

This is Mark Stiles' response to a question from the RPW for the Animas River Workgroup about current management of the Black Swifts (birds) and Fens (plant community). Mr. Stiles is the Forest Supervisor on the San Juan Public Lands. This is from an email dated: 7/27/12

It is a very complicated issue, but here's an attempt at simplification: What we would have to do depends greatly on the specific situation. For swifts, it's pretty simple, we want to protect the flow of water in the stream that makes the waterfall, and the physical structure of the cliff where the nests and waterfalls are located. To a lesser extent, we would be concerned with other disruption immediately adjacent to the nesting sites. If an action were to have no impact to the water or cliff, we probably wouldn't need to address it from the stream protection (e.g., WSR) aspect for that value. If an action were immediately adjacent to the cliff, water and would otherwise disrupt successful nesting, it is reasonable to imagine we might need to address it, but only to the extent of protecting the nesting activity. Stopping water flow would be a problem, slightly reducing flow might not be. Removing the cliff behind/adjacent to the falls might be a problem, mining upstream or downstream might not. Building some sort of mining structure immediately adjacent to the falls might be a problem if it were to somehow interfere with nesting (flashing lights and sirens on an elevated platform next to the falls???). Bottom line for swifts, maintain the waterfall of sufficient size to shield the nests and to maintain needed wet conditions for nesting.

For fens, it gets more complicated. It isn't necessarily every square inch of fen that is the issue, it's the functions, setting and biotic community of the fens that are of concern. Fens are fed by subsurface flows of water. Interrupting the feeder flows threatens the fen by drying it up, possibly changing community composition and its correspondingly its ability to store and filter water. Increasing subsurface flows could also adversely alter the fen (think turning it into a pond instead of a vegetation community). Compacting the surface, removing the vegetation and soil, otherwise damaging the vegetation (pesticide use, snow compaction), changing the quality of the water feeding the fen, or adding too much new sediment to the system could all adversely affect it. The main concerns are actions that might interrupt flows into and out of fens, or direct impacts to the fens' soil and vegetation. Cutting a road into the slope immediately above a fen could interrupt or otherwise alter the flow into the fen. Likewise, cutting a road near the bottom of a fen could alter the water level. Driving across a fen in summer or winter might compact it to the point that flows are altered. Digging a drainage ditch or canal upstream of the fen could alter flows. Mining within the fen would undoubtedly impact it, but mining adjacent could interrupt flows or add unwanted flows.

What we would do about an activity affecting waterfalls or fens also depends on the class of activity. For instance, there are statutory limitations on our authority when it comes to claims under the 1872 Mining Law. Some of the details are included in the FS Manual and BLM Reg sections included below. A simple version of what it all means is that mining activity would not be severely limited as long as it doesn't cause unnecessary or undue degradation. The

definition of that is not so clear. For instance, degradation of a pristine site might be quite easy to recognize, degradation of a previously disturbed site might be hard to see (or might not even be possible). Fens and swift nesting colonies are already recognized as being relatively uncommon, perhaps "special" places. Even outside of our discussions related to WSR we would be very careful in our review of proposed mining operations to ensure we don't greatly impact such places. That means we would work hard to find mutually acceptable mitigation measures to avoid or otherwise minimize impacts. If these resources were identified as outstandingly remarkable values, we would do the same, perhaps with even a little more emphasis given the clear and very public documentation of our intent to protect such values, but we would still be limited by the authority provided by statute, including the 1872 Mining Law.

My usual long answers. Bottom line is we would likely work to protect fens and waterfalls with swifts regardless of the WSR review. It's easy to imagine we will recognize potential concerns even faster as a result of our WSR review. It is likely there would be more public pressure/support to accomplish effective mitigation if these resources are identified as ORVs. The reasons for protection have been made more obvious, outside interests can readily point to things identified as ORVs, but regardless, the statutory authority in relation to mining claims remains somewhat limited.

I've highlighted and/or underlined some of the more relevant guidance for both BLM and USFS below.

Forest Service Manual

www.fs.fed.us/im/directives/fsm/2800/2810.doc excerpt below:

2817 - SURFACE MANAGEMENT PROCEDURES UNDER 36 CFR PART 228, SUBPART A

The regulations require that operations conducted under the authority of the mining laws which might cause significant surface resource disturbance must be covered by an operating plan approved by an authorized officer of the Forest Service, generally the District Ranger. Certain activities of little impact are specifically exempt from the operating plan requirement. Operators who are uncertain that their operations require an approved plan may submit a notice of intention to operate. Based on that notice, a determination is made by the District Ranger that a plan is or is not required. All notices and plans are submitted to the local District Ranger.

2817.01 - Authority

2817.01a - Statutory Authority

1. Organic Administration Act of June 4, 1897 (16 U.S.C. 473-475, 477-482, 551). This act authorizes the Secretary of Agriculture to issue rules and regulations for the use and occupancy of the National Forests and **to protect them from unnecessary environmental impacts.**
2. Multiple Use Mining Act of 1955 (30 U.S.C.611-615). This Act authorizes the Forest Service to restrict mining operations on National Forest System lands to only those uses reasonably incident to mining and **in a manner that minimizes adverse environmental impacts.**

2817.01b - Regulations

Title 36, Code of Federal Regulations, Part 228, Subpart A. This subpart provides direction for administering locatable mineral operations on National Forest System lands.

2817.02 - Objectives

In managing the use of the surface and surface resources, the Forest Service should attempt to minimize or prevent, mitigate, and repair adverse environmental impacts on National Forest System surface and cultural resources as a result of lawful prospecting, exploration, mining, and mineral processing operations, as well as activities reasonably incident to such uses. This should be accomplished by imposition of reasonable conditions which do not materially interfere with such operations.

2817.03 - Policy

The statutory right of the public to prospect, develop, and mine valuable minerals and to obtain a patent shall be fully honored and protected. Proprietary information relating to those rights and obtained through the administration of the agency's mineral regulations shall be protected to the full extent authorized by law.

The regulations at 36 CFR Part 228, Subpart A apply to all unpatented millsites, tunnel sites, and mining claims, including those not subject to 30 U.S.C. 612, and to activities, primarily prospecting, which may be conducted under the mining laws but not on claims.

The regulations at 36 CFR Part 228, Subpart A shall be administered in a fair, reasonable, and consistent manner and not as a means of inhibiting or interfering with legitimate, well-planned mineral operations.

The primary means for obtaining protection of surface resources should be by securing the willing cooperation of prospectors and miners. The willingness of the majority of prospectors and miners to comply with regulations, reasonably administered, is a principal key to the protection of environmental quality in the National Forest System. Face-to-face dialog with operators is encouraged.

However, when reasonable efforts have been made to obtain compliance with the regulations and the noncompliance is unnecessarily or unreasonably causing injury, loss, or damage to surface resources, authorized officers shall take enforcement action (FSM 2817.3(5)).

In the evaluation of a plan of operations, the certified minerals administrator should consider the environmental effects of the mineral operation, including whether the proposed operation represents part of a logical sequence of activities, and whether the proposed activity is reasonable for the stage proposed. For example, consider if the volume of material to be extracted as a sample is reasonable. A 10,000 ton bulk sample may not be reasonable prior to geochemical sampling and assaying.

Additionally, questions sometimes arise as to whether a proposed or existing use or activity is required for or reasonably incident to mining operations conducted under the 1872 Mining Law (FSM 2817.23, 2817.25, and 2818.1.)

When questions about the logical sequence of activities or whether an activity or proposed use is reasonably incident occur, the authorized officer should request the assistance of a Forest Service mineral specialist or certified mineral examiner to evaluate the situation on the ground, and advise the officer whether the proposed or existing surface use is logically sequenced, reasonable, and consistent with existing laws and regulations.

The advice should be used to help with negotiations to secure willing cooperation. If negotiations fail, the advice should be formalized using surface use determination procedures (FSM 2817.03a and FSH 2809.15, ch. 10).

BLM Regulations

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=f0bf738e8eac36020389709106d0f836&rgn=div8&view=text&node=43:2.1.1.3.73.3.167.37&idno=43> excerpt below:

§ 3809.420 What performance standards apply to my notice or plan of operations?

The following performance standards apply to your notice or plan of operations:

(a) General performance standards -(1) Technology and practices. You must use equipment, devices, and practices that will meet the performance standards of this subpart.

(2) Sequence of operations. You must avoid unnecessary impacts and facilitate reclamation by following a reasonable and customary mineral exploration, development, mining and reclamation sequence.

(3) Land-use plans. Consistent with the mining laws, your operations and post-mining land use must comply with the applicable BLM land-use plans and activity plans, and with coastal zone management plans under 16 U.S.C. 1451, as appropriate.

(4) Mitigation. You must take mitigation measures specified by BLM to protect public lands.

(5) Concurrent reclamation. You must initiate and complete reclamation at the earliest economically and technically feasible time on those portions of the disturbed area that you will not disturb further.

(6) Compliance with other laws. You must conduct all operations in a manner that complies with all pertinent Federal and state laws.

(b) Specific standards -

(1) Access routes. Access routes shall be planned for only the minimum width needed for operations and shall follow natural contours, where practicable to minimize cut and fill. When the construction of access routes involves slopes that require cuts on the inside edge in excess of 3 feet, the operator may be required to consult with the authorized officer concerning the most appropriate location of the access route prior to commencing operations. An operator is entitled to access to his operations consistent with provisions of the mining laws. Where a notice or a plan of operations is required, it shall specify the location of access routes for operations and other conditions necessary to prevent unnecessary or undue degradation. The authorized officer may require the operator to use existing roads to minimize the number of access routes, and, if practicable, to construct access roads within a designated transportation or utility corridor. When commercial hauling is involved and the use of an

existing road is required, the authorized officer may require the operator to make appropriate arrangements for use and maintenance.

(2) Mining wastes. All tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable Federal and state Laws.

(3) Reclamation. (i) At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage of the Federal lands.

(ii) Reclamation shall include, but shall not be limited to:

(A) Saving of topsoil for final application after reshaping of disturbed areas have been completed;

(B) Measures to control erosion, landslides, and water runoff;

(C) Measures to isolate, remove, or control toxic materials;

(D) Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

(E) Rehabilitation of fisheries and wildlife habitat.

(iii) When reclamation of the disturbed area has been completed, except to the extent necessary to preserve evidence of mineralization, the authorized officer shall be notified so that an inspection of the area can be made.

(4) Air quality. All operators shall comply with applicable Federal and state air quality standards, including the Clean Air Act (42 U.S.C. 1857 et seq.).

(5) Water quality. All operators shall comply with applicable Federal and state water quality standards, including the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.).

(6) Solid wastes. All operators shall comply with applicable Federal and state standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). All garbage, refuse or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands.

(7) Fisheries, wildlife and plant habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations.

(8) Cultural and paleontological resources. (i) Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands.

(ii) Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.

(iii) The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

(9) Protection of survey monuments. To the extent practicable, all operators shall protect all survey monuments, witness corners, reference monuments, bearing trees and line trees against unnecessary or undue destruction, obliteration or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, obliterated, or damaged by such operations, the operator shall immediately report the matter to the authorized officer. The authorized officer shall prescribe, in writing, the requirements for the restoration or reestablishment of monuments, corners, bearing and line trees.

(10) Fire. The operator shall comply with all applicable Federal and state fire laws and regulations, and shall take all reasonable measures to prevent and suppress fires in the area of operations.

(11) Acid-forming, toxic, or other deleterious materials. You must incorporate identification, handling, and placement of potentially acid-forming, toxic or other deleterious materials into your operations, facility design, reclamation, and environmental monitoring programs to minimize the formation and impacts of acidic, alkaline, metal-bearing, or other deleterious leachate, including the following:

(i) You must handle, place, or treat potentially acid-forming, toxic, or other deleterious materials in a manner that minimizes the likelihood of acid formation and toxic and other deleterious leachate generation (source control);

(ii) If you cannot prevent the formation of acid, toxic, or other deleterious drainage, you must minimize uncontrolled migration of leachate; and

(iii) You must capture and treat acid drainage, or other undesirable effluent, to the applicable standard if source controls and migration controls do not prove effective. You are responsible for any costs associated with water treatment or facility maintenance after project closure. Long-term, or post-mining, effluent capture and treatment are not acceptable substitutes for source and migration control, and you may rely on them only after all reasonable source and migration control methods have been employed.

(12) Leaching operations and impoundments. (i) You must design, construct, and operate all leach pads, tailings impoundments, ponds, and solution-holding facilities according to standard engineering practices to achieve and maintain stability and facilitate reclamation.

(ii) You must construct a low-permeability liner or containment system that will minimize the release of leaching solutions to the environment. You must monitor to detect potential releases of contaminants

from heaps, process ponds, tailings impoundments, and other structures and remediate environmental impacts if leakage occurs.

(iii) You must design, construct, and operate cyanide or other leaching facilities and impoundments to contain precipitation from the local 100-year, 24-hour storm event in addition to the maximum process solution inventory. Your design must also include allowances for snowmelt events and draindown from heaps during power outages in the design.

(iv) You must construct a secondary containment system around vats, tanks, or recovery circuits adequate to prevent the release of toxic solutions to the environment in the event of primary containment failure.

(v) You must exclude access by the public, wildlife, or livestock to solution containment and transfer structures that contain lethal levels of cyanide or other solutions.

(vi) During closure and at final reclamation, you must detoxify leaching solutions and heaps and manage tailings or other process waste to minimize impacts to the environment from contact with toxic materials or leachate. Acceptable practices to detoxify solutions and materials include natural degradation, rinsing, chemical treatment, or equally successful alternative methods. Upon completion of reclamation, all materials and discharges must meet applicable standards.

(vii) In cases of temporary or seasonal closure, you must provide adequate maintenance, monitoring, security, and financial guarantee, and BLM may require you to detoxify process solutions.

(13) Maintenance and public safety. During all operations, the operator shall maintain his or her structures, equipment, and other facilities in a safe and orderly manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to alert the public in accordance with applicable Federal and state laws and regulations.

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