

## PROPOSED CONSERVATION STRATEGY SUMMARY WORKSHEET

### Rock Creek Watershed (portion of the Tuscarora Population Management Unit)

#### **DESCRIPTION OF THE CONSERVATION ACTION:**

Rock Creek Watershed Assessment and Watershed Plan Development.

#### **RISK BEING MITIGATED BY THE PROPOSED ACTION:**

The watershed assessment will be used to refine the risk factors identified for the Tuscarora PMU by identifying the specific locations of the risk factors (e.g., where habitats have been lost due to wildfire, where transmission lines provide predation opportunities in nesting habitat, where habitat quality is sub-optimum due to long-term absence of disturbance, etc.). However, the assessment in and of itself will not mitigate any risk. The assessment will result in a watershed plan, which will identify specific actions to mitigate risk and improve the overall functionality of the watershed. The following risks have been identified at a cursory level for the PMU that includes this watershed:

- Habitat Quantity (loss of habitat to wildfire, mining);
- Habitat Quality (conversion to annual grassland, riparian in non-functioning condition or at risk);
- Habitat Fragmentation (sagebrush habitats fragmented by annual grasslands, power lines);
- Changing Land Uses (subdivisions);
- Livestock Grazing (allotment evaluations out-dated);
- Fire Ecology (lack of disturbance combined with livestock grazing and fire suppression have extended the fire return interval, as well as catastrophic wildfires have converted sagebrush habitats to annual grasslands, reducing the fire return interval);
- Disturbance (mineral exploration and development, sheep trailing, off road vehicles); and
- Predation (associated with power lines).

The assessment will identify specific rangeland health, riparian functioning condition, and sage grouse habitat health issues within the watershed.

#### **OBJECTIVES:**

- Evaluated the indicators of rangeland health, riparian functioning condition, and healthy sage grouse habitats;
- Determine the degree of departure from the ecological site description, ecological reference area, and/or seasonal habitat guidelines for each

- rangeland, riparian, and sage grouse habitat health attribute within the watershed;
- Develop a watershed plan that addresses the issues identified in the watershed assessment.

### **RATIONALE:**

The PMU risk assessment and watershed prioritization that have been conducted thus far have been based on some existing data, professional judgment, and personal experience with each PMU and/or watershed. This level of evaluation was sufficient for prioritization, but not for identifying specific management actions.

The formal watershed assessment will be conducted by an inter-disciplinary team of specialists and interested parties. The watershed assessment/planning team will use the assessment to identify specific management strategies to be implanted to improve the functionality of the watershed. These projects will focus on improving the indicators of rangeland, riparian, and sage grouse habitat health, with the eventual goal of achieving a fully functional watershed.

The watershed assessment will also be useful in evaluating public and private land management actions that have been previously implemented. These actions, such as specific range improvements or management strategies, will be evaluated in the context of the overall functionality of the watershed and also with respect to sage grouse habitat guidelines.

This approach, while not focused only on sage grouse, will improve overall watershed conditions, which should increase the potential for improving sage grouse populations, provide for other sagebrush obligates, improve water quality and quantity, and increase water, nutrient, and energy cycling. Due to the importance of sage grouse in this process, each management action will be evaluated as to its overall affect to sage grouse population dynamics and habitat parameters.

### **PROJECT DESCRIPTION:**

The watershed assessment will combine the methodology included in *Interpreting Indicators of Rangeland Health*, USDI and USDA Technical Reference 1734-6 (2000) and *Ecosystem Analysis at the Watershed Scale* (Federal Guide for Watershed Analysis). The watershed team will also have the opportunity to add variables to the assessment process, as appropriate to the specific watershed.

The initial watershed assessment may identify specific field measurements that are required before a specific management action can be planned (e.g., fuel loading, plant community composition, existence of a seed bank, etc.). These types of activities will be identified during the assessment process and a schedule for obtaining the needed information will be developed and implemented.

NNSG is also exploring the potential to use newly developed aerial photography/GIS survey technology to facilitate obtaining spatial data of the vegetation, riparian areas, and sage grouse habitats. This information would be combined with soil survey spatial data, and grazing utilization patterns, and other spatial and point data to assist with the watershed management plan development, implementation, and monitoring.

The final product of the watershed assessment will be a report that summarizes the existing data and watershed condition, including quantity and quality of sage grouse habitats. *“Watershed analysis provides understanding of the watershed context that is essential to guide project planning and decision making. Watershed analysis is not a decision-making process, and a watershed analysis report is not a decision document, a planning document requiring NEPA review, or a regulatory prescriptive document. Watershed analysis contributes, however, to efficiently meeting land management and regulatory requirements at the watershed scale”* (Ecosystem Analysis at the Watershed Scale, 1995)

This report will be the basis for developing a watershed management plan that:

- will have specific watershed and sage grouse objectives;
- will include specific projects or management strategies to meet the objectives;
- will identify specific monitoring and schedule for monitoring; and
- will identify the responsibilities for various aspects of implementation.

The individual projects, or the plan in its entirety, will be subject to NEPA analysis and land use plan conformance,

#### **LEGAL AUTHORITY:**

The NNSG has no legal authority to implement the watershed assessment or watershed plan process. This process will be conducted in cooperation with the federal and state agencies, private landowners, and interested parties that have either the legal authority or the interest to participate. The watershed assessment and the watershed plan will help coordinate and prioritize federal and private land management activities. For example, if the watershed assessment identifies the need for fuel loading reduction, the watershed plan would include a project with management strategies appropriate to produce sage grouse habitat in conjunction with the reduction in fuel. Such a project could be included in the annual work plan/budget process for the appropriate land management agency. Once included in this process, the project would be implemented based on agency priorities and funding availability. In addition, NNSG could apply for grants or partner with other organizations to provide matching funds for the project, increasing the probability of meeting the agency priority and budgetary constraints.

#### **PROCEDURAL REQUIREMENTS:**

The watershed assessment and watershed plan development will require the formation of an interdisciplinary team. The team will consist of agency specialists, local scientists, and outside experts as needed. The team will also consist of those individuals that make their livelihood from the watershed, as well as other interested parties.

Implementation of any management actions will be conducted through the procedures appropriate to the land ownership. On federally-administered lands or federally-funded projects, the projects will need to be in conformance with existing land use plans and will be subject to the laws, regulations, and policies guiding project implementation on public lands. The NNSG will act as the project proponent with responsibility for project proposal development, and compliance with applicable laws, regulations, and policy. There may be opportunity to combine actions already planned by the land management agency with the watershed plan actions, where these actions are mutually beneficial. In such cases, the public land management agency may be the lead for all or portions of the project with regard to planning, compliance, and implementation.

Where private lands are involved, the land owner and state and local laws will have primacy. No portion of the watershed plan will be implemented on private land without approval and permission of the private land owner.

#### **FUNDING SOURCE:**

The NNSG is currently seeking funding through grant applications to conduct the watershed assessment and watershed plan development. As indicated above, implementation of the individual projects and management strategies may be included in the land management agency annual work plan/budget process, funded totally by outside grants, or a combination of funding sources through partnership opportunities. Specific funding sources cannot be identified until the watershed plan is developed and the specific actions/projects are identified.

#### **IMPLEMENTATION PROCESS:**

- Apply for funding to conduct the watershed assessment and watershed plan development;
- Conduct the watershed assessment (June – August);
- Develop the watershed plan (September – December);
- Apply for implementation funding and proposed appropriate projects for the federal agency work plan/budget process;
- Initiate land use plan conformance review, cultural surveys, special status species surveys, NEPA process, etc.;
- Implement projects on a pre-determined schedule;
- Develop a monitoring schedule;
- Implement monitoring; and
- Use monitoring data to drive the adaptive management process.