations Permit: Application Contents**

The rule details the information requirements that an operator must satisfy when submitting a complete Operations Permit application. These requirements are separated into the following categories: § 9.83, information that must be included in all applications; § 9.87, additional information that must be included for a proposed geophysical exploration; § 9.88, additional information that must be included for a proposed drilling operations; § 9.89 additional information must be included for a proposed well stimulation operations, including hydraulic fracturing; and, § 9.90 additional information that must be included for a proposed production operations.

Some of the information requirements at existing 36 CFR 9.36 are incorporated into the rule without change. However, there is clarification to the following existing information requirements.

- **Ownership Information.** 36 CFR 9.83 requires that operators identify all responsible personnel related to an operation.
- **New Surface Disturbance and Construction.** Section 9.84 requires an operator to specify site security measures and an operation’s power sources and transmission systems.
- **Use of Water.** Section 9.83(e) clarifies and expands upon § 9.36(a)(5) of the 1978 Regulations. Section 9.83(e) requires information regarding the source, transportation method, and quantity of water to be used in addition to how the operator will manage waste water.
- **Cultural Resources.** In the rule, the NPS eliminates § 9.47(a) of the 1978 Regulations, “Cultural Resource Protection,” because the section merely summarized the requirements of the Antiquities Act (54 U.S.C. 320301 *et seq.*). Restating those statutory requirements in the rule is unnecessary, and the 1978 Regulations reference failed to include other statutes that also apply to such resources.
- **Spill Control and Emergency Preparedness Plan.** Section 9.86 consolidates various provisions of the 1978 Regulations, includes a requirement that an operator must submit a spill control and emergency preparedness plan to the NPS, and identifies the information necessary for a spill control and emergency preparedness plan. The NPS has made nonsubstantive changes to the rule



so the term “Spill control and emergency preparedness plan” is used consistently throughout the final rule.

**Additional Information Requirements that Apply to Geophysical Operations, Drilling, Stimulation, and Production.**

The rule at § 9.87 clarifies the additional information a geophysical operator must submit to the NPS. Furthermore, the rule at §§ 9.88 through 9.90 clarifies the additional information an operator must submit if it is proposing to drill, stimulate, or produce a well. The final rule adds language to § 9.88(j) of the rule to include any proposed stimulation technique including hydraulic fracturing.

The rule also contains § 9.89, a new set of information requirements for well stimulation, including hydraulic fracturing operations. Information requirements include identifying the geologic barriers between the target zone and the deepest usable water zone, verifying mechanical integrity of the wellbore, and describing water use and disposal management of flowback fluids. Additionally, NPS has specific guidance on the means to ensure well integrity standards are met in the 2006 Operator’s Handbook for Nonfederal Oil and Gas Development in Units of the National Park System.

A new section, 36 CFR 9.87, will clarify the additional information a geophysical operator will need to submit to the NPS. This section will consolidate sections of the existing regulation and codify existing practices.

**Two-stage Permit Application Review Process.** Under 36 CFR 9.101 and 9.102, the NPS codifies the existing practice of conducting initial and formal review of an operator’s proposal. The rule consolidates the provisions addressing the determination of plan adequacy and the period within which the NPS must make a final decision under one section.

**Elimination of Dual Approval Standards.** Section 9.103 replaces the dual approval standards under the 1978 Regulations with a single three-part approval standard that applies to all operations, regardless of surface ownership. Oil and gas operations located on non-federally owned surface have the potential to impact federally owned or administered lands, waters, or resources of NPS units, visitor uses or experiences, or visitor or employee health and safety to the same degree as operations sited on federally owned surface.

**Final Actions.** Section 9.104 establishes two final actions: (1) approved, with or without conditions, or (2) denial, and the justification for the denial. The Regional Director will notify the operator in writing of the final action. If approved, this written notification constitutes the NPS’s authorization to conduct activities. The NPS has simplified the language at § 9.104(a)(2) to read “all applicable legal requirements.”

In response to public and agency comments and upon further review, the NPS has decided to change the timeframe for “Final Actions” in this rule to “within 30 days of completing all required legal compliance, including compliance with the National Environmental Policy Act...” The NPS is making this change because it more accurately reflects the timeframe for the process that the NPS must follow before taking final action on an Operations Permit.

Page 40 of the FEIS states the following regarding Timeframe for Final Action: “Proposed 36 CFR 9.104 would replace the existing 60 day timeframe with 180 days for the NPS to complete its formal review. This 180 day timeframe is more realistic than 60 days, given the typical time

it takes for the NPS to complete its review of a proposed operation and meet its compliance responsibilities under applicable federal statutes (e.g., NEPA, ESA, and NHPA) that may be triggered by the 9B permitting action.” This ROD modifies the language in the FEIS to reflect the change to the final rule noted above. This change is administrative in nature only and does not affect the impacts analysis or conclusions reached in the FEIS.

**Compliance with Big Cypress National Preserve Addition Act.** The Addition Act, 16 U.S.C. 698m-4, directs the NPS to promulgate rules and regulations governing the exploration for and development and production of nonfederal oil and gas interests within the Big Cypress National Preserve and Addition Area. Accordingly, § 9.105 describes the procedure for initial review of a proposed operation in Big Cypress National Preserve.

**Operating Standards.** Section 9.110 clarifies the purpose and function of operating standards. The NPS will maintain the current practice under the 1978 Regulations of setting non-prescriptive operating standards to allow operators the flexibility to design their proposed operation using the latest technological innovations that will best protect park system resources, values, and visitor health and safety. Section 9.110(a) clarifies the practice under the 1978 Regulations that applicable operating standards will be incorporated into an approved operations permit so that the operating standards become enforceable terms and conditions of an approved permit. Section 9.110(c) requires all operators to use technologically feasible, least damaging methods to protect NPS resources and values while assuring human health and safety. In the 1978 Regulations, “technologically feasible, least damaging methods” was part of an overall plan of operations approval standard at 9.37(a). The rule changes it into an enforceable operating standard.

**Reorganization.** The rule organizes all operating standards into one section and separates the standards into the following categories: §§ 9.111 through 9.116, are operating standards that apply to all operations; § 9.117, additional operating standards that apply to geophysical operations; and § 9.118, additional operating standards that apply to drilling, stimulation, and production operations. Organizing the standards in this manner allows the NPS and operators to readily understand which operating standards are applicable to the particular type of operation proposed.

**Clarification of and Additions to Former Operating Standards.** Some of the operating standards in the 1978 Regulations were minimally described. Additional operating standards were included in the 2006 Operator’s Handbook for Nonfederal Oil and Gas Development in Units of the National Park System. The rule now contains all operating standards. To the extent the rule incorporates operating standards from the 1978 Regulations without substantive change, those standards are not further discussed below. The operating standards summarized below are either clarifications to the 1978 Regulations, are new standards that the NPS has added, or are revisions to those included in the rule.

**Operating Standards that Apply to All Operations.** The rule modifies language from § 9.112(a) to remove the phrase “ground disturbing” because no activities incident to oil and gas operations, whether or not they disturb the ground, may be conducted within 500 feet of any structure or facility used by the NPS for interpretation, public recreation, or administration. The NPS moved § 9.112(a) and added the phrase “within 500 feet of the mean high tide line” to provide notice to operators that the 500 foot setback also applies to tidal areas. The rule includes a new standard at § 9.111(b) to require that either existing or newly created surface disturbance to be kept to the minimum necessary for safe conduct of operations. The rule modifies language from § 9.111(d) to clarify how waste must be handled. The rule modifies language from § 9.111(g) to clarify that hydrocarbon and air pollutant releases are to be minimized along with minimizing the flaring of gas. The rule adds new standards at §§ 9.114 and 9.115 that limit the visual

and sound impacts of oil and gas operations on park visitor use and experience. The rule adds a new standard at 9.111(h) that requires operators to control the introduction of exotic species and new standards at § 9.112 that address hydrologic connectivity.

**Reclamation Operating Standards.** Section 9.116 describes the standards for reclamation.

**Operating Standards that Apply to Geophysical Operations.** Section 9.117 describes standards for geophysical surveying methods including source points, use of equipment and methods, and shot holes.

**Operating Standards that Apply to Drilling, Stimulation, and Production Operations.**

Section 9.118(a)(1) requires all operators to use containerized mud systems during drilling, stimulation, and production operations. Section 9.118(a)(2) prohibits the establishment of new earthen pits for any use. Use of existing earthen pits may continue, however, the Superintendent may require the pits be lined or removed depending on site specific conditions. Section 9.118(b) establishes standards for well stimulation, including standards that address hydraulic fracturing operations, such as ensuring the mechanical integrity of the wellbore, water use and disposal, and management of flowback fluids.

**General Terms and Conditions.** The rule contains a new “General Terms and Conditions” section listing terms and conditions that apply to all operations. This section consolidates the following sections from the 1978 Regulations: §§ 9.35, 9.36(a)(15), 9.37(f), 9.41(g), 9.42, 9.46, 9.47(b), and 9.51(a) and (b). Described below are either clarifications to the 1978 Regulations, new terms and conditions that the NPS has added, or revisions to those included in the rule. Section 9.120(b) requires that an operator may not use any surface water or groundwater owned or administered by the United States that has been diverted or withdrawn from a source located within the boundaries of an NPS unit unless the use has been approved in accordance with NPS policy. Because monitoring and reporting requirements are necessary for all operations, the NPS includes monitoring and reporting requirements under “General Terms and Conditions.” Section 9.121(b) allows the NPS to require that operators hire third-party monitors when they are necessary to ensure compliance and protection of park resources and values. The NPS has modified language from §§ 9.121(c) and 9.121(d) of the rule to clarify the timing for reporting of incidents occurring on an operations site and for reporting requirements for cultural or scientific resources encountered on an operations site, respectively. Section 9.121(e) broadens the reporting requirement from the 1978 Regulations to require that the operator submit any information requested by the Superintendent that is necessary to verify compliance with either a provision of the operations permit or this subpart. Section 9.122 requires reporting related to the hydraulic fracturing process, including the disclosure of chemicals used in the hydraulic fracturing process and the volume of recovered fluids.

**Access to Oil and Gas Rights.** The rule contains a new section that addresses access across federally owned or administered lands or waters to reach the boundary of an operator’s oil and gas right. This new section expands upon former § 9.50. § 9.130(b) clarifies that adequate and feasible access to oil and gas rights located within the boundaries of NPS units in Alaska is governed by the regulations at 43 CFR part 36, which implements § 1110(b). Section 9.131(a)(1) allows the NPS to charge an operator a fee based on fair market value for access (e.g., use of existing roads as well as constructing new roads, or running gathering lines) across federal lands outside the scope of an operator’s oil and gas right. The NPS will set fees consistent with NPS Part 14 Rights-of-way guidance (NPS Reference Manual 53, Special Park Uses). Section 9.131(b) provides that NPS will not charge a fee for access that is within the scope of the operator’s oil and gas right, or access that is otherwise provided for by law. Section 9.132 addresses access across federally owned or administered lands or waters necessary to respond to an emergency.

**Financial Assurance.** The NPS renamed this section of the rule “Financial Assurance” (titled “Performance Bond” under the 1978 Regulations) to better reflect the variety of instruments that

operators can provide to the NPS to meet their obligation under this section. Section 9.141 makes the financial assurance amount equal to the estimated cost of reclamation. This substantially reduces the risk of the American taxpayers being left to assume reclamation costs in the event of operator default. Section 9.142 outlines the process for adjusting the amount of financial assurance due to changed conditions. Section 9.143 describes the conditions under which the NPS will release the financial assurance. Section 9.144 describes those circumstances that will result in forfeiture. Section 9.144(b)(3) allows the NPS to suspend review of an operator's pending permit applications, if that operator has forfeited its financial assurance in any system unit. Suspension would last until the Superintendent determines that all violations have been resolved.

**Modification to an Operation.** Section 9.150 renames the "Supplementation or Revision of Plan of Operations" section as "Modification to an Operation" to characterize any change to an approved operations permit. This section clarifies that either the NPS or the operator can request modification of the operator's permit, and describes the modification procedures. Approval of any modification to an approved permit must meet the relevant criteria applicable to Temporary Access Permits (§§ 9.60 through 9.63) or Operations Permit: Application Review Process (§§ 9.100 through 9.105). Section 9.150(c) of the rule prohibits an operator from implementing a modification until the NPS has provided written approval of the modification.

**Change of Operator.** This section renames § 9.34 "Transfer of Interest" of the 1978 Regulations to "Change of Operator." Section 9.160 holds the previous operator responsible to the NPS until the new operator adopts and agrees to the terms and conditions of the previous operator's permit and provides financial assurance. Section 9.160(a) addresses a transfer of operation where the previous operator did not have an approved NPS permit. Section 9.160(b) requires the previous operator to notify the NPS of its transfer. Section 9.161 requires that the new operator adopt and agrees to the terms and conditions of the previous operator's operations permit. Section 9.161(b) addresses transfer of an operation where an exemption has been granted under § 9.72 of the rule.

**Well Plugging.** Section 9.116(d)(1) (Operating Standards) retains the requirement that an operator conduct reclamation by plugging all wells. Section 9.170(a) requires operators to plug a well within 60 days after cessation of drilling, or 1 year after completion of production operations, or upon the expiration of NPS approved shut-in status. Under § 9.171, an operator may obtain an extension to the plugging requirement if the operator demonstrates mechanical integrity, a plan for future use of the well, and that the operator will follow maintenance requirements.

**Prohibitions and Penalties.** Section 9.181 authorizes the Superintendent to suspend an operation regardless of whether an operator's violation poses an "immediate threat of significant injury." Whether the threat is immediate or not, any violation that results in a threat of damage to park resources and values should be addressed by the Superintendent.

**Prohibited Acts.** Section 9.180 lists prohibited acts to provide operators with notice of the acts that constitute a violation of the 9B regulations. The prohibited acts in the rule include violations of the terms and conditions of an Operations Permit, as well as violations of other provisions of the 9B regulations.

**Incorporating Existing 36 CFR 1.3 Penalties Provision in the 9B Regulations.** The rule incorporates existing penalties provision at 36 CFR 1.3, which allows NPS law enforcement rangers and special agents to issue citations, which result in fines for minor acts of non-compliance, while treating serious acts as ones that may be subject to a fine or imprisonment, or both.

**No New Authorization Unless Operator is in Compliance.** Under § 9.182, NPS will not review any new operating permit applications or continue review of any pending permit applications in any System unit until an operator comes into compliance with this subpart or the terms or conditions of an operations permit.

**Reconsideration and Appeals.** Most of the procedures outlined in § 9.49 of the 1978 Regulations remain the same. The operator continues to have the right to appeal a decision made by either the Superintendent or the Regional Director. The operator now must exhaust these remedies before the NPS decision is a final agency action that is subject to review under the Administrative Procedure Act (APA). The rule renames the first step of the process as a request for “reconsideration,” rather than an appeal, since it is directed to the same official who issued the original decision. The rule also includes other clarifications of the existing language, makes editorial corrections, and reorganizes the sequence of some of the paragraphs.

Consistent with the APA, § 9.193(a) provides that during the reconsideration and appeals process the NPS’s decision will be suspended and the decision will not become effective until the completion of the appeals process. Section 9.193(b) addresses suspension of operations due to emergencies that pose an immediate threat of injury to injury to federally owned or administered lands or waters.

**Public Participation.** The rule renames the “Public Inspection of Documents” section to “Public Participation.” The rule eliminates the public notice steps currently required under § 9.52(a) and (b) of the 1978 Regulation and replaces them with a more efficient public involvement and review process. The rule retains the ability for an operator to protect proprietary or confidential information from disclosure to the public. The NPS has also included provisions that allow an operator engaged in hydraulic fracturing operations to withhold chemical formulations that are deemed to be a trade secret. The NPS has updated § 9.200(c) from the rule to include reference to § 9.88(j) to allow operators to maintain proprietary information for stimulation techniques other than hydraulic fracturing.

## **MEASURES TO MINIMIZE ENVIRONMENTAL HARM**

The rule is a revision of existing regulations that includes enhanced mitigation measures, required compliance for all operators, and specific operational standards for all phases of oil and gas operations to protect park resources. New operating standards that apply to all operations are designed to limit visual and sound impacts, surface disturbance, and the introduction of exotic species from oil and gas operations, and to promote natural processes, including maintenance of native soil profiles and hydrologic connectivity. Other new standards for drilling, stimulation, and production operations address limitations on earthen pits and hydraulic fracturing. These standards along with the existing mitigations that have been codified in the rule collectively serve to avoid or minimize environmental harm. The NPS will monitor and enforce the provisions associated with the rule and permit conditions.

## **BASIS FOR DECISION**

To identify the Selected Alternative, the planning team evaluated each alternative based on its ability to meet the purpose and need and objectives, as described earlier in this ROD, and the potential impacts on the environment. Alternative B was identified as the Selected Alternative because the change in regulation, which brings previously exempt oil and gas operations under the 9B regulations, will result in reduced risk of impacts to park resources and values from oil and gas operations due to implementation of better operating practices for all operations within park boundaries. And by increasing the bond amount to better reflect the cost of reclamation, NPS can ensure adequate reclamation after an operation ends production. By codifying existing best practices and requiring operations permits for all operations,

including previously exempt operations, all operations will be required to meet the least damaging methods standard. Additionally, the Selected Alternative creates an incentive for drilling to occur directionally from outside of park boundaries, thereby generally reducing impacts on park resources and values. The Selected Alternative also ensures that the amount of financial liability assurance carried by operators is equal to the estimated costs of plugging and reclamation and strengthens the NPS's ability to deal with acts of non-compliance.

Alternative C did not meet the objectives regarding directional drilling. Alternative C proposes to extend the scope of the 9B Regulations to include surface and subsurface directional drilling operations outside the boundary of a national park system unit. NPS analyzed its existing directionally-drilled operations outside park boundaries, and found that by regulating only the sub-surface operation inside the boundary of a national park system unit and allowing operators to seek an exemption to the plan of operations requirement, the regulation created an incentive for operators to site operations outside park boundaries. Generally speaking, NPS prefers that operations be located outside its boundaries, avoiding direct impacts to park resources and visitors, which is overall more protective of national park system units.

Alternative C also proposed to allow for an exemption to the operations permit requirement for those operations located wholly on non-federally owned land within a national park system unit, if the operator could demonstrate that the proposed operation would have no effect to NPS administered resources or values. While a reasonable alternative element, NPS ultimately did not select it because alternative B would regulate all operations within NPS boundaries without creating a class of potentially exempt operations.

Lastly, alternative C proposed to hold mineral owners and their lessees jointly and severally liable for all obligations to comply with the terms and conditions of an approved operations permit and any other applicable provision under the regulations. While a reasonable alternative element, NPS ultimately did not select it because the updated financial assurance provision fully protects NPS resources and taxpayer interests.

## **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment. The NPS, in accordance with the NEPA Regulations (43 CFR 46) and the Council on Environmental Quality's (CEQ's) *Forty Questions*, defines the environmentally preferable alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (Section 101[b]) (516 DM 4.10). The CEQ's *Forty Questions* (Q6a) further clarifies the identification of the environmentally preferable alternative, stating, "this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources." Alternative B (Proposed Rule) best meets this definition and is the environmentally preferable alternative because, in addition to bringing previously exempt operations into compliance, providing for greater ability to deal with acts of non-compliance, and assuring adequate financial liability for costs of plugging and reclamation, the Selected Alternative also includes an incentive for drilling to occur directionally from outside of park boundaries, thereby reducing adverse impacts on park resources and values, especially direct adverse impacts associated with site development. Alternative C provides many of the same protections as alternative B, but is not environmentally preferable because it would require the same compliance for wells directionally drilled from outside park boundaries as for wells drilled inside the park. This would eliminate an incentive for operators to locate wells outside the park and could therefore result in additional impacts to park resources.


## CONCLUSION

Overall, among the three alternatives considered, the selected action best meets the purpose, need, and objectives of the EIS and is expected to best protect public health and safety; improve understanding, application and effectiveness of the regulations for the NPS and for industry; and incorporate new requirements that will ensure that all non-federal oil and gas operations conducted in national park system units avoid or minimize, to the greatest possible extent, adverse effects on natural and cultural resources, visitor uses and experiences, park infrastructure and management. It incorporates all practical means to avoid or minimize environmental harm and will not result in the impairment of park resources and values or violate the NPS Organic Act.

The required "no-action period" before approval of the ROD was initiated on September 2, 2016 with the U.S. Environmental Protection Agency's *Federal Register* notification of the filing of the final plan/EIS (81 FR 60697).

The official responsible for implementing the selected action is Jonathan Jarvis, Director, National Park Service.

### APPROVED BY:

  
Jonathan B. Jarvis  
Director, National Park Service

10/20/16

Date



## ATTACHMENTS

### ATTACHMENT A – NON-IMPAIRMENT DETERMINATION FOR THE SELECTED ACTION

National Park Service (NPS) *Management Policies 2006* (section 1.4) require analysis of potential effect to determine whether or not an NPS action would impair a park's resources and values. The Selected Alternative for *Revision of 9B Regulations Governing Non-Federal Oil and Gas Activities / Final Environmental Impact Statement* is alternative B.

The fundamental purpose of the national park system, established by the NPS Organic Act and reaffirmed by the General Authorities Act, as amended, is to conserve park resources and values for the enjoyment of future generations. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws give the NPS management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purpose of a park. That discretion is limited by the statutory requirements that the NPS must leave resource and values unimpaired unless a particular law directly and specifically provides otherwise.

Pursuant to NPS *Management Policies 2006*, impairment is an impact that, in the professional judgment of the responsible NPS manager, "would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values" (NPS *Management Policies 2006*, section 1.4.5). Whether an impact constitutes impairment depends on the particular resources that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance

For the Selected Alternative, a determination of non-impairment is made for each of the impact topics carried forward for detailed analysis in the final EIS. Pursuant to the *Guidance for Non-Impairment Determinations and the NPS NEPA Process* (2011), impairment findings are not necessary for visitor use and experience, park management and operations, and socioeconomics because these impact topics are not generally considered to be park resources and values, and therefore not subject to the written impairment determination found in NPS *Management Policies 2006*. A description of the current state of each resource topic evaluated for impairment can be found in "Chapter 3: Affected Environment" of the final EIS.

The purpose and significance of units of the national park system were considered during the impairment determination for the Selected Alternative. All units of the national park system are formed for a specific purpose and to preserve significant resources or values for the enjoyment of future generations. The



purpose and significance of each park unit is usually identified in its enabling or authorizing legislation or in park-specific planning documents. The most important statutory directives for the NPS are provided by interrelated provisions of what are commonly known as the NPS Organic Act of 1916 (54 USC 100101) and the NPS General Authorities Act of 1970 (54 USC 100752), including amendments to the latter law enacted in 1978.

The key management-related provision of the Organic Act is as follows:

[The National Park Service] shall promote and regulate the use of the National Park System by means and measures that conform to the fundamental purpose of the System units, which purpose is to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations (54 USC 100101).

The fundamental purpose of the national park system, established by the NPS Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment and applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest extent practicable, adverse impacts on park resources and values. However, the laws do give the NPS the management discretion to allow impacts on park resources and values, when necessary and appropriate, to fulfill the purposes of a park so long as the impact does not constitute impairment of the affected resources and values.

The fundamental purpose of all parks also includes providing for the public enjoyment of park resources and values. The enjoyment that is contemplated by the statute is broad; it is for public enjoyment and includes enjoyment both by people who visit parks and by those who appreciate them from afar. It also includes deriving benefit (including scientific knowledge) and inspiration from parks, as well as other forms of enjoyment and inspiration. Congress, recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant. This is how courts have consistently interpreted the Organic Act.

The oil and gas operations that fall within the scope of this action are exercised under valid pre-existing private rights, subject to reasonable regulations to ensure that NPS resources are protected and impairment does not occur. This action is programmatic in nature, and provides an overall strengthening of existing NPS oil and gas regulations to ensure resource protection; no on the ground activities are authorized through this Record of Decision, or the associated Final Rule. Future site-specific oil and gas activities would require a plan of operations, NEPA compliance, and subsequent non-impairment determination.

## **GEOLOGY AND SOILS**

Under alternative B, regulatory revisions will result primarily in long-term direct and indirect beneficial impacts on geology and soils compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-

term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to geology and soils due to previously exempt operations being subject to the least damaging standard as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations). This will result in improved erosion/sedimentation control, storm water management, reduced fire hazards, and improved spill prevention and countermeasure actions. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks. Overall these regulatory improvements will result in long-term direct and indirect beneficial impacts on geology and soils. Oil and gas operations will continue to exist and operate in park units and adverse effects on soils and geology may occur, but under the new regulatory framework, all operations will need to meet enhanced standards and requirements to minimize adverse effects. Also, the directional drilling provision will provide incentives to locate wells outside of park boundaries, providing protection for park resources. The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will be subject to National Park Service approval prior to beginning operations, mitigation measures, and best management practices, all of which will contribute to the avoidance or minimization of impacts to geology and soils. Because alternative B will result in primarily beneficial effects and because adverse effects of regulated operations will be very limited in extent compared to the entire park area, and because mitigation measures and standards in the rules will reduce the loss or degradation of soils and geologic features, current and future generations will continue to have the opportunity to enjoy geology and soils in national park units with oil and gas operations, and therefore there will be no impairment to geology and soils.

## AIR QUALITY

Under alternative B, regulatory revisions will result primarily in long-term direct and indirect beneficial impacts on air quality, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Bringing currently exempt oil and gas operations under the 9B regulations could result in a reduction in the severity of adverse impacts on air quality from oil and gas operations, particularly where outdated equipment with little emission controls are currently in use or where there are wellbore leaks and lower emission equipment or repairs to well casings will be required. Directionally drilled wells will continue to be a potential source of adverse effects, depending on the wind direction, proximity to the park, and mitigation measures employed, as described under alternative A. Impacts of the current regulatory provisions regarding financial assurance, financial liability of owners, compensation for use of federal property, and enforcement and penalties will have potentially beneficial impacts from timely plugging and reclamation, compliance with 9B regulations, and increased monitoring and evaluation of operations.

Bringing previously exempt oil and gas operations under the 9B regulations will reduce the direct impacts of oil and gas operations on air quality; but there will still be impacts to air quality due to vehicles and heavy equipment emissions of nitrogen oxides, volatile organic compounds, carbon monoxide, sulfur dioxide emissions, and odors from operating large engines, pumps and auxiliary equipment. There will also be short-term adverse impacts on air quality from the use of construction equipment during reclamation activities. However, the change in regulation will reduce direct and indirect impacts and the

risks of impacts to air quality from oil and gas operations because of the implementation of better operating practices. The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will require National Park Service approval prior to beginning operations, mitigation measures, and best management practices, all of which will contribute to the avoidance or minimization of impacts to air quality. Because alternative B will result in primarily beneficial effects, because adverse effects of regulated operations will be very limited in extent compared to the entire park area, and because mitigation measures and standards in the rule will reduce impacts on air quality, current and future generations will continue to have the opportunity to enjoy the air quality in national park units with oil and gas operations, and therefore there will be no impairment to air quality.

## **WATER RESOURCES**

Under alternative B, regulatory revisions will result primarily in long-term direct and indirect beneficial impacts to water resources, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to water due to previously exempt operations being subject to the least damaging standard as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations), as was the case under the no-action alternative. This will result in improved erosion/sedimentation control, storm water management, spill prevention and countermeasure actions, well plugging standards, and improved standards/required information for well stimulation including hydraulic fracturing operations. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks. Overall these regulatory improvements will result in long-term direct and indirect beneficial impacts on water resources.

Bringing previously exempt oil and gas operations under the 9B regulations would reduce the direct impacts of oil and gas operations on water resources; but there could still be impacts to water resources due to erosion and sedimentation of water bodies, contamination of water from leaks and spills and possible groundwater contamination from well casing leaks. However, the change in regulation will reduce direct and indirect impacts and the risks of impacts to water resources from oil and gas operations because of the implementation of better operating practices. Specifically, the rule will include new standards applicable to hydraulic fracturing stimulation techniques. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will require National Park Service approval prior to beginning operations, mitigation measures, and best management practices, all of which will contribute to the avoidance or minimization of impacts to water resources. Because alternative B will result in primarily beneficial effects, and because mitigation measures and standards in the rule will reduce the potential for adverse effects on water resources, current and future generations will continue to have the opportunity to enjoy water quality in national park units with oil and gas operations, and therefore there will be no impairment to water resources.

## **WETLANDS**

Under alternative B, regulatory revisions will result primarily in long-term indirect beneficial impacts on wetlands, compared to the existing condition. Previously permitted operations (covered under previous

site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to wetlands due to previously exempt operations being subject to the least damaging standard as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations), as was the case under the no-action alternative. This will result in improved erosion/sedimentation control, storm water management, improved spill prevention (contamination) and countermeasure actions, as well as a reduction in altered hydrology and beneficial effects on wetland function and values. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks. Overall these regulatory improvements will result in long-term indirect beneficial impacts on wetlands.

The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will be subject to stipulations, mitigation measures, and best management practices, all of which will contribute to enhanced protection of park resources and values. Oil and gas operations will continue to exist and operate in park units and adverse effects on wetlands may occur, but under the new regulatory framework, all operations will need to meet enhanced standards and requirements to minimize adverse effects. Also, the directional drilling provision will provide incentives to locate wells outside of park boundaries, providing protection for park resources. Because alternative B will result in primarily beneficial effects, adverse effects of regulated operations will be very limited in extent compared to the entire park area, and mitigation measures and standards in the rule will reduce the loss or degradation of wetlands, wetlands in NPS units with oil and gas activities will continue to function in a manner similar to existing conditions and will continue be enjoyed by current and future generations, and therefore there will be no impairment to wetlands.

## **FLOODPLAINS**

Under alternative B, regulatory revisions will result primarily in long-term indirect beneficial impacts on floodplains, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to floodplains due to previously exempt operations being subject to the least damaging standard as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations), as was the case under the no-action alternative. This will result in improved erosion/sedimentation control, storm water management, improved spill prevention (contamination) and countermeasure actions, as well as improvements to hydrology, soil, and vegetation productivity within the floodplain. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks. Overall these regulatory improvements will result in long-term indirect beneficial impacts on floodplains.

The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any

potential for adverse effects from specific oil and gas operations will be subject to stipulations, mitigation measures, and best management practices, all of which will contribute to enhanced protection of park resources and values. Oil and gas operations will continue to exist and operate in park units and adverse effects on floodplain values may occur, but under the new regulatory framework, all operations will need to meet enhanced standards and requirements to minimize adverse effects. Also, the directional drilling provision will provide incentives to locate wells outside of park boundaries, providing protection for park resources. Because alternative B will result in primarily beneficial effects, because adverse effects of regulated operations will be very limited in extent compared to the entire park area, and because mitigation measures and standards in the rule will reduce the loss or degradation of floodplains, floodplains in NPS units with oil and gas activities will continue to function in a manner similar to existing conditions and will continue to be enjoyed by current and future generations. Therefore there will be no impairment to floodplains.

#### **VEGETATION (INCLUDING PLANT SPECIES OF SPECIAL MANAGEMENT CONCERN))**

Under alternative B, regulatory revisions will result primarily in long-term direct and indirect beneficial impacts on vegetation, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to vegetation due to previously exempt operations being subject to the least damaging standard as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations), as was the case under the no-action alternative. This will result in removal of contaminated soils, effective erosion control, plugging and capping all nonproductive wells, maintaining areas of operations to avoid or minimize the cause of fire; recontouring and reestablishing native vegetative communities; controlling the invasion of exotic plant species; and overall proper site reclamation. This will result in reduced erosion and contaminated soil exposure, and a reduction in overall damage or loss of vegetation communities and special-status plants. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks. Overall these regulatory improvements will result in long-term direct and indirect beneficial impacts on vegetation.

Oil and gas operations in general can result in adverse effects to vegetation. Bringing previously exempt oil and gas operations under the 9B regulations will not change the direct impacts of the footprint of well pads on vegetation; there will still be impacts to vegetation due to temporary vegetation removal and reestablishment of original vegetation within the footprint of previous disturbance. However, the change in regulation will reduce direct and indirect impacts and the risks of impacts to vegetation from oil and gas operations because of the implementation of better operating practices. The revisions make the 9B regulations applicable to all operators conducting non-federal oil and gas operations on lands or waters within a park unit, regardless of the ownership or jurisdictional status of those lands or waters. Under this provision, all operations within NPS boundaries will be required to obtain an operations permit, allowing for site-specific analysis. The proposed revisions include additional mitigation measures and best management practices to avoid and minimize impacts to vegetation during the three phases of oil and gas operations.

The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any

potential for adverse effects from specific oil and gas operations will be subject to stipulations, mitigation measures, and best management practices, and Section 7 consultation if any federally listed species are involved, all of which will contribute to the avoidance or minimization of impacts to vegetation. Because alternative B will result in primarily beneficial effects, and because mitigation measures and standards in the rule will reduce the impacts that could occur under current regulations, vegetation across NPS units will continue to exist in a state similar to existing conditions. Current and future generations will continue to have opportunities to enjoy vegetation, and, therefore there will be no impairment to vegetation, including any species of management concern.

#### **WILDLIFE AND AQUATIC SPECIES (INCLUDING ANIMAL SPECIES OF SPECIAL MANAGEMENT CONCERN)**

Under alternative B, regulatory revisions will result primarily in long-term direct and indirect beneficial impacts on wildlife and aquatic species and special-status species, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to wildlife due to previously exempt operations being subject to the least damaging standard as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations), as was the case under the existing condition. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks.

Oil and gas operations in general can result in adverse effects to wildlife and aquatic species. Bringing previously exempt oil and gas operations under the 9B regulations will not change the direct impacts of the footprint of well pads on wildlife habitat; there will still be impacts to wildlife and aquatic species due to temporary vegetation removal and unavoidable disturbance of park waters in some instances. However, the change in regulation will reduce direct and indirect impacts and the risks of impacts to wildlife and aquatic species from oil and gas operations because of the implementation of better operating practices. Approval by the National Park Service will be required prior to beginning operations, and work times will be scheduled to avoid or minimize effects to wildlife and aquatic species, including species of special management concern. The revisions make the 9B regulations applicable to all operators conducting non-federal oil and gas operations on lands or waters within a park unit, regardless of the ownership or jurisdictional status of those lands or waters. Under this provision, all operations within NPS boundaries will be required to obtain an operations permit, allowing for site-specific analysis before any activities are authorized.. The proposed revisions include additional mitigation measures and best management practices to avoid and minimize impacts to wildlife and aquatic species during the three phases of oil and gas operations.

The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will be subject to stipulations, mitigation measures, and best management practices, and Section 7 consultation if any federally listed species are involved, all of which will contribute to the avoidance or minimization of impacts to wildlife and aquatic species. Because alternative B will result in primarily beneficial effects, and because mitigation measures and standards in the rule will reduce impacts on wildlife and aquatic species, current and future generations will continue to have the opportunities to enjoy wildlife and aquatic species similar to those

that currently exist, in NPS units where oil and gas activities are authorized. Therefore, there will be no impairment to wildlife or aquatic species, including species of management concern.

### **SCENIC VIEWS AND NIGHT SKY RESOURCES**

Under alternative B, regulatory revisions will result primarily in long-term direct and indirect beneficial impacts on scenic views and night sky resources, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. While bringing previously exempt oil and gas operations under the 9B regulations will not change the direct impacts of oil and gas operations on scenic views and night sky resources, bringing previously exempt oil and gas operations under the 9B regulations could slightly decrease the impacts from the visual intrusion of wells that are located relatively close to visitor use areas. Wells would not be relocated, but steps such as screening, painting, and proper equipment maintenance could serve to mitigate visual impacts on visitors.

Oil and gas operations will continue to exist and operate in park units, with adverse effects such as light pollution, which can impact human perception of the night sky, natural landscape, ecological processes, and wildlife interactions. However, under the new regulatory framework, all operations will need to meet enhanced standards and requirements to minimize adverse effects. Also, the directional drilling provision will provide incentives to locate wells outside of park boundaries, providing protection for park resources.

The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will be subject to the stipulations, mitigation measures, and best management practices, all of which will contribute to the avoidance or minimization of impacts to scenic views and night sky resources. Because alternative B will result in primarily beneficial effects and because adverse effects of regulated operations will be very limited in extent compared to the entire park area, and because mitigation measures and standards in the rule will reduce the loss or degradation of scenic views and night sky resources. Current and future generations will continue to have opportunities similar to those that exist now, to enjoy scenic views and night skies in NPS units where oil and gas activities are authorized. Therefore, there will be no impairment to scenic views or night sky resources.

### **NATURAL SOUNDSCAPES AND ACOUSTIC ENVIRONMENT**

Under alternative B, regulatory revisions will result primarily in long-term beneficial impacts on soundscapes and acoustic environment, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits would accrue primarily from the increased ability on the part of NPS to request and enforce the least damaging standard for all operations, including proper maintenance of production equipment and placement of noise mitigation measures (e.g., mufflers, noise barriers, enclosures, retrofits, and quieter equipment), which would result in a reduction of noise and sound impacts.

Bringing previously exempt oil and gas operations under the 9B regulations would not change the direct impacts of oil and gas operations on natural soundscapes and acoustic environment. Oil and gas operations will continue to exist and operate in park units and adverse effects may occur. Occasional seismic surveys would have minimal and generally localized effects on soundscapes and the acoustic environment, and directionally drilled wells would continue to be a potential source of indirect adverse effects if they are sited close to the parks. However, under the new regulatory framework, all operations will need to meet enhanced standards and requirements to minimize adverse effects. Also, the directional drilling provision will provide incentives to locate wells outside of park boundaries, providing protection for park resources.

The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will be subject to the stipulations, mitigation measures, and best management practices, all of which will contribute to the avoidance or minimization of impacts to natural soundscapes. Because alternative B will result in primarily beneficial effects and because adverse effects of regulated operations will be very limited in extent compared to the entire park area, and because mitigation measures and standards in the rule will reduce the loss or degradation of natural soundscapes and acoustic environment, there will be no impairment to natural soundscapes and acoustic environment. Current and future generations will continue to have opportunities similar to those that currently exist, to enjoy scenic views and night skies in NPS units where oil and gas activities are authorized.

## **CULTURAL RESOURCES**

Under alternative B, regulatory revisions will result primarily in long-term indirect beneficial impacts on cultural resources, compared to the existing condition. Previously permitted operations (covered under previous site specific NEPA and non-impairment analysis) will continue and there will be no change in effects from the existing condition, as described under the no-action alternative; however, previously exempt operations will be required to obtain an operations permit, which will result in long-term beneficial impacts from improved operating requirements from those operations. Benefits will accrue primarily from reduced risk to cultural resources due to previously exempt operations being subject to “least damaging” and other operating standards and protocols for section 106 NHPA consultation as opposed to no standards (access-exempt operations), or a standard of “immediate threat of significant injury” (grandfathered operations), as was the case under the no-action alternative. This will result in improved site appearance from erosion/sedimentation control, cleanup of spills, wastes and debris, reduced fire hazards, and improved spill prevention and countermeasure actions. Other regulatory changes will result in an improved process of handling minor acts of noncompliance, accelerated reclamation of sites, and funding sources that could indirectly benefit resources at the parks, which indirectly benefit the visitors using and viewing those resources. Overall these regulatory improvements will result in long-term indirect beneficial impacts on cultural resources.

Bringing previously exempt oil and gas operations under the 9B regulations will not change the direct impacts of oil and gas operations on cultural resources. Oil and gas operations will continue to exist and operate in park units and adverse effects on cultural resources may occur, but under the new regulatory framework, all operations will need to meet enhanced standards and requirements to minimize adverse effects. Also, the directional drilling provision will provide incentives to locate wells outside of park boundaries, providing protection for park resources.



The proposed rule change is programmatic in nature and no site-specific actions will be authorized. Site-specific analysis will be conducted for future operations following promulgation of the final rule. Any potential for adverse effects from specific oil and gas operations will be subject to the stipulations, mitigation measures, and best management practices, including Section 106 review and consultation, all of which will contribute to the avoidance or minimization of impacts to cultural resources. Because alternative B will result in primarily beneficial effects and because adverse effects of regulated operations will be very limited in extent compared to the entire park area, and because mitigation measures and standards in the rule will reduce the loss or degradation of cultural resources, current and future generations will continue to have opportunities similar to those that exist now, to enjoy cultural resources in NPS units where oil and gas activities are authorized. Therefore, there will be no impairment to cultural resources.

## **SUMMARY**

In the best professional judgment of the NPS decision-maker, based upon the impact analysis in the EIS; relevant scientific studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities, no impairment of NPS park unit resources or values will result from implementation of the Selected Alternative and Final Rule.