



Sage Hen Integrated Restoration Project: Transportation Resource Effects Analysis

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1. Introduction/Issues Addressed

This section includes Transportation System issues identified in the Forest-wide Travel Analysis Process (TAP) Addendum for this project.

There is a need to modify the transportation system in the project area in order to reduce impacts to water quality and wildlife and aquatic habitat; provide a safe and efficient transportation system; and reduce road maintenance costs.

The following road management activities would be required for implementation of the proposed action:

- road reconstruction – realignment,
- road reconstruction – aggregate surfacing,
- road aggregate resurfacing,
- addition of unauthorized route,
- travel management changes to motorized use,
- administrative use changes,
- road decommissioning,
- trail decommissioning, and
- temporary roads and road maintenance (related to the timber harvest).

Road reconstruction (aggregate surfacing and road realignments) would facilitate the implementation of project activities and reduce impacts to adjacent resources. The existing prisms would be restored or recontoured (decommissioned) once the realignments are completed. The existing mineral material sources would be expanded and developed to economically support the road surfacing and maintenance activities on project roads. These road surface improvements would not only reduce sediment delivery to adjacent waterways, but also provide improved road surface protection and enhance public safety.

Changes to public motorized uses (Motor Vehicle Use Map) and administrative use on roads would occur as part of implementing project management activities, protecting resources, and long-term management. Road and trails not needed would be decommissioned. Other road management activities include removal of unauthorized routes and/or abandoned templates, aquatic organism passage culvert replacements, and snow plowing.

Road maintenance related to the commercial timber harvest would occur on a majority of the National Forest System roads in the project area. Construction and maintenance of temporary roads would occur related to the commercial timber harvest. These temporary roads would be decommissioned (obliterated) and/or returned to existing uses after project implementation.

2. Methodology

This section includes a description of the methods and data used in the transportation analysis. Data sources included the project-specific GIS data stored in the project record, the Forest Service INFRA database road and spatial information, the Motor Vehicle Use Map, Forest-wide Transportation Analysis Process (TAP) Final Report (2015) and the Forest-wide TAP Addendum for the Sage Hen project (March 2020) and by conducting field surveys in 2019. All spatial information and data was evaluated using the ESRI software ArcGIS version 10.5.

The existing transportation system in the Sage Hen project area, including the authorized system and the establishment of unauthorized and/or abandoned roads, was primarily developed over the last 50 years from past management activities and other uses (e.g., recreation) occurring in the project area. The system evolved in the 1990s to include an extensive motorized trail system co-located on authorized system roads.

Table 1 summarizes the mileage of authorized roads and trails within the project area. Table 2 summarizes the transportation system proposed actions. *For additional information, see Sage Hen environmental assessment Appendix A: Activity Cards, Appendix B: Design Features, and Appendix D: Maps.* The design features in Appendix B help ensure consistency with the 2010 Boise National Forest Land and Resource Management Plan (forest plan, USDA Forest Service 2010) and other applicable laws and regulations, respond to issues/concerns, and/or reduce/eliminate effects to a particular resource.

Table 1. Miles of roads and trails in the Sage Hen project area

Description	Total (miles)
County Roads	15.6
National Forest System (NFS) Road Maintenance Level (ML*) 3 - Suitable for Passenger Cars	70.6
NFS Road ML 2 - High Clearance Vehicles	34.3
NFS Road ML 2 - High Clearance Vehicles (Admin. Use Only)	2.4
NFS Road ML 1 - Basic Custodial Care (closed to all motorized uses/state of storage)	111.7
NFS Motorized Trail	50.0
NFS Non-Motorized Trail	23.4

*All road maintenance levels listed are Operational Maintenance Levels as defined in Forest Service Handbook 7709.58, 10, 12.3 and described in the Guidelines for Road Maintenance Levels (Forest Service, 2005).

Table 2. Summary of transportation system proposed actions

Activity Description	Road Description	Total (miles)
Road Reconstruction – Realignment		
New road template/alignment of National Forest System (NFS) Road Maintenance Level (ML)	625 Road Realignment	0.1
Add unauthorized route to the transportation system as ML 3 Road	625 Road Realignment	0.3
New road template/alignment of NFS Road ML 2 - Admin. Use Only	653D2/D8 Road Realignment	0.6
Add unauthorized route to the transportation system as ML 2 - Admin. Use Only	653D2/D8 Road Realignment	0.6
Add unauthorized route to the transportation system as ML 1 Road	653D2/D8 Road Realignment	0.3

Activity Description	Road Description	Total (miles)
Add decommissioned route to the transportation system as ML 1 Road	653D6 Road Realignment	0.2
Road Reconstruction – Aggregate Surfacing		
New roads to be surfaced with aggregate	607D, 609G, 622, 653D	8.1
Road Resurfacing		
Worn out aggregate surfaced roads to be resurfaced with aggregate	625, 626, and 653 segments	20.3
Add Unauthorized Route to the Transportation System		
Add unauthorized route to the transportation system as ML 2 Road	Referred to as Road 625I	0.3
Public Travel Management Changes to Motorized Use		
NFS Roads changed from ML 2 (Open Year-Round) to ML 1 (closed to all motorized use/state of storage)	614J, 614K1, 614K2, 614L, 626T, 626T1, 626Y, 626Y1 Roads	5.3
NFS Roads changed from ML 2 (Open Seasonally) to ML 1 (closed to all motorized use/state of storage)	653C Road	2.9
Administrative Changes – NFS Roads		
NFS Roads changed from ML 2 - Admin. Use Only to ML 1 (closed to all motorized use/state of storage)	Segment of 653D6 Road	0.6
NFS Roads changed from ML 1 (closed to all motorized use/state of storage) to ML 2 (Admin. Use Only)	Segments of 607D, 653A, 653B Roads	2.6
Road Decommissioning		
Decommissioning of NFS Roads ML1 (closed to all motorized use/state of storage)	See maps for road segments	14.2
Restore/recontour old template of NFS Road ML1	653D6 Road Realignment	0.9
Restore/recontour old template/alignment of NFS Road ML3	625 Road Realignment	0.4
Restore/recontour old template/alignment of NFS Road ML 2 - Admin. Use Only	653D2/D8 Road Realignment	0.5
Trail Decommissioning		
Decommissioning of NFS Trails (TC3 - Developed)	389 Trail	1.0

In addition, several road management activities in the Third Pole Project, which was signed in August 2007, would be implemented (Table 3). Third Pole project's objectives were to improve watershed conditions in the Third Pole and Squaw Pole sub-watersheds. The remaining activities, which includes road reconstruction and realignment, changing motorized use designations, and road decommissioning would occur during the implementation of the Sage Hen project. National Forest System road 624 would not be changed to open seasonally until after the 625 road is realigned, thus preserving year round access in this area.

Table 3. Implementation of remaining transportation system actions from Third Pole Project decision (2007)

Activity Description	Road Description	Total (miles)
Road Reconstruction – Realignment		
New road template/alignment of National Forest System (NFS) Road Maintenance Level (ML) 1	646D1, 653P, 699C Road Realignments	1.7
Public Travel Management Changes to Motorized Use		
NFS Roads changed from ML 2 (Open Year Round) to ML 2 (Open Seasonally)	624 Road	5.6
Road Decommissioning		
Decommissioning of NFS Roads ML 1 (closed to all motorized use/state of storage)	See map for road segments	3.7
Recontour old template/alignment of NFS Road ML 1	Segments of 646D1, 653P, 699B, 699C Roads	2.8

3. Environmental Consequences

3.1. Environmental Consequences of No Action

This section discloses the environmental impacts of not taking action.

Direct and Indirect Effects of No Action

Under the ‘no action’ alternative, no new management activities would occur in the project area. The management and road maintenance of the existing transportation system would continue as currently authorized. All current or existing authorized activities (recreational activities, livestock grazing, motorized travel, etc.) would continue. Suppression of wildfires within the project area would also continue as needed.

The road improvement opportunities discovered and identified would likely remain unaddressed or require treatment through other projects. Public safety risks may increase due to deteriorating road conditions.

3.2. Environmental Consequences of the Proposed Action

This section discloses the environmental impacts of the proposed action.

Direct and Indirect Effects of the Proposed Action

Project implementation would involve a short-term (3 to 15 years) increase in traffic. This would be addressed through temporary traffic controls and implementing applicable design features for public safety.

Road maintenance would increase commensurate with the commercial use of the project. This would improve the forest transportation system within the project area regarding access and minimize impacts to adjacent resources. Removal of roadside danger trees and dead/dying trees along road corridors would improve safety for forest transportation system users.

Changes are currently proposed to the existing forest transportation system; including road reconstruction through realignment of three short National Forest System road segments and new surfacing on four National Forest System road segments, adding one short unauthorized route to the transportation system, moving several National Forest System roads to a state of storage after project implementation, administrative use changes on selected roads (primarily for range management), and road/trail

decommissioning of several National Forest System roads and one National Forest System trail. A number these roads are dual designated as motorized trails. These roads are not displayed as roads on the Motor Vehicle Use Map but are displayed as trails. Roads 609F, 622M and 622T will be decommissioned as a road but retained as a motorized trail. Trail 389 will be decommissioned with the decommissioning of roads 622E and 622G.

All temporary roads, including those located on existing templates/prisms, used for commercial timber harvest would be decommissioned via obliteration upon completion of management activities within a timber sale area.

On some roads, short-term administrative use is expected outside the current allowed public use seasonal provisions for project implementation. Upon completion of proposed vegetation treatments, all roads would continue to be managed per their proposed travel management designations or classifications.

All Maintenance Level 1 roads not being proposed for decommissioning or administrative use only would be returned to a state of storage and closed to motorized vehicles after project completion. Exceptions would occur where selected National Forest System motorized trails are designated or co-located on Maintenance Level 1 roads. In these cases, roads would be returned to motorized trails after completion with proper entrance barriers restricting motorized traffic to the appropriate designation or classification.

Cumulative Effects of the Proposed Action

The cumulative effects boundary for this analysis is defined as the approximately 67,800-acre Sage Hen project area and associated haul routes.

Past activities, including vegetation management, recreational access, fire protection, and access to private lands, have resulted in the establishment of the existing authorized transportation system and unauthorized and/or abandoned routes in the analysis area or the existing condition.

Present and ongoing activities include but are not limited to road use and maintenance, trail use and maintenance, recreational activities (dispersed and developed), livestock grazing, vegetation management, and fire suppression. These continued activities utilize the existing transportation system at different use levels and different time periods during the year. Conflicts between public use and the traffic related to the project implementation (logging trucks, gravel trucks, and other heavy equipment) may potentially increase in the short term, and design features have been developed to mitigate transportation conflicts between public use and project related implementation activities where applicable.

Reasonably foreseeable future activities that could occur at the same time as project activities and could have an effect on the transportation resource have been considered, including vegetation management, increased recreational activities/use, and livestock grazing. It is anticipated minimal mixed-use commercial volume (logging trucks, gravel trucks, livestock trucks, and other heavy equipment) would be utilizing the same haul routes as identified in this project. Design features have been developed to mitigate transportation conflicts between public use and project related implementation activities where applicable.

4. Consistency with Relevant Laws, Regulations, and Policy

4.1. Land and Resource Management Plan

The Boise National Forest Land and Resource Management Plan (forest plan, as amended in 2010) provides standards and guidelines for the Sage Hen Integrated Restoration Project. The forest plan consists of 22 Management Areas and provides forest-wide management direction for different resource areas, including direction for roads.

According to the forest plan, the desired condition of the road network is that it matches the level of management activities occurring on the Boise National Forest and supplies the transportation system needed for recreation, special uses, timber harvest, range management, minerals development, and fire protection. The transportation network is managed, through the use of a variety of tools, to reduce degrading effects to resources. Roads needed for long-term objectives are maintained to provide for user safety and resource protection. Roads not needed for long-term objectives are decommissioned and stabilized.

In addition to forest-wide transportation goals and objectives, the forest plan also includes management direction specific to Management Area 16, Sage Hen Reservoir. Pertinent road-related Management Area direction for roads within the analysis area are listed in the Forest-wide TAP Addendum for the Sage Hen project (March 2020).

The design features in Appendix B ensure consistency with the forest plan and other applicable laws/regulations, respond to issues/concerns, and/or to reduce/eliminate effects to a particular resource. A Forest Plan Consistency Checklist was completed for this project and that document is located in the project record.

5. Conclusion

Roads would be maintained during the implementation of vegetation management activities. Opportunities exist to utilize commercial timber sale or stewardship contracts to resurface existing aggregate roads, repair surface roadway, replace drainage culverts, and clear roadway vegetation and thereby maintaining and/or enhancing overall access and road conditions.

Implementation of the transportation system proposed actions would reflect movement toward desired conditions described in the forest plan for a variety of resources. Decommissioning and/or closing roads would restrict vehicle access in sensitive big game habitat and improve habitat features for flammulated owl and the white-headed and pileated woodpeckers. Decommissioning selected roads would not measurably influence the feasibility of future vegetation management restoration activities as most of the roads proposed for decommissioning are located within riparian conservation areas, are of low benefit for long-term management, and/or are in poor condition. Road realignment/relocation from riparian conservation areas would reduce sediment delivery to aquatic and riparian areas. Aquatic species would benefit from aquatic organism passage culvert replacements.

Changing the road use designations from open to closed would result in a small reduction of roads available for general forest users. Main arterial roads, roads that provide access to developed recreation sites and trailheads, and roads that provide access to high use dispersed recreation areas would be improved.

Finally, the resulting transportation network would continue to facilitate restoration activities related to fuels management and range management, and improve access to range improvements. Critical access for emergency and wildland suppression vehicles would be improved.

6. References Cited

USDA Forest Service. 2010. Land and Resource Management Plan for the Boise National Forest, 2003-2010 Integration, Volumes 1-2, amended July 2010. Boise National Forest, Boise, ID.

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