Boise National Forest
Sage Hen Integrated Restoration Project
Appendix E: Implementation Guide

Contents

Introduction

The purpose of this document is to describe activities comprising the implementation framework for the Sage Hen Integrated Restoration Project. The main goals of this guide are to:

- Demonstrate compliance with management direction specified in the Sage Hen environmental assessment, finding of no significant impact, and decision notice.
- Ensure treatment implementation is responsive to dynamic on-the-ground conditions; achieves multiple resource benefits; considers any new scientific information; and includes integrated engagement with interdisciplinary team members, field personnel, and the line officer.
- Provide a transparent implementation process that keeps the public informed of treatment timing, design and monitoring.
- Demonstrate continued engagement with collaborative group and identify opportunities for shared learning and monitoring activities.
- Focus on shared priorities with tribes and other federal, state, and local governments to accomplish project goals and objectives.
- identify project monitoring activities, including monitoring objectives, methods, timing, reporting requirements and responsible party.

This framework would be utilized over the implementation timeframe (15 to 20 years). This guide is a dynamic document that will be reviewed periodically and updated as needed. Revisions will be posted on the Sage Hen Integrated Restoration Project webpage (https://www.fs.usda.gov/project/?project=56701).

Implementation and Monitoring Framework

The Sage Hen implementation framework is used to define treatment locations and design and evaluate the effectiveness of monitoring strategies used to assess whether treatments are moving the project area towards desired conditions as identified in the Vegetation Condition-Based Management Guide (Sage Hen environmental assessment, appendix C) and the Boise National Forest Land and Resource Management Plan (forest plan, as amended in 2010). Timing and exact locations of all potential vegetation treatments are not known at this time, although proposed timber sale areas and other activities (such as mechanical hazardous fuels reduction and prescribed burning) were identified, along with preliminary sequencing of those activities.

A mixture of fine and mid-scale data was used to inform needs for potential management action, to develop design criteria and to conduct effects analysis; however, it is recognized that as specific locations are identified, further coordination will be needed between resource specialists and personnel implementing activities on the ground, as well as with stakeholders and the public. The implementation steps listed below address pre-implementation layout and surveying, survey results review and consideration of new information, treatment refinement, pre-implementation coordination between project planning and implementers, implementation and monitoring. Commercial and noncommercial treatments that occur under the authority of the environmental assessment, finding of no significant impact, and decision notice will take up to several years to pass through all the phases of implementation; therefore, at any given time there will be several projects occurring that are in different steps of implementation and monitoring. The following sequence outlines the post-decision steps that will occur:

1. **Consult the environmental assessment, finding of no significant impact, and decision notice for direction on treatment priorities, design features and other implementation parameters.**
2. **Conduct and communicate preliminary layout**.
   a. **Design preliminary treatment layout** (identify vegetation treatment needs and treatment feasibility, such as burn blocks and timber harvest units; verify temporary road locations; identify unauthorized routes to be addressed, etc.). *(Timing – Summer/Fall)*
   b. **Communicate preliminary treatments to resource specialists** – Preliminary treatments will be presented to resource specialists so survey needs can be identified. *(Timing - In Fall/Winter)*
3. **Conduct resource surveys** as appropriate to observe necessary conditions*. (Timing – Spring/Summer)*
4. **Refine treatments** based on additional internal and external considerations**:**
   a. **Review any new information or changed circumstances and determine whether it is within the scope and range of effects considered in the original analysis.** The results of the interdisciplinary review will be documented and provided to the responsible official for consideration. If the responsible official determines that a **correction, supplement, or revision** to the environmental document **is necessary**, the Boise National Forest will follow the relevant direction in the Forest Service NEPA Handbook. If the responsible official determines that a correction, supplement or revision to the environmental document is not necessary, implementation will continue.
   b. **Review design criteria already specified for the applicable activity** (timber harvest, temporary road construction, prescribed burning, etc.) to determine applicability based on resource survey results. Revise treatments (for example, drop treatments areas if needed) and specify where design features apply (for example, identify units where timing restrictions apply). *(Timing – In Late Summer/Early Fall)*
5. **Share project information with tribes, the public, and stakeholders/potentially affected parties (local government officials, permittees, private landowners, collaborative groups, etc.)** about upcoming activities. Project modifications may be made based upon feedback received.
6. **Finalize treatment layout**. Treatment areas are transposed into site-specific polygons identified for inclusion in contracts, burn plans or other implementation instruments. As needed, adjust silviculture or treatment prescriptions using the Vegetation Condition-Based Management Guide. The Boise National Forest retains the authority to make final decisions related to location, extent and types of treatments planned and implemented consistent with the Sage Hen environmental assessment, finding of no significant impact, and decision notice. *(Timing – Late Summer/Early Fall/Winter (as weather allows)/Spring)*
7. **Line officer, project planning interdisciplinary team. and implementation interdisciplinary team or Good Neighbor Authority partner coordinate** prior to initiating activities to ensure understanding of and compliance with project requirements.

8. **Implement treatments** including administration of contract terms and other instruments incorporating plan requirements and **monitoring** (see **Monitoring Plan** section for timing).
9. **Conduct post-treatment field review** to determine attainment of desired conditions and effectiveness of treatments. *(Timing – varies based on completion of implementation activities and as appropriate to observe necessary conditions)*

Communication with Government Agencies and the Public

The Boise National Forest will share information on the details of proposed treatments as they become available, thereby allowing government agencies, the public, and all stakeholders the opportunity to learn about implementation activities prior to their commencement. Project information will be posted on the Sage Hen public project webpage. Additional engagement would occur as needed and at the discretion of the responsible official. For example, the responsible official may solicit feedback from collaborative or volunteer groups on monitoring activities and locations or may need to coordinate with local government (such as county government) if activities would impact roads or routes maintained by the county (for example, groomed snowmobile trails where winter harvest is proposed). The responsible official would determine any further adjustments needed and/or establish additional coordination or notification checkpoints based on feedback received during this engagement effort.

Coordination with Permittees, Concessionaires, and Outfitters and Guides

Pre-implementation coordination with permittees (including grazing and special use permittees), concessionaires, and outfitters and guides would occur as needed to ensure these groups are kept informed of upcoming project activities that could affect their operations.

Tribal Consultation

Government-to-government consultation with potentially affected and interested tribes will continue to be conducted through established processes and protocols.

Transition from Planning to Implementation

An integral part of successful implementation of a project is the transition from the planning team to the implementation team. Coordination provides a number of benefits including: the opportunity to identify key contacts; a platform to exchange pertinent information; and an opportunity to clear up questions about the direction in the NEPA document and how it will be translated during implementation.

Elements of Successful Coordination

- Shared understanding of the intent of design features
- Sufficient resources and information to implement design features
- Good communication – mechanisms in place to check progress and build relationships with mutual trust and respect and ability to problem-solve together
- Clearly defined roles and responsibilities, protocols and informal and formal communication paths

- Comprehensive understanding of all phases of the post-decision, pre-implementation, implementation, and post-implementation sequencing
- Compliance with legal requirements—a shared knowledge of legal authorities or constraints

Pre-Implementation Coordination

To ensure a smooth transition from the project NEPA document into project implementation, post-decision pre-implementation coordination will occur between the line officer, planning interdisciplinary team, and implementation interdisciplinary team or Good Neighbor Authority partner (if implementation will be completed under a Good Neighbor Authority agreement). Coordination will also include neighboring national forests and the Shared Stewardship coordinator as applicable for cross-boundary work. Pre-implementation meetings will be held as needed prior to commencement of new activities (a new timber sale, upcoming burning season, campground reconstruction, etc.) to identify roles and responsibilities for each activity, review how design features have been cross-walked into the contract(s), clarify intent of design features, resolve logistical concerns with implementing design features and for the planning interdisciplinary team to share any additional pertinent information that would facilitate implementation of the design features.

If the meeting is with a Good Neighbor Authority partner, the parties will identify and schedule training necessary to facilitate implementation of the project by the partner. If the partner will contract implementation, the Good Neighbor Authority partner and the project planning interdisciplinary team will work together to identify necessary post-award training to facilitate successful implementation of the project and design features. Examples of training topics include recognition of threatened, endangered, proposed, candidate or sensitive species presence in activity areas; recognition of cultural sites; or training on how to delineate riparian conservation areas.

See figure 1 below depicting how communication will flow between the planning interdisciplinary team and the implementation interdisciplinary team or Good Neighbor Authority partner for project design changes or watch out situations encountered.

Program of Work Meetings

In addition to the pre-implementation meetings, program of work meetings will be held between Boise National Forest planning and implementation staff. These internal coordination meetings will ensure new staff are aware of program requirements and ensure staff understand their roles and responsibilities. These meetings will also be used to identify training and technology or equipment needs, review project information and discuss data storage protocols. If new employees onboard in between the program of work meetings, implementation staff and resource specialists would ensure these individuals understand requirements and receive needed training.

Additional internal and external communication will occur as needed within Boise National Forest staff groups and other agencies and stakeholders between the pre-implementation and annual program of work meetings.

Coordination with Heritage

The Sage Hen environmental assessment includes protection measures for cultural resources (see environmental assessment Appendix B: Design Features, CR-1 through CR-4). Per the design features, the implementation team will set up a pre-work meeting with the Boise National Forest Heritage Program staff (this would be a separate meeting if the Heritage Program staff are unable to attend the pre-implementation meeting) to ensure Heritage resource protection requirements are communicated and understood.

The Boise National Forest would use a phased approach to complete the identification and evaluation of historic properties in the project area, and to assess the potential for adverse effects to these properties from proposed management activities. Consulting parties in the Section 106 process include but are not limited to the Advisory Council on Historic Preservation, Idaho State Historic Preservation Officer, and potentially affected Indian tribes. Under the phased approach, the Boise National Forest would complete additional consultation with the appropriate parties on the results of its identification, evaluation, and assessment of effects to historic properties in the project area. Consultation would be completed *prior* to implementation of proposed management activities.

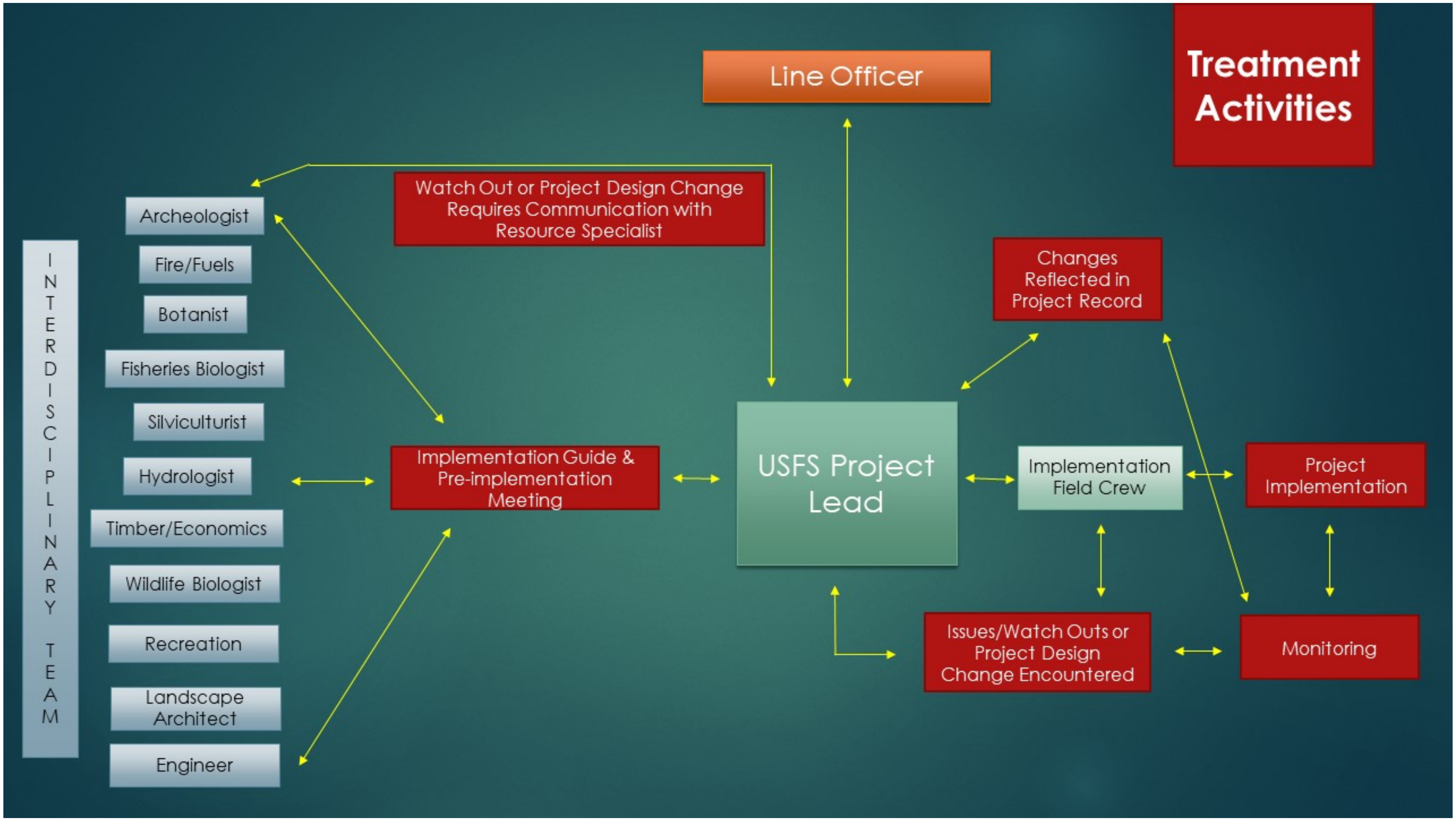

Figure 1. General communication diagram for activities, such as prescribed burning, timber harvest, reforestation, and hazardous fuels treatments

Coordination with the U.S. Fish and Wildlife Service

As provided in 50 Code of Federal Regulations section 402.16, **reinitiation of formal consultation** is required where discretionary federal agency involvement or control over the action has been maintained (or is authorized by law) and if:

1. The amount or extent of incidental take is exceeded.
2. New information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in the Sage Hen Project Biological Opinion.
3. The agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in Sage Hen Project Biological Opinion.
4. A new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Reinitiation of informal consultation may be necessary if:

1. New information reveals effects of the action that may affect listed species or designated critical habitat (if applicable) in a manner or to an extent not considered in the assessment.
2. The action is subsequently modified in a manner that causes an effect to listed species or critical habitat (if applicable) that was not considered in the analysis.
3. A new species is listed or critical habitat designated that may be affected by the proposed action.

Implementation and the Sage Hen Environmental Assessment Appendices

The Sage Hen environmental assessment includes several appendices that relate to project implementation, including Appendix A: Activity Cards, Appendix B: Design Features, and Appendix C: Vegetation Condition-Based Management Guide.

Activity Cards

Activity cards in appendix C describe the management action (or tool) that will be implemented to achieve desired conditions. The activity cards clarify what conditions or situations would trigger use of the management action/tool.

Each activity card includes the following information:

- **Description** of the management activity (what the activity entails)
- **Objectives** of the management activity (what the activity helps accomplish)
- **Condition/situation trigger** (conditions or situations that would indicate a need for management)
- **Related actions** (interdependent parts of an activity that depend on another activity to occur. For example, temporary road construction that would only occur as part of timber harvest activity but may not always be needed)
- **Methods** (the way the activity is implemented to accomplish objectives)

- **Equipment used** (types of machinery, tools, or other equipment that may be used to implement the activity)
- **Timing** (time of year when the activity could be implemented)
- **Duration** (amount of time during which the activity could occur)

Design Features

Design features were developed to conserve and protect area resources during implementation of the project and are included as part of the proposed action. The majority of the design features were derived and adapted from federal and State of Idaho laws and regulations, federal directives (for example, Executive Orders), Forest Service policy and guidance, the Boise National Forest's forest plan standards and guidelines and national core best management practices for water quality management on National Forest System lands. These project-specific design features are expected to provide sufficient resource protection under most treatment situations that would occur during project implementation. However, there may be instances where additional or more stringent measures are needed to address specific conditions.

In addition to listing design features, the design features table in appendix B also specifies the conditions to be aware of (Watch Out Situations), what to do if a Watch Out Situation is encountered, what law/regulation/policy or forest plan standard is complied with by applying the design feature, which activities the design feature applies to, and where the design feature is applicable (by unit, sale area, habitat/resource condition, etc.).

Watch Out Situations are conditions or scenarios that may be encountered during implementation that have the potential to make the design feature less effective, require additional measures to be put in place (adjusting or forgoing the proposed activity), and/or may need additional review and input by the applicable resource specialist(s). If the Watch Out Situation is encountered, the **Procedures if Watch Out Situation Is Encountered** column explains how to proceed (who to contact, information needed for resource specialist to make determinations, determinations that can be made by implementation crew, etc.). The **Ensures Compliance With** column identifies the law, regulation, or policy that makes the design feature necessary. If necessary for forest plan compliance, the applicable standard or guideline is described. If the design feature is based on recommendations in best available science or professional experience/monitoring, that is clarified. The **Applies To Activity(ies)** column specifies the activity the design feature applies to and corresponds to activity cards or other activities described in the Sage Hen environmental assessment. If that activity only applies to certain locations, such as when certain types of equipment are used or if certain conditions are present, that is noted as well.

Vegetation Condition-Based Management Guide

The Vegetation Condition-Based Management Guide in appendix C is organized by conditions anticipated to be found in the project area. It outlines existing and desired vegetation conditions and describes treatments and considerations for adapting based on certain scenarios that may be encountered. The guide is meant to be used in conjunction with the forest plan and the activity cards, as applicable, based on the vegetation treatments described in the Sage Hen environmental assessment. More than one activity may apply to a prescription. For example, timber harvest will almost always be followed by prescribed burning in fire disturbance driven ecosystems. Silvicultural prescriptions are developed for each treatment outlined in the guide, providing additional details specific to the site identified for treatment, including any project design criteria, design features and objectives identified through the interdisciplinary planning process, including ecological, economic and societal objectives and constraints (FSM 2470—Silvicultural Practices 2014).

Monitoring Plan

Monitoring would be conducted during implementation to ensure compliance with design features and to ensure that treatments are being implemented as planned. Monitoring would also be conducted post-implementation to provide feedback to forest managers about how to best design and implement future treatments in the project area and potentially across the Boise National Forest.

Monitoring by resource, objective, methodology, and timing

ID	Resource	Objective	Methodology	Timing
1	Project design features	Assess effectiveness of project-specific design features	Site inspections after project implementation	Annually – a minimum of 1 treatment unit per treatment type
2	Silviculture	Determine whether regeneration harvest units are stocked with trees.	Reforestation surveys.	3 to 5 years after harvest is completed.
3	Silviculture	Assess survival of planted seedlings.	Fixed plot surveys or transects.	First and third years after planting.
4	Timber and Silviculture	Ensure adherence to contract specifications for all treatment types.	Site inspections.	Daily to weekly while operations are active.
5	Soils	Assess detrimental disturbance	Boise National Forest soil disturbance monitoring	1 to 5 years post-harvest
6	Soils	Monitor recovery of temporary roads in Third Fork 6th hydrological unit	Walk-through and photo point monitoring for vegetation recovery.	Annually post-harvest for up to 5 years.
7	Landslide Prone Areas	Verify SINMAP model, temp road const.	Verify during temp road construction	During implementation
8	Stream Substrate Monitoring	Assess sediment changes to stream habitat	Pebble counts, pool tail fines	During implementation and 1 to 5 years post-implementation
9	Fisheries	Detect presence of bull trout post installation of aquatic organism passage structures	Collect eDNA samples	During years 1,3, and 5 following implementation or until bull trout are detected
10	Fisheries/ Hydrology	Turbidity monitoring during water reintroduction phase of aquatic organism passage structure installation	If a more than 50 NTUs increase is observed, operations shall cease for 15 minutes or until turbidity levels are back to background levels.	During implementation
11	Wildlife	Validate effectiveness of design features and treatment prescriptions by evaluating occupancy post-implementation	Broadcast call surveys for white-headed woodpeckers, flammulated owls, bald eagle and/or northern goshawk in occupied stands that were treated and where habitat is created.	Years 1, 3, and 5 following implementation

ID	Resource	Objective	Methodology	Timing
12	Wildlife	Validate management indicator species population and habitat trends	Boise National Forest terrestrial management indicator species monitoring protocol	Annually Note: this is forest-level monitoring that is completed regardless of the project.
13	Wildlife	Verify bald eagle nest site remains active	Nest territory visit(s)	Annually. Note: this is forest-level monitoring that is completed regardless of the project.
14	Wildlife	Validate key fawning areas	Utilize Idaho Department of Fish and Game data and expertise.	Years 0, 10 and 20 after the decision is signed.
15	Wildlife	Complete surveys for flammulated owls and white-headed woodpeckers prior to implementation in harvest or fuels treatments.	Follow established survey protocols.	The season prior to implementation of the activity.
16	Wildlife	Assess temporary road closures and effectiveness	Review a minimum of 3 temporary roads that have been decommissioned for a sale area on 4 separate sales over the life of implementation.	Post-decommissioning.
17	Wildlife	Assess effectiveness of snag and coarse wood retention design features	Review a minimum of 2 stands per silvicultural prescription on 4 separate sales over the life of implementation. Reviews will occur post commercial harvest and fuels treatment.	One time.
18	Botany, Fisheries, Wildlife	Biological opinion compliance: Terms and Conditions and Reasonable and Prudent Measures	To be determined after biological opinion issued	To be determined after biological opinion issued
19	Botany	To assess effectiveness of post-decision project mitigation measures	Implementation review as part of biennial Forest Plan Monitoring Report	Biennial review with project specialists, implementation team
20	Weeds	To assess effectiveness of project design features	Implementation review, weeds inventories and treatments review	Annual accomplishments reporting
21	Heritage	Validate effectiveness of design features for avoiding adverse effects to historic properties.	Site inspections	During project implementation as necessary
22	Recreation	To assess effectiveness of project design features	Site Inspection: ensure unauthorized routes used in the project are properly barricaded; ensure authorized trails are returned to their original state.	One time