

RECORD OF DECISION

Issued by:

STATE OF CALIFORNIA
DEPARTMENT OF HOUSING AND COMMUNITY
DEVELOPMENT

For:

RIM FIRE REFORESTATION ACTIVITIES FUNDED BY
THE CDBG-NDR FOREST AND WATERSHED HEALTH
PROGRAM (FWHP)

OCTOBER 5, 2017

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1. Background

In 2013, California experienced one of the largest wildfires in the state's history. The fire started in August and burned for over two months. Once it was over, the Rim Fire had burned more than 250,000 acres, and was declared a major disaster by President Obama.

In response to the 2013 Rim Fire, the United States Forest Service (USFS), which is charged with forest management activities in the Rim Fire disaster area, prepared an Environmental Impact Statement (EIS) to assess the potential environmental impacts of the proposed restoration activities, including deer habitat enhancement, natural regeneration, noxious weed eradication, reforestation, fuel reduction, plantation thinning and prescribed fire. The resulting Final USFS Environmental Impact Statement - Rim Fire Reforestation (45612) (FEIS) was completed in April 2016 and final decision signed in August 2016.

On September 17, 2014, the United States Department of Housing and Urban Development (HUD) released a Notice of Funding Availability (NOFA) for the Community Development Block Grant - National Disaster Resilience Competition (NDRC). The NDRC awarded nearly \$1 billion in funding for disaster recovery and long-term community resilience using Community Development Block Grant National Disaster Resilience (CDBG-NDR) funding. All states and local governments with major disasters declared in 2011-2013 were eligible to apply.

On behalf of the State of California, the California Department of Housing and Community Development (HCD) applied for funding under the CDBG-NDR, and received an award to implement a series of projects designed to help the impacted area recover from the Rim Fire and to make the area more resilient to future wildfires.

All grantees that received funds were required to complete an environmental review for all project activities prior to obligating any CDBG-NDR funds. The terms of the grant agreement between HUD and HCD, as well as 24 Code of Federal Regulations part 58.4, require HCD, as the responsible entity (RE), to "assume responsibility for the environmental review, decision-making, and action that would otherwise apply to HUD under NEPA and other provisions of law that further the purposes of NEPA." HUD regulations allow the RE to adopt a final EIS prepared by another agency, provided that the EIS was prepared in accordance with 40 Code of Federal Regulations parts 1500 through 1508 (see 24 C.F.R. § 58.52.).

Similarly, the Council on Environmental Quality (CEQ), the agency tasked with implementing the National Environmental Policy Act (NEPA), permits and encourages federal agencies to adopt a Final EIS, or portion thereof, issued by another federal agency, if the EIS or portion thereof "meets the standards for an adequate statement" and the actions covered by the original environmental impact statement and the proposed action are "substantially the same" (40 C.F.R. §§ 1500.4(n), 1500.5(h), 1506.3.).

The proposed action considered in this Record of Decision is to authorize funding for USFS to implement a portion of the activities analyzed in the FEIS. HCD determined that adopting the FEIS was appropriate because the area and activities evaluated in the FEIS are the same as those funded by the CDBG-NDR grant. Furthermore, HCD determined that the FEIS met the standards for adequacy and the action covered is substantially the same as HCD's proposed action in the HUD approved NDRC application.

HCD prepared and posted a 24 Code of Federal Regulations part 58 (Part 58) evaluation of the FEIS to confirm that all applicable HUD compliance factors were analyzed in the FEIS and associated documents. Based upon this review, HCD determined that the FEIS was prepared in accordance with 40 Code of Federal Regulations parts 1500 through 1508 and demonstrates compliance with all applicable laws and authorities cited in 24 Code of Federal Regulations parts 50.4, 58.5, and 58.6.

Accordingly, HCD adopted the FEIS pursuant to NEPA regulations. In order to commence the appropriate comment and review period, HCD prepared and filed its Part 58 evaluation¹ and notified the Environmental Protection Agency (EPA). The EPA published a Notice of Availability (NOA) on its website and in the Federal Register on May 26, 2017 (82 FR 24345).

2. Decision

After careful consideration of the potential environmental impacts, HCD has decided that it will implement the proposed action and, in doing so, authorizes USFS to use CDBG-NDR funds to conduct the proposed reforestation, deer habitat enhancement, and natural regeneration activities on approximately 15,217 acres and noxious weed treatment activities on approximately 5,714 acres (treatment

¹ <http://www.hcd.ca.gov/community-development/disaster-recovery-programs/docs/Reforestation-NEPA-Statutory-Worksheet.pdf>

areas overlap and are not additive). This decision is consistent with the USFS ROD issued in August 2016 and will only include treatment units and types as described in the “Community Alternative” below (see Appendix A for a list of proposed units and Appendix B for a map of the unit locations).

3. Purpose and Need for the Proposed Action

Purpose and Need

The proposed action consists of providing funding for reforestation and noxious weed treatments in the Rim Fire disaster area in Tuolumne County. The purpose and need for the proposed action is clearly stated in Chapter 1 of the adopted FEIS (pgs. 7-10). Specifically, addressing the need to restore this forest landscape by reducing existing fuels, planting native trees, ensuring seedling survival through removal of competing vegetation and eradicating invasive species. These actions will ensure future forest resiliency which is essential to the success of HCD’s Forest and Watershed Health Program (FWHP), as stated in the NDRC application².

As discussed in the adopted FEIS, creating a fire resilient mixed conifer forest that contributes to an ecologically healthy and resilient landscape rich in biodiversity is the overall purpose of the Rim Reforestation project. The goals are to return mixed conifer forest to the landscape, restore old forest for wildlife habitat and connectivity, reduce fuels for future fire resiliency, enhance deer habitat and eradicate noxious weeds within the Rim Fire area.

Proposed Action

The proposed action in the FEIS consists of a number of different activities, including deer habitat enhancement, natural regeneration, noxious weed eradication, reforestation, fuel reduction, plantation thinning and prescribed burning. Reforestation activities include site preparation, planting, release and prescribed burning approximately ten years after planting.

The proposed action considered in this Record of Decision is to authorize funding for USFS to implement a portion of the activities analyzed in the adopted FEIS. HCD’s decision is focused on funding reforestation work (including site preparation, planting, and release) and noxious weed eradication, as stated in the

² See HCD’s NDR webpage for more information on the FWHP and the complete California NDR application: <http://www.hcd.ca.gov/community-development/disaster-recovery-programs/ndrc.shtml>

NDRC grant application and subsequent award by HUD. Specifically, this project will focus on the establishment of future forests through conifer planting and control of competing vegetation as well as noxious weed eradication.

The proposed action is being conducted in conjunction with other NDRC approved activities to assist in building more resilient forests and communities, in order to protect them from future disasters and allow them to recover more quickly when future wildfires occur.

4. Basis of Decision

Based on HCD's review of the FEIS and its supporting documentation, along with extensive discussions with state and federal agency staff, other governmental bodies and members of the public, approximately 15,217 total acres of reforestation, deer habitat enhancement, and natural regeneration treatments as well as 5,714 acres of noxious weed treatments were selected from within the FEIS's fully analyzed alternatives (treatment areas overlap and are not additive). This decision does not conflict with the USFS ROD signed in August 2016. Furthermore, all implementation will be in line with activities and treatments proposed in the USFS ROD. A list of the units selected for potential treatment are shown in Appendix A.

The decision was made to provide CDBG-NDR funding to the USFS to conduct the proposed action because it meets the project's Purpose and Need (EIS Chapter 1.03), while also responding to significant issues related to: Human Health; Native Species Health and Diversity; Local Economy; Forest Establishment; and Fire Hazard (EIS Chapter 1.08).

The decision will meet the overall purpose to "create a fire resilient mixed conifer forest that contributes to an ecologically healthy and resilient landscape rich in biodiversity" and desired future conditions for Old Forest Mosaic, Open Canopy Mosaic and Deer Emphasis Desired Future Conditions.

The decision was made based on public input from local collaborative groups and community representatives. The decision not to treat all 25,000 plus acres in the Rim Fire burn area was made due to the limited amount of funding provided by this grant opportunity.

5. Alternatives Analyzed in the FEIS

Chapter 2.02 of the adopted FEIS describes and compares in detail the alternatives considered for the Rim Reforestation project. It presents the alternatives in comparative form, defining the differences between each alternative and providing a clear basis for choice among the options for the decision maker and the public. These include the proposed action (Alternative 1), the no action alternative (Alternative 2), and three additional action alternatives (3, 4 and 5), which provide a comprehensive range for the decision maker. FEIS Table 2.05-1 provides a summary of the proposed activities and FEIS Appendix E provides detailed information for each specific treatment unit.

The alternative selected by the USFS and approved for funding by HCD is the Community Alternative, as described in detail in the USFS ROD. In summary, the Community Alternative is a combination of Alternatives 1,3,4 and 5. The deer habitat enhancement, natural regeneration, noxious weed eradication and thinning of existing plantations were selected from Alternative 1 (Proposed Action); and a combination of reforestation treatments were selected from Alternatives 1, 3, 4 and 5. The Community Alternative in the USFS decision approves site preparation, including fuel reduction and reforestation on 25,310 acres, deer habitat enhancement on 3,833 acres, and noxious weed eradication on 5,714 acres.

CDBG-NDR funding will reimburse USFS in implementing the Community Alternative on up to 15,217 acres for reforestation, deer habitat enhancement, and natural regeneration activities and up to 5,714 acres for noxious weed treatments, out of the 34,857 acres included in the USFS decision (see Appendices A and B for units and locations authorized to receive CDBG-NDR funding).

The Community Alternative was selected because it meets the elements of the Purpose and Need (FEIS, p. 7-12), while responding to public input and addressing significant issues related to herbicides and reforestation methods (FEIS, p. 17-18). This decision will accelerate the development of conifer forest in severely burned areas within the Rim Fire; accelerate the restoration of old forest composition and structure, that provides critical habitat for sensitive wildlife species such as the California spotted owl, northern goshawk and fisher; creates more forested acres with larger trees, resulting in greater timber yields within the next 50 to 60 years' and allows for the eradication of invasive species. The Community Alternative also meets the goals of HCD's FWHP in creating a more resilient forest in the Rim Fire area.

Summary of Alternatives Evaluated in the FEIS

Five alternatives were fully developed under the FEIS, Chapter 2 (Section 2.02). Section 2.04 also discusses the eight additional alternatives that were considered, but not developed in detail.

Alternative 1, is the proposed action described in the Notice of Intent published by USFS on February 27, 2015 (80 FR 10663-10664), with corrections based on subsequent field information and surveys. The acres also changed because of the way the treatments were displayed, more clearly identifying the proposed treatments, their locations and purpose. The total number of acres of reforestation, deer habitat enhancement and reforestation treatments under Alternative 1 is 29,164, and the total acres of noxious weed eradication under Alternative 1 is 5,714. HCD selected Alternative 1 for a portion of the reforestation and the noxious weed treatments because it meets the goal of forest resiliency, which is essential to the success of HCD's Forest and Watershed Health Program (FWHP). This decision authorizes funding for 4,789 acres of reforestation, 2,529 acres of natural regeneration, 821 acres of deer habitat enhancement, and 5,714 acres of noxious weed treatment activities as described in Alternative 1.

Alternative 2 (No Action) serves as a baseline for comparison purposes. Under Alternative 2, no proposed activities would occur. HCD did not select this alternative because without reforestation and noxious weed eradication, this landscape would not become reforested for many years and its resilience to future fire would be minimal.

Alternative 3 responds to issues and concerns related to: Human Health and Native Species Health and Diversity (FEIS Chapter 1.08) and includes only 3,131 acres of noxious weed eradication. Compared to Alternative 1, it addresses those issues by proposing: using only deep tilling and forest cultivation for site preparation and only hand grubbing (no herbicides) for treatment of competing vegetation and noxious weeds. It also proposes a variable density planting regime to create a "clumpy-groupy" future forest. HCD did select Alternative 3 for a portion of the reforestation activities because it addresses public concerns about human health. This decision authorizes funding for 924 acres of reforestation activities as described in Alternative 3.

Alternative 4 responds to issues and concerns related to: Local Economy and Forest Establishment (FEIS Chapter 1.08). Alternative 4 reforests only 20% of each treated stand. Fuels reduction would occur on 100% of the unit and prescribed fire would be introduced into the area every other decade to maintain

low brush and fuel levels, to allow for natural regeneration in those areas. HCD selected Alternative 4 for a portion of the reforestation because it addresses public concerns. This decision authorizes funding for 1,639 acres of reforestation activities as described in Alternative 4.

Alternative 5 responds to issues and concerns related to: Local Economy; Native Species Health and Diversity; Forest Establishment; and Fire Hazard (FEIS Chapter 1.08). Alternative 5 plants on a traditional spacing pattern and at higher densities than the other alternatives, which is cheaper to implement and with projected mortality, it will have higher numbers of trees per acre. HCD selected Alternative 5 for a portion of the reforestation to be done because it will meet the goal of forest resiliency and returning mixed conifer forest to this landscape. This decision authorizes funding for 4,515 acres of reforestation activities as described in Alternative 5.

In addition to the five fully developed alternatives described above, the USFS considered an additional eight alternatives generated from internal scoping and input from the public. NEPA requires that federal agencies rigorously explore and objectively evaluate all reasonable alternatives and briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 C.F.R. § 1502.14). Chapter 2 Section 2.04 of the FEIS provides a detailed description of the alternatives considered but eliminated from detailed study as well as the reasons for eliminating them. They include: a) Natural Succession; b) Natural Regeneration with Founder Stands; c) Natural Regeneration with Founder Stands with tighter buffers; d) Low Density Planting(Plant 40 to 100 Trees per Acre); e) Maximum Acres of Planting; f) One Herbicide Application; g) Two Herbicide Applications; and h) Spray Areas with 40% or More Bearclover (two applications). They are fully described on pages 48 through 50 of the FEIS.

6. Environmentally Preferable Alternative and Alternatives Comparison

As the lead agency, the USFS selected a combination of all four action Alternatives from the FEIS. HCD's decision is to also select a portion of this combination of alternatives known as the Community Alternative for funding.

The environmentally preferable alternative is often interpreted as the alternative that causes the least damage to the biological and physical environment, or the alternative which best protects and preserves historic, cultural and natural

resources. Other factors relevant to this determination are provided in Section 101 of NEPA (42 U.S.C. § 4321 et seq.) which states that it is the continuing responsibility of the Federal Government to:

- Fulfill the responsibilities of each generation as a trustee of the environment for succeeding generations;
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradations, risk to health and safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and,
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources (42 U.S.C. § 4331(b)).

In consideration of the factors listed above and the potential effects disclosed in the FEIS, HCD concurs with USFS that Alternative 1 is the Environmentally Preferred Alternative for the following reasons:

- Alternative 1 was developed after extensive public involvement. The proposed planting designs which incorporated the individual trees, tree clumps, and openings concept (ICO) for mature forest structure (7 different patterns based on landscape position, desired future condition and strategic fire management areas) are unlike anything the Forest Service has proposed in the past. The Forest Service strove to be innovative and responsive to those who participated in broad collaborative efforts. This compromise between intensive land management and natural vegetation resiliency is most likely to result in the widest range of beneficial uses of the environment while minimizing resource degradation, risks to health and safety, or other undesirable and unintended consequences.
- Alternative 1 would implement reforestation in the Rim Fire to provide natural resources in the long-term for succeeding generations.
- It would achieve a balance between population and resource use by contributing to the long-term supply of wood products for the local timber industry (important to the local economy).
- This alternative would enhance wildlife habitat (FEIS, p. 341-460), increase biodiversity (FEIS, p. 231-290), and improve aesthetic values (FEIS, p. 291-300), thereby providing for a wide range of beneficial uses.
- Alternative 1 would enhance the quality of renewable resources by

establishing healthy forests that would provide timber and other wood products, which contribute to high standards of living for the local population.

7. Mitigation

No additional mitigation measures were identified in HCD's Part 58 compliance review. Project Management Requirements (mitigations) are identified for each resource³ and by Alternative in the FEIS and will apply to this decision where applicable.

8. Compliance with Environmental Laws and Authorities

The Rim Recovery project was prepared in accordance with the following applicable laws and regulations. HCD prepared a Part 58 evaluation to identify where all required HUD compliance factors were analyzed in the FEIS and associated documents. (24 CFR §§ 50.4, 58.5, 58.6.) This "crosswalk" is part of the project record and demonstrates how the proposed action will comply with all applicable environmental law and authorities.

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) requires that all major federal actions significantly affecting the human environment be analyzed to determine the magnitude and intensity of those impacts and that the results be shared with the public and the public given opportunity to comment. The regulations implementing NEPA further require that to the fullest extent possible, agencies shall prepare EISs concurrently with and integrated with environmental analyses and related surveys and studies required by the Endangered Species Act of 1973, the National Historic Preservation Act of 1966, and other environmental review laws and executive orders. Other laws and regulations that apply to this project are described below.

Clean Air Act

The Clean Air Act of 1970 provides for the protection and enhancement of the nation's air resources. No exceedance of the federal and state ambient air quality standards is expected to result from any of the alternatives. The Clean Air Act makes it the primary responsibility of States and local governments to prevent air

³ Resources include aquatic species, cultural, fire and fuels, invasive species, range, recreation, sensitive plants, soils, terrestrial wildlife, vegetation and watershed. Management Requirements are designed to minimize or avoid potential adverse impacts. These mandatory components of the project and will be implemented as part of the proposed activities.

pollution and control air pollution at its source.

California has a plan that provides for implementation, maintenance, and enforcement of the primary ambient air quality standards. This project is located in an area designated as non-attainment for ozone. The burn treatments under the Community Alternative will be conducted under an EPA approved California Smoke Management Program (SMP). Under the revised Conformity Rules the EPA has included a Presumption of Conformity for prescribed fires that are conducted in compliance with an SMP; therefore, the federal actions conform and no separate conformity determination is indicated (FEIS Chapter 3.02).

Clean Water Act

The Clean Water Act (as amended in 1972 and 1987 and previously known as Federal Water Pollution Control Act) establishes federal policy for the control of point and non-point pollution, and assigns the states the primary responsibility for control of water pollution. The Clean Water Act regulates, among other things, the dredging and filling of freshwater and coastal wetlands. Section 404 (33 U.S.C. § 1344) prohibits the discharge of dredged or fill material into waters (including wetlands) of the United States without first obtaining a permit from the U.S. Army Corps of Engineers. Wetlands are regulated in accordance with federal Non-Tidal Wetlands Regulations (Sections 401 and 404). No dredging or filling is part of this project and no permits are required.

Compliance with Section 401 of the Clean Water Act by national forests in California is achieved under state law. The California Water Code consists of a comprehensive body of law that incorporates all state laws related to water, including water rights, water developments, and water quality. The laws related to water quality (California Water Code sections 13000 to 13485) apply to waters on the national forests and are directed at protecting the beneficial uses of water. Of particular relevance for the Rim Reforestation project is section 13369, which deals with non-point-source pollution and best management practices. As described in the FEIS (Chapter 3.15), all actions in the Community Alternative result in the maintenance of the applicable beneficial uses of water in the Water Quality Control Plan for the California Central Valley Water Quality Control Board.

Endangered Species Act

The Forest Service prepared a Biological Assessment (BA) considering the effects to the California red-legged frog (Threatened) found within the project analysis area in Tuolumne County, California (USFWS 2016). That BA requested

concurrence with the determination that the overall project “may affect, not likely to adversely affect” the species. As such, the Forest Service engaged with the USFWS in formal consultation and requested a Biological Opinion (BO) in support of these determinations with the acknowledgement that effects to individuals or habitat are not discountable. Upon further review, the US Fish and Wildlife Service determined that Informal Consultation was more appropriate for this project.

The determination of “may affect, not likely to adversely affect” for California red-legged frog was limited to five locales. Section 7(a)(2) of the ESA requires Federal agencies, in consultation with USFWS and the National Marine Fisheries Service (NMFS), to insure that their actions are “not likely to jeopardize the continued existence of any” listed species (or destroy or adversely modify its designated critical habitat; 16 U.S.C. § 1536(a)(2)). Formal consultation with USFWS is completed and a concurrence letter has been received. The Rim Reforestation project unit specific treatments reflect project management requirements and the content of the BA.

Environmental Justice

Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population” requires that federal agencies make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority populations and low-income populations. As described in the FEIS (Chapter 3.10), none of the action alternatives will disproportionately impact minority or disadvantaged groups.

Floodplain Management

Executive Order 11988 applies to Floodplain Management. Floodplains are found along stream channels throughout the project area. Implementation of this decision would maintain or improve the existing condition of these floodplains by maintaining or improving meadow conditions. The intent of Executive Order 11988 would be met since this project would not affect floodplains in the Rim Reforestation analysis area and thereby would not increase flood hazard. As described in FEIS Section 3.15 Watershed, no measurable changes in stream flow are anticipated from the action alternatives.

National Forest Management Act

The National Forest Management Act (NFMA) of 1976 amends the Forest and

Rangeland Renewable Resources Planning Act of 1974 and sets forth the requirements for Land and Resource Management Plans for the National Forest System.

The Forest Service completed the Stanislaus National Forest Land and Resource Management Plan (Forest Plan) on October 28, 1991. The “Forest Plan Direction” (USDA 2010a) presents the current Forest Plan management direction, based on the original Forest Plan, as amended. The Forest Plan identifies land allocations and management areas within the project area including: Wild and Scenic Rivers, Proposed Wild and Scenic Rivers, Critical Aquatic Refuge (CAR), Riparian Conservation Areas (RCAs), Near Natural, Scenic Corridor, Special Interest Areas, Wildland Urban Intermix, Protected Activity Centers (PACs), Old Forest Emphasis Areas, and Developed Recreation Sites. Activities and areas approved under this decision and the NDRC grant are consistent with the Stanislaus National Forest Plan and all other requirements of the National Forest Management Act.

National Historic Preservation Act & Executive Order 11593, Protection and Enhancement of the Cultural Environment

The National Historic Preservation Act (NHPA) of 1966 is the principal, guiding statute for the management of cultural resources on NFS lands. Section 106 of NHPA requires federal agencies to consider the potential effects of a Preferred Alternative on historic, architectural, or archaeological resources that are eligible for inclusion on the National Register of Historic Places and to afford the President’s Advisory Council on Historic Preservation an opportunity to comment. The criteria for National Register eligibility and procedures for implementing Section 106 of NHPA are outlined in 36 Code of Federal Regulations Parts 60 and 800. Section 110 requires federal agencies to identify, evaluate, inventory, and protect National Register of Historic Places resources on properties they control.

The Stanislaus National Forest developed a specialized agreement:

“Programmatic Agreement Among United States Department of Agriculture, Forest Service, Stanislaus National Forest, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Program of Rim Fire Emergency Recovery Undertakings, Tuolumne County, California” (Rim PA, project record). This agreement defines the Area of Potential Effects (APE) (36 CFR 800.4(a)(1)) and includes a strategy outlining the requirements for cultural resource inventory, evaluation of cultural resources, and effect determinations; it also includes protection and resource management measures that may be used where effects may occur. Additionally, this agreement provides

opportunities to reforest and remove/eradicate noxious weeds within some sites after consultation with the local tribe.

Protection of Wetlands and Sole Source Aquifers

Executive Order 11990 requires protection of wetlands. Wetlands within the project area include meadows, stream channels, springs, fens, and shorelines. The FEIS (3.03 Aquatic Species; 3.15 Watershed) and the Watershed Report address wetlands and riparian vegetation. This project is consistent with Executive Order 11990 since this project would maintain or improve the condition of wetlands in the Rim Reforestation project area (3.15 Watershed).

Wild and Scenic Rivers Act

This project does not in any way assist in the construction of any water resources project that would have a direct and adverse effect on the values for which a wild and scenic river might be designated.

The Tuolumne River is a wild and scenic river. Project activities will not have an impact on the river. Under the Community Alternative, proposed activities would have negative short-term effects on the scenic quality of the river corridors; however, these effects would be minimal in comparison to the already degraded scenic quality due to the Rim Fire itself. While some sedimentation could occur, it is anticipated to be minimal and of short duration and is not expected to affect the long-term beneficial uses and purposes for which this river was designated. Over time as seedlings grow, effects to the scenic beauty, vegetative diversity and wildlife habitat are all expected to decrease until they are no longer evident. The FEIS fully discusses the potential consequences from all proposed activities within the three Wild and Scenic Rivers (p. 224-226).

In addition to complying with the laws and regulations that apply to the USFS, HUD requires HCD to demonstrate compliance with the following laws and authorities cited in 24 Code of Federal Regulations parts 50.4, 58.5, and 58.6. The following laws and controls do not apply to the project:

- **Coastal Zone Management Act** - Project is located in the Sierra Nevada Mountains not in or near any Coastal Zone as defined by Coastal Act Public Code 30103.
- **Coastal Barrier Resources Act**– Project is located in the Sierra Nevada Mountains. There are no coastal barrier resources in HUD Region IV west coast area.

- **Flood Disaster Protection Act** – This Act applies to federally assisted housing units in a 100 year floodplain and specifically the floodplain insurance requirements for such housing units. The proposed project area has no housing units within it.
- **HUD Environmental Standards for Noise Abatement and Control** –None of the project activities meet the definition under HUD Regulations.
- **Farmland Protection Act** - The project does not contain protected lands or activities will not lead to conversion of these lands from existing desired uses.
- **Explosive and Flammable Operations** - This project is in a rural/forested area. The project activities are located at an Acceptable Separation Distance (ASD) from any above-ground explosive or flammable fuels or chemicals containers. The project will not create any new operations of this kind.
- **Hazardous, Toxic or Radioactive Materials & Substances** - This project is in a rural/forested area. No such sites exist within or near the project area. Project activities will not create any hazards.
- **Airport Clear Zones and Accident Potential Zones** - This project is in a rural/forested area. The project activities are not within an airport clear zone as no airport sites exist within or near the project area.

9. Public Involvement

HCD published a Combined NOA of the FEIS for public review and comment on the State of California’s Adoption of the FEIS and Notice of Intent to Request Release of Funds on May 18, 2017. The Combined NOA was published in the Union Democrat, Sonora, CA on May 18, 2017 with a comment period extending until June 26, 2017. HCD sent the NOA to individuals, organizations, agencies, Tribes and commenters who expressed interest during the USFS 2014 - 2016 EIS public involvement process. In addition, HCD sent out an e-mail notification of the NOA to all contacts on HCD’s “Interested Parties” list.

During the review period, the Sierra Nevada Conservancy (SNC, the project coordinator for the FWHP) and the USFS hosted public workshops in Sonora (June 13, 2017) and Groveland (June 14, 2017) to solicit feedback on locations and project activities to be funded by the CDBG-NDR FWHP. See Appendix C for written comments received by HCD and HCD’s responses.

The Part 58 evaluation identifying all the HUD compliance factors was made

available to the public on HCD's NDRC web site

<http://www.hcd.ca.gov/community-development/disaster-recovery-programs/ndrc.shtml#notices>.

Public Involvement During the USFS Environmental Review

The USFS made great efforts to seek early and broad public involvement for this project due to the enormity of the Rim Fire and the tremendous public interest in management of the burned area. USFS public outreach began while the fire was still smoldering and continued up until the point of USFS's decision in August 2016. They sought input from individuals, non-profit groups, industry representatives, local governments, public agencies and Native American tribes. As a result, interested parties submitted a staggering amount of comments – in person, on the phone, in public meetings, and in thousands of letters and e-mails.

USFS engaged several collaborative groups representing a wide range of values and opinions during their NEPA process. One group, Yosemite Stanislaus Solutions (YSS), includes a wide variety of local stakeholders, including timber industry, environmental groups, government agencies and others. YSS fosters partnerships among private, nonprofit, state, and federal entities with a common interest in the health and well-being of the landscape and communities in the Tuolumne River Watershed. The group fosters an all-lands strategy to create a heightened degree of environmental stewardship, local jobs, greater local economic stability, and healthy forests and communities. The YSS group was the first to suggest the Community Alternative.

Another group, the Rim Fire Technical Workshop group, consisted of scientists and representatives from state and national environmental organizations, the timber industry, and government entities with a more national or statewide interest-base. This group was organized through the efforts of the SNC, whose mission is to initiate, encourage and support efforts that improve the environmental, economic and social well-being of the Sierra Nevada Region, its communities, and the citizens of California.

The USFS held its first field trip into the Rim Fire on October 16, 2013 with individuals from the Tuolumne Band of Me-Wuk Indians, Central Sierra Environmental Resource Center (CSERC), Sierra Club, Tuolumne County Alliance for Resources and Environment (TuCARE), California Fish and Wildlife Service, Audubon Society, Tuolumne County Supervisors, logging companies, SNC and the local collaborative group YSS. On November 14, 2013 the Rim Fire Technical

Team toured the burn area with several stops and discussions with Forest Service managers and researchers. Several field trips and meetings followed focusing initially on the salvage.

The Rim Fire Technical Team held its first reforestation specific workshop on July 10, 2014 in Sacramento, California. This was followed by a two day workshop on August 18 and 19, 2014. Each of these workshops included presentations on reforestation by scientists from the Forest Service Pacific Southwest Research Station (PSW) and other experts followed by small group discussions and proposal development.

On December 16, 2014 a public pre-scoping meeting was held to discuss the initial proposed action developed by the Forest Service. Members of YSS, the Rim Fire Technical Team and others attended (a total of 32 people).

FOR FURTHER INFORMATION: To obtain additional information about CDBG-NDR proposed action (funding), or the environmental review process, contact Patrick Talbott at telephone 916-263-2297; or email: ca-ndrc@hcd.ca.gov.

10. Conclusion

This ROD draws upon the FEIS's analysis and the compliance factor evaluation completed by HCD. HCD has complied with all procedural requirements of the environmental review including:

- Review of the FEIS and preparation of a Part 58 evaluation which ensured all HUD compliance factors were addressed;
- Filing and distribution of the FEIS and Part 58 Re-evaluation;
- Publication and distribution of a NOA of FEIS and Part 58 evaluation and Notice of Intent to Request Release of Funds;
- Preparation of this ROD.

HCD approves the proposed action (funding of the Community Alternative) as defined in this ROD. In accordance with 40 Code of Federal Regulations part 1505.2, HCD has considered all practical means to avoid or minimize environmental harm associated with the implementation of the proposed action.

HCD finds that the proposed action would best realize the underlying purpose and need as set forth in its NDRC application. The No Action Alternative would not meet the purpose and need as it would not allow for long-term forest resiliency and lessened fire intensities.

Having considered the FEIS and HCD's Part 58 evaluation and having considered the above information relied upon to meet the requirements of NEPA, as amended (42 U.S.C. § 4371 et seq.), HCD certifies that, consistent with social, economic and other essential considerations from among the reasonable alternatives available, the proposed action avoids or minimizes adverse environmental impacts to the maximum extent practicable.

Based on the foregoing determinations and findings and the entire project record, HCD hereby approves the proposed action in accordance with the above-referenced applicable statutory and regulatory requirements to facilitate funding of forest restoration efforts in the Rim Fire disaster area.

The above ROD is approved and adopted by HCD on the following date:



Date 10/5/17

Moira Monahan

Operations Branch Chief

Department of Housing and Community Development, Division of Financial Assistance

Appendix A. Treatment Unit List

HCD’s decision authorizes funding for up to 15,217 acres of reforestation, deer habitat enhancement and natural regeneration activities, and up to 5,714 acres of noxious weeds treatments in the Rim Fire burn area (treatment areas overlap and are not additive). Of the total units authorized by USFS in the 2016 Record of Decision (ROD), implementation on up to 255 reforestation units will be funded by HCD’s CDBG-NDR Forest and Watershed Health Program. For more detailed information on the treatments, see Chapter 2.01 of the adopted FEIS.

Table A.1 Reforestation, Deer Habitat Enhancement, and Natural Regeneration Treatments Authorized for Funding by HCD.

UNIT	ALTERNATIVE	ACRES
AA008	1	231
AA010	1	135
AA012	1	22
AA015	1	37
AA019	1	50
AA01B	1	73
BB004	3	59
BB005	1	16
BB006	1	65
BB007	1	43
BB008	4	161
BB009	4	24
BB010	3	87
BB011	3	55
BB014	1	32
BB015	4	48
BB016	1	43
BB017	1	20
BB020	4	66
BB021	1	125
BB022	1	113
BB024	1	53
BB025	3	32
BB026	1	19
BB028	1 - Natural Regeneration	163
BB033	1	60
BB036	3	78

UNIT	ALTERNATIVE	ACRES
BB045	5	269
BB046	1 - Natural Regeneration	13
BB047	1	43
BB051	1	101
BB053	1	74
BB055	1 - Natural Regeneration	11
BB056	1	12
BB057	1 - Natural Regeneration	28
BB059	1	27
BB060	1	29
BB062	1	23
BB063	1	21
BB065	1	53
BB066	1	27
BB069	1 - Natural Regeneration	72
BB072	1 - Natural Regeneration	29
BB073	1	21
BB076	4	38
BB080	1	23
BB083	1 - Natural Regeneration	94
BB23B	1	2
BB23C	1	6
BB43B	3	4
BB43C	3	5
CC009	1	17
CC010	1 - Natural Regeneration	11
DD001	1	54

UNIT	ALTERNATIVE	ACRES
DD002	1	19
DD003	1	29
DD006	1	52
DD007	5	28
DD04B	3	8
DD05B	3	3
DD05C	3	5
F007	1 - Natural Regeneration	65
FF002	4	14
FF007	4	96
FF008	4	68
FF009	1 - Natural Regeneration	61
GG020	4	265
GG022	1 - Natural Regeneration	27
GG024	1 - Natural Regeneration	75
GG029	1 - Natural Regeneration	183
GG030	1 - Natural Regeneration	13
GG032	3	9
GG034	4	24
GG035	1 - Natural Regeneration	72
GG036	1 - Natural Regeneration	28
HH001	1	67
HH002	3	93
HH003	3	116
HH006	3	104
HH007	3	22
HH008	3	9
HH009	3	22
HH010	3	41
HH011	3	46
HH012	1	34
HH013	1	64
HH014	1	131
HH022	1 - Natural Regeneration	60
HH023	1 - Natural Regeneration	62
HH025	1 - Natural Regeneration	3
HH028	4	18
HH038	4	93
J003	5	100
J005	5	161

UNIT	ALTERNATIVE	ACRES
J006	1 - Natural Regeneration	136
J007	1 - Natural Regeneration	35
J008	1 - Natural Regeneration	185
J009	1 - Natural Regeneration	16
J010	1 - Natural Regeneration	17
J011	1 - Natural Regeneration	15
J012	5	46
J013	1 - Natural Regeneration	72
L006	1	116
L007	1	111
L008	5	152
L009	1	66
L010	1	22
L010	1	22
L011	1	48
P010	1	61
P011	1	23
P014	1	255
P020	1 - Natural Regeneration	15
P021	1	149
P022	1	61
P023	1 - Deer Cover	25
P024	1 - Deer Cover	43
P025	1 - Deer Cover	15
P026	1 - Deer Habitat	11
P027	1 - Deer Cover	73
Q002B	1	248
Q003	1	21
Q004	1	32
Q005	1	9
Q006	1	24
Q007	1	33
Q008	1	29
Q010	1	24
Q012	1 - Natural Regeneration	61
Q013	1	23
Q014	1	24
R001	5	185
R004	1	121
R005	1	49

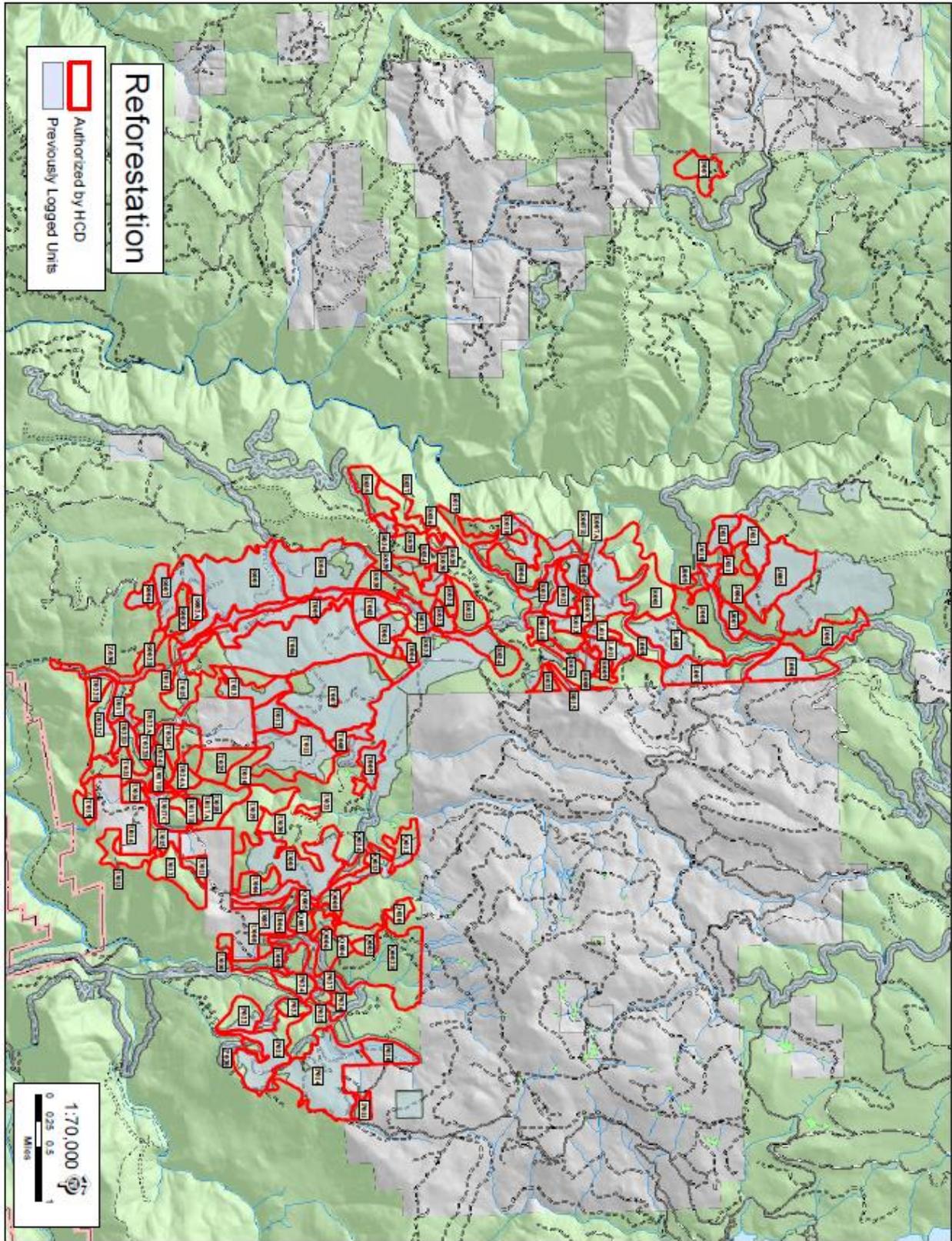
UNIT	ALTERNATIVE	ACRES
R007B	1	3
R007C	1	16
R008	1	9
R009	1	19
R011	1	54
R012	1	48
R013	1	41
R014B	1	65
R015	1	15
R016	1	38
R018	1 - Natural Regeneration	124
R019	1	33
R021	1	21
R022	1	72
R024	1	85
R027	5	60
R028	1	17
R029	5	10
R030	1	24
R031	1	30
R032	1	30
R034	1	33
R035	1 - Natural Regeneration	68
R036	5	17
R037	5	132
R038	5	46
R046	5	233
S001	5	282
S002A	Deer Cover	26
S002B	1 - Deer Cover	29
S002C	1 - Deer Habitat	42
S006	5	32
S007	5	106
T002	5	52
T003	5	78
T004	5	20
T005	5	116
T006	5	461
T007	5	340
T007	5	2

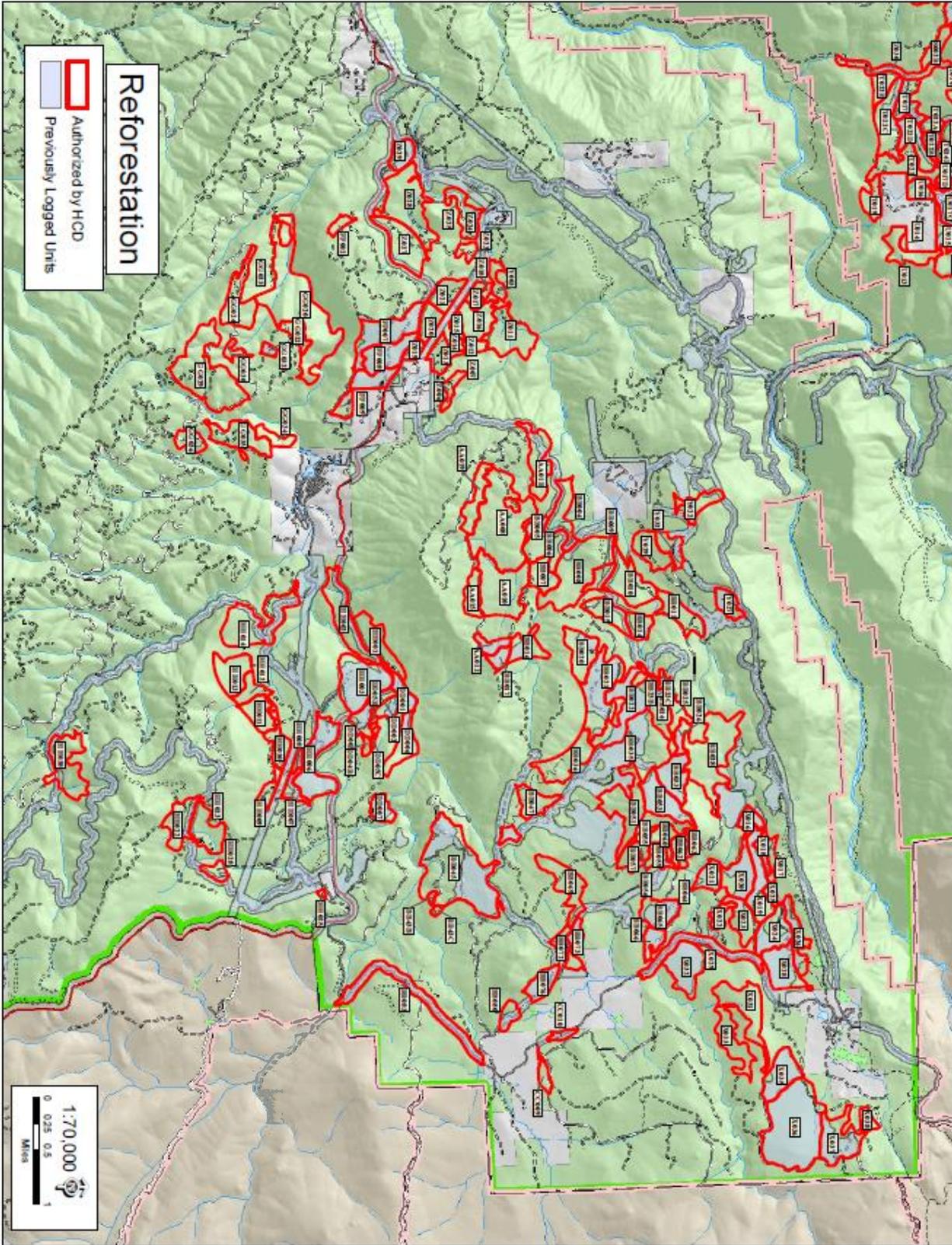
UNIT	ALTERNATIVE	ACRES
T008	5	32
T009	1	47
T011	5	198
T012	5	71
T013	5	80
T014	5	18
T015	5	64
T017	5	45
T019	4	36
T021	1 - Deer Habitat	73
T022A	1 - Deer Cover	16
T022B	1 - Deer Cover	21
T022C	1 - Deer Cover	81
T022D	1 - Deer Cover	55
T022E	1 - Deer Habitat	32
T024A	1 - Deer Cover	66
T024B	1 - Deer Cover	29
T024C	1 - Deer Habitat	42
T025	5	71
U003	1	239
U004	5	50
U005	5	18
U006	1 - Deer Cover	26
U008	1	15
U009	1	48
U010	1	13
U011	1	24
U012	5	94
U013	4	51
U014	1	5
U015	5	40
U016	1	28
U017A	1 - Deer Cover	13
U017B	1 - Deer Cover	28
U017C	1 - Deer Habitat	63
U017D	1 - Deer Habitat	12
U018	5	97
U019	5	130
U021	5	10
X016	1 - Natural Regeneration	25

UNIT	ALTERNATIVE	ACRES
X017	1 - Natural Regeneration	19
X018	1 - Natural Regeneration	18
X019	4	73
X020	1 - Natural Regeneration	69
X021	1	34
X022	1 - Natural Regeneration	19
X023	1 - Natural Regeneration	51
X024	1 - Natural Regeneration	67
X025	5	12
X026	5	48
X028	5	74
X029	1 - Natural Regeneration	70
X031	1 - Natural Regeneration	89
X032	1 - Natural Regeneration	82
X033	5	65
X035	3	67
X036	5	240
X037	5	88
X038	1 - Natural Regeneration	17
Y003	1 - Natural Regeneration	23
Y022	1 - Natural Regeneration	39

UNIT	ALTERNATIVE	ACRES
Y027	1 - Natural Regeneration	31
Y029	3	52
Y032	1 - Natural Regeneration	33
Z006	4	20
Z011	4	91
Z012	1 - Natural Regeneration	16
Z013	4	38
Z015	1 - Natural Regeneration	14
Z016	4	60
Z017	4	20
Z018	3	7
Z019	1 - Natural Regeneration	16
Z020	4	36
Z021	4	43
Z023	1 - Natural Regeneration	15
Z024	1	50
Z027	4	88
Z028	4	137
Z029	4	32
Z030	5	44

Appendix B. Treatment Maps





Appendix C. Response to Comments

The Environmental Protection Agency (EPA) published a Notice of Availability (NOA) in the Federal Register on May 26, 2017 for the FEIS completed by the U.S. Forest Service and adopted by the California Department of Housing and Community Development (HCD), acting as the Responsible Entity on behalf of the U.S. Department of Housing and Urban Development. CEQ regulations state that “an agency may request comments on a final environmental impact statement before the decision is finally made” (40 CFR 1503.1(b)). Pursuant to the CEQ regulations, HCD invited the public to comment on the FEIS. This 30-day comment period ended on June 26, 2017.

In response to HCD’s request for written comments, interested parties submitted 15 unique letters and 23 form style letters. Many comments pertain to both the adopted Rim Fire Recovery FEIS and the adopted Rim Fire Reforestation FEIS. As these are separate decisions, HCD has divided the response to some comments between this document and the Rim Fire Recovery Record of Decision according to the proposed actions referenced in the comment.

This Appendix contains the summary comment statements (as allowed under 40 CFR 1503.4(b)) and responses to substantive issues.

- 1. Comment:** California forest lands have proven time and again that they can regenerate without disruptive human intervention. The Rim Fire site is further evidence of that. I urge you to abandon your plans to use this grant to log live and fire killed trees, disturb undergrowth with heavy machinery, apply poisonous herbicides and then plant seedlings in the Rim Fire sites that are already naturally regenerating with native trees.

Response: HCD recognizes that natural regeneration is occurring in some areas of the Rim Fire, those that had or have a green tree seed source. Unfortunately, the Rim Fire caused extensive vegetative changes across this landscape. High severity patches were uncharacteristically large and accounted for a higher proportion (35%) of the burned area than historically occurred (Miller et al. 2009).

The FEIS completed by the USFS will not remove any green/live trees outside of older plantations that survived the Rim Fire and none of that work is proposed in the Community Development Block Grant - National Disaster Resiliency (CDBG-NDR) program and therefore not a part of this decision.

The USFS is proposing to reforest less than 25,000 acres of the 257,000 acres that burned in the Rim Fire. This number includes over 4,000 acres of natural regeneration units which will be monitored and not planted if the desired regeneration occurs. It is also important to note that almost 11,000 acres of potential conifer forestland are not being proposed for any reforestation treatment for the following reasons: 1) areas were too steep for mechanical treatment and the competing vegetation too tall to treat by hand; 2) the number of acres burned fall within the historical range of natural variability (contiguous openings without live trees were less than 22 acres in size); 3) areas are surrounded by green and mature trees with natural regeneration very likely to occur; 4) ongoing research projects; 5) fire management objectives and goals; and 6) some deer emphasis areas where oak is the desired dominant species. Under this decision, about 10,000 acres have been approved for funding provided by the CDBG-NDR program.

The Forest Service proposed reforestation within and adjacent to areas that were salvage logged or had fuel treatments under the Rim Recovery EIS, within burned 15-to 40-year-old existing plantations and large areas where conifer stocking is low and the site is capable, available and suitable for conifer growth. The mosaic pattern of the fire resulted in areas of high, moderate and low vegetation burn, and reforestation focuses on areas where few if any conifers survived to provide forest cover to meet desired future conditions.

Without mature live trees to provide a seed source within close proximity to the burned areas, or the lack of a viable and healthy cone crop, natural conifer regeneration cannot be counted on within large portions of the Rim Fire. In addition, brush is already beginning to dominate sites, inhibiting conifer survival and growth. Conifer seed dispersal is often sporadic in nature (Shatford et al. 2007). Research in the Sierra Nevada shows that it can take 30 to 50 years for conifers to establish among dense sprouting shrubs following high-severity wildfire (Russell et al. 1998). Once established, the intense competition with sprouting vegetation for light and water results in slow seedling development (Shatford et al. 2007). Nagel and Taylor (2005) estimated that on average it took 30 years for white fir seedlings to grow one foot in height when growing among shrubs; and, about 120 years of fire suppression for white fir to establish and overtake chaparral vegetation.

The Larson Fire portion of the 1987 Stanislaus Complex Fire displays similar trends where over 13,000 acres of productive mixed-conifer forest was severely burned and never reforested. After 10 years, sprouting vegetation still dominated about 85% of the area (USDA 2004b). Today, 30 years after the fire, conifer regeneration is negligible. Without intervention much of the uncharacteristically large high-severity patches of the Rim Fire will persist as continuous woody brushfields that over time become so dense that they impede wildlife movement and significantly delay if not remove the possible establishment of diverse mixed-conifer forest habitat.

The brushfields, along with the dead trees that fall among them, can also quickly spread high intensity fire. Under these situations, natural conifer regeneration resulting in a forested landscape could take hundreds of years to develop.

- 2. Comment:** I urge you to reject the inadequate and outdated Forest Service Reforestation Final Environmental Impact Statement, and start fresh with new environmental analysis that takes into account not only the habitat loss that will occur, but also the damage to watersheds which will result from removing all the current vegetation, and the impacts to our climate that will result from biomass burning carbon emissions.

Response: The USFS Rim Fire Reforestation Final Environmental Impact Statement (FEIS) was released in April 2016 and the Record of Decision (ROD) signed on August 17, 2016. The 662 page FEIS analyzed the potential impacts of all of the proposed activities to wildlife habitat and species (FEIS, p.341-459) and watersheds (FEIS, p.301-340). In addition, the following resources were also fully analyzed; air quality, aquatic species, cultural resources, fire and fuels, invasive species, range, recreation, sensitive plants, society, culture and economy, soils, special areas, vegetation, and visual resources.

UC Davis Adjunct Professor Jim Thorne, modelled climate change conditions within the Rim Fire landscape over the next 85 years. The Forest Service considered that information to formulate site specific treatment prescriptions. Increased temperatures, snowpack decline, drier summers and increased wildfire activity, size and severity are known and predicted effects of climate change to the project area. The effects of climate change was evaluated by each resource specialist including 3.05 Fire and Fuels (p.

117), 3.13 Vegetation (p. 246-247, 263-264) and 3.16 Wildlife (p. 445). The Forest Service recognized that the structure and function of future forests are uncertain due to the effects of climate change (p. 246-247) which will influence future fire regimes and enhance the proportion of early seral habitat on the landscape (p. 246-247). Climate change will also influence plant water balance, mortality, fire risk and microclimate frequency (p. 263-264). The abundance of microclimates in this topographically diverse landscape will contribute to coniferous forest connectivity and enhance the ability of tree species to move and adjust to future climate conditions and disturbances (Groves et. al. 2012). Because of these consequences several things were done to ensure future forests survive and thrive across this landscape; 1) All seedlings will be moved up one elevational band (500 feet) to ensure they are better adapted to the warmer and drier climate; 2) In the majority of the reforestation areas initial planting densities and long-term canopy cover goals were adjusted downward to recognize the greater influence of fire on this landscape; 3) South and southwest facing low elevation slopes were dropped from reforestation activities where the Forest Service identified areas of frequent fire and low conifer potential; 4) More ponderosa pine will be planted because of its tolerance to drought and fire; and 5) Strategic Fire Management Areas (SFMAs) were identified by the Forest Service and specific reforestation strategies applied to these areas throughout the Rim Fire. These fuel reduction areas are designed to interrupt fire progression such that the fire reduces in intensity and becomes a surface fire. SFMAs serve to break up the continuity of the vegetation across the landscape and create mosaic patterns. The overall pattern impedes fire spread.

Comment: We are fully supportive of the Final Environmental Impact Statement adopted by the Forest Service for the reforestation of the Rim Fire burned area. In fact, we worked closely with our collaborators in the Yosemite Stanislaus Solutions group to find a common-ground solution between industry and environmental groups for the reforestation of the Rim Fire. We are grateful that the Forest Service largely adopted our common-ground solution in its FEIS.

We urge the California Department of Housing and Community Development to adopt the US Forest Service's Final Environmental Impact Statement and move forward to implement the Forest and Watershed Health Program under the HUD National Disaster Resiliency Program. The Rim

Fire scorched 250,000 acres of the Tuolumne Watershed nearly 4 years ago and the landscape is badly in need of reforestation as quickly as possible. In fact, it's unfortunate that so little restoration has happened thus far.

Response: Comment noted for project record.

3. **Comment:** Please note that our environmental center strongly supports the adequacy and the mitigations contained in the original NEPA analysis for the Rim Fire Reforestation project produced by the Forest Service. Many uninformed conservation activists have been misled into believing that widespread logging and other negative actions are proposed, when in reality the removal of dead trees, brush, and other fuel is beneficial both for reforestation and for reducing the risk of new stand-replacing high severity wildfires.

Response: Comment noted for project record.

4. **Comment:** YSS participated in every stage of the development of the Rim Reforestation FEIS. In fact, the Rim Reforestation ROD reflects a modified alternative that was collaboratively developed and put forth by YSS. YSS continues to strongly support the ROD and is unanimous (unusual for a collaborative group) in the desire to see the entire area proposed in the FEIS to be reforested using the 4 different alternative treatments and reforestation schemes, including reduction of fuel loadings prior to planting and establishment of fuel breaks to protect the plantations and the public from future catastrophic wildfires. We strongly support adoption of the FEIS as-is and urge the HCD to move forward with funding the reforestation and restoration work as described in the ROD.

Response: Comment noted for project record.

5. **Comment:** We urge you to withdraw your proposal to adopt the U.S. Forest Service's 2014 and 2016 Environmental Impact Statements (EISs) as a means to comply with the National Environmental Policy Act (NEPA) as those documents are insufficient and/or significantly outdated with respect to several key issues such as climate change impacts and natural regeneration of conifer forest.

Response: The analysis completed in 2016 evaluated climate change impacts from the proposed activities as well as existing and potential natural

regeneration and impacts from the proposed actions. No new information has been brought forward that would change the existing analysis. The analysis evaluated reforestation activities through 2029 and noxious weed eradication through 2030 (Appendices R and N, respectively).

6. **Comment:** HCD must comply with the California Environmental Quality Act (CEQA) before taking any steps to approve or carry out any part of the overall project for which HUD funds are sought.

Response: HCD will comply with all applicable federal and state laws, rules, and regulations, including the California Environmental Quality Act (CEQA) before authorizing the use of any grant funds.

7. **Comment:** To date, roughly 4,000 to 5,000 acres of the planned logging in the Rim fire area has been completed, which means that most of the acres planned for logging and artificial planting have not been logged. Whether or not the remaining acres become logged is therefore highly dependent on the HCD funding, as are the resulting climate change impacts of logging these remaining acres of post-fire habitat, and burning the resulting logs and woody material to generate kilowatts (or simply piling and burning them).

Response: To date, over 15,000 thousand acres of logging have been completed in the Rim Fire area. This funding is focusing reforestation treatment on areas that have already been logged during salvage and hazard tree operations (see Appendix B for a map of treatment areas).

8. **Comment:** The failure of the 2014 and 2016 Rim fire EISs to fully analyze the climate impacts of burning forest-sourced woody biomass are documented in the EISs (or their associated record of decision) themselves.

Response: No forest-sourced woody biomass removal is proposed in this project.

9. **Comment:** However, by the time of the Forest Service's 2016 EIS—which incorporated the 2014 EIS and added over 22,000 acres of “reforestation” and herbicide spraying, plus a few thousand acres of additional post-fire logging—the agency fundamentally changed the planned logging, after acknowledging that the unlogged fire-killed trees were no longer merchantable as lumber, due to some decay. The Forest Service stated that planned logging would now be conducted for biomass burning for

energy production instead of as standard “salvage” logging.

As a result of the change in plans, the acreage that was changed to biomass logging has not been analyzed in the 2014 and 2016 EISs with respect to the climate change impacts of the greenhouse gas emissions that will result from burning in biomass plants (or piling and burning) fire-killed trees of all sizes on more than 20,000 acres, as opposed to removing and burning as biomass just small snags on only 2,671 acres;

Response: The commenter’s statement that the Rim Fire Reforestation EIS “incorporated the 2014 EIS” is incorrect. The Rim Recovery EIS and Rim Fire Reforestation EIS are separate documents that stand alone. Page 5 of the Rim Fire Reforestation EIS describes how the document relates to other Rim Fire projects. The commenter also states that the Rim Fire Reforestation EIS added a few thousand acres of post-fire logging and biomass removal, but neither of these activities was proposed in the Reforestation EIS. The project does propose to thin within 15 to 40 year old plantations that survived the Rim Fire. Page 23 of the FEIS provides a detailed description of the proposed thinning activities that would take place on up to 13,000 acres.

10. Comment: The EISs did not analyze the climate change, or wildlife habitat, impacts of the additional \$22 million grant from the Trump Administration that would be used to create new forest biomass energy production plants in California. Consequently, these deficiencies must be analyzed in a supplemental draft EIS, as required by the regulations at issue here.

Response: This comment is outside the scope of this decision.

11. Comment: Unlogged areas of the Rim fire now contain abundant natural regeneration that must be addressed.

The Forest Service’s 2016 EIS (p. 233) states that, in 2014 and 2015 (just one to two years post- fire), the Forest Service gathered data on natural post-fire conifer regeneration within field plots. The 2016 EIS (p. 240) acknowledged that the Forest Service’s post-fire logging operations killed 72% of the natural post-fire conifer regeneration, but the EIS (p. 256) downplayed this impact by reporting that there was no conifer regeneration in 71% of the Forest Service’s plots within high- intensity fire patches. However, in 2017 (four years post-fire), after two to three more years of

post-fire growth and recruitment of new conifer seedlings and saplings, these 2014/2015 data are now outdated and inaccurate. Consequently, this new information must be addressed, and as a result, neither the 2014 nor the 2016 EISs can be relied upon under either NEPA or CEQA to conduct further logging, herbicide-spraying, or reforestation activities in the Rim fire.

Specifically, due to abundant new natural recruitment of conifer seedlings in high-intensity fire patches in 2016 and 2017, there is now natural conifer regeneration in well over 80% of field plots (see Appendix A, B), and even the relatively few plots with no conifer regeneration within plot boundaries have conifer seedlings/saplings growing just outside the plots. Overall, there are now hundreds of naturally regenerating conifer seedlings/saplings growing in the high-intensity fire patches—and thousands per acre in many places. Nowhere has the impact of planned logging on this new forest regeneration growth been analyzed under NEPA or CEQA, nor has the EISs' claimed reforestation need been reevaluated under NEPA or CEQA in light of this new information. Moreover, nowhere has the climate change impacts of crushing and killing this abundant and vigorous new forest growth—and the resulting release of CO₂, as well as the forgone or reduced carbon sequestration opportunities—been analyzed under NEPA or CEQA. Thus, in order to adequately and meaningfully address this new natural conifer regeneration, a supplemental draft EIS is necessary.

Response: The information provided by the commenter was for only seven units (1% of the total number of reforestation units) and included just 32 plots, all within areas where residual overstory live trees have persisted post-Rim Fire and either outside of the high severity burn areas or adjacent to non-high severity burn areas. Five of those plots or 16% contained no natural seedling regeneration. The Reforestation project includes more than 570 units and the surveys conducted by the USFS in 2014 and 2015 completed 1,673 plots including 1,280 plots within high severity burn areas.

It is important to note though that USFS plots done in this same area returned similar results, a small sample of only 32 plots does not adequately capture the variability across such a large area, which is why the larger sample size of 1,673 USFS plots provides a more statistically precise representation of the entire project area.

The Reforestation FEIS (p. 256-258) explains that conifer regeneration

tends to be concentrated in higher densities near seed sources, which also indicates that conifer regeneration is not well distributed throughout the project area. As noted in the FEIS (p. 258), Bonnet et al. (2005) found that seedling establishment was very successful in patches of high-severity that were within about 40 feet of unburned forest canopy, but decreased exponentially toward the center of burn patches. Bohlman (2012) observed a similar trend in the Freds Fire on the Eldorado National Forest. Results from the regeneration survey within the Rim Reforestation project area exhibited a similar trend (Reforestation FEIS Figure 3.13-4). Therefore, describing seedling density using only the total number of seedlings averaged across a large area would give the inaccurate impression that desirable densities of conifer regeneration are well distributed across high-severity burn areas. In contrast, averaging the seedling density based on the number of stocked plots would provide a more accurate representation of seedling densities where seedlings occur. Moreover, the FEIS does not state that the estimated 9,825 acres that are regenerating occur as one contiguous block (or vice versa). While a small proportion of conifer regeneration occurs farther away from seed sources (Reforestation FEIS Figure 3.13-4), it is more likely that it occurs in relatively higher densities near edges of high-severity patches or near small patches of live trees that survived the fire in high-severity burn areas.

Research suggests that secondary succession from shrub-dominated vegetation to conifer forest (especially mature forest) can require longer than 100 years without human intervention. While studies have observed conifer regeneration in high-severity patches (Shatford et al. 2007), seedling density is often lower following high-severity fire than in lower severity burns (Crotteau et al. 2013). Similarly, Russell et al. (1998) reported that successful post-fire establishment of conifers among shrubs required 30 to 50 years and then several additional decades before conifers overtook the site. The findings of Conard and Radosevich (1982b) and Nagel and Taylor (2005) also suggest that development of conifer forest in areas dominated by shrubs is slow and requires well over 100 years in the absence of fire. This slow succession results from a low abundance of conifer seed sources and intense shrub competition that slows the growth of conifer seedlings. Crotteau et al. (2013) found that about 60% of conifer seedlings were overtopped by shrubs 10 years after a high-severity fire in a mixed-conifer forest. Shatford et al. (2007) concluded that following high-severity fire,

shrubs would likely overtop and slow development of conifer seedlings for about 20 years, and beyond 20 years, establishment of conifer forest would be unpredictable. Nagel and Taylor (2005) observed white fir seedlings growing among shrubs that had grown only one foot over the span of 30 years. Most importantly, shade-tolerant conifers such as white fir often dominate conifer regeneration following large high-severity fires (Bohlman 2012; Collins and Roller 2013; Crotteau et al. 2013; Shatford et al. 2007), which is an indication that large high-severity fires are causing an ecosystem type shift (Collins and Roller 2013; Crotteau et al. 2013). These findings were discussed in the draft EIS (p. 239-240, 255, 270-276, 283, 288). The final Reforestation FEIS (p. 7, 241-242) includes additional clarifications and scientific literature citations regarding the potentially long time required to naturally regenerate conifers in large high-severity patches.

12. Comment: As mentioned above, one of the two main premises of the proposed logging plan in the Rim fire is the assumption, based on Forest Service surveys conducted in 2014/2015, that there is low or no ground cover in high-intensity fire patches, creating potential for significant erosion and sedimentation in watersheds during rains. However, as with natural conifer regeneration, this premise is now outdated and inaccurate. In reality, unlogged high-intensity fire areas consistently have 90-100% ground cover (Appendix A)—far higher than the thresholds used by the Forest Service to indicate potential for erosion.

Moreover, post-fire logging, because it is ground-based, using heavy machinery, kills and removes nearly all of the existing ground cover, and creates increased potential for erosion and sedimentation in watersheds; these effects tend to be chronic and long-lasting after post-fire logging. So, for this reason as well, the Forest Service's 2014 and 2016 EISs cannot be lawfully adopted under NEPA or CEQA.

Response: The above mentioned premise is not found in the Reforestation FEIS. Post-fire vegetation response has provided a high level of ground cover in most locations 4 years post fire.

13. Comment: In addition, since the last time the Forest Service conducted field surveys in the Rim fire, in 2014/2015, there may be many rare and sensitive plant species that have grown in, and which would be harmed by planned ground-based logging, herbicide spraying, and artificial tree planting.

Response: Sensitive plant surveys were conducted from 2014 through 2016 and dozens of areas have been identified for protection. The ability for new populations of these plants to grow into the area is far less so many years after the fire because of the amount of native vegetation cover across these sites which are far more competitive than the sensitive plant species. In addition, any new sensitive plant populations discovered during implementation will be protected.

14. Comment: In addition to the issues described above, HCD has failed to provide for meaningful public comment. HCD intends to request release of funds on June 27, 2017, and thus HCD cannot evaluate and address public comments before taking action. We are thus notifying HCD of our objection to any request for release of funds under either NOI pursuant to 24 C.F.R sections 58.73 and 58.75(b) and (d). Specific grounds for objection include, but are not necessarily limited to, HCD's failure to comply with 24 C.F.R. sections 58.14 (requiring coordination of federal and state environmental review responsibilities), 58.52 (requiring preparation of a supplemental EIS if the "project" under consideration is different from that considered in the adopted EIS), and 58.53 (requiring evaluation of environmental factors not previously addressed, analysis of consistency between the project under consideration and the project evaluated in the prior EIS, and updating of EIS to reflect "new environmental issues and data . . . which may have significant environmental impact on the project area covered by the prior EIS").

Response: HCD's adoption of the USFS FEIS is a separate process from requesting the release of funds from HUD. As stated in HCD's public notice dated May 18, 2017, "HUD will accept objections to its release funds and HCD's certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later)." Objections should be directed to HUD, and any potential objectors should contact HUD to verify the actual last day of the objection period.

15. Comment: While the Project speaks to "reforestation", the fact of the matter is that unlogged areas in the Rim fire area already contain considerable natural tree regeneration. Therefore, there is no need to reforest because forest regeneration is already naturally occurring. Consequently, this Project can lead to significant—and entirely unnecessary—environmental impacts.

Moreover, contrary to the assumption guiding the 2016 FEIS that forests need reforestation treatments to regenerate after wildfire, published studies that have investigated this issue have found substantial, heterogeneous natural conifer regeneration following high-severity fire in mixed-conifer and yellow pine forests (Raphael et al. 1987, Shatford et al. 2007, Donato et al. 2009, Haire and McGarigal 2010, Crotteau et al. 2013, DellaSala and Hanson 2015),¹³ especially given that natural post-fire conifer regeneration continues to occur in successive years post-fire (Shatford et al. 2007). This is especially true when such studies assess natural succession over time, since in the driest forests natural post-fire conifer regeneration in high-severity fire patches may be very sparse or absent for the first decade or so post-fire, but then increases substantially (Haire and McGarigal 2010). As discussed in the JMP et al. comments, the 2014 FEIS and 2016 FEIS have omitted critical data on natural regeneration already occurring in the Rim Fire area.

Moreover, reforestation treatments can actually reduce forest health and resilience. Reforestation treatments after wildfire or bark beetle outbreaks are typically associated with salvage logging of dead and living trees, which has been widely shown to be ecologically destructive. In addition, shrub eradication of the type contemplated in the 2016 FEIS often occurs through spraying herbicides, and assumes that natural shrub regeneration competes with planted seedlings. As a result, reforestation treatments tend to result in plantations that are unnatural and significantly different from naturally revegetated areas because they lack snags, shrubs and other natural ground vegetation which provide essential habitat for wildlife, and are subjected to toxic herbicides.

Response: As discussed above, natural regeneration within the Rim Fire footprint is quite variable and mostly non-existent in high intensity burn areas based on over 1,600 plots taken by the USFS. The analysis considered the papers provided by the commenter as well as the subject matter addressed by those papers. Based on the USFS's review of those papers and the much larger body of scientific literature, the Forest Service and HCD have reached different conclusions than those reached by the commenter.

Specifically, the USFS and HCD believe that the weight of scientific literature indicates that the beneficial effect of shrubs on conifer establishment and growth is overshadowed by the foremost limiting factor: water availability. As

noted in the FEIS (p. 262-263), “water availability has been shown to override the beneficial effects of improved nutrient availability on tree growth” provided by shrubs. The FEIS (p. 238-239, 241-242, 260, 270-271, 278, and 281) cites extensive research that observed increased conifer seedling survival and growth when competing vegetation was reduced (e.g., Balandier et al. 2006; Conard and Radosevich 1982a; Lanini and Radosevich 1986; McDonald and Abbott 1997; McDonald and Fiddler 1995; McDonald and Fiddler 1997; McDonald and Fiddler 2001; McDonald and Fiddler 2010; Oliver 1990; Powers and Ferrall 1996; Stephenson 1990; Stuart et al. 1993; Tappeiner and Radosevich 1982; Zhang et al. 2006).

As demonstrated in the FEIS (p. 238-239, 241-242, 260, 262-263, 270-271, 278, and 281) and in the discussion addressing Horton et al. (1999), there is an abundance of scientific literature demonstrating that the beneficial effects of shrubs on conifer establishment and growth is overshadowed by the foremost limiting factor, which is water availability. Therefore, any benefit from increased soil fertility or protection from solar radiation by shading is inconsequential because shrubs effectively compete with conifer seedlings for water. Second, the study did not control for variability in site conditions. In other words, the methodology described no site preparation or control of shrubs for the “open” study plots; thus suggesting, there is some other environmental variable affecting the suitability of the “open” study site to support vegetation. If not suitable for shrubs, then these “open” sites likely had limited suitability for conifer seedlings, which may have contributed to higher conifer seedling success in the study site with higher shrub cover.

Russell et al. (1998) documented the succession of post-fire shrub regeneration leading to forest domination. The findings from this study are similar to findings of other research cited in the FEIS (p. 241-242, 272-276, 285) that documented suppressed conifer seedlings growing among post-fire vegetation (Collins and Roller 2013; Crotteau et al. 2013; Nagel and Taylor 2005; Shatford et al. 2007). Russell et al. (1998) found that successful post-fire establishment of conifers among shrubs required 30 to 50 years and then several additional decades before conifers overtook the site. The FEIS (p. 241, 272-276, 285, 288) agrees with the findings of Russell et al. (1998) and acknowledges the long time period required for conifer establishment and development.

The commenter cites Haire and McGarigal (2010) which discusses natural

conifer seedling establishment rates in high severity fire patches in New Mexico and Arizona. The results of this study have limited applicability to the Rim Fire area based on differences in vegetative composition, geography, fire size, high severity patch size, and climate. For example, the two fires analyzed by Haire and McGarigal had high severity patches as large as 634 hectares (1,567 acres) and 947 hectares (2,340 acres). In comparison, the largest high severity patch size in the Rim Fire was 21,426 hectares (52,944 acres from Jones et al 2016). The FEIS (p. 10 and 11) specifically discusses patch size in yellow pine and mixed conifer forests. It states, “historic mean high-severity patch sizes ranged from 4.2 to 22.5 acres with the majority of the high-severity patches being less than 10 acres (Collins and Stephens 2010; Miller et al. 2012; Mallek et al. 2013). Larger mean patch sizes were associated with fir-dominated areas, while pine-dominated areas were more likely to experience smaller (<15 acres) mean high-severity patches (Collins and Stephens 2010).

Furthermore, Haire and McGarigal (2010) state that “the wettest period in the region in the twentieth century occurred from 1976 to 1999.” This is the time period in which seedlings were established following the fires, and likely increased water availability to conifers. The Rim Fire, on the other hand, occurred in the middle of one of the worst droughts in California history. As stated above, the USFS has found similar results of natural regeneration in areas adjacent to green trees. Unfortunately, the largest high severity patch on the Rim Fire is 9 to 13 times larger than the patches in this study, and several other patches within the Rim Fire are larger than 2,340 acres, the largest within the study. In addition, as stated in the FEIS, the USFS will be utilizing natural regeneration within the Rim Fire, but for long-term resiliency they are proposing to reduce fuels across these landscapes before moving forward with managed stands—critical in this landscape that will burn again.

Alternative 4 also utilizes this similar concept of allowing trees to seed into the landscape over time and not planting the entire area all at once. As the planted and natural seedlings in these areas mature, they will produce cones that will provide seed for the adjacent areas, reforesting these areas over time as opposed to planting the entire area initially.

While HCD and USFS recognize that there is room for reasonable minds to disagree on complex scientific issues, HCD believes that the conclusions advanced by the commenter are not supported by the research papers it

submitted or the body of scientific literature, as discussed above (and in the FEIS).