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Sequoia and Kings Canyon National Parks
Regions 8, 9, 10, and 12

Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole (118372)

Environmental Assessment

May 2026



ON THE COVER

An existing, aging housing unit within the Lodgepole Employee Housing Area of Sequoia National Park.

National Park Service Photo

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Chapter 1: Purpose and Need

Introduction

The National Park Service (NPS) is proposing to finalize and implement a master plan for the Lodgepole Employee Housing Area (Lodgepole Housing Area) in Sequoia National Park (Park) (Figure 1 and Figure 2). The Lodgepole Housing Area houses an average of 60 seasonal and 26 permanent Park employees and currently contains a variety of buildings and service infrastructure. Collectively, the conditions of structures in the housing area do not meet current accessibility, health, and safety standards; increase maintenance demands on the NPS; and contribute to challenges with staff retention and recruitment.

Under the master plan, existing housing units and associated structures would be either replaced with, rehabilitated into, or converted to more durable housing structures that meet health and safety standards, better serve residents, meet the Park's current and future housing needs, improve operational efficiency, and reduce maintenance costs. Utilities would be upgraded, and vehicular access and circulation within the housing area would also be improved to further support safety and operational efficiency. The new master plan may consist of a combination of single-family homes, duplexes, and multi-unit dorm buildings, all designed to withstand the site's climate and snow conditions.

The NPS at Sequoia and Kings Canyon National Parks in Three Rivers, California, has prepared this environmental assessment (EA) consistent with the National Environmental Policy Act (NEPA) (42 United States Code 4321 et seq.), the Department of the Interior (DOI) NEPA regulations, 43 Code of Federal Regulations (CFR) 46, and the 2026 DOI NEPA Handbook (516 DM 1 Handbook [DOI 2026]). The unique identification number for this project is 118372.^{1,2}

Purpose and Need

The purpose of the Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole Project (project) is to provide healthy and safe housing conditions for all employees (residents) and improve staff recruitment and retention in the Lodgepole Housing Area (project area) of the Park by addressing structural deficiencies in the existing housing stock, enhancing the resilience of housing to local conditions, extending the seasonal availability of comfortable housing, and meeting accessibility requirements of the Architectural Barriers Act (ABA) in the project area.

¹ Certification related to Content and Page Limits: This EA represents the NPS's good-faith effort to fulfill NEPA's requirements by prioritizing documentation of the most important relevant considerations within the statutorily mandated page limits. This prioritization reflects the NPS's expert judgment. Any considerations addressed briefly or left unaddressed are, in the NPS's judgment, comparatively non-substantive and would not meaningfully inform the NPS's consideration of environmental effects and the resulting decision. The NPS certifies that the EA is substantially complete, thoroughly considered the factors mandated by NEPA, and contains analysis adequate to inform and reasonably explain the NPS's decision to issue a finding of no significant impact regarding the proposed action.

² Certification related to Deadline: The NPS certifies that this EA represents a good-faith effort to fulfill NEPA's requirements within the congressional timeline; that such effort is substantially complete; that, in the NPS's expert opinion, it has thoroughly considered the factors mandated by NEPA; and that, in the NPS's judgment, the analysis contained therein is adequate to inform and reasonably explain its decision regarding the proposed federal action.

Additionally, the project is needed to reduce the high operational demands placed on the NPS by the current housing stock.

The NPS is authorized to provide government-furnished housing for employees in circumstances where private sector housing is either unaffordable or unavailable within a reasonable commute. This approach is guided by Director's Order 36, Reference Manual 36 (RM-36) (DOI 2024) and Section 9.4.3 of the NPS Management Policies (NPS 2006). Based on results of a 2012 Housing Needs Assessment for Sequoia and Kings Canyon and other national parks (LMI 2012), housing options for Lodgepole staff to reside outside of the Park are not affordable and do not exist within a reasonable 60-minute commuting distance.

Therefore, in accordance with Director's Order 36, the NPS not only has a need to provide housing for employees at Lodgepole but also to ensure that such housing is maintained in good condition and "is safe and sanitary, sited to avoid natural hazards whenever possible, integrated into the park environment and, to the best extent possible, energy efficient and cost-effective to maintain" (DOI 2024:2). Housing improvements are also needed to allow for all-season occupancy and greater flexibility for the NPS' housing management and to improve compatibility with the local environment and operational cost-effectiveness, consistent with Director's Order 36.

Topographic map of the Lodgepole Housing Area in Tulare County, CA. The map shows the Lodgepole Housing Area circled in red, situated near the Lodgepole Visitor Center and the Lodgepole Sherman Tree. Key features include the Sequoia-Kings Canyon Wilderness, the Fork Kaweah River, and the Lodgepole-CG. The map includes a scale bar (0 to 1,500 feet), a north arrow, and a locator map of California. Metadata includes: Base Map: Esri ArcGIS Online, accessed August 2025; Updated: 8/1/2025; Project No. 61504; Layout: Project_Location; Aprx: 61504_LodgepoleHousing_EA.

FIGURE 2. LODGEPOLE HOUSING EXISTING CONDITIONS



Issues

Issue Selected for Detailed Analysis

Employee Health and Safety

The issue of employee health and safety is central to the project and is directly tied to the project's purpose and need. The Lodgepole Housing Area houses an average of 60 seasonal and 26 permanent Park employees. The existing buildings and service infrastructure suffer from numerous deficiencies, including lack of ABA accessible units and features, deteriorating infrastructure, and inadequate thermal conditions. Rodent infestations are a common issue, and utility services are insufficient to meet the needs of occupants. Collectively, these issues result in housing conditions that do not meet health and safety standards and create an uncomfortable living environment for employees.

Issues Considered but Dismissed

The following issues were identified but dismissed from further analysis because: 1) they are not central to the proposal or of critical importance; 2) a detailed analysis related to the issue is not necessary to make a reasoned choice between alternatives; 3) there is not a big point of contention among the public or other agencies; and/or 4) there are no potentially significant impacts to resources associated with the issue.

In addition to the resource issues dismissed below, the issue of park operations and management is analyzed in Appendix A based on its connection to the project's purpose and need. However, park operations and management are not considered an environmental or resource issue in the context of NEPA that warrants analysis and will not factor into the agency's decision on whether the proposed action would have significant adverse impacts.

Air Quality

The Lodgepole Housing Area falls within the San Joaquin Valley Air Pollution Control District (SJVAPCD), which is susceptible to air pollution given its climate, topography, and array of human activities (e.g., urban, agriculture, industrial, and transportation) and is currently designated as a nonattainment area for ozone (1-hour), particulate matter less than 2.5 micrometers in diameter (PM_{2.5}), and PM less than 10 micrometers in diameter (PM₁₀) under California Ambient Air Quality Standards (SJVAPCD 2025). Area nonpoint sources continue to be the major contributor of air pollutants in the district; ozone, acidic and nitrogen deposition, pesticide drift, and regional haze are the most serious threats. Air pollution influences in the project area primarily originate outside park boundaries.

Under the proposed action, emissions from the use of heavy equipment, chainsaws, and vehicles during demolition and construction would result in localized increases in criteria air pollutants, including particulate matter, nitrogen dioxide, and carbon monoxide. In addition, ground disturbance, vegetation removal, felling and hauling of roughly 100 trees, and chipping of brush and tree limbs during construction across the roughly 5-acre project footprint under the proposed action would result in localized increases in fugitive dust and particulate matter.

During construction for the proposed action, emissions from construction vehicles, fugitive dust, and tree chipping or hauling would be transient in nature, lasting 10 hours per day near active work areas for roughly 48 to 54 months, with the intensity of emissions varying depending on the types of activities being performed each day. It is anticipated that emissions, fugitive dust, and particulate

matter would generally dissipate at the end of each project workday and would entirely cease once construction is complete. Under the no action alternative, a lesser degree of emissions would occur and would be spread out over a period of 10 or more years.

Project-related emissions from the proposed action would be relatively low in the context of human activities (e.g., urban areas, agriculture, industrial uses, and major transportation corridors) occurring throughout the San Joaquin Valley, which currently impact air quality within the Park (SJVAPCD 2025). Further, implementing the proposed action would not be expected to result in significant air quality impacts or contribute to any exceedance of state or federal air quality standards. The NPS would further minimize its contributions to vehicle emissions and fugitive dust through project design specifications described in the alternatives. Because impacts of either alternative would be temporary, localized, and minimal due to design specifications, this issue was dismissed from further analysis.

Aquatic Resources (including floodplains, wetlands and waters, and water quality or quantity)

Aquatic resources can be directly affected by grading activities or indirectly affected by erosion of sediment when project actions disturb soils or sensitive vegetation in and around waterways. Changes in site drainage or stormwater discharge volumes can also affect aquatic resources by modifying water quality and quantity.

Under existing conditions, stormwater and snowmelt runoff generally flows across the ground surface from the existing residential area and infiltrates into permeable surfaces on-site (e.g., soils and vegetated areas). Some overland flows may reach the adjacent Marble Fork of the Kaweah River, which is approximately 100 to 300 feet from the project area, depending on location, and is at the base of a steep slope that runs along the southern boundary of the project area, which physically separates the river from the site. There are no stormwater plantings (i.e., vegetated swales or rain gardens) on-site under existing conditions.

There are no mapped wetlands, waters, or floodplains within the project footprint (Federal Emergency Management Agency 2025; U.S. Fish and Wildlife Service [USFWS] 2025a; U.S. Geological Survey 2025); however, several natural swales and one unmapped drainage (non-perennial) have been observed east of the Lodgepole Housing Area, in between the housing area and the Lodgepole Campground. Aside from these features, no other water features have been observed within the project area, and the next closest water body is the Marble Fork, which is described above.

The proposed action includes a potential east access road that would require a crossing of the swales and unmapped drainage east of the Lodgepole Housing Area. Preliminary design of the east access road includes culverts where road crossings of natural swales and drainages are required. The NPS would formally delineate these features to determine their federal and state jurisdictional status under the Clean Water Act and Porter-Cologne Water Quality Control Act, respectively. If needed, the NPS would obtain applicable federal or state permits for discharge into waters prior to construction, which would ensure any direct impacts to waters are approved under applicable regulations. Aside from the east access road, no other project components would have the potential to result in direct impacts to aquatic resources.

The limits of potential ground disturbance would encompass roughly 8 acres under the proposed action but would be much less under the no action alternative. Under both alternatives, most construction activities would take place in previously developed footprints, including foundations where buildings currently exist, which would minimize the potential for soil disturbance and

erosion. During construction, standard erosion and stormwater control mechanisms, including coconut wattles (no straw or hay would be used) or silt fences, would be used to prevent impacts on any off-site aquatic resources. In addition, the phasing of construction activities would limit the number of sections of the housing area that would be disturbed at any given point. Following construction, disturbed areas adjacent to buildings (if any) and paved areas would be revegetated, either naturally or through native plantings. The proposed action would also include several stormwater plantings (i.e., rain gardens or vegetated swales) adjacent to paved areas to improve on-site capacity for stormwater infiltration and minimize the potential for runoff and erosion.

Under the proposed action, there would be a net gain of approximately 27,000 square feet (roughly 0.60 acre) of impervious area, largely due to proposed parking and roadway improvements, which involve adding areas of new pavement. Stormwater runoff patterns would be slightly modified due to localized changes in grading or the footprint of paved and vegetated areas; however, stormwater would be routed into new vegetated swales and rain gardens to the maximum extent possible or would continue to infiltrate into permeable surfaces on-site.

Were the proposed action to be implemented, changes to surface water quality would not be expected to occur because stormwater volumes would not noticeably change from existing conditions and the addition of new stormwater plantings adjacent to paved areas would increase the site's permeability and capacity for stormwater infiltration relative to existing conditions. Under the no action alternative, current conditions would continue.

For the reasons described above, the NPS has determined that there is no potential for either alternative to result in significant impacts to water quality, although the degree of potential temporary impacts would be less were the no action alternative to be implemented. In order to further reduce potential for impacts to water quality should the proposed action be selected, all applicable permit requirements, including those required by the state's National Pollutant Discharge Elimination System construction stormwater general permit, would be followed during construction to ensure that applicable water quality standards are not temporarily exceeded as a result of project-related runoff.

Cultural Resources

Cultural resources can be impacted directly through ground-disturbing activities or indirectly through changes in landscape character; individual resources are impacted differently depending on the type of resource and the environmental factors that contribute to its eligibility under the National Historic Preservation Act. Archeological surveys were completed within the project area in May of 2025, and no archeological, prehistoric, or historic resources were documented within the area of potential effects. One isolate (consisting of two recently cut utility poles) was found, which was determined not eligible for the National Register of Historic Places. All structures within the project area have been determined not eligible for the National Register of Historic Places.

Given that there are no identified historic properties present in the project area, that most ground-disturbing activities under the proposed action would take place in previously developed areas where buildings currently exist, and that the project incorporates mechanisms to address previously undocumented resources should they be identified during construction (e.g., an inadvertent discovery plan), the NPS has made a determination of no historic properties affected for this project. Further, no potential for significant impacts to cultural resources exists. This issue was therefore dismissed from further analysis.

Invasive Species

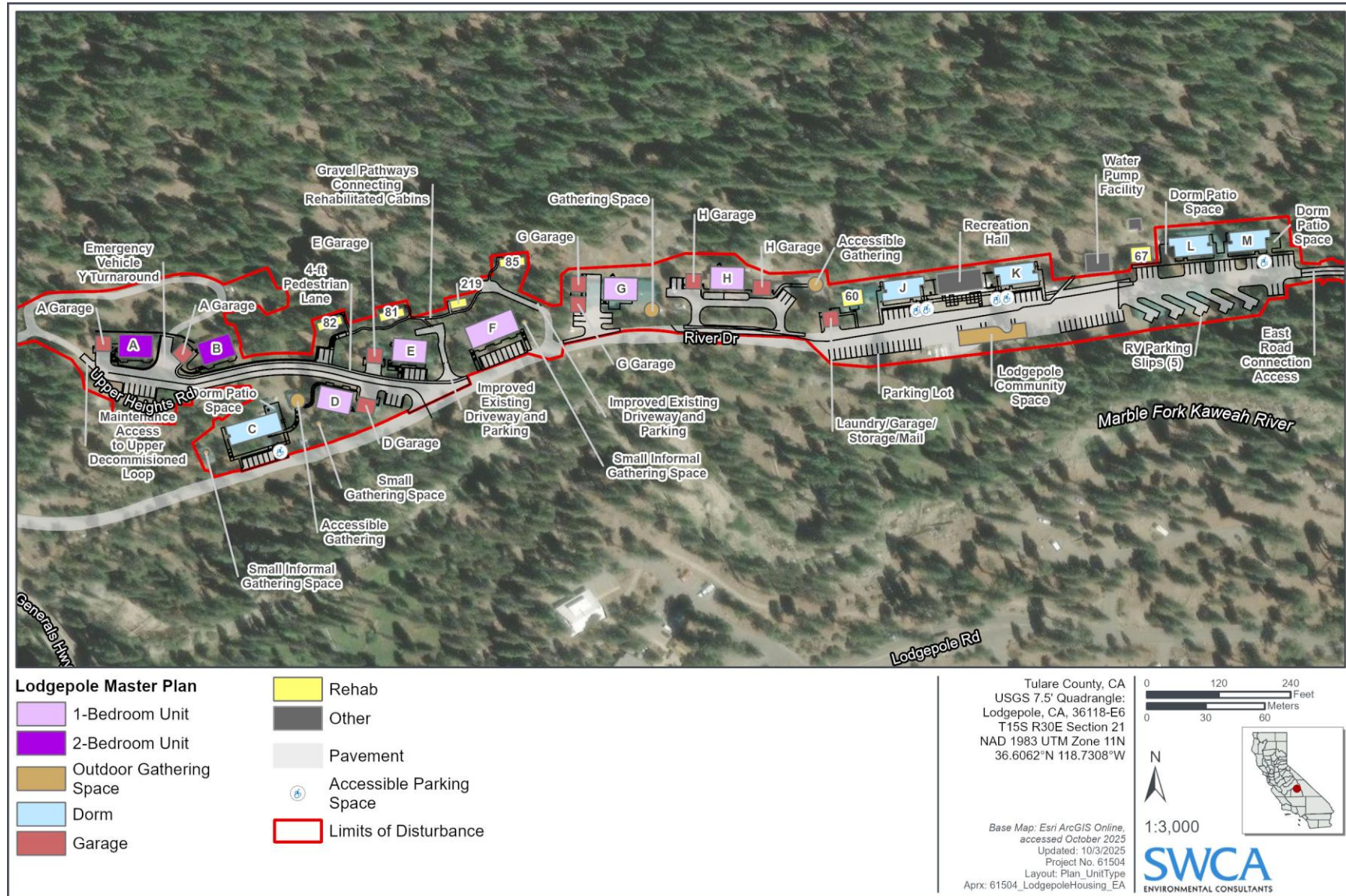
Soil disturbance can provide an opportunity for invasive plant species to be introduced to the Park or become established and spread in the project area. Invasive plant seeds and propagules can also be introduced to the Park and transferred between project areas via fill materials, project equipment, tools, and clothing.

NPS completed project-specific surveys for invasive species in July 2025 within the limits of disturbance shown on Figure 3, as well as the North and West Terrace Wuksachi parking lots shown on Figure 1, which would likely be used for staging and/or housing during construction. In total, five invasive plant species were detected during surveys, consisting of cheatgrass (*Bromus tectorum*), red brome (*Bromus madritensis* ssp. *rubens*), rattail fescue (*Festuca myuros*), curly dock (*Rumex crispus*), and common mullein (*Verbascum thapsus*). Based on the NPS's knowledge of species occurrences, foxglove (*Digitalis purpurea*) and daffodil (*Narcissus* sp.) are also known to occur in the general vicinity of the project area. Overall, invasive species presence was minimal and localized to disturbed areas along the shoulder of River Drive, around parking areas, and at the Wuksachi parking lots.

The project area is developed and is continuously inhabited by NPS staff and family who travel in and out of the area and represent an existing vector for the potential introduction of invasive species. Neither alternative would import topsoil, reducing the potential for introduction of invasive plants through those means. The relative sparseness of invasive plants in the project area would reduce the potential for spread of those species during construction. Additionally, design specifications would limit potential for invasive species to be introduced or spread. Examples of specifications integral to the project include keeping equipment on road surfaces, inspecting vehicles for seed and propagules prior to work, using weed-free erosion-control materials, and limiting ground disturbance during debris removal. Following construction of the proposed action, Park managers would continue to monitor for one to three growing seasons and treat invasive species detected, which would further minimize the long-term potential for invasive species to be introduced and spread. Under the no action alternative, standard park best management practices for maintenance would continue to be implemented.

Due to design specifications or park management practices, the lack of imported topsoil to be used in either alternative, and the relative lack of existing invasive plants at the project area, the alternatives would not be expected to result in the potential for a significant increase in the threat of invasive species introduction and proliferation above current conditions. Therefore, this issue was dismissed from further analysis.

FIGURE 3. PROPOSED LODGEPOLE HOUSING AREA IMPROVEMENTS



Soils

Soils can be impacted by ground-disturbing activities. Under the proposed action, demolition and construction activities would result in some soil impacts (e.g., from excavation, soil compaction, or erosion) within the approximately 5-acre construction footprint (see Table 4 for estimated cut and fill volumes). Under the proposed action there would be a net gain of approximately 27,000 square feet (just over 0.60 acres) of impervious area, largely due to proposed parking and roadway improvements which involve adding new areas of pavement.

As described in the Soils, Stormwater Management, and Site Vegetation/Revegetation section, the project would result in minimal potential for effects to soils. Although there would be some temporary displacement of sub-soils should the proposed action be implemented, topsoil in this area is thin to nonexistent (top layers typically granitic with duff layers), and all activities would take place in a developed site, including foundations and roadways where buildings currently exist and/or where sub-soils have been previously disturbed by construction of the original housing development. In addition, the phasing of construction activities would limit the number of sections of the housing area that would be disturbed at any given point, reducing the potential for runoff and erosion by buffering disturbed areas with undisturbed areas.

Postconstruction, disturbed areas adjacent to buildings and paved areas would be revegetated, either naturally or through native plantings. The proposed action would also include several stormwater plantings (i.e., rain gardens or vegetated swales) adjacent to paved areas to improve on-site capacity for stormwater infiltration and minimize the potential for runoff and erosion.

Because the site has been previously disturbed and the scale of soil disturbance under the proposed action is small in the context of undisturbed soils within the project area or within the Park as a whole, there is no potential for the proposed action to result in significant impacts to soils. In addition, the project incorporates design specifications that would protect soil profiles and stabilize soils postconstruction to further reduce impacts. Temporary impacts described above would not occur under the no action alternative, though there would also not be any improvement in drainage.

As there is no potential for either alternative to result in significant impacts to soils and because the project is designed to minimize impacts of implementing either alternative, this issue was dismissed from further analysis. See the Aquatic Resources section for additional information related to erosion and stormwater management.

Soundscapes

Soundscapes can be impacted when the use of noise-producing equipment or increased levels of human activity during construction and operation exceed existing background noise levels. Under the proposed action, the use of heavy equipment, including chainsaws, chippers, skid steers, back-hoes, trenchers, dump trucks, and cranes during tree felling, demolition, and construction would result in intermittent construction sounds ranging from 80 to 110 decibels (dBA) within 50 feet of equipment throughout the workday (up to 10 hours per day) over the course of each 9 month construction window for roughly 5 consecutive years (Federal Highway Administration 2006). Construction noise would generally be expected to travel up to 0.25 mile from the project site (Federal Highway Administration 2006; Nuclear Regulatory Commission 2012).

In addition to construction noise, replacing existing propane furnaces with new electric heat pump units would represent a new source of exterior noise in the long term. Noise levels for heat pump units would generally range from 71 to 75 dB, depending on the unit size. Additionally, the use of mobile generators, whose noise can range from 50 to 100 dB depending on the model and size,

would introduced temporary, exterior noise during power failures (estimated at 2–3 days at a time, two to three times a year).

The project area is in an administrative area across the Marble Fork of the Kaweah River from and within 600 feet of a visitor-services complex, which includes a market, a visitor center, a campground, and a trailhead that is popular with day use visitors and campers, where sounds from roads and human activity routinely exceed 65 dBA. In more secluded areas of the broader Lodgepole complex soundscapes have been modeled by the NPS as low as 28 to 34 A-weighted dBA (Mennit 2015), indicating that soundscapes in the area vary but are generally more degraded near areas of development, such as the Lodgepole Housing Area. Visitors recreating near the river or within the vicinity of the market complex or campground may experience degraded soundscapes for the duration of construction of the proposed action. For these reasons, although the temporary impacts to soundscapes described above are likely under the proposed action, impacts would be relatively minor given the context in which they would occur and given that they are temporary in nature. Sound levels would return to pre-activity levels at the end of each workday and would fully recover after each phase of construction is complete except for areas in close proximity to the electric heat pump units where infrastructure would buffer any increase in sound. The no action alternative would again result in a lesser degree of impact, as most construction activities would not occur or would occur over such an extended timeframe (10 or more years) that the increase in sound would not likely be measurable.

Due to the generally temporary nature of impacts of each alternative (besides the addition of noise from heat pumps), the context of the affected environment where the project would occur (i.e., an existing developed area), and the relative abundance of natural soundscapes throughout the park, project-related noise would not result in significant impacts on the Park's natural soundscapes. Design specifications incorporated into the proposed action would further minimize noise-related impacts (e.g., use of mufflers and sound attenuation devices and limited construction hours) should this alternative be selected. Therefore, this issue was dismissed from further analysis. Consideration of potential project-related noise impacts on wildlife and species of special concern are described in their respective sections below (pages 15 and 11, respectively).

Species of Special Concern

Species of special concern can be impacted when ground disturbance and vegetation clearing causes available habitat to be reduced or degraded, when increased noise and human activity causes individuals to be disturbed or displaced, or through direct mortality (e.g., vehicle strikes or trampling). Species of special concern include species that are federally listed under the Endangered Species Act (ESA) as threatened, endangered, candidate, or proposed.

The NPS used the USFWS's Information for Planning and Consultation (IPaC) system, USFWS descriptions of species habitat requirements, and park staff expertise to determine whether species of special concern have the potential to occur in the project area and have the potential to be affected by the project. Based on review of IPaC data, 11 species were evaluated for potential effects (Table 1). Of the species evaluated, two species (California spotted owl [*Strix occidentalis occidentalis*] and fisher [*Pekania pennanti*]) were found to have the potential to be affected by the project; these species are further discussed below. The NPS has determined that the remaining nine species would not be affected by either alternative due to a lack of suitable habitat, lack of documented occurrences in either the Park or in the project area, because the project area is outside their current range, and/or they have an aversion to human presence. The rationale for each species' effect determination is provided in Table 1.

TABLE 1. SPECIES OF SPECIAL CONCERN EVALUATED FOR POTENTIAL EFFECTS

Species of Special Concern (ESA status)	Potential for Effects?	Rationale
Fisher (<i>Pekania pennanti</i>) (E)	Yes	The project area is outside of proposed critical habitat and in slightly higher elevation habitat than fishers have generally been detected in this portion of the Park. Although fisher do occur in the surrounding landscape and may travel through the area, they are less likely to den or regularly occur within the direct project footprint due to development and year-round human presence. Indirect noise effects may occur if fisher are present in adjacent and surrounding areas. There would also be potential for disturbance if medium-to-large trees need to be removed in spring. Further analysis is included below (following table).
Gray wolf (<i>Canis lupus</i>) (E)	No	As of July 2023, one wolf pack is known to occur in Tulare County, California (Yowlumni Pack) (California Department of Fish and Wildlife [CDFW] 2025a). Although ongoing monitoring studies have yet to document wolves crossing the southern boundary of Sequoia, given wolves' generalist habitat tendencies and ability to disperse large distances, it is likely that gray wolves will disperse into the Park in the coming years. However, the NPS does not anticipate that wolves will occupy this developed area even if surrounding undeveloped areas do become occupied in the future.
North American wolverine (<i>Gulo gulo luscus</i>) (T)	No	Wolverine occurrences are extremely rare in California, and the project area lacks the suitable sub-alpine habitat with persistent snow cover that the species typically inhabits (USFWS 2023a).
Sierra Nevada red fox (<i>Vulpes vulpes necator</i>) (E)	No	Although presumed absent or at very low densities since the early 1900s, CDFW staff have been conducting surveys via remote cameras and have detected Sierra Nevada red foxes as recently as 2025 within the Park in the eastern high elevation portions of the Park (Green 2025, unpublished data); however, the project area is not near any of the recent detections and lacks the suitable sub-alpine habitat with persistent snow cover that the species typically inhabits (USFWS 2018).
California condor (<i>Gymnogyps californianus</i>) (E)	No	Given the species' generalist habitat associations and wide ranges, it is possible that the species could occur in the general project vicinity while foraging (USFWS 2025b), and landings have been documented by NPS staff and partners in some areas of the Park as recently as 2025. However, the NPS has not yet documented nesting within the Park nor have condors been reported in the immediate vicinity of the project area (California Natural Diversity Database [CNDDDB] 2025). Because condors have not been documented in the project area and their presence in the Park is currently rare and transient, the NPS does not expect the species to be affected by the project. Additionally, condors would require exceptionally large trees with a suitable microsite for nesting (e.g., giant sequoia), and no obvious such structures are in the project area or immediate surroundings. Design specifications would ensure that construction sites are kept clean and all trash and debris are contained so as not to attract wildlife, including but not limited to condors that may incidentally pass overhead.
California spotted owl (<i>Strix occidentalis occidentalis</i>) (PT)	Yes	Although individual owls have not recently been observed within the actual project footprint, the project area provides marginal nesting habitat, and occupied territories are known to occur in the vicinity of the project area. The species is also known to use the general surrounding area for foraging. Indirect noise effects may occur if California spotted owls are present in adjacent and surrounding areas during project construction. Further analysis is included below (following table).

Species of Special Concern (ESA status)	Potential for Effects?	Rationale
Northwestern pond turtle (<i>Actinemys marmorata</i>) (PT)	No	No suitable aquatic habitat for pond turtle is present within the project area, and upland habitats within the project area are not likely accessible to pond turtles that may occur in the Marble Fork of the Kaweah River due to steep topography (USFWS 2023b).
Foothill yellow-legged frog (<i>Rana boylei</i>) (E)	No	The foothill yellow-legged frog is rare in Tulare County and is not known to occur within Park boundaries. The project area lacks suitable aquatic habitat for the species (USFWS 2023c).
Mountain yellow-legged frog (<i>Rana muscosa</i>) (E)	No	The species has been historically reported (ca. 1955–1956) to occur within 1 mile of the project area in the Marble Fork of the Kaweah River Drainage but has not been reported within the project area (CDFW n.d., CDFW 2025b). Stormwater control specifications in the project description would ensure that sediment and other pollutants would not enter into the river drainage, avoiding impacts to this species if present downstream.
Monarch butterfly (<i>Danaus plexippus</i>) (PT)	No	Based on site-specific vegetation surveys, the project area does not include suitable host plants (i.e., milkweeds) for monarchs, and does not include prolific nectar sources, which would attract monarchs (USFWS 2025c). Although possible for them to occur in the project area for feeding, they are unlikely to reproduce in the project area and would be able to move away and avoid the project area during construction to avoid effects.
Whitebark pine (<i>Pinus albicaulis</i>) (T)	No	The species typically occurs at higher elevations than the project area (USFWS 2021), and site-specific vegetation surveys confirmed that whitebark pine does not occur within the project area.

Note: E = endangered; T = threatened; PT = proposed threatened.

FISHER

The Southern Sierra Nevada Distinct Population Segment of fisher is federally listed as endangered (50 *Federal Register* 29532–29589). The species is associated with many of the characteristics of mature forests (e.g., dense canopy cover, large-diameter trees, and tree cavities) (USFWS 2020). The entire project area is within modeled suitable fisher habitat, and the nearest modeled reproductive habitat occurs within approximately 0.07 mile of the site. Although there is no designated critical habitat for the species, critical habitat has been proposed across the species' range and encompasses approximately 595,500 acres of habitat considered essential for the species' conservation (87 *Federal Register* 66987). Proposed critical habitat does not occur within the project area; the closest proposed critical habitat is approximately 1 mile from the Lodgepole Housing Area and approximately 0.50 mile from the Wuksachi Village parking lots, which may be used for staging and temporary housing under the proposed action.

Because the project area is not modeled as suitable for reproduction and is not within proposed critical habitat, the proposed action would not further degrade or remove habitat critical to fisher survival and reproduction despite removal of roughly 100 conifer trees with an average diameter at breast height (dbh) of 6 - 35 inches. Although the project site is within modeled suitable habitat, habitat characteristics suggest that the area is more suited as a travel corridor or foraging habitat than reproductive habitat. As fishers generally tend to avoid areas of year-round human activity (USFWS 2025d), the NPS does not anticipate fisher denning within or making regular use of the project area itself. Further, due to the context of the project in relation to modeled suitable habitat, the likelihood of a fisher selecting a den site within 0.25 mile of the housing area is likewise low.

Despite low potential, design specifications have been integrated into the project to reduce potential for impacts such that adverse effects would not occur. These include avoidance of tree felling from March 1 to May 30 and avoiding exterior demolition and construction activities above ambient levels prior to May 15 if denning fisher are detected. Any fisher foraging within 0.25 mile of the project area and not habituated to human disturbance would be able to disperse, unimpeded, away from the project area in a manner similar to existing conditions such that daily foraging and resting requirements would continue to be met in surrounding areas. The no action alternative would result in a lesser degree of impacts than taking action.

For reasons outlined above, the NPS has determined that the alternatives do not have the potential to result in significant impacts to fisher, and this issue was therefore not carried forward for detailed analysis. Chapter 4: Consultation and Coordination discusses the timing and results of Section 7 ESA consultation with the USFWS regarding impacts to this species. Project specifications developed in consultation with the USFWS were incorporated into the project design to further reduce potential for impacts to fisher should they be incidentally or actively using the area during construction of the proposed action.

CALIFORNIA SPOTTED OWL

California spotted owl is a California Department of Fish and Wildlife Species of Special Concern, and the Sierra Nevada Distinct Population Segment of the species is currently proposed for federal listing as threatened under the ESA (88 *Federal Register* 11600–11639). The species relies on medium- to large-diameter trees for nesting and rearing and can be disturbed by high-decibel sounds, such as those that are expected to result from the project (NPS 2024).

California spotted owls tend to nest in quiet areas. Developed areas where human presence is high are generally considered unsuitable habitat for nesting and foraging (NPS 2024). Given the developed nature of the project area, it is unlikely that California spotted owls would use the habitat within the project area for nesting, although owl presence has been documented approximately 1 mile away on either side of the river (Green 2026, unpublished data) as recently as 2025. Despite recent detections in the area, no active nests have been identified, and recent history suggests that the likelihood of owls nesting directly within or near the project area is low. Therefore, although roughly 100 conifers greater than 30 inches dbh would be removed under the proposed action, direct effects to any owl nests would not be anticipated. In order to further reduce the potential for direct effects should the proposed action be selected, tree removal activities would not occur from March 1 to August 31 if surveys document the presence of nesting owls. As trees are not proposed to be removed under the no action alternative for the purposes of housing rehabilitation or replacement, there is no potential for disturbance related to tree removal for that purpose.

Indirect impacts from noise disturbance could occur should California spotted owl be present within 0.25 mile of the project area during project activities or ongoing use. Indirect effects from noise disturbance would be expected to be minimal, as the species is unlikely to nest in or immediately adjacent to the project area, and those pairs that do are likely habituated to some level of noise disturbance (NPS 2024).

For the reasons outlined above, the NPS has determined that neither alternative has the potential to result in significant impacts to California spotted owl, and this issue was not carried forward for detailed analysis.

Vegetation (including trees and special status species)

Tree removal would not occur under the no action alternative; however, demolition and construction proposed under the proposed action would involve the removal of up to approximately 100 Jeffrey pine [*Pinus jeffreyi*] or white fir [*Abies concolor*] trees 6-35 inches dbh.

Tree species proposed for removal are common and fast-growing and the number of anticipated tree removals proposed under the proposed action is small compared to the overall abundance of these tree species within the broader Lodgepole area (e.g., surrounding campgrounds and trail system) or parkwide and would not result in population-level impacts even at the local scale.

Some limited understory vegetation would be impacted by vegetation clearing and site preparation activities across approximately 5 acres under the proposed action. However, due to thin soils and ongoing human use, vegetation in the project area is sparse, which is common and characteristic of developed sites with thin soils, such that little vegetation would be expected to be directly affected. For vegetation that is incidentally removed, the top surface of the soil and seedbed would be retained to the extent feasible during excavation, allowing existing vegetation to recover post-project. Standard weed prevention and control measures would be implemented under either the proposed action or no action alternative during construction and operation to protect native ecosystems.

The project area does not include any rare or unique habitat types, and targeted surveys for rare plants in July 2025 documented no rare plants. If sensitive plants are inadvertently discovered during construction, impacts would be mitigated through avoidance or propagation methods.

Because the NPS does not anticipate significant impacts to trees from either alternative, rare plants were not detected, and impacts to common understory vegetation would be limited, this issue was dismissed from detailed analysis.

Wildlife (including migratory birds)

Impacts to wildlife can occur when the habitat on which they rely is lost, especially when that habitat is rare. Wildlife can also suffer direct harm or mortality during project-related actions that disturb habitat they occupy. Increased human activity and noise during construction may disturb general wildlife species and cause avoidance of the area. Nests and nesting birds may be impacted by vegetation removal and noise. Wildlife can also become habituated to human food or be injured by ingesting food packaging.

The habitat on-site is characteristic of a developed area in a remote setting and is not rare. Human presence and associated sources of noise (e.g., from vehicles) are common in the area. Due to its developed nature and defensible space work, extensive understory vegetation is not present on-site; therefore, vegetation disturbance would be minimal should the proposed action be selected. Should action be taken, roughly 100 trees would be removed over the course of the project, and most would be removed in the fall. Abundant higher quality habitats are available for wildlife species and nesting birds in areas surrounding the project area; therefore, the potential for direct effects to nesting birds is expected to be low under the proposed action and would not occur under the no action alternative.

Both the no action alternative and the proposed action would comply with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act by implementing USFWS nationwide avoidance and minimization measures to reduce the potential for direct impacts. These measures include, but are not limited to, completing vegetation removal outside of the primary nesting season (March 1–August 1) to the maximum extent practicable. Design specifications are incorporated directly into

the project to reduce potential for wildlife to be habituated to or injured by human food or containers. Other specifications, such as minimizing vegetation removal, would further minimize the potential for impacts to general wildlife species and habitat.

Because of the temporary and localized nature of potential impacts of the alternatives, the existing conditions in the project area, availability of higher quality habitats in surrounding areas, and design specifications that would minimize impacts, this issue was dismissed from further analysis.

Chapter 2: Alternatives

Two alternatives—a no action alternative and the proposed action—are carried forward for evaluation in this EA. This chapter describes the alternatives carried forward, as well as a brief description of an alternative that was considered but dismissed from further analysis.

Alternative 1: No Action – Continue to Maintain Existing Structures under Routine Maintenance Program

Under the no action alternative, the NPS would not finalize or implement a master plan to replace any infrastructure and would continue to maintain and repair existing building and utility infrastructure under the Park's routine maintenance program. Extensive structural deficiencies, including major rehabilitation, would be addressed on a case-by-case basis in order of priority and as capacity and funding allow. Annual structural winterization and rooftop snow removal would also continue.

If, under the no action alternative, no housing improvements are made (beyond routine maintenance), existing housing would continue to fall below current code and accessibility requirements. Construction quality would remain low, and deferred maintenance would continue to increase because most of the buildings are beyond their useful life and are not good candidates for reconditioning. Thermal comfort would remain very poor due to inadequate building envelopes. Employees would remain at risk of contracting disease due to rodent infestation despite implementation of and adherence to safety protocols. Waterline breaks and power outages would continue to be common. The number of garage spaces available (14 under existing conditions) would remain low, leaving most of the 26 permanent residents without secure and weather-tight garage space.

Under this alternative, the NPS anticipates that some buildings would be abandoned for further use if staff capacity does not enable the NPS to maintain all structures in a safe and habitable condition. Park operations may need to be adjusted in the future to compensate for insufficient housing.

Under this alternative the NPS would implement Park standard best management practices for building maintenance, construction, and rehabilitation to minimize impacts to potentially affected resources.

Alternative 2: Finalize a Master Plan to Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole (Proposed Action)

Under the proposed action, the NPS would finalize and implement a master plan by repairing or replacing aging units and infrastructure. The improvements would meet current California code building requirements, align with NPS housing standards, and address ABA deficiencies. Specifically, the plan would address issues stemming from physical degradation of structures, weather intrusion, rodent infestations, energy inefficiency, lack of accessibility routes and features, insufficient utility capacities, and inadequate tenant space and privacy. Additionally, improving access and circulation to the housing units would improve employee ingress and egress in winter and timely emergency service when needed. By rehabilitating housing units and infrastructure that can be effectively repaired and replacing that which cannot, the project would also aim to improve the Park's

operational efficiency, reduce operational costs associated with routine and ongoing maintenance or repair needs, reduce energy and utility usage and cost, and better meet park housing demands.

Under the plan, the NPS would rehabilitate structures where repairs are feasible and demolish and replace structures that cannot be suitably repaired or do not otherwise meet housing standards (see Figure 3). Replacement housing would include a mix of single-family, duplex, and multi-unit facilities using standard NPS prototypes, modified as necessary to meet local conditions and needs. Retained structures would be rehabilitated following a structure specific rehabilitation plan. Each replaced or rehabilitated unit would be suited for the site's climate and snow conditions and would be designed to accommodate a total of 26 permanent employees and 60 seasonal employees.

Final design and construction would occur in phases, with phase 1 expected to be constructed in 2028. Work is anticipated to begin in spring, though precise timing of construction is dependent upon operational considerations, weather, and wildlife. Specifically, exterior work is not anticipated to occur under snow conditions. If fisher are documented to be denning within 0.25 mile of the project area, construction activities above ambient levels (demolition, grading, and construction) would not occur between March 1 and May 15 of the year of detection. This EA assumes that the total duration of construction is from 4 to 5 years (48–54 months), with construction activities taking place spring through fall (an approximately 9-month-long window each year).

All project activities would take place within the limits of disturbance shown on Figure 3, which encompasses just over approximately 8 acres and lies within the same footprint of the existing housing area. This area represents the maximum construction envelope; however, only approximately 5 acres would be disturbed based on current design plans (see Site Preparation, Groundwork, Equipment, and Staging section below).

In accordance with Director's Order 36 (DOI 2024), the NPS selected and designed the proposed replacement housing units using the standard NPS standard building prototypes and specifications that comport with accessibility requirements and applicable safety codes. Minor modifications to prototypes are proposed to accommodate site-specific context factors, such as climatic conditions, and all modifications have been assessed using the NPS value analysis process outlined under Director's Order 90 (DOI 2002), which requires consideration of factors such as function and lifecycle costs. Specific housing and infrastructure improvements under the proposed action are further described in the sections below. The total estimated cost of the proposed improvements as of April 2026 is approximately \$58 million.

Building Rehabilitation and Replacement

Under the proposed action, the NPS would rehabilitate or replace 18 residential buildings encompassing 86 bedrooms (two-bedroom, one-bedroom, or dormitory units) and nine garages, comprising 17 parking spaces total. For the purposes of understanding the proposed implementation schedule, the NPS has divided the project into implementation phases, where phase 1 would address approximately 40% of the updated housing needs (replacing 34 bedrooms and seven garage parking spaces), and the remainder would be updated during future phases (52 bedrooms and 10 garage parking spaces total). Construction phases are anticipated to be continuous during construction seasons until the project is complete.

In total, under the proposed action, 36 buildings—currently in deteriorating condition with inadequate thermal conditions and space requirements—would be demolished, consisting of 31 residential and five non-residential buildings. Residential buildings to be demolished consist of 17 tent houses, seven one- or two-bedroom cabins, four one- or two- bedroom houses, and three four-

bedroom apartments. In addition, five non-residential buildings (e.g., garages, comfort station, and storage) would also be demolished. Twenty-two buildings would be demolished and replaced during phase 1 (including 17 residential buildings and five non-residential buildings), and the remaining 14 buildings (all residential buildings) would be demolished and replaced during future phases. The combined footprint of ground disturbance for all building demolitions would be approximately 6,800 square feet (roughly 0.15 acre), the majority of which would occur during phase 1 (5,400 square feet [roughly 0.10 acre]).

New buildings would include a mixture of single- and double-story buildings, with two to eight units per building, and either one- or two-bedroom or dormitory unit types. Six new buildings (34 bedrooms total) would be constructed in phase 1 and an additional six to seven buildings (42–43 bedrooms) would be constructed during future phases. Replaced buildings would be oriented to maximize solar gain, thereby improving energy efficiency and aligning with the site's climatic needs, and to preserve views for residents toward the upper Kaweah River. In addition, four new garage buildings (comprising seven parking spaces total) would be constructed in phase 1 to provide covered parking for permanent employees, and another five garage buildings (comprising 10 parking spaces total) would be constructed in future phases. Additionally, five new recreational vehicle (RV) parking slips with utility hookups would also be provided to expand flexibility of housing options (see Parking section for additional information).

One building (Building 85) may either be rehabilitated or replaced during future phases; the NPS will decide on the best approach as design advances. Building 85 is a single-story one-bedroom cabin that is currently condemned and uninhabitable. In the event Building 85 is replaced, the NPS would select and design the replacement unit using the standard NPS standard building prototypes and specifications, as well as the NPS value analysis process, which requires consideration of factors such as function and lifecycle costs. Depending on the outcome of the value analysis process, the NPS could select a stand-alone prototype building or they could modify another of the proposed replacement buildings to include one additional unit. For the purpose of this EA analysis, it is assumed that if Building 85 were to be replaced, it would provide up to one additional building and one additional bedroom to the total number of proposed replacements under future phases (bringing the total up to seven buildings and 43 bedrooms).

Proposed replacement buildings in phase 1 and future phases are summarized in Table 2 and are shown on Figure 3.

TABLE 2. PROPOSED REPLACEMENT BUILDINGS BY PHASE

Building No.	Designated Staff Use	Building Description
Phase 1		
Buildings A and B	Permanent	Single-story duplex • Gross square feet: 2,130 (1,054 square feet per unit) • 2 units • Each unit has 2 bedrooms, 2 bathrooms, and 1 kitchen • Each unit includes hookups for 1 stackable washer/dryer, 1 refrigerator, and 1 stove* • Each duplex includes a covered front deck, a detached garage with 2 parking spaces, plus additional designated surface parking (3 spaces per building)

Building No.	Designated Staff Use	Building Description
Building C	Seasonal	Single-story dormitory - Gross square feet: 2,885 6 bedrooms, 4 bathrooms, and 1 kitchen - Dorm includes 2 side-by-side washers/dryers, 3 refrigerators, and 1 stove* - Designated surface parking (7 spaces) for residents - The dorm includes outdoor concrete patio, as well as a shared outdoor gathering area between Buildings C and D
Building D	Permanent	Single-story four-plex - Gross square feet: 2,130 (480 square feet per unit) 4 units - Each unit has 1 bedroom, 1 bath, and 1 kitchen - Each unit includes hookups for 1 stackable washer/dryer, 1 refrigerator, and 1 stove* - Includes 2 detached garages (2 parking spaces each; one accessible garage would be built during phase 1), plus additional designated surface parking (3 spaces) - Includes a shared outdoor gathering area between Buildings C and D - Building would be accessible
Buildings J and K	Seasonal	Two-story dormitory - Gross square feet: 4,282 (2,147 square feet per story) - Each story has 4 bedrooms, 2 bathrooms, and 1 kitchen - Each story includes 1 side-by-side washer/dryer, 2 refrigerators, and 1 stove* - Designated surface parking (8 spaces per building, 16 spaces total) for residents. Accessible parking would be provided at each building. - Includes outdoor concrete patio connecting to the recreation hall - Buildings would be accessible
Garages (for Buildings A, B, D, and 60)	Permanent	Single-story garage - Square feet: 629 - Parking spaces: 2 (except Building 60 garage, which only includes 1 parking space to allow for laundry facility)
Phase 1 Totals		6 housing structures 34 bedrooms 4 garages (comprising 7 parking spaces)
Future Phases		
Building E	Seasonal	Single-story four-plex - Gross square feet: 2,130 (480 square feet per unit) 4 units - Each unit has 1 bedroom, 1 bath, and 1 kitchen - Each unit includes 1 refrigerator and 1 stove* - Designated surface parking (4 spaces) for residents
Building F	Seasonal	Single-story six-plex - Gross square feet: 3,185 (480 square feet per unit) 6 units - Each unit has 1 bedroom, 1 bath, and 1 kitchen - Each unit includes 1 refrigerator and 1 stove* - Designated surface parking (8 spaces) for residents - Includes informal outdoor gathering space

Building No.	Designated Staff Use	Building Description
Building G	Seasonal or Permanent	Two-story eight-plex - Gross square feet: 4,573 (527 square feet per unit) 8 units (4 units per story) - Each unit has 1 bedroom, 1 bathroom, and 1 kitchen - Each unit includes hookups for 1 stackable washer/dryer, 1 refrigerator, and 1 stove* - Includes two detached garages (2 parking spaces each) plus additional surface parking (4 spaces) - Includes informal outdoor gathering space
Building H	Seasonal or Permanent	Two-story six-plex - Gross square feet: 4,573 6 units (3 units per story) 4 units would have 1 bedroom, 1 bath, and 1 kitchen (527 square feet per unit) 2 units would have 2 bedrooms, 2 baths, and 1 kitchen (1,055 square feet per unit) - Each unit includes hookups for 1 stackable washer/dryer, 1 refrigerator, and 1 stove* - Includes two detached garages (2 parking spaces each, including one accessible garage space each) plus additional surface parking (5 spaces) - Includes informal outdoor gathering space - Building would be accessible
Buildings L and M	Seasonal	Two-story dormitory - Gross square feet: 4,282 (2,147 square feet per story) - Each story includes 4 bedrooms, 2 bathrooms, and 1 kitchen - Each story includes one side-by-side washer/dryer, 2 refrigerators and 1 stove* - Designated surface parking (8 spaces) for residents - Includes outdoor concrete patio - Building M would be accessible
Building 85	Permanent	The NPS is currently evaluating whether this building would be rehabilitated or replaced and will decide on the best approach as design advances for future phases. If replaced, it is assumed that up to one additional building and one additional bedroom would be provided, whether as a stand-alone prototype building, or by modifying another of the proposed replacement buildings to include one additional one-bedroom unit. Additional details regarding parking, amenities, etc., would be decided at a later date. 1 bedroom
Garages (for Buildings D, G, and H)	Permanent	Single-story garage - Square feet: 629 - Parking spaces: 2
Future Phase Totals		6–7 housing structures 42–43 bedrooms 5 garages (comprising 10 parking spaces)

* Note the amenities as described above are based on current estimated need to accommodate seasonal and permanent residents, although housing assignments, and therefore amenities, may be subject to change over time.

During phase 1, building replacements would require approximately 49,000 square feet (just over 1 acre) of ground disturbance, all of which would occur within the limits of disturbance (see Figure 3). Up to roughly 3 acres of additional disturbance would result from housing area improvements

during future phases (including buildings, roads, utilities, and similar actions). Building rehabilitation and replacement activities are estimated to result in up to roughly 3,200 cubic yards of cut (maximum depths between 2–6 feet) and 1,800 cubic yards of fill (depths between 2–7 feet).

Future phases would also include the rehabilitation of five to six buildings, comprising nine to ten total bedrooms. Rehabilitation of buildings would include a mixture of exterior and interior repairs, such as new roofing and attic insulation, new exterior siding or trim, new windows and doors, new porches and steps, modified interior layouts, and new interior finishes (e.g., flooring, paint, cabinets, countertops, appliances). Proposed upgrades would vary depending on the specific needs for each building. Proposed building rehabilitations are summarized in Table 3.

TABLE 3. PROPOSED BUILDING REHABILITATIONS

Buildings Proposed for Rehabilitation	Description	Proposed Upgrades
Building 60	Single-story residence • Square feet: 1,003 • Units: 1 • Unit type: one-bedroom • Total bedrooms: 2 • Garage: yes; 2 parking spaces	Rehabilitate the residence as a two-bedroom housing unit. Roofing, flooring, and framing repairs (as needed). Bring electrical and fire alarm systems up to code. New furnace and water heater. Building 60 garage would be constructed in phase 1.
Building 67	Two-story dormitory • Square feet: 1,310 • Units: 4 • Unit type: multi-bedroom • Total bedrooms: 4	Rehabilitate the residence to serve as a four-bedroom dormitory. Repair or replace roofing, stone foundation, windows, doors, and porch as needed. Modify the interior layout for increased living space, and install new kitchen and bedrooms. Add new plumbing, heating, electrical, and fire alarm components. Replace existing single bathroom and utility room with two new bathrooms.
Building 81	Single-story residence • Square feet: 436 • Units: 1 • Unit type: one-bedroom • Total bedrooms: 1	Rehabilitate the residence to serve as a one-bedroom housing unit. Repair or replace roofing, siding, trim, windows, doors, flooring, porch screening, and interior walls, as needed. Add new kitchen cabinets and countertops. Add new plumbing, heating, electrical, and fire alarm components.
Building 82	Single-story residence • Square feet: 436 • Units: 1 • Unit type: one-bedroom • Total bedrooms: 1	Rehabilitate the residence to serve as a one-bedroom housing unit. Repair or replace roofing, siding, trim, windows, doors, flooring, porch screening, and interior walls, as needed. Add new kitchen cabinets and countertops. Add new heating, electrical, and fire alarm components.

Buildings Proposed for Rehabilitation	Description	Proposed Upgrades
Building 85	Single-story residence (currently condemned) • Square feet: 436 • Units: 1 • Unit type: one-bedroom • Total bedrooms: 1	The NPS is currently evaluating whether this building would be rehabilitated or replaced and will decide on the best approach as design advances for future phases. If rehabilitated, improvements would include rehabilitating the residence to serve as a one-bedroom housing unit. Major foundation repairs would be needed, as the building is currently condemned. Once the foundation is addressed, roofing, siding, trim, windows, doors, flooring, porch screening, and interior walls would need to be repaired or replaced, as needed. New kitchen cabinets and countertops would be added, as well as new heating, plumbing, electrical, and fire alarm components.
Building 219	Single-story comfort station and bath • Square feet: 250 • Units: 1 • Unit type: one-bedroom • Total bedrooms: 1	Rehabilitate the comfort station and bathroom for new use as a one-bedroom or studio housing unit. Remove all interior walls and curbs and reconfigure the layout to encompass a bedroom, a bathroom, and an open kitchen-living area.
Rehabilitation Totals	Housing Structures: 5–6 Bedrooms: 9–10	

Common Space and Community Amenities

Under existing conditions, the project area contains several dispersed, rustic recreation amenities in marginal condition, including picnic tables, rock fire pits, log round seating, and a non-operational swing set. These features are scattered throughout the project area and would be subject to disturbance or removal during construction activities to accommodate the installation of new common spaces and gathering areas which are described below. Following project completion, the master plan would provide designated areas for these amenities to be reinstalled or replaced with new facilities in kind. An existing basketball hoop located adjacent to the recreation hall parking area, which utilizes the parking lot surface as the court, is not within the construction footprint and would be retained in place without impact. Overall, the proposed action is expected to result in a net improvement to the quality and functionality of recreation amenities in the Lodgepole Housing Area.

Under the proposed action, multiple undeveloped shared common spaces would be available to accommodate both small and large gatherings (see Figure 3). Building-specific gathering areas would be located next to some of the new buildings, whereas small community gathering spaces would be integrated within building clusters, and a larger gathering area (Lodgepole community space) would be provided for residents and employees across the road from the recreation hall.

The specific gathering areas and common spaces, which would be included in phase 1 of the proposed action, include space for the following (see Figure 3):

- Building C would have its own outdoor concrete patio with space for picnic tables and other outdoor seating.
- Buildings J and K would each have their own outdoor concrete patio that would connect to the adjacent recreation hall and offer a transition space.
- Small informal gathering spaces would be south of Building D and west of Building C.

- An accessible community gathering space would be between Buildings C and D and would include space for outdoor picnic tables and other seating.

Other gathering areas and common spaces would be made available in future phases, which would include:

- The Lodgepole community space, which would provide an unpaved, open-space area for outdoor gathering (e.g., picnic tables, barbeques).
- An accessible concrete gathering space east of Building H, two small informal spaces near Buildings F and G, and outdoor concrete patios for Buildings L and M (see Figure 3).

These common areas would be minimally graded to offer recreational space while preserving and enhancing the natural landscape and minimizing environmental impacts. The existing recreation hall building would remain as-is under the proposed action and would continue to be available for community use.

Other amenities that are included in the proposed action include a shared laundry facility (in the new garage structure west of Building 60). Dormitory-style buildings (C, J, K, L, and M) with shared kitchens would include multiple refrigerators (two or three refrigerators shared amongst four or six people, respectively) and one stove. Dormitory-style buildings would also include space for either one or two side-by-side washer/dryer units (one in four-bedroom dormitories and two in six-bedroom dormitories), which would be shared among four or six people, respectively.

Accessibility Improvements

The master plan would establish the required number of accessible units meeting ABA accessibility standards and current International Existing Building Code accessibility requirements. Where feasible, ABA-compliant features would be extended throughout the site to enhance accessibility. Activities under the proposed action would include development of ABA-compliant walkways, parking areas, and garages connecting buildings with accessible units to associated common areas and the recreation hall. Of the 18 proposed replacement and rehabilitation buildings, five would be accessible: Buildings D, H, J, K, and M (see Figure 3). Accessibility features at these buildings would include accessible parking spaces, sidewalks, ramps, and entries. Designated accessible parking areas, including two garage units (comprising four parking spaces) and six surface parking spaces, would be provided near accessible units. Two of the proposed outdoor community gathering spaces would be accessible and equipped with accessible seating; one space would be located between Buildings C and D and another would be located east of Building H (see Figure 3).

Pedestrian Circulation and Access

Under the proposed action, paved pathways connecting parking areas to buildings, as well as a network of unpaved natural surfaced pathways linking buildings, common areas, and the recreation hall, would be included. This may include but is not limited to a potential 4-foot-wide paved pedestrian walkway along the northern edge of Upper Heights Road. This walkway would consist of a 4-foot extension of the roadway pavement, with a line to delineate the walkway from the roadway (see Figure 3). Some of the existing narrow asphalt pedestrian access paths, which have become eroded and covered in sediment and vegetation, would be removed, recontoured, and revegetated as part of the improvements. Additionally, ABA-compliant walkways would be provided at accessible parking areas and buildings, and wherever feasible, to enhance accessibility throughout the site (see Accessibility Improvements section for more details).

Roadway Improvements

Under the proposed action, River Drive and Upper Heights Road would continue to serve as Lodgepole Housing Area's primary access routes for snow plowing and maneuvering. Roadway improvements would be implemented for River Drive and Upper Heights Road to enhance their long-term functionality and durability, as discussed below.

In addition, during phase 1, Upper Heights Road would be reconstructed and widened to 20 feet, which would include a new emergency and maintenance vehicle turnaround between Buildings A and B to better accommodate emergency vehicles and snow removal equipment. The improved roadway design would also include retaining walls where the road cuts into the hillside. The combined width of the Upper Heights roadway and adjacent walkway would be 24 feet. Improvements to Upper Heights Road would result in approximately 2 acres of ground disturbance and roughly 360 cubic yards of cut and fill, with a cut/fill depth of roughly 6 feet. The section of the Upper Heights Loop above Buildings A and B would remain in place for maintenance access to the existing water main and would not be modified or resurfaced.

Under the proposed action, during phase 1, roadway rehabilitation and paving of River Drive would focus on areas impacted by utility trenching and grade adjustments required for parking and building access. Upon full implementation of the master plan (including future phases), River Drive would receive an overlay extending from the west end of phase 1 to the east end of the project.

Parking turnouts along River Drive and Upper Heights Road would also be paved and striped to provide clear, organized access.

Emergency Access

The proposed action may include construction of an east access road, which would be a 600-linear-foot (LF), 12-foot-wide gravel road on the east side of the Lodgepole Housing Area, with 1-foot-wide shoulders, connecting to the Lodgepole Campground. This road would serve as a utility access and maintenance and emergency egress route for Lodgepole residents and campground users. Construction of the east access road would result in approximately 18,800 square feet (0.4 acre) of ground disturbance and approximately 230 cubic yards of cut and fill, with a cut/fill depth of roughly 4 feet.

The proposed east access road would cross several natural swales, as well as one unmapped drainage (non-perennial) that has been observed east of the Lodgepole Housing Area. Preliminary design of the east access road includes culverts where road crossings of swales or drainages are required. If the east access road is pursued under the proposed action, the NPS would formally delineate these features to determine their federal and state jurisdictional status and applicable federal or state permits for discharge into waters would be obtained, if needed, prior to construction.

Parking

Under the proposed action, parking for permanent and seasonal park staff would be provided at a ratio of up to one stall per bedroom (i.e., per resident) through a combination of garages and uncovered spaces located near new buildings and the recreation hall. The construction of up to nine new garage buildings would provide 17 parking spaces total (associated with Buildings A, B, D, G, H, and 60). An additional 111 uncovered parking spaces would be provided to accommodate temporary staff, as well as visitors, maintenance, delivery, and other service vehicles. Of these 111 spaces, six would be designated accessible spaces near accessible units.

To minimize grading and earthwork, redesigned parking spaces would be placed within previously developed footprints to the extent feasible. Some existing paved areas would be revegetated to improve community aesthetics, enhance permeability, improve hydrology, delineate drive paths, and improve snow plowing efficiency. Large, continuous paved parking areas would be avoided to preserve natural hydrology and minimize grading impacts. The paved area at the recreation hall would be reconfigured with striping to create clearly delineated parking spots. Additionally, some of the existing driveways accessing housing units (Buildings 81, 82, 85, and Comfort Station and Bath 219) would be repaved and striped to accommodate parking and turnarounds.

Five tandem RV parking slips with water, sewer, and electric hookups would also be provided to expand flexibility of housing options. The permanent RV slips would be strategically located within previously developed building footprints to minimize site disturbance and grading.

Parking improvements would result in approximately 40,000 square feet (0.9 acre) of new pavement and 23,000 square feet (0.5 acre) of replaced pavement for a total combined footprint for parking area improvements of 63,000 square feet (under 2 acres). Relative to existing conditions, the proposed action would result in a net gain of approximately 27,000 square feet (0.6 acre) of impervious area. Areas of new pavement would be relatively evenly distributed throughout the site along the widened edge of Upper Heights Road within new designated parking areas in front of replacement buildings and within the new RV slips.

Parking improvements are estimated to result in up to 2,100 cubic yards of cut (maximum depths between 2–10 feet) and roughly 900 cubic yards of fill (maximum depths between 2–6 feet). The use of aggregate base course and subbase compaction would be required during paving activities. Parking improvements would be relatively evenly split between phase 1 and future phases; however, slightly larger volumes of cut and fill would be required during phase 1 compared to future phases.

Utilities

Under the proposed action, the design of new or rehabilitated buildings would also include a range of mechanical, electrical, propane, plumbing system, backup power, and fire suppression system improvements. Existing water and sewer service laterals serving buildings slated for demolition would be removed back to the main lines, whereas new water and sewer service laterals would be installed on the existing main lines along River Drive and extended to new building locations in phases. The service laterals would be installed at a minimum of 36 inches deep for water and up to 5 to 10 feet deep for sewer. Water laterals would be sized to meet both domestic and fire sprinkler demands and would include backflow prevention measures. A portion of the existing 8-inch-diameter water distribution line from the Lodgepole Treatment Plant to the connection with the Wolverton Interconnect water supply line would be replaced. The water main size capacity would be assessed to confirm it can support fire and domestic water demands, with mainline upsizing and/or booster pump and water tank installations implemented as needed to meet building requirements.

New underground electrical facilities, telecommunication conduits, and cable distribution would be installed. These would be co-located in trenches with other utilities wherever possible. Electric utilities would be used to support mechanical and plumbing systems (e.g., heating/cooling and water heaters). Heating and cooling would be provided to all new and improved buildings through a fully electric centralized air source heat pump unit to improve resident comfort in all seasons. The selected heat pump would be capable of low temperature operation to handle winter temperatures on-site. Buildings would be provided with a generator inlet box for each building to allow the use of generators in case of a power outage. Propane systems or other backup heat sources, such as wood stoves, may also be incorporated. In addition, Buildings C, J, and K, which are best suited for

photovoltaic options, would be designed and constructed to accommodate future installation of photovoltaic panels should the NPS choose to pursue them in the future for increased power reliability.

The total estimated length of utility trenching needed for the project is 6,300 LF, or 1.20 miles. This includes 3,100 LF for electric, 1,700 LF for water, 1,000 LF for sewer, and 500 LF for storm drainage features, such as bioretention areas and vegetated swales. Trenching depths would vary across utility types but would range from 30 to 36 inches deep for electric and water, respectively, and 5 to 10 feet deep for sewer lines.

A single fire alarm system would be provided to protect all buildings, and new automatic fire sprinkler systems would be provided for each rehabilitated and replaced building. A transmitter would facilitate off-premises monitoring of the individual signals in a listed central station facility.

All pipes, water tanks, and other structures would be capped or screened to prevent wildlife from entering and becoming entrapped. Escape ramps would be constructed in all trenches left overnight to prevent wildlife from becoming entrapped. Any old tanks or pipes would be removed and disposed of off-site.

Service and Maintenance Area

Under the proposed action, well-defined and designated access and parking area would be maintained for the water treatment plant and the office/storage building. The existing, non-functional wash pad across from the water treatment plant would be removed during phase 1 and backfilled with native soil, and the paved area would be preserved to support snow removal operations. Native vegetation would be planted between the water treatment plant and service/maintenance area and residential areas to improve visual screening of functional spaces from residential areas.

Site Preparation, Groundwork, Equipment, and Staging

Under the proposed action, site preparation activities would include vegetation removal, grading, removal and fill, felling of roughly 100 trees, and demolition. These activities would occur in localized areas where improvements are proposed for each phase of construction. No trees or other plants would be removed or injured without prior approval. Soil disturbance would be minimized to the extent necessary to accomplish project work. No topsoil would be imported.

All project activities would take place within the limits of disturbance shown on Figure 3, which encompasses approximately 8 acres and lies within the same footprint of the existing housing area. This area represents the maximum construction envelope within which all ground-disturbing activities (clearing, grading, removal, and fill) would occur during staging, demolition, grading, road work, utility work and construction of new or rehabilitated buildings. Based on current project design, the actual acreage of ground disturbance that would occur during construction is estimated at approximately 5 acres, of which 2 acres are associated with phase 1 improvements, and the remaining 3 acres are associated with future phases of work (Table 4).

The proposed action is estimated to result in approximately 5,800 cubic yards of cut and 3,00 cubic yards of fill (e.g., topsoil, gravel, or aggregate base materials), resulting in a net export volume of 2,800 cubic yards. For the entire project there would be a net gain of approximately 27,000 square feet (0.60 acre) of impervious area, largely due to proposed parking and roadway improvements,

which involve adding areas of new pavement. Dust control, using water from existing developed sources, would occur as needed on active work areas where dirt or fine particles are exposed.

Table 4 details the anticipated area of ground disturbance and volume of cut and fill for each project phase.

TABLE 4. ESTIMATED GROUND DISTURBANCE AND CUT/FILL VOLUMES BY PHASE

Project phase	Estimated Area of Ground Disturbance* (acres)	Estimated Volume of Cut/Fill (cubic yards)
Phase 1	2.5	2,700 cut / 1,920 fill
Future Phases	2.9	3,100 cut / 1,100 fill
Total	5.4	5,800 cut / 3,000 fill

* Ground-disturbing activities include clearing, grading, removal, and fill. All surface disturbance would take place within the just over 8-acre limits of disturbance depicted on Figure 3.

Project demolition and construction would involve the removal of approximately 100 trees and some understory vegetation. At a minimum, tree felling would not occur between March 1 and June 30. Removal of small shrubs would be conducted outside of the March 1 to August 1 timeframe to the extent feasible. If some vegetation needs to be removed prior to August 1, a 500-foot buffer would be implemented if nesting birds are detected. Preconstruction surveys would be conducted by the NPS in suitable reproductive fisher habitat prior to construction. If fisher are denning in nearby reproductive habitat during a given construction year, exterior demolition and construction above ambient levels would not begin prior to May 15 of that year. Active California spotted owl nest trees for spotted owl would not be removed.

Felled trees would be cut down to a stump height of no more than 6 inches, and stumps would be treated with products, as deemed necessary, to prevent spread of root rot. Fungicides would be applied so as to dry within 8 hours of application. Tree protection measures would be used during construction to protect any trees that are not being removed from root damage. Felled trees would be hauled from the Park, whereas brush and limbs would be chipped on-site to a depth of no more than 2 inches. Any excess chips would be hauled out of the Park. Chipping would be restricted between March 1 and May 31.

The project may use the Wuksachi Village West Terrace parking lot, 2.5 miles from the Lodgepole Housing Area, for temporary housing, staging, and stockpiling during construction (see Figure 3). This parking lot is an existing paved site that is currently used by park operations for ongoing material stockpiling needs. No new ground disturbance would occur at the site.

Construction activities would be limited to daylight hours.

Equipment Cleaning and Maintenance, and Spill Planning

Before entering the Park, all construction equipment would be pressure washed and/or steam cleaned to remove debris and potential weed propagules. Equipment would be inspected by NPS staff to ensure compliance with cleanliness requirements; inadequately cleaned equipment would be rejected. Staging areas would be inspected for invasive plants and approved prior to use.

The contractor would provide an inventory of all equipment, and the suitability of add-on emission controls would be identified for each before the start of the project. Contractors would properly maintain equipment (e.g., mufflers) to minimize noise from equipment use, would follow California

state idling regulations/laws, and would not allow equipment to idle longer than necessary. Engines would not be tampered with to increase horsepower, and lower emitting engines and fuels would be used, including electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations, if feasible. All motor vehicles and equipment would have mufflers conforming to original manufacturer specifications that are in good working order and are in constant operation to prevent excessive or unusual noise, fumes, or smoke. Mufflers and sound attenuation devices (such as rubber strips or sheeting) would be installed and maintained on all equipment to the extent feasible. This includes truck tail and other gate dampeners (both opening and closing) for all dump trucks used in the project area.

Where appropriate and available, “environmentally friendly” grease, hydraulic oil, and bar and chain oil would be used. These lubricants would be vegetable or mineral oil based and biodegradable. All equipment at the project site would be maintained in a clean and well-functioning state to avoid or minimize contamination from mechanical fluids, as well as meeting California Air Resource Board On-Road emission requirements. All equipment would be checked daily.

A hazardous spill plan would be developed, stating what actions would be taken in the case of a spill, notification measures, and preventive measures to be implemented, such as the placement of refueling facilities, storage, and handling of hazardous materials. A hazardous materials management plan would be developed to outline the proper handling and storage and disposal techniques for hazardous building materials, such as lead-based paints and asbestos-containing materials.

Traffic Management

A construction traffic and parking management plan would be developed that minimizes traffic interference and maintains traffic flow as necessary. Use of air horns within the Park would be limited to emergencies only.

Minimum acceptable visibility and speed limits, or traffic control, for all public roadways would be enforced by speed limit signs or traffic controllers during construction as needed. All project staff would follow posted speed limits but would reduce their speed by an additional 5 miles per hour during dawn and dusk. Traffic monitors would have park radios with the appropriate frequency, appropriate safety clothing, and reflective signs. NPS staff would not be allowed to stop/park within active construction work areas. Emergency vehicles would be allowed on an as-needed basis.

Soils, Stormwater Management, and Site Vegetation/Revegetation

Construction phasing would limit the number of sections of the housing area that would be disturbed at any given point. During phasing, disturbance from activities, such as earthwork, grading, clearing, and grubbing, would be kept to a minimum around rehabilitated buildings and proposed new structures to minimize exposed soil and the potential for erosion. Topsoil or surface layers would be removed, retained, and restored in the native profile postconstruction to promote vegetative recovery and site stabilization. Standard erosion and stormwater control measures (e.g., coconut wattles or silt fences) would be implemented to prevent impacts to any off-site aquatic resources; hay or straw erosion-control methods would not be used. All equipment not being used for demolition or excavation within or for building footprints would remain on disturbed gravel or paved roadway surfaces within the road/construction prism. Machinery would remain within the construction limits to prevent unintended ground disturbance.

The project would comply with applicable terms, conditions, and requirements of the National Pollutant Discharge Elimination System construction stormwater general permit, including but not

limited to, completion of a stormwater pollution prevention plan and water quality monitoring plan that identifies project-specific control measures to ensure water quality standards are not exceeded as a result of project-related runoff. BMPs for drainage and sediment control, as identified in the Federal Highway Administration and NPS stormwater pollution prevention plan, would be implemented to prevent or reduce nonpoint source pollution and minimize soil loss. Site inspections would be conducted during construction to ensure that erosion-control measures were properly installed and are functioning effectively.

Storm drainage features would be installed to route stormwater into vegetated swales and rain gardens to the maximum extent possible or would continue to infiltrate into permeable surfaces on-site. Upon completion of proposed infrastructure improvements, disturbed areas adjacent to buildings and paved areas would be revegetated naturally or, if determined necessary, through a combination of erosion-control seeding with native plants, mulching, and selective planting of native plants. In addition, as necessary, some areas would be revegetated as stormwater plantings (i.e., rain gardens or vegetated swales) to collect stormwater runoff. Stormwater plantings are proposed along the northern edge of Upper Heights Road (near Buildings A, B, C, and D) and along the northern edge of River Drive (near Buildings C, D, 60, and the recreation hall). Invasive plants would be surveyed for and treated for 1 to 3 years after construction. Remedial actions, including controlling nonnative plant species with herbicide, would be implemented if invasives were detected.

Temporary Housing

During construction, existing residential units would be demolished, thereby creating a deficit in available housing within the Lodgepole Housing Area; therefore, the NPS would provide temporary housing for impacted employees during the construction period.

The NPS may use the existing Wuksachi Village North Terrace parking lot, 2.5 miles from the project area, for temporary housing during construction (see Figure 1) or consider another developed site if necessary. The Wuksachi Village North Terrace parking lot has adequate space for the anticipated required housing units and would require minimal utility work to connect into the existing water, sewer, and power utilities that are available at the site.

General Practices

Contractors would attend NPS staff-led training on fisher and fisher den tree identification and food storage and garbage removal. A litter-control program would be implemented during construction to eliminate the accumulation of trash. This program would include a dedicated individual assigned to patrol the project area and ensure that food and beverage items are stored properly. At the end of each shift, the individual would be assigned the responsibility of ensuring that staff have disposed of and secured litter in proper receptacles. All food, including food in vehicles, would be stored in bear-proof containers. Spilled food would be cleaned up immediately. Waste pickup would occur at least once a week at appropriate dumps outside of Sequoia National Park subject to state, county, and local regulations.

Feeding or approaching wildlife would not occur, and any wildlife collisions would be reported to Park personnel. The park biologist or ranger would be notified if bears loiter in the area or if fisher sightings occur.

Work zones would be signed at approach points. No work activity would be permitted outside the limits. Workers would be instructed to avoid conducting activities beyond the construction limits as

defined by construction plans or marked limits, including fencing. Fencing used to delineate construction zones would be constructed to prevent entrapment of wildlife.

All tools, equipment, barricades, signs, surplus materials, and rubbish would be removed from the project work limits upon project completion. All demolition debris would be removed from the project area and disposed of outside the Park at an approved location.

In the event of the inadvertent discovery of historic properties, such as archeological resources, suspected human remains, funerary objects, sacred sites, or objects of cultural patrimony, the cultural resources branch chief, park archeologist, and superintendent would be immediately notified. Work in the affected area(s) would stop immediately until the historic properties are reviewed by the NPS. As appropriate, consultation with the California State Historic Preservation Office (SHPO) and American Indian Tribes would also take place regarding disposition of affected artifacts and remains, per 36 CFR 800.13 and, as appropriate, provisions of the Native American Graves Protection and Repatriation Act of 1990. During consultation, reasonable measures would be taken to protect the discovery site, including any appropriate stabilization or covering; to ensure the confidentiality of the discovery site; and to restrict access to the discovery site. Depending on the location of the discovery, security may be warranted.

Consideration of Other Action Alternatives

The NPS did not develop additional action alternatives for housing improvements because other alternatives would have been less cost-effective, less efficient, and more impactful. As such, other action alternatives would not align with NPS policy, which prioritizes cost-effectiveness, operational efficiency, and minimizing environmental and operational impacts as described below. Below are a summary of actions that were not considered feasible or reasonable given current conditions and NPS policy and were therefore not developed as action alternatives.

Do Not Provide Housing at Lodgepole

In 2012, the NPS completed a service-wide Housing Needs Assessment for Sequoia and Kings Canyon and other national parks and found that the area surrounding the parks consists primarily of rural communities, with very limited short-term housing (LMI 2012). At the time, the monthly rents for hotels and motels with kitchenettes were more than \$750 per month, and the availability of these rooms was very scarce. The assessment also found that there were no housing units within a 60-minute commute of Lodgepole.

NPS policy directs the superintendent to provide sufficient housing to support park operations when reasonable housing alternatives do not exist. Further, NPS policy requires parks to provide housing in “good” condition. Given the findings of the needs assessment and that these findings continue to apply, the option of providing housing outside Sequoia and Kings Canyon National Parks was not considered as an action alternative.

Utilize Alternate Housing Designs

When existing housing is replaced, parks are instructed to use standard building designs and specifications, which are intended to enhance the planning, design, and construction process. These standardized designs, or prototypes, are developed by the Washington Area Service Office and should be used unless there is substantial justification for deviation, as outlined in Director’s Order 36 (DOI 2024).

For the proposed housing improvements, NPS determined that the available prototype housing designs would meet all identified needs, with only minor modifications required to address specific site conditions. In accordance with NPS policy, master plan alternatives for housing were evaluated through a value analysis process, as described in Director's Order 90. Because the prototypes could be adapted to the site and the evaluation process was completed per policy, the NPS did not consider any action alternatives that used other housing designs.

Relocate Lodgepole Housing

The Lodgepole Housing Area is a developed housing site that has been continuously used for decades. No other previously developed locations are available for relocating this housing area within the Park. Developing an entirely new site was not considered, as it would result in much greater impacts and substantially higher costs compared to rehabilitating the existing site. For these reasons, relocation was not considered as an action alternative.

Chapter 3: Affected Environment and Environmental Consequences

This chapter provides a description of the existing conditions of specific resources that would be affected by the alternatives if implemented and the likely environmental consequences from implementing either the no action alternative or the proposed action considered in this EA. This chapter addresses the resources/impact topics that were retained for detailed analysis from internal and public scoping: employee health and safety (see the Issues section in Chapter 1).

Employee Health and Safety

Affected Environment

The Lodgepole Employee Housing Area is currently designed to house an average of 60 seasonal and 26 permanent employees. Seasonal employees currently reside within a mixture of tent houses, cabins, apartments, and single-family residences. Permanent employees are given priority for houses but may also reside in cabins or apartments. Tent houses include one-bedroom, one-kitchen, and no-bathroom units and are mostly designed for double occupancy, meaning two people reside within a single bedroom. Apartments, cabins, and houses range from two to four bedrooms (with one person per bedroom) and typically one bathroom and kitchen for every one to two people.

Existing housing units at the Lodgepole Housing Area were constructed sporadically between the 1930s and 1980s and have seen only limited maintenance and modernization since that time. As a result, many of the units currently show signs of age-related deterioration and do not meet current building codes and standards. In its current condition, the housing environment presents a range of health and safety risks to employees who reside in these units and diminishes overall employee comfort. Furthermore, the existing housing contributes to employee recruitment and retention challenges, as substandard living conditions can deter potential hires and lower morale among current staff. Park managers have received complaints from Lodgepole Housing Area employees about the building conditions and how they create a generally uncomfortable and undesirable living environment, and hiring officials have received feedback that potential hires either do not even apply for jobs in the Park or turn down offers because of housing conditions. Specific employee health and safety concerns for the Lodgepole Housing Area are described in the following sections.

Building Conditions

The age-related deterioration of housing units presents health and safety risks to employees due to lack of ABA accessibility; outdated and undersized utilities (e.g., electrical wiring and plumbing) leading to plumbing failures, power outages, water damage and mold growth, and increased risk of fire; and an increased potential for structural failures (e.g., broken stairs, decks, foundations, and similar issues). The presence of outdated construction materials also presents health and safety risks to employees due to potential for exposure to lead-based paint and asbestos-containing materials, which remain in some units.

Inadequate thermal conditions caused by poor building insulation, deteriorating heating and ventilation systems, and a lack of air conditioning systems create uncomfortable indoor living conditions and increase electrical costs for employees, particularly during winter and summer months when temperatures are at extremes. No cooling systems are currently installed in any of the units, and residents rely on fans. When extreme weather events are combined with unreliable electric

utilities and power outages, employees have had to vacate their housing units when indoor temperatures become unsuitable.

The housing units' inappropriate weather design, such as flat roofs in a high-snowfall area and poor or nonexistent insulation, not only contribute to uncomfortable indoor temperatures but also require employees to clear roofs in winter and lead to snow and ice accumulation near doorways, which presents a safety hazard for staff and residents.

In addition, most existing buildings currently have inadequate ground clearance and poorly maintained exteriors, which allow rodents and other insects to enter housing units, making infestations a pervasive issue across the site. Rodents in particular present a serious employee health and safety concern due to the risk for hantavirus exposure, which can lead to infection and serious, sometimes fatal, diseases, such as hantavirus pulmonary syndrome and hemorrhagic fever with renal syndrome (Centers for Disease Control 2024). Intrusion by other insects or animals has also been known to occur, which presents health or safety risks from bites, stings, or food contamination depending on the type of animal or insect.

Accessibility

Currently, there are no accessible buildings and no accessibility features, such as accessible parking spaces, ramps, or pathways, in the Lodgepole Housing Area. The lack of ABA accessible units and features may preclude housing occupancy by current or future employees requiring accommodation.

Parking and Roads

Parking spaces across the site are currently undesignated (i.e., not delineated with lines) and are not assigned to specific units, which leads to inefficient use of available parking areas. At times, available parking spaces for employees can be limited and/or far away from their housing units. Currently, only 14 garage spaces are available for permanent employees, leaving some without covered parking. This increases the risk of rodent damage, exposes vehicles to adverse winter weather, and can restrict staff access to their vehicles during and immediately following winter snow events.

The existing access roads to the site are also currently undersized and make it difficult for maintenance and emergency services to operate efficiently, particularly for snow-plowing vehicles during the winter, which employees rely on to ensure ingress and egress and safe travel. Any impediment to the efficient and successful completion of critical maintenance and emergency services could have a commensurate effect on employee health and safety where those services influence an employee's ability to both leave or access their housing.

Alternative 1 – No Action Alternative

Current and Expected Future Condition – Employee Health and Safety

Under the no action alternative, actions described under Alternative 1 would continue. As a result, environmental effects would be the same as previously described in the Current and Expected Future Condition of the Environment if No Action is Taken section. The no action alternative would continue to hinder the agency's ability to provide and maintain employee housing that is safe, sanitary, and cost-effective to maintain.

Reasonably Foreseeable Future Effects – Employee Health and Safety

Existing and reasonably foreseeable actions that have influenced, or would continue to influence, employee health and safety include the ongoing implementation of NPS programs related to human resources and asset management.

NPS programs related to human resources and asset management would continue to be implemented in accordance with applicable NPS plans and policies. Ongoing implementation of these standard management programs would likely result in a continuation of existing conditions whereby infrastructure is maintained as issues arise but is not replaced or rehabilitated.

These existing and reasonably foreseeable trends and actions would have adverse effects on employee health and safety by allowing the existing risks to employee health and safety to continue without intervention and because prospects for alternative off-site housing options would continue to be unreasonable. Without intervention, the continued decline in housing quality at Lodgepole Housing Area would undermine federal efforts to modernize infrastructure, enhance resilience, and support employee health and safety.

Alternative 2 – Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole (Proposed Action)

Expected Future Condition – Employee Health and Safety

The expected future condition of employee health and safety under the proposed action includes benefits of improved building condition, improved accessibility, and improved parking and road access, which are described further below.

BUILDING CONDITION

The new and rehabilitated residential buildings would include new utility systems (including water, sewer, and electric), heating, ventilation, and air conditioning (HVAC) systems, and fire systems, which would improve the reliability of utilities and reduce the risk of water damage, mold, plumbing failure, fire risk, and power outages. Heating and cooling would be provided to all new and improved buildings through a fully electric centralized air source heat pump unit to improve resident comfort in all seasons. The new and rehabilitated residential buildings would also reduce safety hazards associated with potential structural failures (e.g., broken stairs, decks, foundations, and similar issues) and potential for exposure to lead-based paint and asbestos-containing materials.

New or rehabilitated buildings would be designed or upgraded to better withstand the local climate conditions and would include new insulation, weatherproofing, and other exterior finishes appropriate for a high-snowfall environment. These upgrades would improve indoor thermal conditions while also reducing potential intrusion by rodents, insects, and other animals. As a result, employee comfort would be improved. Further, health and safety risks and potential cost to employees from replacing damaged food or equipment would be reduced.

Standing seam metal roofs would also increase the resiliency of buildings to fire, thereby reducing safety hazards for employees. Though snow and ice clearing along pathways and roads would continue to be necessary in this snow-prone environment, new exterior and roofing designs would eliminate the need for employees to clear snow from roofs and reduce the potential for snow and ice accumulation near doorways and stairwells and around vehicles, thereby reducing safety hazards for employees.

In general, the new and rehabilitated housing units would include new interior finishes (e.g., lighting, floors, cabinets, appliances), which would enhance the overall comfort, functionality, and appeal of the housing units for employees.

ACCESSIBILITY

The proposed action would incorporate several accessibility improvements throughout the site to bring the housing area up to current ABA standards and to improve employee health and safety, particularly for disabled employees. Five of the proposed replacement buildings (D, H, J, K, and M) (see Figure 3), would be designed to be accessible and would include accessible parking spaces, ramps, and walkways. The outdoor patios connecting Buildings J and K with the recreation hall would also be accessible, as well as the paved outdoor Lodgepole community space, which would be developed across from the recreation hall. In addition, two new outdoor community gathering spaces would be accessible and would include space for accessible seating; one space would be located between Buildings C and D, and another would be located east of Building H (see Figure 3).

PARKING AND ROADS

The proposed action would improve parking conditions for residents by increasing the number of available garage spaces to 17 (compared to 14 under existing conditions) and by clearly delineating and allocating parking spaces to specific buildings. These improvements would result in beneficial effects to permanent employees who would have access to safe and weather resilient storage, as well as contribute to more efficient use of parking space and safe access for both permanent and seasonal residents.

The proposed roadway improvements under the proposed action would improve access to the site for maintenance and emergency vehicles, which are important for maintaining a safe work and home environment for employees. Improving the efficiency and success of these support services would therefore have a commensurate beneficial effect on employee health and safety.

CONSTRUCTION-RELATED DISTURBANCE

During construction, some residents would be temporarily displaced, resulting in an inconvenience to residents of the Lodgepole Housing Area. Residents remaining on-site would experience impacts from construction-related dust during daily construction. Construction noise levels under the proposed action would likely exceed what is generally recommended in residential areas (60–65 dBA, as a 24-hour average) (Tulare County 2012). Impacts would be minimized by the fact that most residents would be away during working hours, and some residents would be temporarily relocated outside the project area.

Despite these temporary impacts, collectively, the proposed housing area improvements outlined above would result in a healthier, safer housing environment for employees. Employees' exposure to various health and safety risks would be eliminated or significantly reduced relative to existing conditions. The proposed improvements to the housing area would also align with the agency's obligations under Director's Order 36 (DOI 2024)—to provide and maintain employee housing that is safe, sanitary, and cost-effective to maintain.

Reasonably Foreseeable Future Effects – Employee Health and Safety

As previously discussed under the no action alternative, existing and reasonably foreseeable actions that influence, or would continue to, employee health and safety include the ongoing implementation of NPS programs related to human resources and asset management. NPS programs

related to human resources and asset management would likely result in a continuation of existing conditions and are not likely to result in any additional changes to the housing area conditions.

When combined with the effects of other existing and reasonable foreseeable future effects, the proposed action would result in beneficial effects on employee health and safety, as it would fulfill the need to address numerous housing areas deficiencies and their associated effects on overall employee health and safety, which would not otherwise be addressed by any other existing or reasonably foreseeable actions.

Chapter 4: Consultation and Coordination

Tribal Consultation

This project was first introduced to Tribal representatives during a Tribal forum on May 16, 2024. Park managers officially initiated consultation on October 15, 2024, in a letter shared with 14 federally recognized Tribal chairs associated with the Park. In a separate letter, an additional 90 Tribal individuals or representatives from Tribal entities were also informed of the proposed action and planning process. As of April 2026, no response had been received from any Tribal chair or interested party. When the NPS releases the EA and FONSI to the public, the Tribal community will be informed.

National Historic Preservation Act

The NPS initiated consultation with the SHPO under Section 106 of the National Historic Preservation Act in accordance with the standard process outlined in 36 CFR 800.3. In a letter to the SHPO dated November 18, 2025, the NPS identified the proposed action as an undertaking and requested concurrence on NPS's determination of no historic properties affected within the project's area of potential effects. The NPS received SHPO concurrence on this determination in a letter dated January 5, 2026 (NPS_2025_1126_001).

Endangered Species Act

The NPS informed the USFWS of the development of this EA on June 17, 2025, through a press release shared directly with agency partners. On December 22, 2025, the NPS initiated Section 7 consultation under the *Programmatic Biological Opinion on Proposed Activities of the National Park Service that May Affect the Southern Sierra Nevada Distinct Population Segment of the Fisher* (USFWS 2020 [08ESMF00- 2020-F-2011-1]), requesting concurrence that the proposed action may affect but is not likely to adversely affect the fisher. The USFWS responded to the NPS on March 24, 2026, concurring with the determination that the project may affect but is not likely to adversely affect the fisher because 1) fisher are unlikely to den within the action area; 2) the NPS will conduct camera surveys for fisher and, if denning individuals are detected, will delay construction until females can safely move kits away from disturbance or will consult with the USFWS as to an appropriate course of action; and 3) the NPS will implement additional conservation measures to further reduce the impacts to fisher from proposed project activities. (Consultation No. FWS-2025-0021102).

Civic Engagement Summary

The NPS solicited public input on the *Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole EA* during a 30-day public scoping period extending from June 17 through July 17, 2025. The public scoping effort resulted in the receipt of five pieces of correspondence from members of the public. These pieces of correspondence were reviewed by park staff and were considered in the decision-making process and in the writing of this EA.

During the public scoping period, the NPS posted all materials for public review and comment on the NPS Planning, Environment, and Public Comment (PEPC) website: <https://parkplanning.nps.gov/LodgepoleHousing>. The availability of the documents and the public comment period dates were announced through a press release. Public comments were accepted via U.S. mail and the PEPC website.

The NPS will make the *Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole* EA and FONSI publicly available on the NPS PEPC website. Consistent with the DOI NEPA Procedures Handbook, Appendix 1, Implementation Guidance to Bureaus (DOI 2026), the NPS is not soliciting public comment on the EA.

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Appendix A. Park Operations and Management

The following analysis describes how park operations and management would be affected under the no action and proposed action. Although the issue of park operations and management is central to the purpose and need for the project, it is not considered an environmental issue or resource concern in the context of NEPA that warrants analysis in the EA. Therefore, the following park operations and management analysis is presented for informational purposes only but does not factor into the agency's decision on whether the proposed action would have significant adverse impacts.

Affected Environment

The Lodgepole Housing Area units were constructed sporadically between the 1930s and 1980s and have seen only limited maintenance and modernization since that time. As a result, many of the units currently show signs of age-related deterioration and require a high degree of regular maintenance and repairs. In addition, the layout of the site presents access issues for maintenance and emergency vehicles, and the overall poor condition of the housing area presents staffing challenges, all of which diminish Park managers' ability to operate the housing area efficiently and cost-effectively. The specific operation and maintenance issues for the Lodgepole Housing Area are described in the following sections.

Maintenance Needs

Existing residential buildings were not designed to withstand the local climatic conditions; for example, roofs are not appropriately pitched, resulting in snow accumulation, ice build-up, and shedding of snow and ice, which creates hazards for workers. Overall poor construction, inadequate insulation, and the use of non-durable materials create uncomfortable indoor temperatures and cause the buildings to degrade further each season, resulting in a continual need for repairs that place an excessive maintenance burden on park operational staff. Significant efforts are required to winterize the buildings each year.

Existing utility systems are undersized and power outages and water leaks are common, resulting in additional operations and maintenance (O&M) burdens for the NPS. Existing heating systems consist of propane furnaces and wood burning stoves. Although maintenance costs are currently low for these systems, the systems themselves can be inefficient and are costly to replace at the end of their lifespan.

Roadway Access and Circulation

The housing area is currently accessible from a single roadway off Generals Highway onto River Drive (west access route). All operation and maintenance vehicles, including snow removal, garbage, and other utility services, must use this single, narrow, access route for O&M purposes.

Existing roadway widths, surfaces, and alignments present maneuverability challenges for snow-plowing operations and other maintenance or emergency vehicles (e.g., garbage or fire trucks) and make it difficult or impossible to access certain areas, including some residential driveways. There is insufficient turnaround space for emergency and maintenance vehicles along Upper Heights Drive and at the east end of the housing area where River Drive dead ends.

Annual snow removal and snow-plowing needs incur substantial costs during the off-season; these costs can be exacerbated by the inefficiencies caused by the roadway restrictions mentioned above.

Operations and Maintenance Parking

Parking at the housing site is currently undesignated (e.g., informal pull-off gravel areas), resulting in inefficient use of parking areas and limited space for maintenance and operation vehicles.

Housing Needs

The current Lodgepole housing stock is insufficient to meet the NPS's staffing needs for this area, leading to seasonal housing shortages and logistical challenges for Park management. In addition, this issue is compounded by the fact that many of the buildings' thermal problems do not allow for four-season occupancy, which further reduces the availability of housing during the off-season. The lack of sufficient housing has been an issue of management concern at Lodgepole Housing Area for over 10 years, as demonstrated by the NPS's 2012 housing needs assessment (LMI 2012), which found that the number of available employee housing units was deficient by approximately five bedrooms based on the number of permanent and seasonal employees that the NPS wished to house at Lodgepole and the lack of off-site affordable housing options within reasonable commuting distance of the Lodgepole area (60 minutes or less).

In accordance with Director's Order 36, the NPS is required to maintain government furnished housing in good condition and ensure that the housing "is safe and sanitary, sited to avoid natural hazards whenever possible, integrated into the park environment and, to the best extent possible, energy efficient and cost-effective to maintain." Due to the existing conditions of the housing area, the NPS incurs significant costs to maintain the housing conditions while still struggling to meet the minimum standards under Director's Order 36. Additionally, the housing units are not currently energy efficient or cost-effective to maintain, which conflicts with the objectives outlined under Director's Order 36.

Alternative 1 – No Action Alternative

Current and Expected Future Condition – Park Operations

Under the no action alternative, the housing units would remain in their current deteriorating condition, and no building or access improvements would be made to alleviate the existing O&M burdens for the Park. The existing issues related to excessive maintenance and repair costs, inadequate access and circulation for maintenance and emergency vehicles, staffing issues, and housing shortages would remain as described in the Affected Environment section. Park managers would continue to maintain and repair existing buildings and utility infrastructure under the Park's routine maintenance program.

Over the long term, the continued aging and deterioration of buildings and infrastructure would further diminish their overall integrity and ability to function as intended, and the costs for annual maintenance and repairs are likely to increase as these age-related issues become more severe. Utility outages could also become more common due to continued aging and deterioration of utility infrastructure. In the future, additional buildings could be condemned if their condition worsened to a point of being uninhabitable. This would further exacerbate existing issues related to housing shortages and staffing challenges (i.e., greater difficulty in attracting and retaining staff compared to existing conditions). In the absence of rehabilitation, Park managers may need to adjust park

operations in the future to compensate for insufficient housing stock. These adjustments could include staff reductions, temporary trailers, or other similar measures. Seasonal candidates are likely to continue to decline positions due to lack of suitable housing conditions, and staff turnover would remain high.

Reasonably Foreseeable Future Effects – Park Operations

Existing and reasonably foreseeable actions that have, or would continue to, influence Park O&M in the Lodgepole Housing Area include ongoing maintenance and repair activities for buildings, roads, and associated infrastructure, as well as housing upgrades being planned in Kings Canyon, major rehabilitation of the Mineral King Road in Sequoia, and extensive campground rehabilitation and waterline replacements in both parks. Although maintenance and repair activities would continue to be implemented in accordance with applicable NPS plans and policies, rehabilitation work parkwide is expected to reduce the overall maintenance backlog at the Park level though would not directly address O&M deficiencies at the Lodgepole Housing Area.

Alternative 2 – Rehabilitate or Replace Deficient and Deteriorated Employee Housing at Lodgepole (Proposed Action)

Expected Future Condition – Park Operations

Under the proposed action, the NPS would rehabilitate or replace the deteriorating housing and associated infrastructure at the Lodgepole Housing Area, which would reduce the overall O&M burden on the Park. All aspects of the master plan have been, and would continue to be, developed with consideration of their potential effect on Park O&M needs and their lifecycle costs (including costs for annual maintenance and operating costs). Aspects of the master plan that have been designed to minimize O&M burdens and improve operational efficiencies are outlined in detail below.

Maintenance Needs

Replacement buildings would be designed to withstand the local climatic conditions, resulting in a reduced O&M burden on the Park. The new prototype building roofs and entries would be specifically designed to minimize snow-related hazards (e.g., snow shedding) and maintenance needs (e.g., snow accumulation and removal), which would reduce winter maintenance costs while also making the area's conditions safer for residents and workers. The roof design for new buildings would include increased pitches (minimum 6:12 slope ratio) and snow guards to minimize build-up and ice dams, and the roofs would be constructed of standing seam metal for added durability and to minimize the risk of snow sliding off in large sheets. Entries and stairwells would be covered to avoid snow accumulation and associated snow clearing needs.

Prototype buildings would be equipped with new HVAC systems consisting of centralized air source heat pump units that are highly efficient systems with low operating costs and average annual maintenance costs. New HVAC systems, combined with better insulated buildings, would provide long-term energy cost savings.

Installation of new and improved electrical, water, and sewer utilities that are appropriately sized to meet tenant demands would dramatically reduce the need for maintenance and repairs and associated O&M costs. Roll-up generators would be available for backup use in the event of a power

outage; although power outages would likely become less frequent following the electrical upgrades, backup generators would offer a low-cost, low-maintenance solution to this decreasing concern.

Replacing deteriorating buildings with new and rehabilitated buildings that are appropriately designed to withstand local climatic conditions would also dramatically reduce routine maintenance and repair needs for exterior and interior finishes, such as siding, decks, floors, cabinets, and similar features.

Roadway Access and Circulation

Proposed roadway improvements on Upper Heights Road and River Drive, including re-paving both roads and widening and adding a new Y turnaround on Upper Heights Road, would improve the maneuverability of these roads for maintenance and emergency vehicles. In addition, site-wide paving upgrades for residential driveways and surface parking areas would increase the accessibility of these areas and would allow maintenance vehicles (e.g., snowplows) to service a larger proportion of the housing area and to do so more efficiently. Increasing snow-clearing operations would allow buildings to be occupied for extended periods throughout the year, increasing their seasonal usability and providing more consistent housing availability for employees. Better accommodation for snow removal would also contribute to lower general operating costs for snow damage on the housing sites.

The master plan includes the possibility for construction of a new east access road, which would connect the Lodgepole Housing Area to the Lodgepole Campground and would serve as a secondary emergency and maintenance access route to the housing area, in addition to the site's existing access route off Generals Highway. This east access route would be exclusively for maintenance and emergency vehicle use. Although a second access route is not required to meet the National Fire Protection Association standards for egress, the addition of a second access point would benefit Park O&M by improving access to water and sewer utilities for maintenance (e.g., the water treatment plant, which is toward the east side of the housing area) and providing a secondary access route in the event that the west access route is blocked or congested.

Operations and Maintenance Parking

Under the proposed action, additional parking would be provided for work, maintenance, delivery, and other service vehicles at the site. Of the 111 surface parking spaces being proposed under the master plan, eight would be designated for shared visitor and maintenance use, and an additional 34 spaces would not be specifically reserved for residents, visitors, or maintenance vehicles. This would ensure adequate availability of parking spaces for maintenance staff that are evenly distributed throughout the housing area. Expanding parking options for maintenance staff would enhance operational efficiency and support more effective maintenance activities.

Housing Needs

Under the proposed action, the available housing stock and housing capacity would increase relative to existing conditions, and the improved thermal conditions for new and rehabilitated buildings would enable year-round occupancy in buildings that are currently limited to seasonal occupancy. Replacing existing two-person tent cabins with a mix of dorms and single units and the addition of five new RV slips will further improve flexibility in housing assignments. All these changes combined would improve the NPS's ability to accommodate the variable housing preferences of residents while minimizing the risk of housing shortages.

By repairing and replacing aging units and infrastructure and addressing access issues, the project would improve the NPS's operational efficiencies and reduce operational costs associated with routine and ongoing maintenance or repair needs. In addition, the proposed action would aim to address staffing challenges caused by low recruitment and high turnover rates as well as seasonal housing shortages. Over the long term, the project's potential to improve the Park's workforce stability and hiring competitiveness would benefit Park operations by reducing the amount of Park resources spent on recruitment and training efforts.

Reasonably Foreseeable Future Effects – Park Operations

As previously discussed under the no action alternative, existing and reasonably foreseeable actions relevant to Park O&M are limited to ongoing maintenance and repair activities for buildings, roads, and associated infrastructure; housing upgrades being planned for housing in Kings Canyon; major rehabilitation of Mineral King Road in Sequoia; and extensive campground rehabilitation and waterline replacements parkwide. Although rehabilitation work in other areas of the Park is expected to reduce the overall maintenance backlog at the Park level, it would not directly address O&M deficiencies at the Lodgepole Housing Area.

The beneficial impacts of the proposed action on Park O&M would make meaningful improvements to housing area conditions. This would reduce the maintenance burden placed on the NPS, improve operational efficiencies, and reduce overall O&M costs for the Lodgepole Housing Area. The benefits of this alternative would also alleviate management challenges related to staffing and housing shortages and contribute to long-term improvements in management efficiencies.

When combined with the effects of other existing and reasonably foreseeable actions, the proposed action would result in beneficial effects on Park operations and management because it would improve existing conditions, which would not otherwise be addressed by ongoing routine activities.