PROPOSED ACTIONS FOR THE LAVA RESTORATION PROJECT
Public Scoping Information

PROJECT OVERVIEW

The Boulder Fire, located about 9 miles south of Cascade ID and approximately 1 mile southeast of the Tripod Lookout was ignited during a lightning storm on July 24, 2024. On September 2nd another lightning-event caused the Lava Fire near the outskirts of the town of Ola ID (approximately 12 miles southwest of Cascade). On September 9th, the two fires merged, and the incident was managed as the Lava Fire, forming a combined burn area of 97,615 acres the Boise and Payette National Forests, BLM lands, State lands, and private lands. The fire was called out on December 18, 2024.

In response to this event, the Boise National Forest is proposing the Lava Restoration Project to mitigate hazard trees, reestablish forested conditions, protect the landscape from unauthorized access, and recover some economic value of fire killed trees. Further rationale is provided below under Potentially Affected Environment. These objectives are based on multiple-use management in compliance with the Boise National Forest Land and Resource Management Plan (Forest Plan, as amended in 2010).

The Forest will seek approval for an Emergency Situation Determination (ESD) as authorized under 36 CFR § 218.21. Projects authorized under ESDs are not subject to Forest Service Objection Review processes.

Where is the Project Located?

The project is located along the northwestern boundary of the Boise National Forest about 50 miles north of Boise, Idaho (Map 1). The project area is located on the west side of the Emmett Ranger District, within Gem and Valley counties. The project area is part of the Sage Hen Reservoir Management Area 16 and contains a portion of the Snowbank Inventoried Roadless Area. The project area consists of the 39,340 acres of the Lava Fire that burned into the Sage Hen Integrated Restoration Project area on the Emmett Ranger District.

Potentially Affected Environment

The project area is entirely within the perimeter of the Lava Fire. The 39,340-acre project area includes 34,380 acres of National Forest System (NFS) lands; all proposed actions are on NFS lands. The project area spans in elevation from 3,425 to 8,327 feet above sea level. Topography is bisected by multiple drainages, some providing critical habitat for ESA-listed bull trout. A portion of the Snowbank Inventoried Roadless Area is within the project area.

A Burned Area Emergency Response team completed an assessment of the burn area in October 2024. Geospatial analysis was used to determine soil burn severity and vegetation burn severity.

Most of the road network in the project area was created to support timber harvest activities and multiple uses including safe public access. Major public access routes impacted by the fire include NFS Roads 618, 625, and 624. Post fire flooding has already severely altered the Chief Eagle Eye drainage. Forest roads could be subject to increased movement from sediment crossing the roadway from the increased erosion potential of the surrounding landscape, resulting in further road damage and/or impacts to the hydrology of the watershed.

Although portions of the Lava Fire burned in a mosaic of intensity, a substantial portion of the fire burned at a high intensity; overall, the fire resulted in substantial tree mortality. Vegetation burn severity generally correlates to the level of soil burn severity. Hazard trees are now present throughout the project area. The fire has resulted in a change of tree species composition and stand density. Desired vegetation attributes

may no longer be present. Tree mortality associated with fire-injury, drought, and insect and disease infestations will continue for years after the Lava Fire.

Moderate and high burn severity of vegetation and soils have created conditions for the increased risk of invasive botanical species to outcompete native plants. Low-elevation non-forested habitats may not be able to recover naturally following the fire, specifically, those areas historically supporting drought-adapted bitterbrush, sagebrush, Idaho fescue, and bluebunch wheatgrass.

Approximately 34,980 acres of the Payette C&H and OLA-C C&H allotments were affected within the project area. Range improvements used to manage livestock were destroyed and/or damaged. Livestock grazing operations were impacted by wildfire and will require modification during recovery and rehabilitation efforts.

Figure 1. Photo of Third Fork Chief Eagle Eye Creek drainage after the Lava Fire, taken on October 14, 2024. Photo edited for clarity and brightness.

The project area contributes to recreation and ecosystem services to nearby communities and agricultural areas. Communities closest to the project area include Cascade, Smiths Ferry, Ola, High Valley, and Sweet. Portions of the project area are popular for recreation. The nearby Sage Hen Reservoir area did not burn. However, the fire affected several designated trails, used for both summer and winter recreation. Fire has resulted in damaged trees near and adjacent to designated trails and trailheads, as well as the Third Fork Cabin. The cabin itself was unharmed.

Unauthorized roads and user-created trails that existed prior to the fire are now visible and accessible due to vegetative cover loss. Fire suppression activities, including repaired dozer lines, are also visible. Where fire impacts have left these routes visible, there is a need to deter access and prevent further damage to the landscape.

Purpose and Need: Why do we need to act?

The purpose of the Lava Restoration Project is to address and mitigate the impacts to the landscape from the 2024 Lava Fire as described above in the Potentially Affected Environment section. The following specific needs exist:

Hazard Tree Mitigation

There is a need to mitigate the risks of hazard trees. Fire-damaged trees, if left standing, pose a hazard to parked or moving vehicles, forest users, and Forest Service personnel. Fire-damaged trees could also fall when vehicles/users are not present, creating hazards in the road or trail, potentially blocking individuals behind or between trees across the roadway, or plugging culverts/drainage ditches in a way that may compromise the road or trail.

Commercial Salvage

There is a need to recover the economic value of fire-damaged trees. Trees damaged by the fire are deteriorating and generally lose marketability within one to two years of mortality, depending on condition.

Commercial timber harvest is a tool that may be implemented to facilitate hazard tree removal, salvage fire-damaged trees, and contribute to the local economy.

Reforestation

There is a need to restore or manage desired vegetation attributes and re-establish native plant communities to improve post-fire watersheds. Reforestation of early seral species would be prioritized to support the long-term sustainability of native and desired non-native wildlife species.

Revegetation of Non-Forested Areas

There is a need to restore at-risk non-forested habitat in the project area. Low elevation non-forested habitats are not expected to recover naturally following the fire, specifically those areas historically supporting drought-adapted bitterbrush, sagebrush, Idaho fescue, and bluebunch wheatgrass.

Recreation and Access Management

There is a need to provide safe public access on designated roads and trails. There is also a need to protect the fire-damaged landscape from unauthorized access. This would protect soil and water quality while allowing the area to undergo natural recovery unhindered by human activity. This may be achieved through maintaining appropriate use on authorized routes as well as reducing the creation and use of unauthorized routes.

Infrastructure Repair

There is a need to improve human safety, maintain administrative and recreational access, improve the overall recreational experience, and protect water quality by repairing damage to forest infrastructure including roads, trails, bridges, culverts, and signs.

Range Management

There is a need to ensure that the allotments have an opportunity for recovery of vegetation, improve water quality and soil stabilization, and allows for other natural recovery processes to occur without additional disturbance from permitted livestock grazing. This can be achieved by working with permittees to rest the affected portions of grazing allotments from livestock grazing for a minimum of 2 years. This rest period also allows for the replacement or repair of vital range improvements used for livestock management across the allotments that were impacted by wildfire.

There is a need to encourage livestock to graze and congregate away from streams and ponds by repairing stock water developments affected by the fire.

Proposed Action: What are we proposing to do?

The Forest proposes to address the purpose and need by implementing a suite of post-fire restoration activities including hazard tree mitigation, area salvage, reforestation/revegetation, recreation management, range management, and road maintenance and infrastructure repair/replacement.

Table 1. Summary of Proposed Vegetation Treatments.

Activity	Acres
Hazard Tree Mitigation	3,410
Area Salvage	1,560
Reforestation in Hazard Tree Mitigation and Area Salvage Units	4,970
Reforestation outside Hazard Tree Mitigation and Area Salvage Units	26,920
Revegetation of Non-Forested Areas (shrub planting)	2,920

Vegetation Management

Hazard Tree Mitigation

Hazard tree mitigation will occur along open National Forest System (NFS) roads. Map 2 displays road segments proposed for hazard tree mitigation. Felling of such trees could occur out to a maximum extent of 200 feet on either side of the roadway. Trees identified as hazards will be felled by hand or using ground-based mechanized harvesting equipment. Felled trees may be commercially harvested to recuperate their remaining economic value.

Where opportunities and conditions warrant, hazard tree mitigation will also occur along NFS trails in the project area and associated trailheads. Along these trails, within the 200-foot maximum extent, trees identified as hazards will be felled by hand. Table 2 below identifies the trails in the project area. Figure 2 illustrates an example of hazard tree mitigation needs.

Hazard trees near the Third Fork Cabin and associated infrastructure would be mitigated as well as opportunities allow.

Figure 2. These burned trees presenting a hazard to the Third Fork Cabin and the gate would be felled.

Dispersed recreation occurs on the Forest as evidenced by highly impacted sites in some areas. The Forest does not direct people to these areas, nor does the Forest actively manage these areas. Hazard identification requires identifying the level of risk, or the relative potential that a hazard may cause harm to someone or something of value (i.e., the tree's proximity to people and property). Fire-damaged trees now exist throughout the fire perimeter. The Forest cannot risk-proof the entire project area.

The Forest has placed signs (Figure 3) along the main travel ways into the fire perimeters warning forest users that the area has been burned and that hazards may be present.

Figure 3. These warning signs are posted at the Bulltrout Fire area and along NFS Road 380. Similar signs are in place in and near the Lava Fire burn area.

Area Salvage

Area salvage outside the 200-foot roadside corridor is proposed on 1,560 acres. This work would take place in areas where access exists, and the trees are commercially viable. See Map 3.

Trees designated for salvage will be felled and removed with ground-based mechanical harvesting equipment. Treatments with commercial salvage may be followed with additional hazard tree mitigation to facilitate reforestation.

Reforestation of Forested Areas

Reforestation, or planting, is proposed following hazard tree mitigation and salvage activities where species composition and/or stocking levels are not expected to meet Forest Plan desired conditions based on potential vegetation group (PVG) (Map 2). This action would mitigate loss of forest cover and maintain forest productivity. Species planted would be based upon PVG but would focus on fire-resilient shade-intolerant species including, but not limited to, ponderosa pine, Douglas-fir, or western larch. Whitebark pine may also be planted.

Planting may occur outside Hazard Tree Mitigation and Area Salvage units as needs are identified and funding becomes available.

Site preparation before or at time of planting is generally needed to provide seedlings the best chance of survival. At this time all site preparation would be completed by hand methods. Site prep with hand tools consists of scalping (removing existing vegetation and other organic or inorganic material) a small planting area to mineral soil.

Revegetation of Non-Forested Areas

The Forest proposes reseeding and hand transplant of live plugs for fire-affected non-forested habitats in the project area (Map 3). Seeding could occur either aerially or via hand-broadcast depending on site size and feasibility. At this time the Forest has identified approximately 2,920 acres where shrub planting would be beneficial. Final planting units will be determined once the Forest field verifies existing conditions and planting suitability.

Fuels Treatments

Activity and existing fuels in hazard tree mitigation and area salvage units would be disposed of through hand or machine piling, pile burning, jackpot burning, lopping and scattering, mastication, chipping, biochar processing, or biomass removal. Felled trees and branches may be left on site if needed for resource benefit (e.g. providing microsites for planting, assisting with soil amelioration, retaining soil on slopes, reducing compaction on skid trails and temporary roads or to meet Forest Plan coarse woody debris requirements).

Machine piling and mastication (mechanical chipping/grinding/shredding of fuels) would occur in hazard tree mitigation units where slash is too large or dense for hand piling. These are typically areas where the material that is greater than 3 inches diameter, has fuel loadings greater than 4 tons per acre, and the majority of the material is on the ground. Mastication is a treatment that can be used to remove smaller diameter trees or rearrange the ground fuel/slash into a size that will decompose more rapidly.

Recreation and Trail Management

Trail drainage stabilization and trail structure stabilization will occur along the NFS trails listed below in Table 2. This work includes repair and stabilization on drainage and structural trail features such as grade dips, water bars, retaining walls, and turnpikes. Trail prisms would also be reestablished. This work would prevent trail tread and structure loss, soil erosion and runoff into streams, and prevent the cost of full reconstruction. See Vegetation Management section above for information on hazard tree mitigation on trails.

Table 2. Trails in the Project Area.

Trail Name	Trail length within the project area
Greenfield Flat #223006	1.8
West Mountain #131006	4.1
Poison Creek #134006	2.2
Wilson Corrals #135006	5.0
Wilson Creek #133006	0.9
Gabe's Peak #136006	2.8
Total Trail Mileage	**16.8**

Transportation Management

The Forest proposes several transportation system-related maintenance activities, repairs, and replacements.

Road Maintenance and Use

Proposed road activities designed to support management objectives include road maintenance on all open roads within the project area and timber haul routes. Maintenance includes excavation and embankment work, roadway reconditioning (grading, ditch and drainage system cleaning), spot surfacing, ditch armoring, and culvert replacements (ditch relief culverts, intermittent drainages, seeps; not perennials) on existing roads within the project area on an as-needed basis. All work will be conducted within the existing road limits, will not change the surface type or maintenance level of any roads, and will not include the construction of any new roads. This work would mitigate further sedimentation and resource damage, facilitate treatments in the project area, and improve user safety and comfort.

Dust abatement will occur as needed during project operations to mitigate impacts to the environment and provide for public safety. Methods may include, but not be limited to, applying water or aggregates to road surfaces, and implementing speed limits, and limited operating periods.

Roads in the project area, including temporary roads, may be snowplowed to allow access for logging or reforestation activities.

Temporary Road Access

To facilitate access to area salvage units, NFS roads currently classified as maintenance level 1 (ML1) would be reopened for project use then restored to their current state of storage upon project completion. In addition, approximately 2 miles of temporary road would be needed. Temporary roads would be decommissioned once harvest activities are complete and would not be added to the Forest Transportation System. No permanent roads will be constructed.

Chief Eagle Eye Creek Bridge Replacement

The Forest proposes replacing the existing bridge at milepost 20.6 on NFS Road 653. This 40-foot long by 16-foot-wide timber multi-girder bridge was constructed in 1963. It was heavily damaged in mid-September 2024 during a post-fire 500-year flood event. Most of the structural backfill behind one of the abutments was eroded and the timber sill on that abutment is now undermined across its entire length, reducing the bridge's load carrying capacity to virtually zero. The road is now under a temporary closure order due to the bridge being in a condition state of imminent failure.

The Forest would remove the bridge in its entirety and install a new bridge measuring approximately 66 feet long by 16 feet wide, likely featuring a steel superstructure, concrete shallow abutment substructure, corrugated metal deck, and aggregate surfacing. The new structure will be designed to accommodate 100-year flows and HL-93 loading. Replacing this bridge would restore access and public safety, prevent further adjacent resource damage, and facilitate other treatments in the project area.

Figure 4. Photo of the Chief Eagle Eye Creek Bridge taken after the post-fire flooding

Chief Eagle Eye Creek Aquatic Organism Passage Replacement

The Forest proposes replacing the existing aquatic organism passage (AOP) culvert near milepost 11.8 on NFS Road 625. The current AOP measures roughly 18 feet wide by 12 feet high and 80 feet long. This steel multiplate bottomless structural arch was severely damaged in mid-September 2024 during the estimated 500-year equivalent flood event. The new AOP would be approximately equal in size and type, however it may be slightly larger to accommodate higher post-fire flows and slightly realigned to better match the current stream alignment. The new structure would be designed to accommodate 100-year flows and HL-93 loading. Replacing this AOP would restore access and public safety, prevent further adjacent resource damage, and facilitate other treatments in the project area.

Figure 5. Damaged aquatic organism passage (AOP) culvert near milepost 11.8 on NFS Road 625.

Range Management

Replacement and/or repair of all in-kind major range infrastructure that is necessary for livestock management and resource protection would be carried forward.

Reconstruction of the Third Fork Gathering Corral

The Third Fork Gathering Corral would be reconstructed. This corral, used for turning out, sorting, and gathering livestock on and off National Forest lands, is located on NFS Road 618 directly across from the Forest Service recreation cabin. It would be re-constructed of wooden posts and rails and include a wooden loading ramp. The approximate footprint of the facility is half an acre.

Reconstruction of the Third Fork Riders Cabin and Horse Corral

The Third Fork Riders Cabin and Horse Corral would be reconstructed. This cabin was a single-story structure that housed the hired rider for the allotment and was adjacent to the Third Fork recreation cabin.

Fence Repair and Replacement

Range fencing would be repaired/replaced throughout the Project Area. See Table 3 for details:

Table 3. Proposed Fence Management Actions

Fence Name and Location	Priority	Activity	Proposed Action
Payette / Ola-C boundary fence, Southwest portion	3	Maintenance	Maintain 2.6 miles of 4-strand barbed wire with metal t-posts and wooden braces.
Payette / Ola-C boundary fence, Northeast portion, off NFS Road 653	2	Maintenance	Maintain 0.75 miles of 4-strand barbed wire with metal t-posts and wooden braces.
Payette / Ola-C boundary fence, north portion at Forest boundary with the Payette National Forest	1	Replace	Rebuild 3 miles of fence along the ridgeline.
Third Fork Ridge Drift Fence, separates two pastures of the Payette Allotment	4	Replace	Rebuild 2 miles of fence along the ridgeline.

Water Developments

Stock water development repairs and replacements would occur in several areas. This would require some ground disturbance, such as digging up the head boxes of spring sources, digging shallow trenches for piping, and some small-scale leveling to place the new troughs. Water rights will be verified for correct source location before work is implemented.

Community Involvement

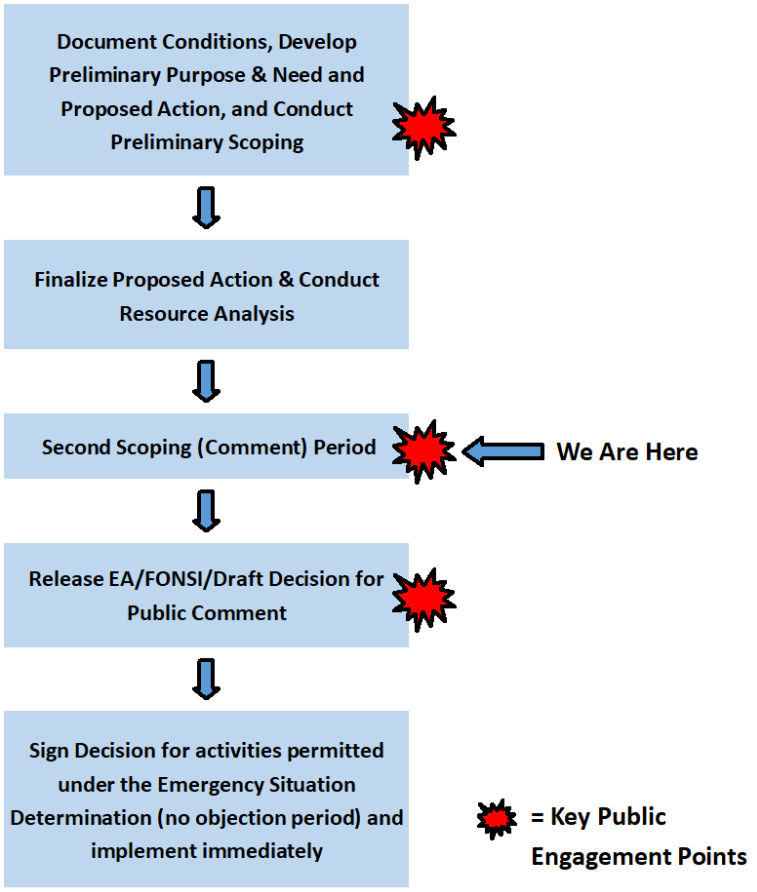
The Boise National Forest Supervisor is the responsible official for this project. The project would implement the Boise National Forest's 2003 Land and Resource Management Plan, as Amended in 2010 and is being developed under the Council on Environmental Quality's (CEQ) revised 2022 NEPA regulations.

We are in the second scoping phase of the project now. Your feedback on the Lava Restoration Project is invited. Scoping provides the public an opportunity to identify potential issues that have not already been identified during the interdisciplinary team process being used to develop this project. Some aspects of the proposed actions could change prior to a decision being signed based on comments received during scoping, conversations with interested publics, and additional analysis conducted by specialists.

We anticipate an environmental assessment (EA) and draft Finding of No Significant Impact (FONSI) of the project will be prepared to disclose effects that may occur as a result of proposed activities. There will be a 30-day public comment period on the EA-FONSI (anticipated in late March or early April 2025).

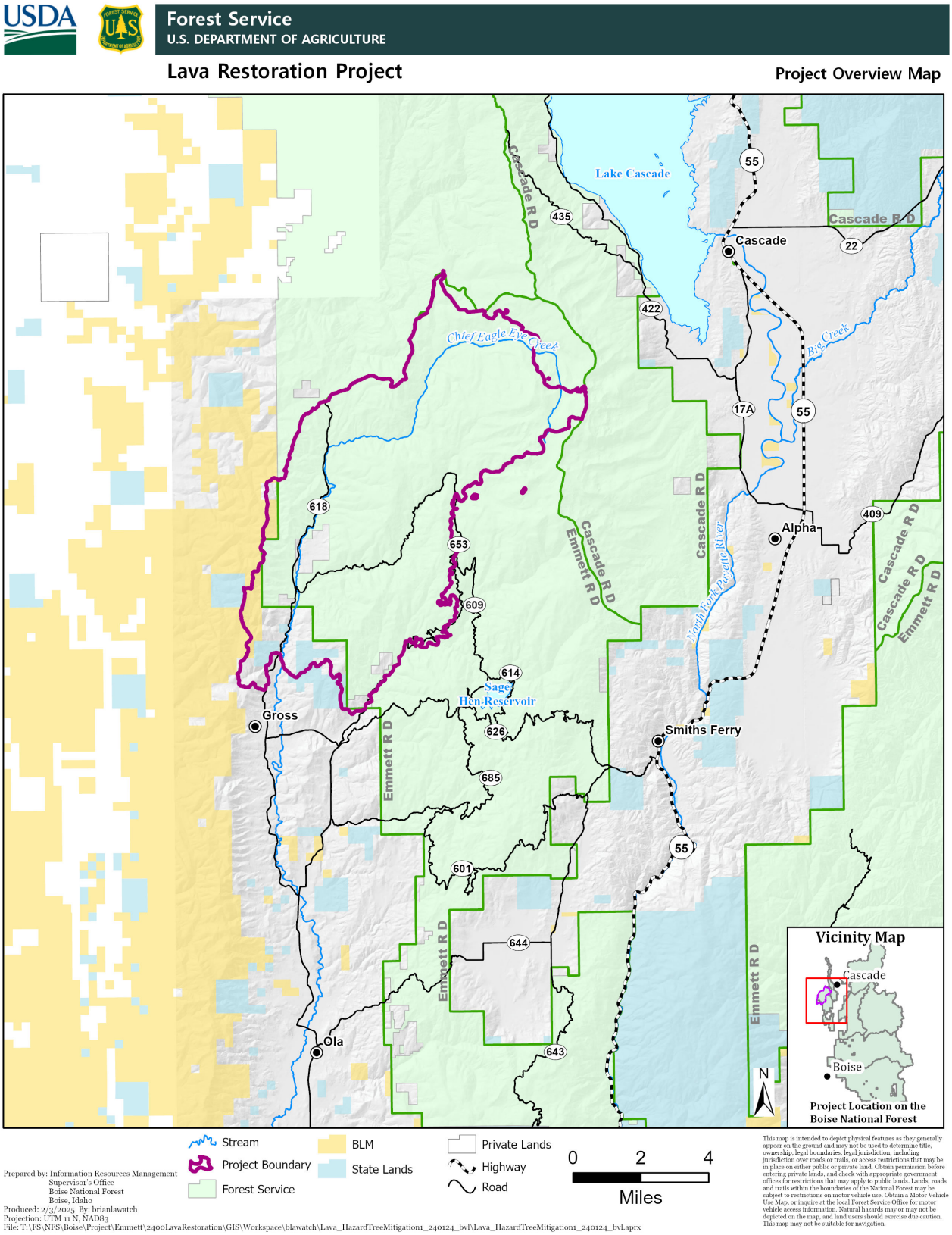
The Forest will seek approval for an Emergency Situation Determination (ESD) by the Chief of the Forest Service. ESDs are not subject to the pre-decisional administrative review processes under 36 CFR 218 subparts A and B. After considering comments on the EA/FONSI and adjusting the purpose and need and proposed actions accordingly, the responsible official may sign a decision notice and the emergency activities may be implemented immediately. See Figure 6. We expect this decision notice to be published in June 2025.

Figure 6. Basic flowchart of the steps in getting from a project proposal to a project decision using an Environmental Assessment with an Emergency Situation Determination.

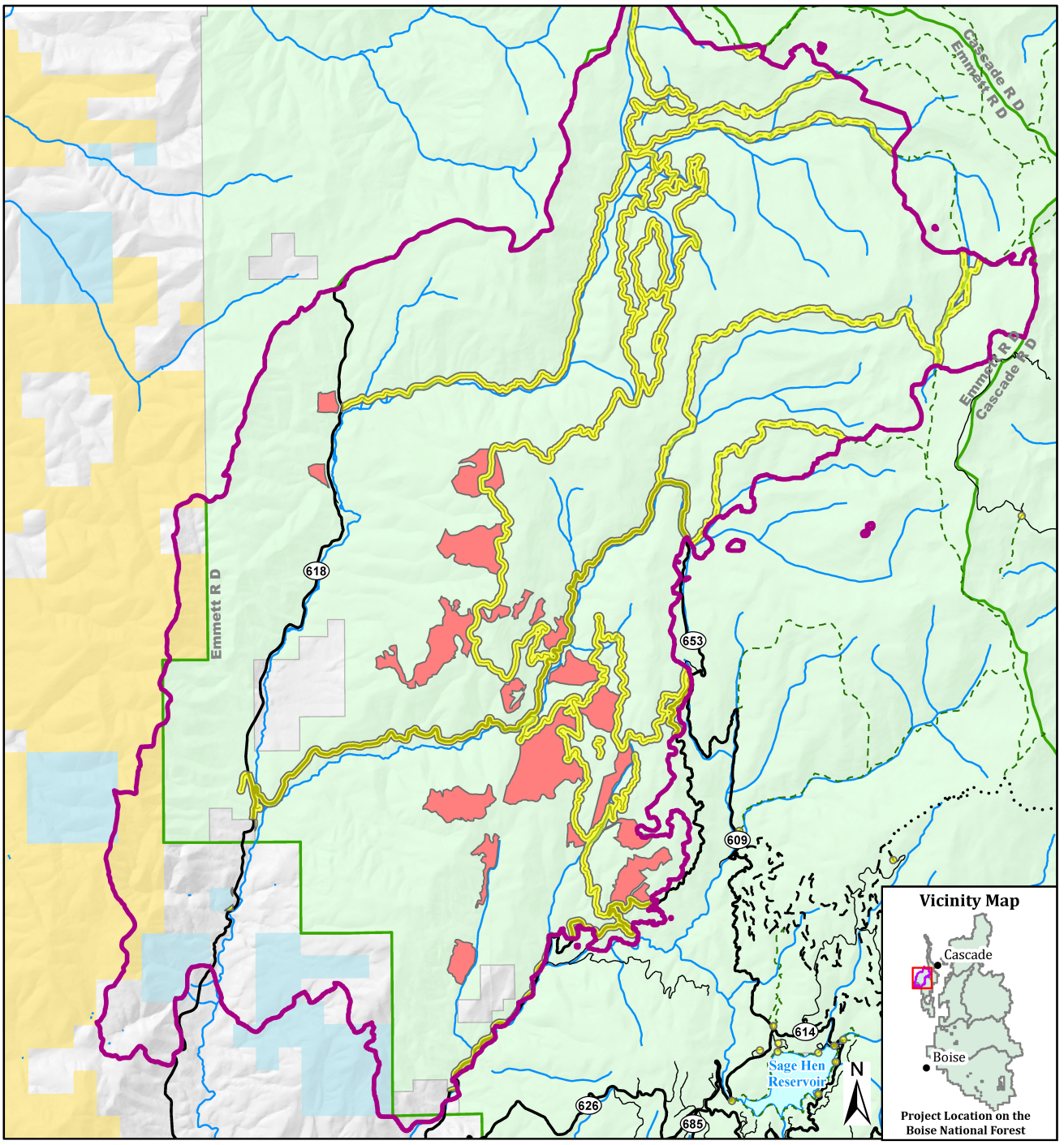


Appendix A – Maps

Map 1. Project Vicinity Map. The Lava Restoration Project Area in relation to the Boise National Forest and nearby communities.



Map 2. Proposed Hazard Tree Mitigation and Area Salvage.



Map 3. Proposed Reforestation and Revegetation of Non-Forested Areas.