USDA - Forest Service, Allegheny National Forest, Marienville Ranger District
OGM Review for Threatened, Endangered and Sensitive Species
Duhring Resources Inc., Case 595, 10 wells, 1 road segment with multiple spurs, tank battery, well improvements and plugging
Date: August 2, 2007 File Codes: 2600/2800

1.1 Introduction and Background

Administrator: Lauren Miles	**Total Acres Impacted**: 13.0
Access: Duhring Road	**Watershed**: Straight Run

For additional information on specific locations of wells, roads, storage facilities, and pipelines and the expected timelines of this proposal, please refer to the OGM Case Information Sheet and project map(s) in the case file.

Responsibility: This project is not a federal action, on a non-federal mineral lease, but impacts National Forest land. It is the responsibility of the mineral owner to comply with the Endangered Species Act and with the Standards and Guidelines of the ANF Land and Resource Management Plan (Sections 2600 and 2800, Forest Plan, March 30, 2007).

2.1 Present Condition of Wildlife Habitat

2.2 Physical Setting and Features

Date of field check:	July 26, 2007
Terrain, aspect and range of slope:	Plateau and gentle hillside, primarily west and east, 0 to 70%
***Soil conditions:**	Poor to well-drained
***Rock outcrops and boulders:**	**Well 12** is positioned near widely scattered boulders (no habitat features) **Well 11** is positioned near widely scattered boulders (no habitat features) **Well 19** is positioned near a patch of boulders (located to the east, no habitat features) **Well 23** is positioned near large flat rocks, rocky surface, (no habitat features) Six other wells are located on stoney to very rocky forest soils
***Water sources, wetland, vernal pools, floodplain, and riparian conditions::**	**Duhring 1 (plug)** – the proposed well plugging is a short distance east of 3 spring/seeps located on 70% slope **Well 8** – the proposed road between Wells 8 and 13 crosses 2 large deeply entrenched springs **Well 9** – the proposed road between Wells 8 and 9 crosses 2 intermittent springs

	Wells 8, 9 and 13 are 100 feet or more away from the perennial stream **Wells 8, 10, and 12** are located in regions of heavy surface rock and rubble and it is suspected that underground water sources may flow beneath some of these features **Well 25** - a spring is located next to and flows across the existing road between Well 25 and PA Gas Well 1253
*** Raptor or heron nests:**	**None**
Other:	---

* These resources are considered non-renewable, unique, specialized or particularly sensitive to human development. If the proposed actions directly or indirectly affect these features, the project is expected to comply with the Standards and Guidelines of the ANF Land and Resource Management Plan. The project design will implement conservation measures to eliminate or reduce potential impacts on these resources.

2.3 Habitat Description

Primary forest types and conditions:	Allegheny hardwoods consisting of black cherry, red maple, sugar maple, and black birch. Minor components of these hardwood stands include yellow birch, and beech.
Secondary habitats and conditions:	none
Primary understory vegetation:	Beech, sugar maple and birch are common. Birch, juneberry, witch hazel, ironwood, and hawthorn are a minor component of the understory.
Primary ground cover:	Hay-scented fern, short husk grass, and wood fern were most frequently observed. Other dominant species include tree clubmoss, bracken fern, New York fern, cinnamon fern, cinquefoil, goldthread, basil, self-heal, goldenrod, blackberry, deer tongue grass, may-apple, jewelweed, jack-in-the-pulpit, dewberry, starflower, Indian cucumber-root, Canada mayflower, green sedge, crooked stalk, partridge-berry, violet, false violet, staghorn clubmoss, shining clubmoss, wood sorrel, and moss (2 species undetermined).
Unique Plant communities:	None
Noxious or Invasive weeds:	None
Key wildlife habitats or usage:	The area is suitable habitat for white-tailed deer, chipmunk, robin, hermit thrush, white-breasted nuthatch, ruby-throated hummingbird, downy woodpecker, dark-eyed junco, and American toad.
Specialize habitat (winter range,	None

etc):	
Other:	Horse trails cross proposed roads and use segments of existing roads in at least 6 different areas within the project

3.1 Threatened and Endangered Species Status and Habitat in the Project, Effects and Determinations, and Recommended Conservation Measures (CM)

There is no officially designated critical habitat for any federally listed threatened or endangered species (16 U.S.C. 1532 (50 A)) on the ANF.

Species	Status and Habitat in the Project	Determinations and Conservation Measures (CM)
Indiana Bat	No documented occurrences in project. Past surveys for timber sales throughout the watershed failed to capture one. Suitable roosting and foraging habitat is provided by the mature forest habitat throughout the project.	**May affect, but not likely to adversely affect** determination is reached due to the change in roosting and foraging habitat to small opening and open corridor habitat. Case 595 may affect but is not likely to adversely affect the Indiana bat due to the scope of the project, species use on the ANF has been shown to be very rare, and the vast amount of suitable habitat available to the species across the Forest. No CM anticipated.
Small Whorled Pogonia	No documented occurrences in project. Past surveys for timber sales and OGM project in the immediate vicinity of Case 595 and throughout this watershed have failed to detect the species. Although the field survey found two associated species, partridge-berry and bracken fern, much of the hardwood forest environment (here) has low to no potential habitat due to dense understory and ground cover (competing) vegetation throughout the project.	Based on potential habitat factors (dense competing vegetation) and no previously documented occurrences, **a 'no effect'** determination is reached for the small whorled pogonia. No CM anticipated.
Northeastern Bulrush	No documented occurrence or habitat in the project	**No effect'** determination. No CM anticipated.
Northern Riffleshell	No documented occurrence or habitat in the project	**No effect** determination. No CM anticipated.
Clubshell Mussel	No documented occurrence or habitat in the project	**No effect** determination. No CM anticipated.

During the review of the Plan of Operation, if known occurrences of federally listed, proposed, threatened, or endangered species are located in the vicinity of proposed

mineral developments, this will be documented in a letter to the operator and copied to the U.S. Fish and Wildlife Service Field Office in State College, PA. The responsibility to comply with the Endangered Species Act will rest with the operator. The letter will direct the operator to contact the Fish and Wildlife Service to resolve issues related to threatened and endangered species prior to proceeding with any tree cutting or earth disturbance.

4.1 Regional Forester Sensitive Species (RFSS) Status and Habitat in the Project, Impacts and Determinations, and Recommended Conservation Measures

Land directly impacted by this proposal does not provide suitable habitat for 54 of the 61 listed ANF RFSS. Currently, these 54 species have not been documented (historically) in the project and suitable habitat (for any of these species) is not found in the area and would not be impacted by this proposal. As a result, a '**no impact**' determination has been reached for 54 RFSS and these species will not be addressed (further) in this report.

Species	Status and Habitat in the Project	Determinations and Conservation Measures (CM)
Northern Goshawk	No documented occurrences but suitable nesting and foraging habitat are found in the project. Field surveys did not detect any active northern goshawk nests in Case 595. There are no active or inactive goshawk territories within the project area, but Case 595 is on the NE edge of an active territory (FR 226).	The project will alter forest habitat and create a small opening and open corridors that could provide a different type of foraging habitat. A '**no impact on individuals, but suitable nesting and foraging habitat will be altered**' determination is reached. This project will not cause a trend toward federal listing of this species. No CM anticipated.
Timber Rattlesnake	The closest documented occurrences have been recorded 1.5 miles from the project. Past surveys for timber sales and OGM projects in these watersheds failed to observe one. Potential winter den or basking sites are not found in the project area. The mature hardwood forest in this area provides suitable foraging habitat.	The new construction would alter foraging and potential den/basking habitat. Because of this project's limited scope, potential den and basking habitat is avoided, and foraging habitat is readily available across the ANF, Case 595 '**may impact individuals and suitable habitat will be altered**', but it will not cause a trend toward federal listing of this species. No CM anticipated.
Hooker's Orchid, American Ginseng, Mountain Wood Fern, Checkered Rattlesnake	These species are associated with mid to late hardwood forest. There are no documented occurrences in the project. Past surveys for timber sales and other OGM projects throughout the watershed has failed to detect these species.	Considering there are no documented occurrences of these species in the Straight Run watershed and the project's scope, a '**no impact on individuals, but suitable habitat will be altered**' determination is reached. Although forest habitat will be converted to opening and open corridor

Plantain, White Trout Lily	The mature hardwood forest throughout the project is considered suitable habitat.	habitat, this project will not cause a trend toward federal listing of these species. No CM are necessary

5.1 Maintenance and Protection of Unique or Specialized Habitat or Resources Sensitive to Development.

Site-specific Conservation Measures Recommended for this Project

Water Quality Protection Measures

Well Duhring #1 (plug) – The proposed well plugging is a short distance east of 3 spring/seeps located on 70% slope. **Recommend** using an existing lease road that heads east from the well opening and follows the contour (east) to plug this well.

Well 8 – The proposed road between Wells 3672-8 and 13 crosses 2 large deeply entrenched springs. **Install adequate sized culvert pipes** and implement necessary measures to stabilize disturbed or exposed soils and reduce the risk of erosion and sedimentation.
Re-vegetate roadsides within 100 feet of the waterways. **Recommend** an application of limestone on the running surface of the road and line the roadside ditches within 100 feet of each of these streams.

Well 9 – The proposed road between Wells 3672-8 and 9 crosses 2 intermittent springs. **Install adequate sized culvert pipes** and implement necessary measures to stabilize disturbed or exposed soils and reduce the risk of erosion and sedimentation.

Wells 8, 10, and 12 are located in regions of heavy surface rock and rubble and it is suspected that underground water sources may flow beneath some of these features. These areas can be identified as very rocky sites having shallow depressions or gullies. Currently, the drought conditions make it extremely difficult to verify sub-surface water flows. Recommend that the operator use great care when trying to construct roads across these features. Excavating the surface rubble will likely impact the waterways flowing just below the forest floor. Additional culvert pipes and erosion and sedimentation control measures may be necessary near these sites.

Well 25 - A spring is located next to and flows across the existing road between Well 3672-25 and PA Gas Well 1253. If this section of road is used to develop this lease, the **installation of an adequate sized culvert pipe** and **erosion and sedimentation controls** are recommended at this site.

Protection of Forest Soil

Wells 11 and 12 – These wells are located on terrain of 25 to 30 percent slope. Sizeable cut-banks will be necessary to develop level well pads and road surfaces. Keep the surface cutting to a minimum and re-vegetate the disturbed and exposed soil with a

suitable ground cover to reduce the risk of erosion and reduce the need to constantly clean ditches and culverts.

Minimize Impacts on Forest Habitat

Unless adverse resource impacts would occur, reconstruction of existing or abandoned roads is generally preferred over the construction of new roads.... The number of roads needed to access a development area will be limited to the minimal amount needed. Avoid unnecessary parallel road construction where possible and utilize single road systems for access (Forest Plan, page 92).

The following recommendations are made to provide for public safety, maximize the use of existing roads, and minimize the construction of new roads to ultimately reduce the impacts on forest resources and wildlife habitat:

A. To protect the residence (people and property) and provide a suitable entrance/exit on to Duhring Road, **shift the first 300 feet of entrance road** approximately 100 to 150 feet to the south to provide better sight distance and a road profile suitable for turning heavy vehicles on to Duhring Road. Do not use the segment of right-of-way next to the 'Fireside Cottage'.

B. **Utilize (re-construct) the 1,100 feet of existing road** between Duhring #8 well and Duhring #10 well.

C. **Drop the 1,600 feet of new construction** proposed between Well 3672-11 and PA Gas Well 1253 and between Duhring #6 Well and PA Gas Well 1253.

D. **Construct a new 300 feet road segment** between Well 3672-25 and Duhring #9 Well to provide access to the PA Gas Road between Wells 1247 and 1253.

Protection of Unique Wildlife Habitat or Features

Minimize construction impacts on and near the boulders around **Wells 11, 12 19 and 23.**

Additional Recommendations for Habitat Improvement Projects

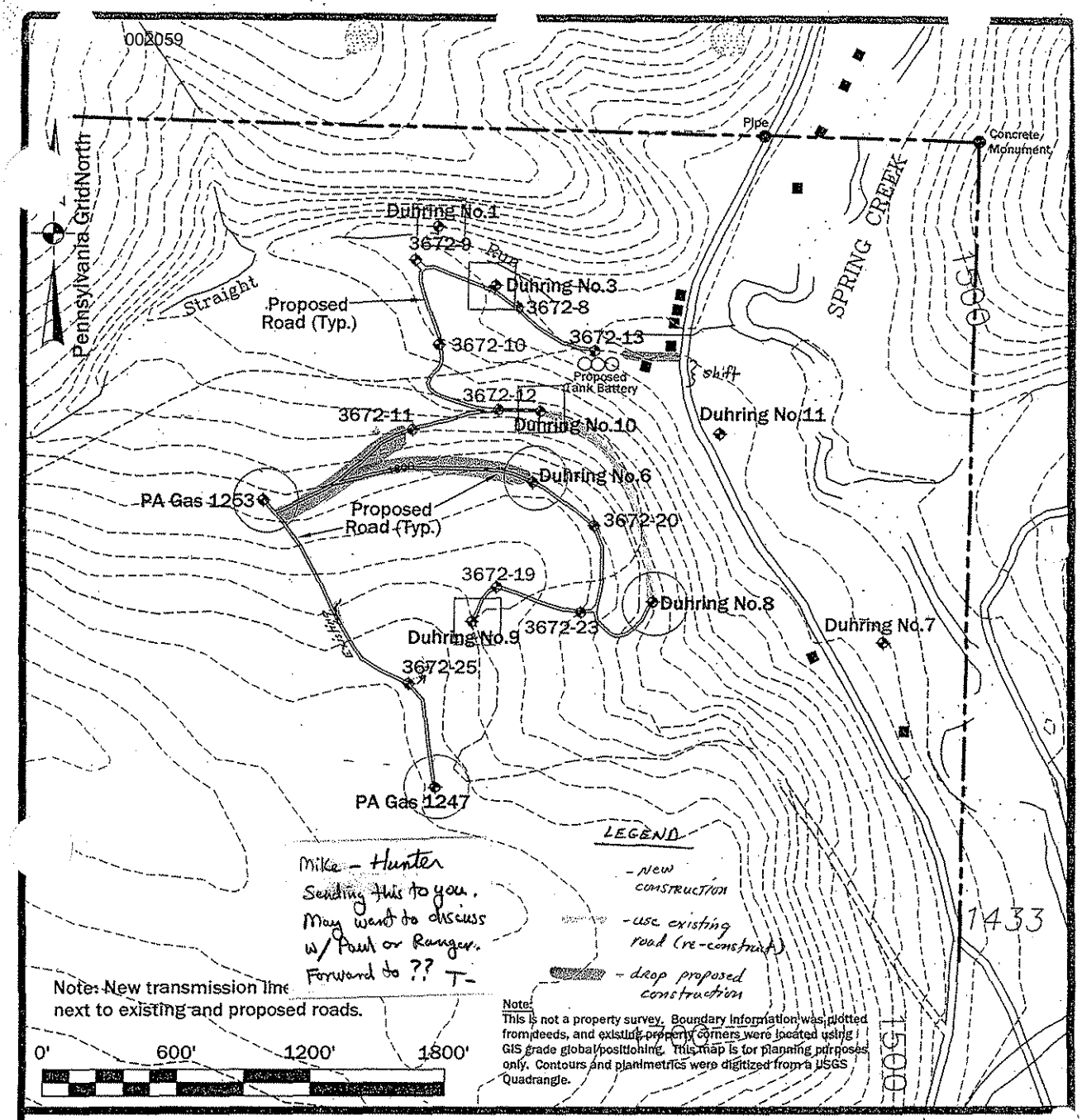
The Ranger District should initiate a NEPA project and develop a KV plan to improve wildlife habitat impacted by this project area. The following are recommends to; restore or improve affected habitat, control invasive plants, and provide habitat structures for species with viability concerns. When a KV plan is developed, timber compartments and stands will need to be identified for the following activities based on well locations in Case 595.

A. On those well sites that remain inactive and become plugged (possibly Duhring Wells #1, #3, #6, #9, and #10), plant a mixture of conifer cover (white pine, spruce, etc.), soft-mast trees and shrubs (apple, juneberry, witch

hazel, hawthorn, hobblebush, elderberry), and/or hard-mast trees (red oak and/or white oak, etc.). Make improvements (wildlife planting and fencing) on up to 5 acres.

B. Recommend an application of limestone on the running surface of the road and line the roadside ditches within 100 to 150 feet of each of four tributary streams crossed by the proposed road between Wells 3672-13 and 3672-9.

District Wildlife Biologist,
/s/ Terry Steffan



Scale: 1" = 600' OGM CASE 575 Date: 06/04/2007

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Exhibit – Site Map

for

Duhring Resource Company

"Warrant 3672"

Allegheny National Forest

Jenks Township, Forest County

Pennsylvania

RE WORK

PLUG