

# ELKO COUNTY SAGEBRUSH ECOSYSTEM CONSERVATION STRATEGY

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## NORTHEASTERN NEVADA STEWARDSHIP GROUP, INC.

### **Mission Statement**

#### **Whereas:**

As the Northeastern Nevada Stewardship Group, Inc., we appreciate:  
Opportunities which allow us to live and work in Northeast Nevada;  
Natural resources which enable local prosperity;  
Productive ecosystems which provide healthy environments and quality lifestyles;  
Our western heritage, culture, and customs.

#### **Therefore:**

In order to ensure a better future for our families, community, and future generations,  
To build trust amongst our diverse citizenry, and to  
Ensure sustainable resource use,  
We join together as full partners to  
Provide a collaborative forum for all willing participants.  
We are dedicated to dynamic, science-based resolution of  
Important issues related to resource stewardship and  
Informed management of our public lands with  
Positive socioeconomic outcomes.

## ***SIGNATURE PAGE***

The Strategy presented herein is a process for assessing the 19 watersheds within the planning area. As such, there is no commitment by any agency or individual signatory below to any expenditure of funds or personnel resources to the process. By their signatures, these individuals and/or the agency represented by the signatory, are agreeing to proceed with the process and are indicating a general approval of the Strategy. Their signature should not be interpreted to mean that each signatory is in total agreement with all of the wording or all of the components of this Strategy. Each agency can only participate to the extent allowable by law, regulation, or policy.

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## **PREFACE**

The Northeastern Nevada Stewardship Group, Inc. (NNSG) was established in the fall of 1998 as a result of frustration with the confrontational manner in which natural resource and land use issues were being addressed in the region. Seeking an alternative means of conflict resolution, a collaborative training session was conducted. Following the training, the group met again and decided that sufficient interest and support existed to form a community-based organization operating under the concept of collaboration. The NNSG was thus formed, and the first task undertaken was to develop a mission statement that met the needs and expressed the values of the diverse membership (see preceding page).

The NNSG is open to all individuals, organizations, interest groups, businesses, corporations, and governmental agencies. The NNSG has no jurisdictional authority, yet is empowered by the process of collaboration and by its membership. It is noteworthy that the NNSG did not form as a result of the potential petition to list the Sage-Grouse as threatened or endangered under the Endangered Species Act (ESA) of 1973, as amended. Rather, the NNSG formed as a group and developed their mission prior to seeking an issue to pursue (i.e., the mission statement was not born of any specific issue, but recognized the need to develop a format to address all issues). As such, the NNSG has incorporated community values into the development of this strategy, a strategy developed to provide for the natural resources within the county, as well as to provide for the well being of the people, continuance of the land uses, and maintenance of the cultures of Elko County.

By 1999, the potential for a petition to list Sage-Grouse as threatened or endangered under the ESA was the issue "du jour." Because this issue had the potential to affect land users of every persuasion; and therefore, the potential to bring diverse viewpoints to the table to resolve the issue, Sage-Grouse conservation was selected as the issue for NNSG to implement the collaborative process. This was a new issue and hard-line positions had not yet developed. The potential for a successful collaborative effort

existed and the citizens worked to resolve differences for the common good.

Developing and accepting the strategy are only the first steps in a long journey. The strategy is the road map, but there will be unexpected detours in the road ahead. Only time will tell if the trust that has been built among the members will be sufficient to weather the obstacles ahead. It is important that we remain true to our mission, and so the mission statement is included as the very first page, convenient for continual reference.

The NNSG makes no pretense to having ownership or jurisdiction over any lands or resources. However, as indicated by the development of this document, the NNSG does have a stake in how these lands are managed, and has taken the active role in providing a road map for the management of the lands within Elko County. The NNSG also recognizes the importance of private lands within the regional landscape. Management strategies on private and public lands need to complement each other if either strategy is to be successful. Therefore, in terms of land management actions, the strategy will not distinguish between private land and public land. The distinction will lie in how those strategies can be implemented, funding for the implementation, and the adaptive management process for modifying the strategies based on monitoring.

The strategy that follows is the result of a collaborative effort. The NNSG as a group decided to explore the Sage-Grouse conservation issue and assigned the task to a committee or "pod." The pod then went through a series of steps, including weekly meetings over a six-month period, and monthly meetings (more or less) over a four-year period, to develop the framework and content of the strategy. During this time, Governor Guinn convened a statewide Sage-Grouse Conservation Team. NNSG was invited to participate in this statewide effort. The completion of the NNSG Sagebrush Ecosystem Conservation Strategy was delayed to allow the statewide Sage-Grouse Conservation Strategy to develop. The NNSG agreed to be one of the six local planning groups involved in the statewide effort, but also decided to maintain the original course of the NNSG Sagebrush Ecosystem Conservation Strategy. The primary difference is the focus of the two strategies. The

NNSG strategy is a watershed-based, ecosystem conservation strategy and the State strategy is primarily focused on Sage-Grouse conservation. While the two strategies share common goals and considerable overlap in process, they remain separate approaches. The end result is that the NNSG has incorporated some of the statewide strategy for Sage-Grouse conservation, but will implement Sage-Grouse conservation through watershed/ecosystem management. The actual writing of the strategy was contracted out to a third party to facilitate the writing process, but the process has been at the direction and supervision of the pod. The pod members and contributors to this strategy are listed in **Appendix A**.

During this process, NNSG sponsored a series of workshops and symposia on topics directly related to this effort. Producing a strategy that is science-based requires that the membership be exposed to the existing science and to understand the underlying scientific principles sufficiently to evaluate the various fact and fiction that arises during the process. For many people, reading this document may be their first, or their only, or their major exposure, to Sage-Grouse or sagebrush ecology; therefore, the information from the literature and the science symposia has been included extensively into this document. Although this has added to the length of the document, Section 2 provides the reader with an opportunity to have this information in one location for easy reference. This information has also been the basis for understanding the relationship between Sage-

Grouse and its habitat, and therefore, the basis for developing the several of the management strategies.

Of utmost importance is the recognition that this is not an ending point, but a starting point. The concern about Sage-Grouse has led to additional research to explore relationships between habitat and nutrition, habitat and predation, seasonal movements, population genetics, and many other topics. The strategy presented herein includes the concept of adaptive management. This allows for new information and new hypotheses, which develop from controlled research studies or from on-the-ground experience, to be included into the decision-making process. Therefore, this strategy is based on our current understanding of the sagebrush ecosystem, which is admittedly only superficial. However, this basic understanding is sufficient to move forward and to allow us to learn from our mistakes, as well as our successes. With approximately 11 million acres in the planning area, it is impossible with current, or even with wishful funding levels, to affect a large amount of acreage in a short period of time. Therefore, by taking small steps and implementing the monitoring of the key resources and systems, and by implementing the adaptive management process, the on-the-ground work can proceed without fear of making a mistake that will wreak irrevocable damage to the ecosystem. That is not to imply that we won't make mistakes, but that they will be made at a scale and magnitude that they can be corrected with time.

## ACKNOWLEDGEMENTS

The major contributors to this strategy are listed in **Appendix A**; these are the pod members that attended meetings, discussed the issues, and contributed to the solutions. Their perseverance is appreciated. This document is first and foremost, their collective vision.

Mr. J. Kent McAdoo, University of Nevada Cooperative Extension, accepted the task of editing the document before it was presented to the pod for their review. His suggestions greatly improved the document and his contributions to the process are greatly appreciated. Kent was also a "sounding board" for many of the theoretical concepts that are included in this Strategy, and the discussions about these topics were improved by his thoughts.

Mr. Ray Lister, Elko Field Office, Bureau of Land Management (BLM), led the effort to coordinate the GIS mapping and the determination of "restoration" ratings (habitat R values) of the habitat within the planning area. He was assisted in this effort by Mr. Bruce Piper, also of the Elko Field Office, BLM. Ray also provided the summary of BLM activities that currently provide consideration and/or benefits to Sage-Grouse within the Elko Field Office.

Mr. Larry Gilbertson and Mr. Sid Eaton of the Nevada Department of Wildlife (NDOW), provided access to the local NDOW data base regarding Sage-Grouse. This included lek count data, lek locations, and wing data. In addition, they revised the original Sage-Grouse Population Management Unit (PMU) boundaries based on their local knowledge and developed the population estimates for each PMU. They also made the first assignment of risks within the risk matrix. Mr. Steve Foree, NDOW Habitat Biologist contributed in a variety of ways, not the least of which was his questioning of the basis for each part of the strategy. Steve also provided a summary of NDOW's efforts to enhance Sage-Grouse populations and the monitoring conducted by NDOW.

Mr. Paul Blackburn and Mr. Chuck Petersen, Natural Resource Conservation Service (NRCS) provided guidance on the use of the NRCS soil survey data that was used in the identification of the restoration ratings. Mr. Leland (Lee)

Campsey, also of the NRCS, took minutes of the pod meetings and provided important information regarding range issues and grazing. Lee also served as an important link between the NNSG Sage-Grouse Pod and the ranching community through the local Conservation Districts.

Mr. Will Amy and Ms. Portia Jelineck, U.S. Forest Service (USFS) also contributed with their local knowledge of habitat condition and Sage-Grouse seasonal use areas on National Forest lands. They also kept the group advised of actions that had potential to be in conflict with the Forest Plan. Will provided a summary of the USFS actions that benefit Sage-Grouse or Sage-Grouse habitat.

The ranching community was well represented at the meetings and contributed much in the way of local knowledge of Sage-Grouse distribution, as well as providing a historical perspective of Sage-Grouse abundance, landscape changes, and grazing practices. Mr. Fred Zaga and Mr. Harvey Barnes also assisted the pod through their support of the NNSG effort through their membership in other organizations, such as the Nevada Cattlemen's Association, the Elko County Public Land Use Advisory Council, and the N-1 Grazing Board. Of all the stakeholders in this process, the ranching community has the potential to be most affected. The strategy would be hollow without their input and support.

The mining industry was also well represented on the pod and contributed ideas for the Strategy, funds for symposia, and funds to support the administrative needs of NNSG. There has been willingness by this industry to be part of the solution and it is greatly appreciated.

The Nevada Subcommittee for Public Lands provided the initial grant for writing the Strategy and for acquiring information on the other sagebrush obligate species. We hope they view this as money well spent. Assemblyman John Carpenter also provided support for the group at County Commission meetings and other public meetings. His support and participation is appreciated.

At the beginning of this process, the N-1 Grazing Board provided a grant of \$20,000 to allow the NNSG to implement demonstration projects. These projects were a test of some of

the ideas included in this Strategy and were important in letting individuals see the opportunity that exists for improving wildlife habitat, livestock forage, and fuels management.

The Elko Field Office, BLM and Mountain City and Ruby Mountain Districts, USFS have also contributed funding for various operational, symposia, and activity costs. The completion of this strategy would not have occurred without their assistance.

Many other individuals have contributed to the thinking that went into this document through questions, suggestions, and comments about Sage-Grouse, range management, predation, and a variety of other topics. Too numerous to mention, or even remember, but they will recognize their contribution as they read the strategy.

There are two men who guided the preparation of this document, yet never attended a meeting. Dr. William H. Marshall, a pioneer in the field of wildlife ecology, stressed the value of habitat in the management of game animals, and the interrelationships of plants and animals as the basis for developing management plans. Mr. Gordon W. Gullion, a former resident of Elko and game biologist with NDOW, and one of the foremost experts of ruffed grouse ecology, stressed the need to learn the conditions under which healthy populations existed prior to settlement. This includes the factors that created suitable habitat conditions, as well as the factors (such as predators), that influenced how a species used or selected habitats. While these conditions cannot often be recreated exactly, they do provide the basis for designing habitat management actions. These two themes were the paradigm for this strategy.



## **PREAMBLE**

The NNSG recognizes that the federal land management agencies have laws, regulations, and policies that direct how they administer the public lands. The Federal Land Policy Management Act (FLPMA) directs the agencies to develop land use plans (LUPs) to guide their on the ground management. In addition, the federal agencies are required by the National Environmental Policy Act (NEPA) to conduct environmental analysis of federal actions or federally funded actions. The federal agencies have also entered into agreements (Memoranda of Understanding, Cooperative Agreements, etc.) that further define roles and responsibilities. One such agreement is the Memorandum of Understanding (MOU) between the federal land management agencies and the Western Association of Fish and Wildlife Agencies (WAFWA). This MOU states that the federal agencies will consider the guidelines for the management and conservation of Sage-Grouse developed by WAFWA in federal land actions.

In addition, the Bureau of Land Management (BLM) Nevada has included Sage-Grouse as a Sensitive Species and has developed guidelines for considering the potential impacts to Sage-Grouse or Sage-Grouse habitat from various program-specific actions (i.e., rights-of-way for utility lines, mining, fences, land exchanges, etc.). These guidelines were risk-based and are incorporated into the decision-making process. The U.S. Forest Service (USFS) has also identified Sage-Grouse as a Sensitive Species, but has not yet developed specific management guidelines; however, Sage-Grouse was previously considered a USFS Management Indicator Species, which provides special consideration of the species in their decision-making process.

The Northeastern Great Basin Resource Advisory Council (RAC) has also developed Standards and Guidelines for Rangeland Health. These standards apply to livestock and wild horse and burro actions as they relate to vegetative conditions, or rangeland health. The USFS also has desired conditions that are developed for each plant community. These conditions address the soil, vegetation, hydrology, and disturbance associated with

functioning, not functioning, and threshold conditions. These plant community conditions are the basis for evaluating land uses and planning new actions.

These are just some of the sideboards within which the federal agencies must operate. Therefore, the NNSG Elko County Sagebrush Ecosystem Conservation Strategy can only be adopted by the federal land management agencies to the extent that the actions proposed in the strategy are in conformance with the applicable LUPs, laws, policies, and agreements. However, there are also lands in Elko County that are not administered by the federal agencies; and therefore, it is appropriate to include in this strategy actions that may be conducted on private lands that are beyond the actions appropriate for federally-administered lands. Consequently, the signing of this strategy by authorized officers of the federal agencies does not imply that all actions proposed within this strategy, or subsequent watershed plans, are appropriate for federally-administered lands, but is an acceptance of the strategy in concept.

Actions that are developed and proposed for specific locations on public lands, or actions that are federally funded, will be reviewed for conformance with LUPs, laws, regulations, policies, and agreements. If a specific action is not in conformance with the LUPs, laws, regulations, policies, and agreements, then either the action will be modified to the extent possible to provide conformance, or an amendment to the LUP will be proposed. In addition, all actions that are proposed for public lands or that are federally funded, will be subject to NEPA analysis. Under this process, the special consideration afforded to Sage-Grouse as a BLM Sensitive Species or a USFS Sensitive and/or Management Indicator Species, and any other risk-based guidelines would be incorporated into the analysis.

Furthermore, the NNSG Elko County Sagebrush Ecosystem Conservation Strategy (Strategy) does not supercede any LUPs or seek to interfere or replace existing federal agency management. However, the NNSG is hopeful that some of the solutions to resource issues provided within this strategy, and to be developed in subsequent watershed management plans, can be viewed as consistent with the goals, objectives, and management decisions outlined in the LUPs and



will be incorporated into existing LUP implementation strategies or actions. The process outlined in this Strategy may be useful to identify and prioritize needed changes in management to address specific issues.

As part of this effort, the Strategy presented focuses on those aspects of ecosystem management that have not been a priority for the federal agencies and does not address those issues that the federal agencies are currently addressing. In addition, there is overlap in dealing with some issues where the synergy of two or more independent actions can be combined to achieve results not possible by either action alone. For example, the federal land management agencies regulate grazing on public lands in terms of kind of livestock, number of livestock, season of use, and allowable utilization levels. The NNSG does not propose to conduct independent allotment evaluations to determine if the existing grazing systems are achieving the desired results; this is the purview of the federal agencies. However, the NNSG strategy focuses on the functionality of systems (energy, nutrient, and water) within watersheds. The stressors on the systems, including but not limited to livestock grazing, will be evaluated through the watershed assessment process. As a result of the assessment process, the NNSG may determine that some adjustments in grazing may be required to allow a system to function. In such cases, the information will be provided to the appropriate federal land management agencies to be incorporated as part of the allotment monitoring data and as input from an interested party in the allotment evaluation process. Thus, the NNSG will attempt to influence the decision-making process based on the results of the watershed assessment, but it remains up to the federal land management agencies to make the final decision.

The major focus of the NNSG strategy is that of landscape health. This is a synergistic effort in

that the Bureau of Land Management's Great Basin Restoration Initiative, the Forest Service's Healthy Forest Initiative, and the North Fork Humboldt Land and Resource Management Plan provide the direction for restoring rangeland and forests to healthy, productive condition. The watershed assessment/planning process is compatible with the goals and objectives of these agency initiatives.

The NNSG has identified several factors that affect Sage-Grouse populations; however the three general conditions that need to be addressed through the watershed assessment/planning process that allow for synergism and include: 1) annual grasslands (primarily cheatgrass); 2) encroachment of pinyon-juniper woodlands from woodland sites to range sites; and 3) the interference of natural disturbance regimes that have allowed for sagebrush-grassland plant communities to become dominated by older sagebrush and to reach extreme fuel loading conditions. Each of these conditions represents a stressor on the sagebrush ecosystem and to the fauna and flora that inhabit this ecosystem. The watershed assessment/planning process will allow for an objective evaluation of the causes of these conditions, as well as other stressors to the watershed, and the appropriate site-specific actions needed to rectify the conditions or to remove the stressors. The end result should be increased health of the range and forest lands.

Sage-Grouse have been the impetus for this conservation effort, but should be viewed as the "means" not the "ends"; by understanding the ecology of this species and the ecology of the sagebrush plant community on which it depends, some of the general concepts for ecosystem management can be developed. The "ends" is to achieve properly functioning ecosystems that allow for sustainability of the resources and the sustainability of the land uses that depend on those resources.

## ELKO COUNTY SAGEBRUSH ECOSYSTEM CONSERVATION STRATEGY

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## EXECUTIVE SUMMARY

### *Introduction*

The Elko County Sagebrush Ecosystem Conservation Strategy (Strategy) is the result of collaboration among various interest groups, individuals, and agency personnel in response to the potential for listing Sage-Grouse as threatened or endangered under the Endangered Species Act. However, the Northeastern Nevada Stewardship Group (NNSG) quickly realized that the Sage-Grouse was an indicator species of ecosystem health. Because of the variety of plant community types (i.e., habitats) needed by Sage-Grouse for breeding, nesting, brood-rearing, and wintering, "the goal of managing Sage-Grouse habitats for an optimal balance of shrubs, forbs, and grasses at community and landscape scales should be analogous with restoring and /or maintaining form, function, and process in sagebrush-dominated habitats" (Crawford et al. 2004). Consequently, the focus of the effort changed from a single-species conservation plan to an ecosystem conservation strategy. However, the emphasis on Sage-Grouse has not been lost in the process. Throughout the process, sagebrush obligate species, special status species (both plants and animals), and other unique land features (e.g., aspen stands, sub-alpine forests, etc.) will be considered in the management actions developed with the intent on maintaining the diversity of communities on the landscape.

### *Habitat Conservation Assessment*

The Strategy includes an assessment of the planning area that consists of a summary of Sage-Grouse biology and ecology, a description of sagebrush ecology, a list of factors that affect Sage-Grouse and Sage-Grouse habitats, and a historical perspective of the landscape changes and Sage-Grouse populations.

As part of this assessment, the NNSG followed portions of the Nevada Sage-Grouse Conservation Strategy developed by the Governor's Sage-Grouse Conservation Team. Sage-Grouse population management units

(PMUs) were identified within the planning area, and each PMU was evaluated for risks to Sage-Grouse using the following factors: Habitat Quantity, Habitat Quality/Nutrition, Habitat Fragmentation, Changing Land Uses, Livestock Grazing, Fire Ecology, Disturbance, Predation, Hunting, Disease, Cycles, and Climate/Weather. Those PMUs with higher total risk values were identified as priority areas for management. The level of risk assessment was general; not specific enough to identify individual project level actions, but detailed enough to identify the general types of issues that need to be addressed.

The condition of the vegetation with respect to Sage-Grouse habitat requirements was also evaluated using soil mapping provided by the Natural Resource Conservation Service (NRCS), various vegetation mapping efforts provided by the Elko Field Office, Bureau of Land Management (BLM), allotment evaluation data from BLM and U.S. Forest Service, Humboldt-Toiyabe National Forest (USFS), and field experience of the members of the team. The evaluation generally followed the protocols developed in Idaho and included five habitat categories:

- R-0: Habitat areas with desired species composition that have sufficient, but not excessive, sagebrush canopy and sufficient grasses and forbs in the understory to provide adequate cover and forage to meet the seasonal needs of Sage-Grouse (4,805,000 acres);
- R-1: Habitat areas which currently lack sufficient sagebrush and are currently dominated by perennial grasses and forbs, yet have the potential to produce sagebrush plant communities with good understory composition of desired grasses and forbs (1,170,000 acres);
- R-2: Existing sagebrush habitat areas with insufficient desired grasses and forbs in the understory to meet seasonal needs of Sage-Grouse (2,018,000 acres);
- R-3: Sagebrush habitat areas where pinyon-juniper encroachment has affected the potential to produce sagebrush plant communities that provide adequate cover and forage to

meet the seasonal needs of Sage-Grouse (354,000 acres); and

- R-4: Habitat areas which have the potential to produce sagebrush plant communities but are currently dominated by annual grasses, annual forbs, or bare ground (251,573 acres).

The remaining 1,626,000 acres of the planning area were identified as non-Sage-Grouse habitats (forests, urban areas, salt-desert shrub, etc.).

This breakdown indicated that although Elko County has considerable acreage of intact Sage-Grouse habitat (R-0 acreage), the potential habitat in which sagebrush can be readily established and sagebrush habitat in poor condition (R-1 and R-2 acreage, respectively), and the areas formerly occupied by sagebrush but now occupied by pinyon-juniper and cheatgrass (R-3 and R-4 acreage, respectively) account for 44 percent of the acreage (3,793,000 acres) that have potential to support Sage-Grouse within the planning area. These habitat condition categories that represent risks to Sage-Grouse also represent acreage that is not functioning in terms of watershed values. Consequently, the issues of habitat quantity and habitat quality were identified as major issues to be addressed.

## ***Conservation Strategy***

The NNSG Strategy and the Nevada Sage-Grouse Conservation Strategy (State Strategy) identify some common goals. The first goal of the State Strategy is to:

Create healthy, self-sustaining Sage-Grouse populations well distributed throughout the species' historic range by maintaining and restoring ecologically diverse, sustainable, and contiguous sagebrush ecosystems and by implementing scientifically-sound management practices.

The goal of the NNSG Strategy is to:

Manage watersheds, basins, and sub basins in a manner that restores or enhances (as appropriate) the ecological processes necessary to maintain proper functioning ecosystems, inclusive of Sage-Grouse.

The NNSG Strategy also includes goals specific to various resources (e.g., Sage-Grouse, vegetation, special status species, livestock, recreation, mining, and fuels management). However, these goals are general goals that can be refined at the watershed management unit level.

The objectives of the NNSG Strategy are to:

Implement a watershed analysis process on the watersheds within the planning area by initiating the assessment of three watersheds each year; and

Develop a watershed plan for each watershed within one and one-half years following the initiation of the process.

The watershed assessment will follow range, watershed, riparian, and Sage-Grouse habitat evaluation processes developed by the BLM, U.S. Geological Survey, NRCS, Agricultural Research Service, USFS, Environmental Protection Agency, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, National Park Service, the Bureau of Indian Affairs, and the Western Association of Fish and Wildlife Agencies.

The watershed management plans will include actions and management strategies that address the specific land health and Sage-Grouse habitat issues identified in the watershed assessment. Once completed, the individual projects, groups of inter-related projects, or the entire watershed plan will be subject to National Environmental Policy Act (NEPA) analysis to determine the impacts of such actions on the critical elements of the human environment, as well as the cumulative impacts of such actions.

The NNSG Strategy identifies several management strategies that are likely to be incorporated into the watershed management plans on a site-specific basis. The management strategies identified to date address some of the major issues that have been identified in the initial PMU risk assessment and watershed review. As other issues are identified in the watershed assessment process, additional management strategies will be developed.

Monitoring at the watershed plan-level, at the individual watershed project-level, and at the on-

the-ground resources-level will be part of the watershed management process. For each monitoring level, the responsibility for conducting the monitoring, the variable(s) to be monitored, the frequency at which monitoring is to occur, and the manner in which the monitoring will be reported will be specified. The variables to be monitored will be directly related to the goals and objectives of the watershed plan, the project, and the resources to be affected by the project.

The feedback provided by the monitoring with respect to the objectives will provide the basis for implementing adaptive management strategies. If objectives are being achieved, then

the type of action implemented will continue. If objectives are not being achieved, then the hypothesis on which the objective is based, the practice that was implemented, the conditions under which it was implemented, the variables being monitored, and monitoring methodology will all be re-evaluated to determine where changes need to be instituted.

This Strategy is the process for identifying the site-specific issues, developing watershed-specific management/conservation plans, proposing and implementing site-specific actions, determining the appropriate monitoring of these actions, and implementing adaptive management concepts to the entire process.