Chapter 3: Proposed Wilderness Plan

3.1. Introduction

This chapter describes the proposed Wilderness Plan for the King Range Wilderness and the Rocks and Islands Wilderness Areas. The wilderness management plan serves to implement national and local wilderness management guidance, including the Wilderness Act, the Northern California Coastal Wild Heritage Wilderness Act, BLM wilderness management policies, the CCNM RMP, and the King Range NCA RMP. The plan also addresses issues identified through the public and internal scoping processes.

In order to protect the untrammeled nature of both wilderness areas, the BLM has strived to identify the minimal actions necessary to protect wilderness character while managing congressionally authorized uses. Given the minimal amount of human use received by the Rocks and Islands Wilderness, as well as its unimpaired condition, the management strategies described in this plan are limited to authorizing research and conducting monitoring. Where applicable, the objectives identified below apply to both wilderness areas, but the majority of management actions are directed towards the King Range Wilderness.

3.2 Management Vision for the King Range Wilderness and Rocks and Islands Wilderness Areas

As described in Chapter 2, the King Range Wilderness is one of the last remaining coastal wilderness areas in the contiguous U.S. It encompasses a vibrant mosaic of naturally functioning ecosystems and provides outstanding opportunities for solitude and primitive, unconfined recreation. Just offshore, the Rocks and Islands Wilderness contributes to the dramatic coastal vista while providing valuable habitat. In order to maintain the untrammeled quality of these areas, management actions would be the minimum necessary to restore and protect other wilderness character qualities. Actions would be implemented with the intent to reduce future needs to manipulate wilderness. The BLM recognizes that some management actions described in this plan promote one wilderness quality while impairing another, such as the removal of invasive plants may promote naturalness while impairing the area's untrammeled quality. In accordance with Section 4(c) of the Wilderness Act, the BLM would use the minimum tools, equipment, or structures

necessary to successfully, safely, and economically accomplish a particular wilderness management objective. Using the time of designation as a baseline, the BLM would ensure that through its management, the wilderness character of the King Range Wilderness and Rocks and Islands Wilderness is maintained or enhanced. A monitoring program would be implemented to ensure that management actions are effective in moving the BLM towards this goal.

3.3 Management Actions to Maintain or Achieve Naturalness

As described in Chapter 2, naturalness is a fundamental component of wilderness character. The King Range Wilderness encompasses seven primary natural communities: chaparral, coastal scrub, coastal beach, forest, grassland, rivers and streams, and rocky intertidal. In many cases, the most appropriate management approach is to allow these systems to function without management interference. The following section details specific goals, objectives and management actions to attain or achieve naturalness.

Naturalness Goal: Protect existing intact ecosystem components and natural systems; restore those components and systems in areas impacted by past uses or by outside influences: grassland communities, fire cycles, and the presence of invasive species.

3.3.1 Grassland

Grassland Objective 1: Maintain or exceed, within documented historic acreage, the 2005 baseline assessment levels of 3,500 acres of grassland within the King Range Wilderness.

Grassland Action 1.1: Use hand tools to remove encroaching Douglas-fir seedlings and brush species once every 3 years from key grassland areas impaired by the suppression of natural fire cycles. Refer to Figure 3-1 for specific treatment locations.

Rationale: Current grassland acreages are below those documented prior to the era of mechanized logging and fire suppression in the King Range. This action is intended to slow the conversion of grassland to other types of ecosystems in order to protect native grasses until natural ecosystem processes can be restored.

Grassland Monitoring Question: Is the baseline acreage of grassland maintained or exceeded after the first decade of plan implementation?

> Indicator: Acres of grassland present after the first decade of plan implementation.

Measure: Grassland acres determined through interpretation of aerial photography.

Grassland Objective 2: Maintain and enhance native perennial grasslands.

Grassland Action 2.1: Collect and nursery-propagate local, native grassland plant varieties for use in restoration efforts. Use native stock to rehabilitate areas impacted by invasive weed removal, wildfire, fire-suppression activities, prescribed fire, and historic overgrazing. Allow up to 10 planting actions per year. The use of motorized vehicles would be authorized only when necessary as analyzed in Appendix C, and only on the routes identified in Figure 2-12 as 1) the access corridor to private property designated by Public Law 109-362, and 2) the access route to Life Estate A. Refer to Figure 3-1 for specific treatment locations.

Rationale: Management actions would protect native perennial grasslands, which are threatened by invasive, non-native grasses and human disturbance of natural ecosystem processes.

3.3.2 Fire and Fuels Management

The goal for fire and fuels management in wilderness is to protect human life and property while minimizing the need for intensive fire suppression, limiting damage to wilderness character where fire suppression is necessary, and, in the long-term, allowing natural fire dynamics to occur.

Fire and Fuels Objective 1: Minimize the impact of fire suppression activities on natural and cultural resources.

Fire and Fuels Action 1.1: Maintain the existing King Range fuel break system outside the King Range Wilderness boundary, as shown in Figure 3-2.

Fire and Fuels Action 1.2: Use small-scale entries of prescribed fire in the wilderness to reduce fuel loading along the boundary and minimize the need for more intensive suppression actions. Prescriptions would be for low-intensity backing fires, burning no more than 500 feet into the wilderness, with minimal torching. Chainsaws may be used to construct firelines, but heavy equipment would not be employed (Appendix C). To maintain control, no more than 2 miles along the fuel break would be ignited at any time. No more than 10 miles would be burned through prescribed fire in a single year in order to limit impacts to scenic values.

Fire and Fuels Action 1.3: Use Minimum Impact Suppression Tactics (MIST) (Appendix D) where suppression is necessary within the wilderness. Initial attack operations would normally utilize handcrews, chainsaws, portable pumps, helicopter water drops, fixed-wing retardant

drops, and allow for helispot construction and ferrying crews by aircraft. Fire engines would be used where necessary and feasible. Spike camp size would be limited to no more than 50 individuals. Upon extended attack, strategies and tactics would be determined through the application of the Wildfire Decision Support System, which would incorporate wilderness character protection objectives in addition to weather, community risk, fuel, terrain, and other variables.

Fire and Fuels Action 1.4: Use of heavy equipment within the King Range Wilderness would require BLM California State Director approval on a case-by-case basis. The BLM recognizes that under extreme circumstances there may be a need to use heavy equipment during a wildfire incident in order to protect human life and property.

Fire and Fuels Action 1.5: Restrict the use of all heavy equipment within the area south of Kinsey Ridge and the Smith-Etter Road, north of the ridge line on Fire Hill, and west of the established fuel break system on public lands as identified in Figure 3-2. Heavy equipment, fire engines, water tenders, crew transport vehicles, and support vehicles may access private lands through this area to perform point protection activities on private properties.

Fire and Fuels Action 1.6: To minimize soil erosion, damages associated with fire suppression activities would be repaired prior to the rainy season. In collaboration with CALFIRE, develop a fireline damage repair plan before a fire is declared out. This plan would include a minimum requirements analysis to determine appropriate modes of restoration. The plan would incorporate specific considerations for restoring the area's wilderness character, including actions such as pulling slash back over bulldozer lines, replacing duff on hand-lines, recontouring slopes, and disguising stumps. It may be necessary to use heavy equipment to accomplish this task in a timely manner, but this would be avoided if possible (as determined through minimum requirements analysis, Appendix C). Where replanting is necessary, native plants would be used.

Rationale: The King Range fuel break system, located primarily along the eastern wilderness boundary, establishes fire control lines of reduced fuel loading outside of the wilderness. However, given the heavy accumulations of fuels adjacent to the fuel break, and the naturally occurring high-intensity fire environment, limited prescribed burning along the boundary is necessary to reduce the need for more intensive suppression within the wilderness. Through these practices, the King Range fuel break system could be mature enough within the next 10–15 years to expand areas where the natural dynamics of fire are allowed to occur.

Fire and Fuels Action 1.7: A resource advisor trained in wilderness management will be assigned to each wildland fire within wilderness or with the potential to burn into wilderness. Each resource advisor will:

- Ensure initial attack and incident commander are aware of wilderness resources and management direction.
- Coordinate with fire suppression personnel to ensure appropriate suppression actions are used that minimize the rehabilitation requirements.
- Support appropriate rehabilitation actions prior to release of suppression forces.
- Identify additional rehabilitation and restoration needs, request an Emergency Stabilization and Rehabilitation Team if necessary, and initiate project planning actions to ensure rehabilitation and restoration needs are carried out.

Fire and Fuels Objective 2: Allow for natural ecological processes to restore burned areas while providing for public safety and minimizing wildfire damage to recreational infrastructure such as trails within the wilderness and to areas outside of wilderness.

Fire and Fuels Action 2.1: Limit emergency stabilization and rehabilitation actions to those necessary to prevent loss of wilderness trails, to prevent the introduction of noxious weeds within wilderness, for public safety, to prevent catastrophic erosion, or for protection of private or public infrastructure outside of the wilderness (Appendix C).

Rationale: These are the minimum actions necessary to maintain natural character of the wilderness.

3.3.3 Invasive Plant Species

Invasive Species Objective 1: Prevent and eradicate new infestations of invasive, non-native plant species and effectively contain existing populations to prevent colonization of additional areas.

Invasive Species Action 1.1: Annually survey for invasive, non-native plant species with a particular focus on grassland, coastal scrub, chaparral, and areas frequented by the public such as the LCT.

Invasive Species Action 1.2: Treat all newly identified invasive, non-native plant infestations within 1 year of discovery. The potential for use of motorized equipment is analyzed in Appendix C. If vehicle use is authorized, it would be limited to the authorized routes identified in Figure 2-12.

Invasive Species Action 1.3: Contain inaccessible pampas grass infestations south of Miller Flat from spreading north through manual treatment of all accessible pampas plants. The potential for use of motorized equipment is analyzed in Appendix C. If vehicle use is authorized, it would be limited to the authorized routes identified in figure 2-12.

Invasive Species Action 1.4: Use genetically local, native plants where needed to fill niches occupied by removed invasive plants, if bare ground is expected to be present long enough to be vulnerable to invasion by wind-borne weed species.

Rationale: Invasive plants impair the wilderness quality of naturalness by displacing native species and potentially degrading habitat for native wildlife.

3.4 Management Actions to Maintain or Achieve an Undeveloped Quality

As described in Chapter 2, the "impact of man's work" is substantially unnoticeable within the King Range Wilderness. There are, however, limited developments within the wilderness, most related to livestock grazing, private inholdings, edgeholdings, life estates, and ROW. These developments are allowable, non-conforming uses under the Wilderness Act. The BLM is required to allow these uses to continue within the framework of their existing authorizations or new authorizations as specifically outlined by law and policy while minimizing impacts to wilderness character.

Undeveloped Quality Goal: Discretionary developments would not be placed in the King Range Wilderness unless they are the minimum required to protect public health and safety or wilderness character. The BLM would work with authorized users to minimize impacts from allowed, non-conforming uses permitted by the Wilderness Act.

3.4.1 Livestock Grazing Management

Livestock Grazing Objective 1: Minimize impacts to wilderness character while managing the two active grazing leases consistent with the King Range NCA RMP, the Northwestern California Standards for Rangeland Health and Guidelines for Livestock Grazing Management (BLM 1999), and the Congressional Wilderness Grazing Guidelines (Appendix B). Phase out routine use of motorized equipment over time.

Livestock Grazing Action 1.1: Amend current grazing lease authorizations to include guidelines and criteria to clarify the purpose and need for use of motorized equipment.

Livestock Grazing Action 1.2: Vehicles would not be used for maintenance of grazing improvements during weekends between, and including, Memorial Day and Labor Day or during deer hunting season. Deer hunting season encompasses 9 weeks, including both archery and rifle season, beginning the third weekend in July through the last weekend in September.

Livestock Grazing Action 1.3: Vehicle use for livestock management may be authorized on the routes identified by the BLM (Figure 2-11), except where the potential for resource damage is determined to be unacceptable and an alternate route is identified and approved by the BLM prior to use. Lessees would be required to contact BLM prior to any use of motor vehicles.

Livestock Grazing Action 1.4: Not more than once every 10 years, the BLM would authorize the use of motor vehicles, motorized equipment, or other forms of mechanical equipment for replacement of stock troughs and head boxes where other means are not practical and a) the project is included in an approved decision or document (e.g., allotment management plan, grazing decision, etc.) or b) the use of such equipment is demonstrated to have occurred prior to wilderness designation. The BLM may allow additional use of motorized or mechanized equipment on a case-by-case basis where the BLM determines the need for replacement is due to extraordinary circumstances beyond the lessee's control (i.e., landslide, wildfire, vandalism, etc.). Any requests for additional use of motor vehicles, motorized equipment, or other forms of mechanical equipment under the circumstances above must also conform to the requirements of the Congressional Wilderness Grazing Guidelines (Appendix B).

Rationale: Troughs and spring boxes designed to last at least 10 years are typically constructed of heavy steel or thick rubber and can weigh 300–1500 pounds or more. Moving such items without use of mechanized or motorized equipment is neither safe nor practical in the rough terrain of the wilderness area. Items designed to last longer than 10 years are commercially available, but prohibitively expensive and require specialized equipment for transportation and installation. When feasible, the BLM would purchase more durable items to reduce the frequency with which motorized vehicles and/or mechanized equipment are used for maintenance and replacement.

Livestock Grazing Action 1.5: Lessees may use motor vehicles, motorized equipment, or other forms of mechanical transport on the routes identified in Figure 2-11 to replace or repair any single segment of pre-existing fence line at least one-sixteenth of a mile (330 feet) in length,

where maintenance by foot or horseback is not feasible. It is likely that fence segments in excess of one-sixteenth of a mile would require repair or replacement as much as every other year. Alternative fence locations, materials, construction techniques, and the use of additional gates would be evaluated prior to authorizing more frequent use of motorized and/or mechanized equipment.

Rationale: Replacement of a fence segment one-sixteenth of a mile or longer requires more than 400 pounds of fence supplies and tools; single t-posts weigh approximately 9 pounds each and a roll of fence wire 75 pounds. While it is possible to carry 75 pounds by horseback or on foot, the amount of time needed to haul the necessary materials and tools and to repair this length of fence is not cost-effective and would likely affect the lessee's ability to use the affected allotment during at least part of the season. The King Range is a place of extremes, with a dramatic precipitation regime, marine corrosion, flash flooding, steep topography, and regular seismic activity. These factors create an environment where fences inevitably require frequent repair and replacement.

Livestock Grazing Action 1.6: Transportation of other materials or items in support of range management would be allowed on the routes identified in Figure 2-11 in conjunction with the authorized use of motor vehicles, motorized equipment, or other forms of mechanical equipment for repair or replacement of range developments, provided the addition of such items does not require use of motorized and/or mechanized equipment beyond that which would otherwise be necessary.

Rationale: Regular maintenance reduces the need for large-scale facility replacement. Maintaining functional range facilities helps manage livestock grazing and prevents impacts to naturalness from poor cattle distribution.

Livestock Grazing Action 1.7: The use of motor vehicles, motorized equipment, or other forms of mechanical equipment for the maintenance or construction of range developments within the King Range Wilderness not specifically identified in this plan would only be considered as part of an application for a new range development, analyzed for compatibility with plan objectives and the Congressional Wilderness Grazing Guidelines (see Appendix B) under a separate environmental analysis, and when such actions would result in a net decrease in mechanical or motorized use.

Livestock Grazing Objective 2: Improve livestock distribution to improve conditions of naturalness within the Spanish Flat Allotment.

Livestock Grazing Action 2.1: Construct one new water development to improve livestock distribution. The proposed development would be located at an area known locally as Commodore Flat shown in Figure 3-3. The development would also require about 200 feet of waterline to divert water from the spring to the trough to protect the spring area from livestock trampling. The trough would be constructed to meet Visual Resource Management Class 1 standards (USDI 1984), by locating it out of view of trails and camping areas and by constructing it with materials and colors that blend with the natural terrain. The use of motorized equipment is analyzed in Appendix C.

Rationale: The planned water development is needed to better distribute livestock grazing in the upper part of the Sea Lion pasture in the Spanish Flat grazing allotment. Fencing designed to protect fisheries, cultural resources, and visitor solitude has resulted in the concentration of significant grazing pressure in the Mackey pasture of the Spanish Flat grazing allotment as shown in Figure 3-3. The new development would disperse grazing pressure, reducing the impact to naturalness in the Mackey pasture. This development is consistent with the Congressional Wilderness Grazing Guidelines which allow for "the construction of new grazing improvements for the purpose of resource protection rather than to accommodate increased numbers of livestock." The intent of the planned Commodore Flat water development is to disperse grazing pressure and improve resource conditions but not to increase grazing use.

Livestock Grazing Monitoring Question: Is the installation of one new water development effectively improving livestock distribution?

> Indicator: Use of the Mackey Pasture region in comparison to other areas of the Spanish Flat grazing allotment.
>
> Measure: Residual dry matter and distribution of invasive species will be monintored throughout grazing allotment.

Livestock Grazing Objective 3: Maintain existing and active range facilities in a condition that minimizes the need for large, intensive facility replacement or maintenance projects.

Livestock Grazing Action 3.1: Meet annually with grazing lessee(s) to review annual operating plans and discuss and coordinate annual range improvement inspection and maintenance needs.

3.4.2 Private Land (Inholding and Edgeholding) Access

Private Inholdings Objective 1(S): Provide access to inholdings that serves the purposes for which the private land is held or used, while minimizing the impact to wilderness character.

Private Inholdings Action 1.1(S): Permit routes and modes of travel to privately-owned properties located in or on the edge of the King Range Wilderness that allow adequate access for the reasonable use of the property, while causing the least temporary and permanent damage to wilderness character. Permit such routes and modes of travel under the provisions of 43 CFR, subparts 6305 and 2920, and as depicted on Figure 2-12. In conformance with 43 CFR 6305.10(a) the extent of allowable motorized use by the inholder to the inholding will include the combination of routes and modes of travel that existed on the date of wilderness designation and that BLM determines will serve reasonable purposes and cause the least impact on wilderness character.

Rationale: Consistent with the wilderness legislation and federal regulation, the action would provide adequate access to ensure the reasonable use and enjoyment of the property by the owner.

3.4.3 Life Estates

Life Estate Objective 1: Recognize the rights of the two life estates that are within the wilderness area.

Life Estate Action 1.1: Work with life estate holders to minimize the impact to wilderness character from access to, and use of, life estates on the deeded easement shown in Figure 2-12.. Life estate holders would not be permitted to stop along routes for the purpose of accessing public lands. Any access for use of public lands within the wilderness must be via non-mechanized transport.

Life Estate Action 1.2: Ensure that the repair or reconstruction of structures on the life estates does not result in new developments outside the original footprint or character of the existing structures. Repair or reconstruction of any structures on the life estates must be within the original footprint and character of the existing structures.

3.4.4 Rights-of-Way

ROW Objective 1: Manage the two existing ROW to reduce impacts to the undeveloped quality of the King Range Wilderness and to minimize the need for future maintenance, and construction of facilities or access routes.

ROW Action 1.1: Provide ROW holders with the opportunity to move existing facilities to an area outside the King Range Wilderness to facilitate motorized access to their facilities. The two ROW agreements contain no provisions for access to the ROW, but only for use of the ROW themselves. Therefore, any access for maintenance purposes to the current sites is by non-mechanized means. Current access to the ROW includes crossing private property. The BLM has no authority to grant this access therefore the ROW holders must secure private land access through the respective landowners.

Rationale: At the request of the ROW holders, the existing facilities would be located outside of wilderness to eliminate developments and the need for motorized access into the wilderness.

3.5 Solitude or Primitive and Unconfined Recreation Opportunities

As described in Chapter 2, the King Range Wilderness offers visitors an opportunity to explore a wild and dramatic landscape of coastline and mountains. The BLM has been working to protect the area's outstanding opportunities for solitude or primitive and unconfined recreation.

Solitude or Primitive and Unconfined Recreation Goal: Visitors entering the wilderness are informed and educated to experience the area, and are provided with opportunities for solitude, freedom of choice, and self-reliance.

For management actions related to Solitude or Primitive and Unconfined Recreation, planning objectives and actions include the coastal strand extending north from the wilderness boundary to the Mattole Trailhead. Although this approximately 70 acre area is not within the wilderness, it is within the Backcountry Management Zone in the King Range RMP and includes the northern 2.5 miles of the LCT (see Figure 1-3).

3.5.1 Visitor Access

Visitor Access Objective 1: Maintain opportunities for solitude by managing visitation and overnight visitor use patterns primarily through off-site actions.

Visitor Access Action 1.1: Manage visitor use to not exceed the maximum capacities (people at one time) for each visitor use area identified in Figure 3-4. The two numbers for each area in Figure 3-4 represent peak season/off season use respectively as explained in action 1.5 below. Target capacities for upland use areas may be increased, particularly in the northern uplands area, to promote better visitor distribution and to

allow for the establishment of new campsites along existing and proposed upland trails.

Visitor Access Action 1.2: The current "backcountry permit" program for individuals and families was initiated prior to wilderness designation. The name would be changed to the "wilderness permit" program.

Visitor Access Action 1.3: Permits (wilderness permits or SRPs) would be required for all overnight use within the King Range Wilderness and the King Range RMP Backcountry Management Zone outside of the wilderness. No allocation or permits would be instituted for day use of these areas. The permit program would be implemented consistent with 43 CFR 6302.12(b)(3).

Visitor Access Action 1.4: Implement an advanced reservation permit allocation system that provides for commercial and organized group uses under SRP, as well as casual individual and family use. A reservation fee and use fee may be required.

Visitor Access Action 1.5: Modify the current backcountry permit program (for individuals and families) and SRP program (for organized and commercial groups) to implement the allocation system within 2 years. Under allocation, visitor access would be limited by the number of daily "starts" (i.e., people per day who could enter the wilderness for overnight use). To maintain backcountry use levels at or below the capacity thresholds established in Figure 3-4, the allocation system would limit starts to 60 people per day during the peak season of May 15 to September 15 and 30 starts per day during the off season of September 16 to May 14.

Visitor Access Action 1.6: Reserve a portion of the starts to be distributed on a first-come, first-served basis. Most starts would be available through a reservation system (e.g., on-line or phone) and the remaining starts would be available on a first-come, first-served basis. Permits would then be available at the BLM Arcata and King Range offices either the day before or day of the start of the trip. Other authorized backcountry permit outlets may be designated during implementation. Any starts that are unreserved by the permitted start date would be made available at the permit outlets on a first-come, first-served basis.

Visitor Access Action 1.7: No specific number of starts would be allocated to commercial or organized groups through the SRP program. However, the total SRP starts between May 15 and September 15 would be limited to no more than 50 percent of the total daily allocation, i.e., no more than 30 SRP starts would be permitted in a single day. All starts would be available to SRPs from September 16 to May 14.

Visitor Access Action 1.8: SRP starts would be available on a first-come first-served basis, until the maximum allocation is reached). SRP holders would be penalized for non-use of projected starts in the case of cancelation or overbooking if they are not returned to the permit pool prior to 30 days before the trip start date (specific penalties would be outlined in the permit application packet). This 30-day timeframe may be adjusted or additional stipulations added to SRPs if needed to provide an incentive for permittees to return unused starts to the pool versus holding onto them so that they would be unavailable to other users.

Visitor Access Action 1.9: Stock animals would not be included in the allocation numbers. The maximum party size of "25 heartbeats" (people/stock combination) and 15 people per group would continue for stock users as described in action REC 6.4.3 in the King Range NCA RMP, unless group size is reduced under the adaptive management as identified in action 1.10 below.

Rationale: The BLM is required to manage wilderness to provide for solitude or primitive and unconfined recreation opportunities. As shown in Chapter 2, King Range, visitor use has risen steadily over the past several years, with the most notable peaks occurring around spring and summer weekends and holidays. The daily entry limit of 60 people was developed through analysis of campsite capacities for various visitor use zones within the wilderness. In combination with other actions, managing the total visitor load would maintain opportunities for solitude at most overnight locations and meet the intent of the Wilderness Act, as well as direction in the King Range RMP to establish capacities to manage for solitude and reduce crowding. Establishing a 30 person daily entry for September 16 to May 14 would still allow for growth in visitation during the off-peak season, while maintaining opportunities for solitude, which are greatest during these times. By providing different seasonal capacity levels, visitors can choose to access the area when they can expect different levels of use/encounters with other parties. Although the target of 60 starts per day (and 192 people at one time) during the peak season may seem limited in an area with over 80 miles of trails, visitor use is concentrated along the LCT. Also, LCT users frequently congregate in certain locations due to limited camping sites, average hiking distances, and tide conditions so that visitors are not equally spread throughout the area.

Visitor Access Action 1.10: Take additional actions to manage visitor use levels if target capacities shown in Figure 3-4 are exceeded more than 30 percent of the time in one or more of the areas (see Visitor Access Monitoring Question below). Such actions would be consistent with

plan objectives and would be implemented in an adaptive manner (i.e., the least restrictive off-site actions would be implemented first, with actions that are more restrictive to visitor freedom implemented only if initial actions are unsuccessful). Adaptive actions could include, but are not limited to:

- Increasing outreach efforts to encourage visitation during times where use has historically been less than permit allocation limits.
- Providing information on suggested camping locations or other "tips" to avoid typically overcrowded camping locations.
- Providing information to the public on the number of permit reservations already taken for a given date, as well as information on past permit issuance.
- Reducing the maximum allowable group size for wilderness permits or SRPs.
- Reducing the number of overnight visitor starts per day.
- Requiring commercial and organized groups to use assigned group use sites if SRPs are shown to be the principle cause of overcrowding. This would only be implemented for specific camping areas where targeted capacities are regularly exceeded.
- Requiring backcountry users to maintain fixed itineraries to emphasize standards for solitude at destination camping areas, where limiting backcountry permits and providing detailed information about campsite use does not result in adequate distribution among campsites.
- Identifying, defining, and hardening group use sites using natural materials such as native stone, gravel or logs to establish durable group use areas and to confine camping to areas within the designated campsite.

Rationale: Past visitor studies identified campsite interaction as having the most impact to visitors' perception of solitude (Cole et. al. 2009). The BLM would employ adaptive management to protect solitude while impinging as minimally as possible upon visitor use. The BLM would begin by capping visitor use levels (as described in Visitor Access Action 1.3) and would only require fixed itineraries and the use of designated campsites if overnight visitation thresholds are regularly exceeded. By requiring fixed itineraries and the use of designated campsites, campsite crowding can be managed to achieve solitude objectives. Creating group use sites could help alleviate conflict in camping areas by locating large

groups out of sight and sound of dispersed camping areas. Tent pads and cooking areas may need to be identified and hardened to prevent encroachment on native vegetation and riparian resources.

Visitor Access Monitoring Question: What are the opportunities for solitude within the wilderness area and how have opportunities for solitude been maintained, improved, or declined at backcountry campsites as a result of permit allocations?

> Indicator A: The average number of visitors recorded within each target capacity area (see Figure 3-3) established through the plan.
>
> Measure: Number of visitors camped at one time in each target capacity area.
>
> Indicator B: Number of encounters with other visitors reported by campsite visitors.
>
> Measure: Visitor observations as reported in surveys.

3.5.2 Managing Visitor Impacts

Managing Visitor Impacts Objective 1: Minimize visitor impacts, including the presence of user-created facilities (e.g., driftwood shelters, beach art, campfire rings, memorials, etc.).

Managing Visitor Impacts Action 1.1: Establish the following standards for campsite development levels within the wilderness. Ratings for campsite development levels are described in Table 2-2.

- Naturalize any site that receives a rating of five to a condition rated at a two or below.
- Allow only two class four-rated campsites in any wilderness camping area (e.g., a creek mouth). Any further sites to receive a rating of four would be naturalized to a condition rated at two or below.

Managing Visitor Impacts Action 1.2: Remove beach art, monuments, memorials, and other user-made recreational developments or installations upon discovery.

Managing Visitor Impacts Action 1.3: Expand existing user education and outreach program to increase the use of minimum impact backcountry ethics. Encourage all users to read and understand key wilderness use practices. Continue to require SRP guides to conduct client orientation.

Managing Visitor Impacts Action 1.4: Allow geocaching within the King Range Wilderness by permit only and solely for "virtual" caches that are educational in nature and would not require physical items, facilities, or

surface disturbance. Geocaches would only be authorized where access does not require off-trail travel into sensitive locations (e.g., cultural sites, riparian, or intertidal areas).

Rationale: Wilderness management policy generally prohibits permanent man-made structures or facilities, except as necessary to manage for wilderness values. Geocaching has the potential to create new disturbance and to alter visitor use patterns, which could create impacts to wilderness resources.

Managing Visitor Impacts Action 1.5: Remove ocean trash and abandoned property from areas along the LCT. The use of motorized vehicles to transport bulky and heavy debris that cannot be removed by other means would be authorized only when necessary as analyzed in Appendix C, and only on the routes identified in Figure 2-12 as 1) the access corridor to private property designated by Public Law 109-362, and 2) the access route to Life Estate A.

Managing Visitor Impacts Objective 2: Protect water quality and maintain sanitary conditions by proactively addressing human waste management issues.

Managing Visitor Impacts Action 2.1: If site observations of improperly buried human waste or toilet paper increase beyond current levels, the BLM would implement actions potentially including, but not limited to, the following:

- Updating and increasing current outreach efforts to improve compliance with minimum impact backcountry ethics. Target specific areas and user groups (e.g., Big Flat, SRP groups, etc.).
- Distributing waste bags and including information that encourages users to pack out human waste that cannot be buried below high tide.
- Requiring all overnight visitors to pack out their human waste.
- Reducing visitation at backcountry sites that continually experience waste management issues by further limiting the number of daily entries or creating trailhead or site allocations.
- Requiring SRP groups to properly develop and decommission latrines when using upland campsites or when ocean burials are not possible.

Rationale: Taking action to reduce human waste at campsites is important to managing natural conditions and providing for a primitive recreation experience. Under this set of planned adaptive actions, permanent

latrines would not be installed. Permanent latrines would impair the undeveloped condition of the wilderness and require frequent inspection and maintenance, affecting visitor solitude. However, due to geological constraints, the area available to properly deposit and bury human waste is limited. Outreach efforts would be critical to attaining and managing for sanitary conditions. If sanitation is a persistent problem, limiting visitation would have less of an impact to the undeveloped character.

Visitor Impacts Monitoring Question: Is nearshore marine or freshwater stream water quality being affected by human uses in the backcountry?

Indicator: Presence of human waste in water.

Measure: Total and fecal coliform counts.

3.5.3 Recreation Facilities

Recreation Facilities Objective 1: Maintain the existing backcountry trail system to provide for primitive and unconfined recreation opportunities while protecting other wilderness qualities.

Recreation Facilities Action 1.1: Maintain trails to standards as identified in Appendix E using the minimum tools required. Appendix C contains the Minimum Requirements Decision Summary for determining when motorized or mechanized equipment would be needed for non-routine trail maintenance.

Recreation Facilities Action 1.2: Actively restore and allow for natural revegetation of trail segments that have multiple treads (braided areas) and reduce two-track roads to single track trails where roads do not provide authorized vehicle access.

Rationale: Reducing trail width to a single track would enhance the primitive nature of the trail system and discourage motorized trespass on hiking trails. A number of trails—including parts of the Lost Coast Trail, Spanish Ridge Trail and Cooskie Creek Trail—follow old two-track vehicle ways through coastal prairies. The dual tracks are currently perpetuated by hikers making use of both treads in order to hike side-by-side.

Recreation Facilities Action 1.3: Maintain a trail sign system at the minimal level necessary to protect resources and provide for a wilderness experience. Use native materials, such as driftwood, where possible when replacing or creating new signs within the wilderness. All new signing and visitor information would be placed at trailheads unless there is a demonstrated need, such as safety or the prevention of trespass, to have a sign on-site within the wilderness.

Recreation Facilities Action 1.4: Remove barriers to equestrian access by modifying trailhead gates to allow passage by equestrian users.

Recreation Facilities Action 1.5: Remove the trail shelter at the top of King Peak and benches from the Chemise Mountain Trail at the end of their lifespan.

Recreation Facilities Objective 2: Maintain a core area of forest habitat where wildlife and plant species are minimally affected by human influences.

Recreation Facilities Action 2.1: Remove the existing 3.4 mile trail segment on the decommissioned King Range Road from the wilderness maps and allow the tread to rehabilitate to natural conditions. Do not extend this trail to connect with the Miller Loop as described in the King Range RMP (USDI BLM 2005). Refer to Figure 3-5 for trail locations.

Rationale: The Honeydew Creek drainage includes the largest areas of old-growth forest and intact riparian areas within the King Range Wilderness and currently receives minimal visitor use. The existing trail segment is a remnant of past road removal and accesses the steep slopes above the Honeydew Creek drainage. The trail has no featured destination, receives minimal use, and does not have exceptional scenic or recreation qualities. By not developing a connection from Lightning Trailhead to Miller Loop and removing the existing trail from backcountry maps, a large, remote, primitive area would be maintained in a critical watershed with important wildlife habitat. This would promote the natural and undeveloped qualities of the wilderness, as well as preserve a true experience of solitude and primitive, unconfined recreation for visitors who do venture into the drainage. The Honeydew drainage would be protected as one of the largest core undeveloped areas in the King Range.

Recreation Facilities Objective 3: Provide for opportunities to experience the upland portions of the wilderness by providing additional trail opportunities and reliable year-round water sources.

Recreation Facilities Action 3.1: Develop an approximately 4 mile hiking trail through the Mill Creek Area of Critical Environmental Concern to create a connection between Lighthouse Road and the LCT via Cooskie Creek Trail (Figure 3-6). Work with partners to deliver interpretive programs and information to promote the protection of Mill Creek's sensitive resources. Refer to Figure 3-6 for the proposed trail location.

Recreation Facilities Action 3.2: Maintain existing spring improvements at Bear Hollow, Miller Camp, Bonus, Pinnacle and Telegraph springs.

Recreation Facilities Action 3.3: Evaluate and develop, as necessary, new drinking water sources where visitor use is impacting riparian or spring resources.

Rationale: The hot, dry summer climate and steep terrain of the upland trails limit the number of available water sources. A number of spring improvements constructed from gravel and small outlet pipes were put in place along these trails prior to wilderness designation for visitor use and safety, as well as resource protection. Without BLM maintenance, the water sources would eventually deteriorate and the spring areas could be impacted by visitors seeking water (e.g., digging in riparian areas etc.)

3.5.4 Public Information and Management Presence

Public Information/Management Presence Objective 1: Use wilderness outreach programs to promote minimum impact backcountry ethics (Leave No Trace 2011) and reduce evidence of human uses and the need for law enforcement. At the time of the next King Range visitor survey (currently scheduled for 2013), 90 percent of visitors would know and understand the proper and required practices for obtaining a backcountry permit, disposing of human waste, and storing food.

Public Information/Management Presence Action 1.1: Provide visitors with information about use patterns and crowding conditions at certain camping areas to encourage users to self disperse.

Public Information/Management Presence Action 1.2: Relocate and replace the interpretive panel at Punta Gorda Lighthouse to the inside of the lighthouse structure consistent with the National Historic Preservation Act.

Public Information/Management Presence Action 1.3: Develop off-site interpretive and educational materials for backcountry trails.

Public Information/Management Presence Action 1.4: Provide Leave-No-Trace training courses for seasonal staff and partner organizations to develop a pool of well-informed educators in the field.

Public Information/Management Presence Action 1.5: Use signs to identify wilderness boundaries for the public. Signing would be concentrated in areas where motorized trespass occurs, including closed ways that are now non-motorized trails, and along major boundary roads. If trespass problems are eliminated, signs may be removed to decrease visual impacts. Wilderness boundaries that follow surveyed lines or other map-based features that are not near vehicle access routes would be signed only as required to prevent trespass.

Public Information/Management Presence Action 1.6: Conduct law enforcement patrols of the wilderness at least twice per use season (e.g., Memorial Day, spring break, and the opening of deer hunting season) to provide education and enforcement of backcountry permit, bear can, vehicle, and campfire regulations.

Public Information/Management Presence Action 1.7: Develop an awareness and education program for residents and visitors emphasizing techniques for minimizing disturbances to seabirds, marine mammals, and the rocky intertidal zone (particularly tide pools), and to protect coastal water quality.

Invasive Species Action 1.8: Increase visitor education regarding prevention, identification, and control of invasive plants.

3.5.5 Wilderness Search and Rescue

Wilderness Search and Rescue Objective 1: Minimize the number of SAR incidents within the King Range Wilderness by providing visitor information that promotes personal responsibility and self-sufficiency.

Wilderness Search and Rescue Action 1.1: The BLM would provide visitors with information on current conditions, safety tips, and Leave-No-Trace principles (Leave No Trace 2011) through the BLM website, the King Range map and brochure, informational trailhead kiosks, one-on-one contact between visitors and field staff, and other outreach and education programs.

Rationale: Better informed wilderness visitors would be less likely to require SAR assistance and would be more prepared for self-rescue.

Wilderness Search and Rescue Objective 2: Minimize the impact of SAR activities on wilderness character and other visitors by utilizing the most appropriate and expedient means of finding and extracting the victim(s). The potential for use of motorized equipment is analyzed in Appendix C.

Wilderness Search and Rescue Action 2.1: Work cooperatively with the HCSO, the Mendocino County Sheriff's Office, CALFIRE, the USCG, and local volunteer fire departments to establish formal protocols for SAR/EMS activities and for the use of mechanized transport and motorized equipment within the King Range Wilderness. Such protocols would include definitions of agency roles, notification procedures and communication plans, and emphasize utilization of the appropriate level of response to protect the health and safety of persons in the wilderness while minimizing impacts to wilderness character.

Wilderness Search and Rescue Action 2.2: Conduct annual meetings among SAR/EMS agencies to evaluate and update participants' roles, contact information and communication plans, conduct after-action review of the prior year's SAR/EMS activities, evaluate training needs, and refine protocols.

Wilderness Search and Rescue Action 2.3: Conduct on-the-ground SAR/EMS training and evaluations, as necessary, to respond to emergent and changing needs, technologies, and procedures. Authorize requested SAR/EMS training on a case by case basis. The BLM recognizes that SAR/EMS organizations must train under realistic conditions for these activities. The BLM would normally allow SAR/EMS training involving non-mechanized equipment upon written request, with a detailed training description, from the SAR/EMS organization. Use of non-motorized wheeled carts for hauling stretchers may be used in training with BLM authorization. Use of motorized vehicles such as All-Terrain Vehicles (ATVs) and landing motor boats in training exercises would not be allowed.

Wilderness Search and Rescue Action 2.4: SAR/EMS resources would not be committed for dog or other animal rescue in the King Range Wilderness. The BLM would not authorize motorized vehicle use for dog or other animal rescue in the wilderness (with the exception of guide dogs as defined under the American's With Disabilities Act).

Rationale: The use of mechanized transport is prohibited within wilderness unless it meets a purpose as identified in the Act. The use of cooperatively established search and rescue protocols would expedite rescue operations and result in the most efficient and appropriate level of response to protect the health and safety of persons in the wilderness. An example of a protocol for determining the appropriate level of search and rescue response is the Search Urgency Worksheet (Appendix F). Conducting training exercises with the use of specialized mechanical patient transport (wheeled-stretcher) would allow local SAR/EMS organizations to become proficient with this equipment so that they can make responsible decisions regarding its use in rescue situations. This would protect wilderness character by reducing the need for more intrusive motorized vehicles such as ATVs during certain rescue operations.

3.6 Management in Support of Unique/Supplemental Values

As described in Chapter 2, the King Range Wilderness and Rocks and Islands Wilderness have unique cultural, scientific, and ecological values. As defined by the Wilderness Act, these values contribute to the area's wilderness character.

Unique/Supplemental Values Goal: Maintain or enhance the condition of the unique cultural, scientific, and ecological values contributing to the wilderness character.

3.6.1 Cultural Values

The BLM would continue to identify and manage cultural resources within the King Range Wilderness according to the overall goals and regulations set out in the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act of 1979, and current BLM guidance. The National Historic Preservation Act requires the inventory of federally-managed lands to identify and record archaeological deposits that are eligible for inclusion on the NRHP. High levels of visitor use within certain parts of the wilderness combined with the region's highly-active geologic processes, necessitate the frequent monitoring of known archaeological sites.

Cultural Objective 1: Within 10 years of plan completion, all NRHP-eligible cultural resources within the King Range Wilderness would be inventoried, evaluated, protected, and monitored.

Cultural Action 1.1: Systematically inventory and evaluate all known cultural resources sites for NRHP eligibility. Utilize partnerships with tribal representatives, the State Historic Preservation Office, universities, and other partner organizations in accomplishing this action. National Register evaluations would require subsurface testing of archaeological deposits. Limited excavation would be done with manual bucket auger and/or shovel test pits, and may include hand excavation of larger test units in specific cases. These efforts would use non-mechanized transport and hand tools. However, the use of technology that is equipped with non-motorized wheeled transport (e.g., ground penetrating radar) would be authorized on a case-by-case basis, where the wheeled equipment can be transported along existing trails, and where it is determined that resources would be better protected or where crew time and surface disturbance can be reduced. Refer to Appendix C for analysis of the use of mechanized transport to conduct site testing and evaluation.

Cultural Action 1.2: Monitor NRHP-eligible sites annually to record changes in site integrity due to natural or human impacts.

Cultural Action 1.3: Facilitate monitoring of cultural sites with Native American tribes and other partners using non-motorized, non-mechanized transport.

Cultural Action 1.4: Conduct site stabilization and mitigate degradation of NRHP-eligible sites. Actions would be undertaken using natural

materials and hand tools and equipment would be transported via foot or horseback. An exception to the use of natural materials would be instances where human remains erode from burials and may require the subsurface use of synthetic stabilization materials such as geotextiles.

Cultural Action 1.5: Stabilize and maintain the Punta Gorda Lighthouse and Oil House in a manner that allows safe public access and protects the historical integrity of the NRHP registered site. Stabilization would require installation of steel reinforcement and exclusion bars to ensure structural integrity and to prevent visitors from entering the oil house building. Periodic maintenance would be conducted at 8–10 year intervals to maintain the structures in useable condition. Refer to Appendix C for analysis of the use of mechanical transport or motorized equipment to conduct stabilization and maintenance activities.

Cultural Objective 2: Recognize and preserve the Hidden Valley historic orchard as a valuable interpretive resource associated with homesteading in the region.

Cultural Action 2.1: Use hand tools to maintain the existing conditions of the historic apple trees through brush-clearing and pruning.

Cultural Action 2.2: Use off-site interpretive materials such as kiosk signage and brochures to educate visitors about the historic orchard and homesteading.

Rationale: The historic orchard is an important example of prior use of the land by homesteaders.

3.6.3 Research

The King Range and Rocks and Islands Wilderness Areas provide opportunities for research in a wide variety of fields including biology, geology and archaeology. High quality research within these wilderness areas can both increase general knowledge and facilitate more effective management, without impairing wilderness character.

Research Objective 1: Provide a standardized research authorization system to allow research within the King Range and Rocks and Islands Wilderness Areas while protecting the area's wilderness character.

Research Action 1.1: Establish an interim research authorization system for researchers wishing to work within the King Range and Rocks and Islands Wilderness Areas that is consistent with Department of the Interior Scientific Integrity Policy (USDI 2011). A BLM-wide National Landscape Conservation System (NLCS) research permit reporting system is currently in development and, when implemented, would replace

the interim system described in this document. Under the interim research authorization system:

- Research would be limited to activities that are the minimum required to manage for wilderness character.
- Researchers working with archeological resources would not use this system but rather follow established Archeological Resources Protection Act permit procedures.
- Research authorizations would be required for most scientific activities in the wilderness that involve fieldwork, specimen collection, and/or have the potential to disturb resources or visitors.
- Authorizations would not be required for BLM employees or their designees in conducting official duties consistent with agency policies and this plan.
- The BLM would collect and store information on the number of research authorizations issued and authorized research activities.
- All research authorizations would include General Conditions (Appendix G) to which researchers must adhere. Additional specific conditions may also be included to address unique resources or activities.
- The BLM would approve or deny a research authorization based on an evaluation of favorable and unfavorable factors (Appendix G) and on an assessment of perceived risks and benefits. Although BLM staff would work with applicants to arrive at a mutually acceptable research design, applications may be denied where no acceptable mitigating measures are possible for research activities.
- Final research reports must be submitted to the BLM.

Research Action 1.2: Conduct outreach efforts to inform researchers of research authorization requirements.

Rationale: Research activities that assist with wilderness management could lead to enhanced wilderness character. An interim research authorization program would allow for research compatible with wilderness.

Research Objective 2: The BLM would actively encourage research that supports agency priorities and effective wilderness management.

Research Action 2.1: Consistent with the BLM's NLCS Science Policy, BLM staff would develop a science plan outlining the research priorities for the King Range Wilderness within 3 years. This plan would be updated every 5 years.

Research Action 2.2: The BLM would actively work with partners such as universities, non-profit groups, federal and state agencies, and volunteer groups to accomplish established research priorities.

Research Action 2.3: Once established, wilderness research priorities would be posted on the King Range website along with information on research authorization requirements and contact information for pertinent BLM specialists.

Rationale: Both wilderness areas could benefit from information obtained through research activities. Encouraging research that supports agency priorities would increase the probability that research within wilderness areas would be applied to protect and enhance wilderness character.

3.7 Supporting Actions

These actions are included in the plan to provide context to plan decisions. In order to distinguish supporting actions each objective and action have a "(S)" appended to the identifying number. The actions described below support other actions or support the stewardship of the King Range Wilderness and Rocks and Islands Wilderness. These actions have already been analyzed in the King Range RMP, CCNM RMP, or do not need further NEPA analysis.

3.7.1 Chaparral and Coastal Scrub

Chaparral and Coastal Scrub Objective 1(S): Maintain a natural distribution of chaparral and coastal scrub habitat.

Chaparral and Coastal Scrub Action 1.1(S): Minimize management actions that would impact ecosystem function in these areas.

Rationale: These ecosystems are currently functioning in a natural state within wilderness.

3.7.2 Forest

Forest Objective 1(S): Allow the natural development of a healthy and self-sustaining forest ecosystem within wilderness that represents the natural array of forest vegetation structure and composition.

Forest Action 1.1(S): Allow previously harvested forest stands within the wilderness to naturally return to pre-harvest conditions.

Forest Objective 2(S): Work with partners to increase knowledge of natural and harvested forest conditions.

Forest Action 2.1(S): Conduct visual monitoring and documentation of forest succession and general forest health conditions.

Rationale: Monitoring and documentation of harvested stands would contribute to scientific understanding of forest succession and, perhaps, to more effective stewardship.

Forest Objective 3(S): Provide for non-commercial collection of appropriate special forest products (e.g., cones, mushrooms) while protecting the wilderness character.

Forest Action 3.1(S): Provide information on the King Range Wilderness and allowable uses to those receiving permits for non-commercial special forest product collection within the King Range NCA.

Rationale: Non-commercial collection of certain special forest products is compatible with wilderness designation. The vast majority of special forest products permits issued in the King Range Wilderness are associated with mushroom collecting.

3.7.3 Infection and Disease

Infection and Disease Objective 1(S): Prevent and/or control the spread of sudden oak death into the King Range Wilderness.

Infection and Disease Action 1.1(S): Use the best available science and management practices compatible with wilderness regulations to control the spread of sudden oak death should the disease be identified in the wilderness

Rationale: Given that the spread of this introduced disease is not completely understood, it may be impossible to prevent its establishment in the wilderness. Using adaptive management practices to prevent and/or control the spread of this disease is the best strategy that can currently be considered.

3.7.4 Coastal Beach, Intertidal Zone, Rocks and Islands

Coastal Beach and Intertidal Objective 1(S): Protect seabird nesting, resting, and roosting habitat and marine mammal haul outs.

Coastal Beach and Intertidal Action 1.1(S): Develop an awareness and education program for residents and visitors emphasizing techniques for minimizing disturbances (e.g., reduced lighting of offshore rocks) to seabirds, marine mammals, and the rocky intertidal zone (particularly tide pools), and to protect coastal water quality.

Coastal Beach and Intertidal Action 1.2(S): Establish baseline information on existing and historic seabird nesting, roosting, and resting sites and

sea lion colonies. Sightings of tagged or tattooed seabirds and marine mammals would be reported to the U.S. Fish and Wildlife Service or the National Oceanic and Atmospheric Administration.

Coastal Beach and Intertidal Action 1.3(S): Establish baseline information on the health of rocky intertidal areas and near-shore waters.

Rationale: The King Range Wilderness' coastal beach and intertidal systems, as well as the adjacent Rocks and Islands Wilderness and their surrounding waters, provide important habitat for seabirds, marine mammals, and intertidal species (especially in rocky intertidal areas). The popularity of the LCT and the proximity of the community of Shelter Cove to the Rocks and Island Wilderness make these areas, and the species for which they provide habitat, particularly vulnerable to impacts by visitors and residents.

3.7.5 Native American Values

Native American Objective 1(S): Recognize the traditional Native American uses of the King Range Wilderness and facilitate the continuation of these uses while protecting wilderness character.

Native American Action 1.1(S): Work closely with traditional Native American practitioners to best provide for the long-term protection of special or sacred places.

Native American Action 1.2(S): Allow and promote traditional native gathering of non-timber forest products per the Traditional Gathering Policy implemented by the California BLM (USDI BLM 2007). Gathering would be conducted using non-mechanized transport or non-motorized equipment. Gathering and resource management would be undertaken using hand tools.

Rationale: BLM recognizes traditional Native American use of the King Range Wilderness and would continue to work closely with tribes to facilitate uses and provide long-term protection of special or sacred places.

3.7.6 Research

Research Objective 1(S): Protect wilderness character from impacts related to research activities.

Research Action 1.1(S): Anyone found to be conducting research without a valid authorization would be reported to their employer as well state and federal regulatory agencies, as appropriate. Violators may also be cited consistent with 43 CFR 6302.12,16, and 20.

Rationale: Some research activities have potential to harm wilderness character. Encouraging compliance with the interim research authorization program would increase wilderness protection.

3.7.7 Threatened and Endangered Wildlife Species

Threatened and Endangered Species Objective 1(S): Maintain and allow for an increase in northern spotted owl habitat and breeding success to support the King Range RMP objective of restoring population levels to at least 20 breeding pairs.

Threatened and Endangered Species Action 1.1(S): Manage threats to the northern spotted owl within wilderness (e.g., barred owls, loss of habitat). Coordinate with the U.S. Fish and Wildlife Service on best management practices for northern spotted owls.

Rationale: BLM is required under Section 7 of the Endangered Species Act to take affirmative actions to promote recovery of listed species.

3.7.8 Rivers and Streams

Rivers and Streams Objective 1(S): Improve understanding of anadromous and freshwater fish within the King Range Wilderness.

Rivers and Streams Action 1.1(S): Support the ongoing partnership with Humboldt State University to build on the existing data set for the unique populations of steelhead within west side streams.

Rivers and Streams Action 1.2(S): Support the ongoing partnership with Mattole Salmon Group to build on existing anadromous fish data set for Mill Creek, Honeydew Creek, and Bear Creek.

Rivers and Streams Action 1.3(S): Evaluate fish population data in relation to future recovery plans prepared by the National Marine Fisheries Service for the four listed evolutionarily significant units within the wilderness.

Rationale: The King Range Wilderness offers the opportunity to conduct research in a relatively undisturbed habitat on anadromous fish populations with unique characteristics.

3.8 Monitoring

Monitoring would be conducted in accordance with guidance contained in, "Measuring Attributes of Wilderness Character," BLM's implementation guidance of the interagency monitoring protocol developed by the four wilderness management agencies and presented in, *Keeping it Wild: An Interagency Strategy to Monitor Trends in Wilderness*

Character Across the National Wilderness Preservation System (Landres et. al 2009). The monitoring protocol specifically assesses condition and trends of the five wilderness character qualities that provide the basis for management direction in the proposed action (e.g., naturalness, undeveloped, untrammeled). Measurement and documentation of trends in wilderness character would help determine how well the wilderness management program is fulfilling the congressional mandate to "preserve wilderness character."