

Basic Information Form

Park Name: Sequoia & Kings Canyon NP

PEPC Project ID: 119393

Related Project(s): 107200

Project Status: Proposed

Compliance Status: In Process

Project Target Start: 10/11/2023

Project Title: Minor Change to Selected Alternative in FONSI for Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment

Secondary Title: Track Planted Seedling Survival and Increase Installations to Monitor Environmental Conditions in Severely Burned Sequoia Groves

Project Description: This project is to slightly amend the monitoring component of the selected alternative in the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment to:

- 1) Track seedling survival in up to six severely burned sequoia groves and an adjacent proposed fisher critical habitat corridor by installing small plant tags on approximately 27 seedlings within each monitoring plot (identified within the EA) in all of the areas that are planted in accordance with the selected alternative. The monitoring plots and associated plant tags will help monitor the effectiveness of the planting treatment as it was prescribed, and enable the NPS to learn how successful the planting was and if/when to consider supplemental planting; and
- 2) Increase the monitoring installations from 60- -as analyzed in the EA- -to roughly 160 installations within Redwood Mountain Grove and the adjacent fisher habitat corridor (if planted) to monitor seedlings survivorship and growth under differing environmental conditions. This will also include tagging approximately 150 seedlings within up to 18 (total) acre-sized blocks across these two areas. This "seedling-climate-shrub" would involve intentionally planting under shrubs and in clumps in specific areas so that we can test the degree to which shrubs can either facilitate or inhibit seedling survival and growth. The common understanding for foresters is that shrubs always compete with planted seedlings, yet some evidence shows that those shrubs can also facilitate survival and growth through shading and increased soil moisture. We can measure the degree to which shrubs are altering these conditions using climate sensors across a range of site conditions and proximity to shrubs, and linking that with the data on survival and growth. Knowing when and where shrubs may act as facilitators vs competitors is critical to inform planting designs, particularly in these novel postfire environments.

In addition, this amendment further clarifies that the 600 plot markers for monitoring that are identified in the selected alternative would be removed if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying plot boundaries (the EA assumed these markers would be in place for 40 years). This amendment also clarifies that the 160 monitoring installations described in #2 above would remain onsite for approximately 3 years (as opposed to the 40 years assumed in the EA). Plant tags would also be removed as seedlings/trees die, grow to a size such that a plant tag is no longer needed to identify precise individual, or if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying the individual seedling/tree that is monitored. The NPS anticipates that most plant tags will be removed within 20 years of initial planting, though some may remain present for 40 years.

Project Leader: Andrew Bishop

NEPA Specialist: Elizabeth Boerke

NHPA Specialist: Juanita Bonnifield

Project Type: Restoration

Project Category: Plant Communities (Vascular and Non-Vascular), Research, Soil, Terrestrial Ecosystem, Vascular Plant, Vegetation, Wilderness

Locations: Tulare County, CA

File List

- FONSI for Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment (PEPC# 107200) incorporated by reference

Last Updated Date: 10/06/2023

Last Updated By: ELBoerke



ENVIRONMENTAL SCREENING FORM (ESF)

Updated Sept 2015 per NPS NEPA Handbook

A. PROJECT INFORMATION

Project Title: Minor Change to Selected Alternative in FONSI for Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Environmental Assessment

PEPC Project Number: 119393

Project Type: Restoration

Project Location:

County, State: Tulare, California

Project Leader: Andrew Bishop

B. PROJECT DESCRIPTION

This project is to slightly amend the monitoring component of the selected alternative in the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment to:

- 1) Track seedling survival in up to six severely burned sequoia groves and an adjacent proposed fisher critical habitat corridor by installing small plant tags on approximately 27 seedlings within each monitoring plot (identified within the EA) in all of the areas that are planted in accordance with the selected alternative. The monitoring plots and associated plant tags will help monitor the effectiveness of the planting treatment as it was prescribed, and enable the NPS to learn how successful the planting was and if/when to consider supplemental planting; and
- 2) Increase the monitoring installations from 60- -as analyzed in the EA- -to roughly 160 installations within Redwood Mountain Grove and the adjacent fisher habitat corridor (if planted) to monitor seedlings survivorship and growth under differing environmental conditions. This will also include tagging approximately 150 seedlings within up to 18 (total) acre-sized blocks across these two areas. This "seedling-climate-shrub" would involve intentionally planting under shrubs and in clumps in specific areas so that we can test the degree to which shrubs can either facilitate or inhibit seedling survival and growth. The common understanding for foresters is that shrubs always compete with planted seedlings, yet some evidence shows that those shrubs can also facilitate survival and growth through shading and increased soil moisture. We can measure the degree to which shrubs are altering these conditions using climate sensors across a range of site conditions and proximity to shrubs, and linking that with the data on survival and growth. Knowing when and where shrubs may act as facilitators vs competitors is critical to inform planting designs, particularly in these novel postfire environments.

In addition, this amendment further clarifies that the 600 plot markers for monitoring that are identified in the selected alternative would be removed if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying plot boundaries (the EA assumed these markers would be in place for 40 years). This amendment also clarifies that the 160 monitoring installations described in #2 above would remain onsite for approximately 3 years (as opposed to the 40 years assumed in the EA). Plant tags would also be removed

as seedlings/trees die, grow to a size such that a plant tag is no longer needed to identify precise individual, or if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying the individual seedling/tree that is monitored. The NPS anticipates that most plant tags will be removed within 20 years of initial planting, though some may remain present for 40 years.

C. RESOURCE IMPACTS TO CONSIDER:

Resource	Potential for Impact	Potential Issues & Impacts
Air Air Quality	None	Impact: This amendment is not anticipated to have any effect on air quality as it does generate dust or modify the frequency of monitoring such that it would increase emissions.
Biological Migratory birds	None	Impact: This amendment is not anticipated to have any effect on migratory birds as it does not change the frequency of monitoring activities such as to disturb wildlife beyond that which is evaluated in the EA.
Biological Nonnative or Exotic Species	None	Impact: This amendment is not anticipated to have any effect on nonnative or exotic species beyond those described in the EA as it does not change the frequency or intensity of monitoring activities such as to increase the potential for transporting non-native seeds or plant material to the project areas beyond that which is evaluated in the EA.
Biological Sequoias	None	Impact: This amendment is not anticipated to have any effect on sequoias beyond those described in the EA as it does not change the frequency of onsite work such as to disturb vegetation beyond that which is evaluated in the EA.
Biological Species of Special Concern or Their Habitat	None	Impact: This amendment is not anticipated to have any effect on species of special concern or their habitat as it does not directly or indirectly modify habitat nor change the frequency of monitoring activities such as to disturb wildlife beyond that which is evaluated in the EA.
Biological Vegetation	None	Impact: This amendment is not anticipated to have any effect on vegetation beyond those described in the EA as it does not directly disturb vegetation or change the frequency of onsite work such as to indirectly disturb vegetation (i.e., no increased foot traffic) beyond that which is evaluated in the EA.
Biological Wildlife and/or Wildlife Habitat including terrestrial and aquatic species	None	Impact: This amendment is not anticipated to have any effect on wildlife beyond those described in the EA as it does not directly or indirectly modify habitat nor change the frequency of monitoring activities such as to disturb wildlife beyond that which is evaluated in the EA.
Cultural Archeological Resources	None	Impact: This amendment is not anticipated to have any effect on archeological resources as mitigations have been identified to avoid archeological resources, consistent with the EA.
Cultural Cultural Landscapes	None	Impact: This amendment is not anticipated to have any effect on cultural landscapes. There are no identified cultural landscapes in the project areas.

Cultural Ethnographic Resources	None	Impact: This amendment is not anticipated to have any effect on ethnographic resources. There are no identified ethnographic resources in the project areas.
Cultural Museum Collections	None	Impact: This amendment is not anticipated to have any effect on museum collections.
Cultural Prehistoric/historic structures	None	Impact: This amendment is not anticipated to have any effect on structures as the change involves not use of or modification to structures, whether prehistoric or historic.
Geological Cave Resources	None	Impact: This amendment is not anticipated to have any effect on cave resources.
Geological Geologic Features	Potential	Issue: Burying up to 88 monitoring devices (1.75 x 2.88 x 1.41 inches) in Redwood Mountain Grove and the adjacent fisher habitat corridor Impact: The installation of plant tags is not anticipated to have any effect on soils as plant tags are attached to the seedlings via wire. The burying of up to 88 monitoring devices in Redwood Mountain Grove would involve additional disturbance beyond that included in the EA, equivalent to an additional 88 holes dug, similar to those for planting seedlings (less than 2" by 6"). These small holes, though an additional impact to soils, are consistent with the scope and scale of impacts to soils evaluated and does not modify the overall conclusion concerning impacts to soils within the EA (pages 11-12).
Geological Geologic Processes	None	Impact: This amendment is not anticipated to have any effect on geological processes.
Lightscaapes Lightscaapes	None	Impact: This amendment is not anticipated to have any effect on lightscaapes or night skies as there is no component of this activity that involves lighting.
Other Human Health and Safety	None	Impact: This amendment is not anticipated to have any effect on human health and safety as it does not change the frequency of monitoring activities such as to increase human exposure to threats beyond that which was considered for the approved action.
Paleontological Paleontological Resources	None	Impact: This amendment is not anticipated to have any effect on paleontological ethnographic resources. There are no identified paleontological in the project areas.
Socioeconomic Land Use	None	Impact: This amendment does not involve modifications to land use; no impacts anticipated.
Socioeconomic Minority and low-income populations, size, migration patterns, etc.	None	Impact: This amendment does not involve any action that would impact any human population demographics, including minority and low-income populations.
Socioeconomic Socioeconomic	None	Impact: This amendment does not involve modifications to employment, occupation, income, tax base, or infrastructure; no impacts to socioeconomics anticipated.

Soundscapes Soundscapes	None	Impact: This amendment is not anticipated to have any effect on soundscapes as the components of this amendment do not generate noise and the amendment does not change the frequency of monitoring activities such as to disturb soundscapes beyond that which is evaluated in the EA.
Viewsheds Viewsheds	None	Impact: This amendment is not anticipated to have any effect on viewshed as the addition of plant tags and 100 additional monitoring devices are small (in dimensions measures by inches) and are not visible from any identified viewsheds within the parks.
Visitor Use and Experience Recreation Resources	None	Impact: This amendment is not anticipated to have any effect on recreation resources as it does not alter the supply, demand, visitation, or available activities in the project areas.
Visitor Use and Experience Visitor Use and Experience	Potential	Issue: Addition of plant tags in monitoring plots (portion of the areas planted) Impact: This amendment has the potential to slightly alter the visitor experience to the project areas as it would add plant tags on some seedlings. For visitors who are curious about scientific research, this could slightly enhance their experience by increasing their interest or connection to the project area. For visitors who do not like to see signs of human use on the landscape, this could diminish their experience, though it is unlikely to modify use patterns in the project area. Notably, these plant tags are measured in inches are not highly visible to the untrained eye such that the potential for these impacts is low. Additionally, six of the seven project areas have very low visitation.
Water Floodplains	None	Impact: This amendment is not expected to impact floodplains as it does not add infrastructure to floodplains.
Water Water Quality or Quantity	None	Impact: Nothing in this amendment would modify water quantity or quality; no impacts anticipated.
Water Wetlands	None	Impact: This amendment is not expected to impact wetlands as it does not add infrastructure to wetlands.
Wilderness Wilderness <i>Undeveloped</i>	Potential	Issue: Use of plant tags (approximately 27 per monitoring plot in planted plots (vs. control plots)) in areas planted under selected alternative and additional plant tags (estimated to be roughly 150 in up to 18 acre-sized blocks) across Redwood Mountain Grove and adjacent fisher habitat. An additional 100 monitoring devices in Redwood Mountain Grove and adjacent fisher habitat. Impact: Impacts to undeveloped quality related to monitoring will increase in number but are expected to decrease in duration over what was initially described in the EA as 27 tree seedlings planted per monitoring plot (e.g., the NPS anticipates approximately 20 plots in Board Camp and 50 plots each in Redwood Mountain Grove and the adjacent fisher habitat) will be tagged to track survival and additional planted seedlings in Redwood Mountain Grove would be tagged to monitor their survival and growth under differing environmental

		<p>conditions. In addition, a total of 160 monitoring installations would be used as opposed to an estimated 60 monitoring installations described in the EA. All additional monitoring installations, though numerous in number are small - measured in inches, and are consistent with the scope and scale discussed in the EA as all plant tags would be associated with a monitoring plot or block. These changes would increase the number of temporary installations in the John Krebs and Sequoia-Kings Wildernesses for the duration they are present, but is expected to decrease the overall length of time all monitoring devices associated with the selected alternative are within wilderness. While the EA estimated a total of 40 years, the 160 monitoring devices would be present 3 years and plot markers would be removed as soon as more precise GPS becomes available (which is expected to be less than 40 years).</p>
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ASSESSMENT OF ACTIONS HAVING AN EFFECT ON HISTORIC PROPERTIES

A. DESCRIPTION OF UNDERTAKING

1. **Park:** Sequoia and Kings Canyon National Parks

2. **Project Description:**

Project Name: Minor Change to Selected Alternative in FONSI for Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Environmental Assessment

Prepared by: Juanita Bonnifield **Date Prepared:** **Telephone:** (559) 565-3139

PEPC Project Number: 119393

Locations:

County, State: Tulare, CA

Describe project:

This project is to slightly amend the monitoring component of the selected alternative in the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment to:

- 1) Track seedling survival in up to six severely burned sequoia groves and an adjacent proposed fisher critical habitat corridor by installing small plant tags on approximately 27 seedlings within each monitoring plot (identified within the EA) in all of the areas that are planted in accordance with the selected alternative. The monitoring plots and associated plant tags will help monitor the effectiveness of the planting treatment as it was prescribed, and enable the NPS to learn how successful the planting was and if/when to consider supplemental planting; and
- 2) Increase the monitoring installations from 60- -as analyzed in the EA- -to roughly 160 installations within Redwood Mountain Grove and the adjacent fisher habitat corridor (if planted) to monitor seedlings survivorship and growth under differing environmental conditions. This will also include tagging approximately 150 seedlings within up to 18 (total) acre-sized blocks across these two areas. This "seedling-climate-shrub" would involve intentionally planting under shrubs and in clumps in specific areas so that we can test the degree to which shrubs can either facilitate or inhibit seedling survival and growth. The common understanding for foresters is that shrubs always compete with planted seedlings, yet some evidence shows that those shrubs can also facilitate survival and growth through shading and increased soil moisture. We can measure the degree to which shrubs are altering these conditions using climate sensors across a range of site conditions and proximity to shrubs, and linking that with the data on survival and growth. Knowing when and where shrubs may act as facilitators vs competitors is critical to inform planting designs, particularly in these novel postfire environments.

In addition, this amendment further clarifies that the 600 plot markers for monitoring that are identified in the selected alternative would be removed if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying plot boundaries (the EA assumed these markers would be in place for 40 years). This amendment also clarifies that the 160 monitoring installations described in #2 above would remain onsite for approximately 3 years (as opposed to the 40 years assumed in the EA). Plant tags would also be removed as seedlings/trees die, grow to a size such that a plant tag is no longer needed to identify precise individual, or if

high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying the individual seedling/tree that is monitored. The NPS anticipates that most plant tags will be removed within 20 years of initial planting, though some may remain present for 40 years.

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

No Reviews From: Curator, Archeologist, Historical Architect, Historian, 106 Advisor, Other Advisor, Anthropologist, Historical Landscape Architect

C. PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS

Consistent with the EA, the NPS has determined that this amendment, as defined for the purposes of NEPA, need not necessarily equate to the undertaking as defined pursuant to 36 CFR § 800.3(a) and determined that the NEPA project planning area will not be used to define the undertaking or Area of Potential Effect (APE) for the purposes of the National Historic Preservation Act (NHPA). Each treatment area will have independent utility, individual approval processes, and is not inextricably connected to other treatments. Because the areas are independent and undergo separate approval processes, each treatment or subset of treatments addressed by an implementation plan will be considered individual undertakings under NHPA, and Section 106 compliance will be fulfilled in accordance with provisions of the 2008 Nationwide Programmatic Agreement.

D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

Compliance Specialist:

NHPA Specialist

Juanita Bonnifield _____ **Date:** _____

E. SUPERINTENDENT'S APPROVAL

The proposed work conforms to the NPS *Management Policies* and *Cultural Resource Management Guideline*, and I have reviewed and approve the recommendations, stipulations, or conditions noted in Section C of this form.

Signature

Superintendent: _____ **Date:** _____

Clayton Jordan



Other Compliance/Consultations Form

Park Name: Sequoia and Kings Canyon National Parks

PEPC Project Number: 119393

Project Title: Minor Change to Selected Alternative in FONSI for Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Environmental Assessment

Project Type: Restoration

Project Location:

County, State: Tulare, CA

Project Leader: Andrew Bishop

ESA

Any Federal Species in the project Area? Yes

If species in area: No Effect

General Notes: This amendment is not anticipated to have any effect on species of special concern or their habitat as it does not directly or indirectly modify habitat nor change the frequency of monitoring activities such as to disturb wildlife beyond that which is evaluated in the EA.

Data Entered By: Elizabeth Boerke

Date: October 6, 2023

ESA Mitigations

ESA mitigations are identified in the FONSI, which this project amends; no additional ESA mitigations identified.

Floodplains/Wetlands/§404 Permits

Question	Yes	No	Details
A.1. Is project in 100- or 500-year floodplain or flash flood hazard area?		No	Not in floodplain or flash flood hazard area.
A.2. Is Project in wetlands as defined by NPS/DOI?		No	Not in wetland as defined by NPS/DOI.
B. COE Section 404 permit needed?		No	No placement of fill in waters of the United States.
C. State 401 certification?		No	
D. State Section 401 Permit?		No	Issue Date: Expiration Date:
E. Tribal Water Quality Permit?		No	

F. CZM Consistency determination needed?		No	Date Review Requested: Date Reply Received: Date State Concurred:
G. Erosion & Sediment Control Plan Required?		No	
H. Any other permits required?		No	Permit Information:
Other Information:			

Data Entered By: Elizabeth Boerke

Date: October 6, 2023

Floodplains & Wetlands Mitigations

No Floodplains & Wetlands mitigations are associated with this project.

Wilderness

Question	Yes	No	
A. Does this project occur in or adjacent to Designated, Recommended, Proposed, Study, Eligible, or Potential Wilderness?	Yes		
B. Is the only place to conduct this project in wilderness?	Yes		
C. Is the project necessary for the administration of the area as wilderness?	Yes		
D. Would the project or any of its alternatives adversely affect (directly or indirectly) Designated, Recommended, Proposed, Study, Eligible, or Potential Wilderness? (If Yes, Minimum Requirements Analysis required)	Yes		
E. Does the project or any of its alternatives involve the use of any of the Wilderness Act Section 4(c) prohibited uses: commercial enterprise, permanent road, temporary road, motor vehicles, motorized equipment, motorboats, landing of aircraft, mechanical transport, structure, or installation? (If Yes, Minimum Requirements Analysis required)	Yes		
If the answer to D or E above is "Yes" then a Minimum Requirements Analysis is required. Describe the status of this analysis in the column to the right.			Initiation Date: Completed Date: Approved Date:
Other Information: All monitoring installations will be evaluated within site-specific MRAs and would not be implemented if not determined to be the minimum necessary for administration of the area as wilderness.			

Data Entered By: Elizabeth Boerke

Date: October 6, 2023

Other Permits/Laws

Question	Yes	No
C. Wild and scenic river concerns exist?		No
D. National Trails concerns exist?		No
E. Air Quality consult with State needed?		No
F. Consistent with Architectural Barriers, Rehabilitation, and Americans with Disabilities Acts or not Applicable? (If N/A check Yes)	Yes	
G. Other:		No

Data Entered By: Elizabeth Boerke

Date: October 6, 2023



Categorical Exclusion Documentation Form (CE Form)

Project: Minor Change to Selected Alternative in FONSI for Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Environmental Assessment

PEPC Project Number: 119393

Description of Action (Project Description):

This project is to slightly amend the monitoring component of the selected alternative in the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment to:

- 1) Track seedling survival in up to six severely burned sequoia groves and an adjacent proposed fisher critical habitat corridor by installing small plant tags on approximately 27 seedlings within each monitoring plot (identified within the EA) in all of the areas that are planted in accordance with the selected alternative. The monitoring plots and associated plant tags will help monitor the effectiveness of the planting treatment as it was prescribed, and enable the NPS to learn how successful the planting was and if/when to consider supplemental planting; and
- 2) Increase the monitoring installations from 60- -as analyzed in the EA- -to roughly 160 installations within Redwood Mountain Grove and the adjacent fisher habitat corridor (if planted) to monitor seedlings survivorship and growth under differing environmental conditions. This will also include tagging approximately 150 seedlings within up to 18 (total) acre-sized blocks across these two areas. This "seedling-climate-shrub" would involve intentionally planting under shrubs and in clumps in specific areas so that we can test the degree to which shrubs can either facilitate or inhibit seedling survival and growth. The common understanding for foresters is that shrubs always compete with planted seedlings, yet some evidence shows that those shrubs can also facilitate survival and growth through shading and increased soil moisture. We can measure the degree to which shrubs are altering these conditions using climate sensors across a range of site conditions and proximity to shrubs, and linking that with the data on survival and growth. Knowing when and where shrubs may act as facilitators vs competitors is critical to inform planting designs, particularly in these novel postfire environments.

In addition, this amendment further clarifies that the 600 plot markers for monitoring that are identified in the selected alternative would be removed if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying plot boundaries (the EA assumed these markers would be in place for 40 years). This amendment also clarifies that the 160 monitoring installations described in #2 above would remain onsite for approximately 3 years (as opposed to the 40 years assumed in the EA). Plant tags would also be removed as seedlings/trees die, grow to a size such that a plant tag is no longer needed to identify precise individual, or if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying the individual seedling/tree that is monitored. The NPS anticipates that most plant tags will be removed within 20 years of initial planting, though some may remain present for 40 years.

Project Location: Tulare County, CA

Mitigation(s):

- All mitigations included in the selected alternative in the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Revised Environmental Assessment will be followed.
- Monitoring installations will be removed as soon as possible: All monitoring devices will be removed within three years of installation; monitoring plot markers will be moved if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying plot boundaries; and plant tags will be removed as seedlings/trees die, grow to a size such that a plant tag is no longer needed to identify precise individual, or if high resolution GPS improves to such an extent that physical markers are no longer required for precisely identifying the individual seedling/tree that is monitored.

CE Citation: 3.3.B.1 Changes or amendments to an approved plan, when such changes would cause no or only minimal environmental impact.

CE Justification:

As the NPS developed the monitoring plan for planting efforts, staff realized that additional scientific installations, beyond those identified in the EA, were needed in order to enable rigorous and scientifically valid monitoring protocols that will enable the NPS to 1) understand seedling survivorship within the planting areas and therefore inform whether or not supplemental plantings will be needed, and 2) better understand how environmental conditions affect seedling survivorship and growth and therefore inform any subsequent planting plans that may be implemented in accordance with the FONSI. Multiple monitoring plots with each forest type are necessary for statistical replication—which will enable credible and actionable results—and tagged seedlings will enable the NPS to track survival and growth through time—which is otherwise not possible.

As described in the project description, this project slightly amends the selected alternative in the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Environmental Assessment (PEPC 107200). As described in the environmental screening form, these changes would cause only minimal environmental impacts to soils, visitor experience, and the developed quality of wilderness character, some of which would intensify negative effects, but some of which would shorten the duration of impacts to these resources.

Decision: I find that the action fits within the categorical exclusion above. Therefore, I am categorically excluding the described project from further NEPA analysis. No extraordinary circumstances apply.

Signature

Superintendent: _____ **Date:** _____

Clayton F. Jordan

Extraordinary Circumstances:

If implemented, would the proposal...	Yes/No	Explanation
A. Have significant impacts on public health or safety?	No	This amendment is not anticipated to have any effect on human health and safety as it does not change the frequency of monitoring activities such as to increase human exposure to threats beyond that which was considered for the approved action.
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?	No	See attached environmental screening form.
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	See attached environmental screening form.
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	Plant tags and monitoring devices have been implemented in many other projects within Sequoia and Kings Canyon National Parks with no identified uncertain or potentially significant environmental effects.
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	The additional monitoring installations associated with this amendment do not set a precedent for future action or represent a decision in principle about future actions that are not already identified and analyzed within the associated FONSI and EA. Specifically, information gathered from the additional installations within the monitoring protocol will inform whether or not supplemental planting may be needed, the potential (and associated impacts) of which was included in the FONSI and EA.
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	This amendment is a minor modification to the FONSI associated with the Re-establish Tree Seedlings in Severely Burned Giant Sequoia Groves and Adjacent Fisher Habitat in Sequoia and Kings Canyon National Parks Environmental Assessment (PEPC 107200); cumulative impacts are expected to be generally consistent with, in scope and scale, those outlined in the revised EA.
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?	No	This amendment is not anticipated to have any effect on historic properties as mitigations have been identified to avoid archeological resources, consistent with the EA, and there are

		no other types of properties within the project areas.
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?	No	This amendment is not anticipated to have any effect on species of special concern or their habitat as it does not directly or indirectly modify habitat nor change the frequency of monitoring activities such as to disturb wildlife beyond that which is evaluated in the EA.
I. Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	The nature of this amendment does not violate a federal, state, local, or tribal law or requirement. All monitoring installations will be evaluated within site-specific MRAs and would not be implemented if not determined to be the minimum necessary to administer the area for the preservation of wilderness character, consistent with the Wilderness Act.
J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	The nature of this amendment does not impact low or minority populations.
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	No	There are no Indian sacred sites in the project areas and the nature of the amendment does not alter access to any location.
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?	No	This amendment is not anticipated to have any effect on nonnative or exotic species beyond those described in the EA as it does not change the frequency or intensity of monitoring activities such as to increase the potential for transporting non-native seeds or plant material to the project areas beyond that which is evaluated in the EA.