Chapter 2. Alternatives, Including the Proposed Action

This chapter describes and compares the alternatives considered for the Santiam Pass Summer Motorized Recreation Project. It includes a description and map of each alternative considered. This section also presents the alternatives in comparative form, sharply defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. Information used to compare the alternatives is based upon the design of the alternative (i.e., miles of designated roads and trails for OHV use and other added features) and on the environmental and social effects of implementing each alternative.

Alternatives Considered but Not Fully Developed

An alternative was submitted to the District Ranger by the Sand Mountain Society (SMS) in the summer of 2007. The "SMS Alternative" was considered by the District Ranger and IDT, but it was not fully developed as an alternative, as many of its elements were already included in existing alternatives (3 and 4). Sand Mountain Society proposed their alternative to the team to isolate recreational OHV use away from areas which they feel would be "incompatible" with such use, and designed it to generally keep OHV use to an area along Forest road 2690, north of and outside the Santiam Wagon Road SIA, and mostly north of 2690-860 and to a western limit at 2690-826.

The SMS Alternative would close many dead end roads and user trails, particularly those that lead to volcanic ash deposits in the eastern half of the planning area. The intent in their alternative was to protect the ash deposits and cinder cones outside of the Sand Mountain SIA, which are of particular interest to SMS. The SMS Alternative would include one staging area at Ray Benson. Additional measures were recommended in the SMS Alternative that would take steps to modify public behavior (i.e. alcohol ban) and which would prohibit "paddle tires," a type of ATV tire.

The SMS submitted their alternative as a way to provide a non-motorized buffer around important heritage, geological, and cultural resources (Santiam Wagon Road, the Sand Mountain SIA, Pacific Crest National Scenic Trial, and Mt Washington Wilderness). In their words, Sand Mountain Society proposed the SMS Alternative to "restore balance of recreational visitors to Santiam Pass, many of whom (i.e. hikers, equestrians, etc.) have been largely displaced by OHV use, and whose recreational activities are more compatible with much of the terrain and heritage resources."

This EA considers a full range of alternatives containing many of the actions proposed by the Sand Mountain Society and others in their scoping comments, and which Sand Mountain Society included in their Alternative. For instance, all action alternatives are designed to protect important heritage, geological, and cultural resources detailed in the SMS Alternative, such as the Santiam Wagon Road, the Sand Mountain SIA, the Pacific Crest National Scenic Trial, and Mt Washington Wilderness, consistent with the amended Forest Plan. However, not all aspects of the SMS Alterative

are incorporated. For instance, all alternatives considers the entire project area as potentially available for motorized recreation use when such use is compatible with established land and resource objectives and when use is consistent with resource capability and suitability, as stated in the Purpose and Need (Willamette Forest Plan).

All action alternatives include Forest Plan Amendment #49, which would restrict OHV use to designated roads and trails. Alternatives 3 and 4 do not include any areas of ash deposits for designated trails or play areas, which addresses the SMS concern to protect this area. Alternatives 2, 3, and 4 are designed to protect and restore the Santiam Wagon Road, with Alternative 4 restricting use on the Santiam Wagon Road to highway legal vehicles as the SMS Alternative proposes. All action alternatives take measures to block existing OHV access to the Pacific Crest National Scenic Trail, which protects it from intrusion by motorized vehicles to help avoid conflicts between users. None of the alternatives would change or cancel Special Closure Order #110 that restricts off road or trail travel within the Sand Mountain SIA. Alternative would close Forest road 2690-810 at the 2690-860 junction, thereby eliminating motorized vehicle access to Sand Mountain Lookout to all but administrative vehicles. Alternative 4 would limit travel up to the parking area below Sand Mountain lookout to Highway Legal Vehicles, as the SMS Alternative proposes. By eliminating OHV use south of the Santiam Wagon Road SIA, Alternative 4 does what the SMS Alternative proposes, by providing a non-motorized buffer near the Sand Mountain SIA and north of the Mt Washington Wilderness.

Alternatives Considered in Detail _____

Alternative 1 – The Current Management Situation (No Action)

This alternative assesses the present condition of the affected environment and serves as the basis of comparison for the other alternatives analyzed in this EA. Recreation use within the Santiam Pass Summer Motorized Recreation Project Area would continue to be managed as it currently is under the existing management situation.

Current trends of OHV use would continue, and the McKenzie River Ranger District would continue to monitor uses allowed under existing Forest Plan Standards and Guidelines. Current use of ATVs on all roads and trails would continue and the area would remain open to cross-country travel. Enforcement of present regulations applying to recreational ATVs within the project area would continue unchanged. Areas where ATV use is not permitted, such as the Pacific Crest Trail, Patjens Lake Trail, Hoodoo Ski Area, and off of Forest road 2690-810 within the Sand Mountain SIA would remain off-limits to off road OHV use.

This alternative does not close and or rehabilitate user-created tracks. The unregulated dispersed camping that is occurring would continue and expansion into undisturbed areas would continue. No facilities would be designated for loading and unloading of ATVs.

Since Alternative 1 would not take actions to change how OHV use is managed within the project area and it does not meet the purpose and need identified in Chapter 1. That is, it does not designate a system of Forest roads and trails for motorized recreation vehicle use within the project area consistent with the Willamette Forest Plan. It does not provide for maximum use for a range of activities that

provide semiprimitive motorized experience, and based on an analysis of resource conditions, it does not take action to protect resources in this area. It does not meet the need to rehabilitate existing motorized recreation vehicle impacts along the Santiam Wagon Road within the project area, and it does not protect this heritage resource from future impacts. Lastly, it does not meet the need to change conditions in the project area to provide recreation opportunities for a quality family-oriented experience.

Alternatives 1 as it Responds to the Significant Issues:

Issue 1. Santiam Wagon Road SIA

Alternative 1 would take no action to change the current condition of the Santiam Wagon Road SIA because OHVs use on both the Eno and Sand Mountain Segments (HPMP) of the historic wagon road would continue. With no action, existing motorized recreation impacts to the Santiam Wagon Road would remain. No actions would be taken to return the wagon road to its historic route, profile, and width. The 8 user-created OHV trail crossing that exist would remain in use and the number of crossings could increase. Dispersed camping within the Santiam Wagon Road SIA would continue to be unregulated, with the 43 existing dispersed campsites remaining in use for an estimated 39.5 acres. No speed limits would be implemented along the historic wagon road to reduce the potential for road surface material displacement.

Issue 2. OHV Spectrum of Opportunity

There would be no actions taken to provide comprehensive management of OHV use in the project area. Alternative 1 would provide the most opportunity for OHV freedom. ATVs would continue to be allowed on all system roads, and cross-country travel would continue. User-created routes would not be closed to OHV use or rehabilitated. Dispersed camping opportunities would continue to be managed as they currently are. A continued expansion of user-created routes and dispersed camping sites is likely to promote larger groups and more people overall. Designated camping areas, sanitary facilities, and day-use parking areas suitable for loading and unloading ATVs would not be provided beyond what is currently available.

Issue 3. Recreation User Conflicts

Alternative 1 allows more freedom of choice for dispersed campers as it does not designate or restrict the size of campsites. Camping opportunities would remain unchanged and would likely expand in size, encouraging large groups at times. Motorized trespass along the Pacific Crest National Scenic Trail is likely to continue unchecked because of numerous user-created access points in the project area and no restrictions on cross-country travel. Without a designated motorized travel system, all areas within the planning area would be available for mixed recreation use with dispersed campsites likely to be used by primarily OHV users in the summer months. Non-motorized recreation activities would continue to be impacted by unrestricted OHV use and would continue the potential for user conflict.





Chapter 2 – Alternatives

Figure 4. Map of Alternative 1.



Actions Common to All Action Alternatives

All action alternatives include Non-Significant Amendment #49 with these specific components:

1. A One-time Exemption of Management Area Standard and Guideline MA-5a-01 and MA-10b-01. (See page 7 for more details.)

MA-5a-01: An Implementation Guide shall be prepared for each SIA describing the site specific management objectives, enhancement programs, and other acceptable uses and activities.

MA 10b 01: An Involvementation Guide shall be grouped for each Seminimizing Materials and

MA-10b-01: An Implementation Guide shall be prepared for each Semiprimitive Motorized area describing the site specific management objectives, enhancement programs, and other acceptable uses and activities.

2. The Addition of Management Area Standard and Guideline MA-10b-04a.

In all action alternatives, Management Area Standard and Guideline **MA-10b-04a** would be added to the Willamette Forest Plan (USDA Forest Service. 1990, page IV-185). This amendment would restrict OHV use in the project area to only designated roads, trails, and other specified areas, meeting the need to protect resources from unregulated OHV use. This action would change the "Open" designation, as mapped in the 1990 Willamette Forest Plan Map, to "Closed" for all of Management Area 10b within the Santiam Pass Summer Motorized Recreation Project Area. An exception to this change would be made for the designated Open Play Area north of Sand Mountain SIA in Alternative 2 (see Figure 6 – Map of Alternative 2).

Existing Standard and Guideline MA-10b-04:

MA-10b-04, Access by motorized vehicles shall be limited to snowmobiles, trail bikes and ORVs not greater than 45 inches in width. The general area is open to off-road vehicle use off designated roads and trials.

The proposed added Standard and Guideline applicable to the project area:

MA-10b-04a, Within the Santiam Pass Summer Motorized Recreation Area, access by wheeled motorized vehicles on designated Forest Service trails shall be limited to trail bikes and ORVs not greater than 50 inches in width or over 800 pounds vehicle weight. The general area is not open to off-road vehicle use off designated roads, trails or other specified areas.

3. A Management Area Change from MA-10e, to MA-10b Along Forest Winter Trail #3558.

For Alternative 2, Forest Plan Amendment #49 also changes the Management Area designation of two corridors of National Forest System land from MA-10e, Dispersed Recreation, Semiprimative Nonmotorized, to MA-10b, Dispersed Recreation, Semiprimative Motorized (Willamette Forest Plan, page IV-184 to IV-195):

a) A 12 foot wide corridor would be re- designated as MA-10b on the location of winter snowmobile trail #3558, from the east termini of Forest road 2690-920 near the Pacific Crest Trail to the Willamette National Forest boundary at the Cascade Crest. This change in Management Area allocation would be implemented with the construction of a designated OHV trail for Class I and III ATVs on existing user-created tracks.

As previously mentioned, Sisters Ranger District of the Deschutes National Forest is currently involved in road management planning, which may result in designated roads and trails for OHV use on the Deschutes, east of the Santiam Pass Summer Motorized Recreation Project area. A travel corridor in this location could provide a connecting route to the east side of the Cascade crest for access to existing roads and trails.

ATV Trail System Designation

The ATV trail system has been designed to accommodate ATV Class I and III vehicles and to provide a quality family recreation experience for a variety of ATV trail users. Design guidelines used during trail layout and through project implementation will be consistent with guidelines from Forest Service Trails Handbook, FSH 2309.18. Trail design would also consult the Wernex Motorcycle Trail Guidelines for Design, Construction, and Maintenance and User Satisfaction (Wernex 1994). The system would be designed primarily to "easy" ATV trail standards, with an average clearance of 74 inches wide, 6 foot height and maximum 20 percent grade. The system would not be open to motorized vehicles larger than 50 inches in width and over 800 lbs. vehicle weight.

Proposed trail locations have been identified with the intent of providing a variety of trail recreation opportunities in terms of terrain, difficulty and scenery. Multiple loops and a variety of trail lengths were also incorporated into the proposal to disperse users and minimize the number of contacts, and to allow users to choose conditions best related to the experiences they were seeking.

Trail construction would occur either on previously undisturbed ground, or by incorporating user-created tracks. No new trails would be constructed within Riparian Reserves. User-created tracks have been reviewed for their recreation value and are located to minimize impacts to special habitats for plants, or home range for any TES species. Routes with high recreation value and have little or no potential to affect the other resources were considered for inclusion in the action alternatives. User created tracks not incorporated into the system would be closed and rehabilitated. They would be closed to all recreational uses during the period of rehabilitation.

User-created tracks proposed for inclusion in the motorized trail system that do not meet motorized trail standards would be reconstructed or narrowed to improve the recreation experience. Narrowing would be accomplished by adding natural structures such as stumps, logs, or rocks, or allowing natural vegetation along the corridors to reestablish and encroach from the sides.

Trail speeds would be regulated by design. Curves would be used to minimize long, straight stretches of trail. In areas where curves for speed control would not be feasible, constructed features

on the trail surface would help to reduce speeds. Trails would be constructed with areas wide enough for safe passing of other vehicles, or would include pull-out areas. Potential blind spots along the trail system would be minimized through trail design and maintenance, minimizing any surprise to users sharing the trail.

A sign plan and maintenance strategy would be developed for both the designated dispersed camping areas and the motorized trail system in accordance with the December 2005 Forest Service Engineering Manual EM7100-15 Sign and Poster Guidelines for the Forest Service (USDA Forest Service. 2005b). Trail signing would be provided on all system trails and include directional, interpretive, and difficulty rating. Any roads designated for mixed-use would also be signed in accordance with these guidelines.

All roads proposed to be designated for mixed-use would be consistent with EM-7700-30 "Guidelines for Engineering Analysis of Motorized Mixed Use on National Forest System Roads," (USDA Forest Service, 2005c).

Santiam Wagon Road

The Sand Mountain Segment of the Santiam Wagon Road (Forest road 2690-810, from the junction with 2690-860 east to the Big Lake Road) is designated for OHV use in all action alternatives, but vehicle use designation would vary by each action alternative described below. All action alternatives would restore displaced road surface material along the 6.0 miles within the project area on both the Eno and Sand Mountain Segments and attempt to return the road profile to original width and alignment. Designated OHV crossings would be clearly marked and designed to preserve the integrity of the wagon road. All action alternatives would include speed limits on portions of the Santiam Wagon Road open to motorized vehicles. All action alternatives would also install signs with a wagon road logo to inform users that they are on the historic wagon road, and the informational kiosks in the staging areas would include graphic displays pertaining to the historic wagon road.

Staging Area Development

All action alternatives would construct a day-use staging and parking area, approximately 1-2 acre in size on the west side of the Big Lake Road 2690, and south of the intersection of Forest road 2690-860. This day-use area is centrally located within the designated OHV system of trails for all action alternatives. It would include an information kiosk and a concrete pad for the portable toilets installed during the summer. Vegetation would be planted along the interface of the staging areas and road access to reduce the noise and screen the area from general traffic along Big Lake Road. Design criteria would include bumpers and planted vegetation to confine use and limit impacts to within the designated area. Speed limit would be posted adjacent to the staging area.

Dispersed Camping in the Regulated Camping Zone

All action alternatives would include a Regulated Camping Zone surrounding Ray Benson Sno Park, extending south to the end of Big Lake Road 2690, along the Santiam Wagon Road with various coverage by alternative, and encompassing the Big Lake Campground Complex. The regulated camping zone would restrict dispersed camping to designated sites. The estimated number of designated dispersed campsites would vary by alternative. No dispersed campsites would be located

in any riparian reserves adjacent to Big Lake. No designated dispersed campsites would be located within 100 feet of the Pacific Crest Trail.

All existing dispersed campsites in the regulated camping zone that are selected for inclusion in any of the action alternatives would be posted as an established site. Hard boundary markers and physical barriers would identify and define the specific camp area. A mix of group and single occupancy campsites would be distributed along the road corridors. No constructed improvements such as tables, garbage cans, or toilet facilities would be provided. Some designated dispersed campsites may have constructed fire rings installed to reduce potential fire hazards. Designated dispersed campsites would be surveyed annually for safety and sanitation standards. During the selection of campsites, any trees identified under current hazard tree criteria would be felled.

Other Dispersed Camping

All motor vehicles must remain within 100 feet of an open Forest system road, for other dispersed camping throughout the project area but outside the Regulated Camping Zone.

Implementation

The ATV Grants Program, administered by Oregon State Department of Parks and Recreation, provides funding for development and maintenance of road and trail systems, and for patrol, enforcement and monitoring of recreational ATV use areas throughout the State of Oregon. Over the last decade, ATV grants have been applied to assist in the development of ATV recreation areas on Federal lands in Oregon. As an example, the Willamette National Forest used State ATV grants in part, for the development of the Huckleberry Flat OHV Area near Oakridge, Oregon. ATV grants also helped develop the Shotgun Creek OHV Area, located on Bureau of Land Management lands near Marcola, Oregon. The McKenzie River Ranger District has applied for ATV Grant funding to help to implement actions that move forward in this initiative.

Work eligible for funding on this project includes the rehabilitation of the road surface, width, and alignment of the Santiam Wagon Road, the construction of the designated ATV road and trail system, the construction of the "Kiddie Loop" youth learning trail, construction and restoration work at the dispersed campsites within the regulated camping zone, and the rehabilitation of user-created tracks.

Any work funded through ATV grants may take 3-5 years to complete due to annual distribution of funds for competing projects. In order to provide continuing opportunities to the public for OHV recreation, project implementation would be timed such that some of the dispersed camping areas and Forest roads and trails available to OHV use would remain open while others are undergoing reconstruction and rehabilitation.

Enforcement of Forest Orders and State Laws

An area education and enforcement plan would be implemented to actively promote responsible, appropriate and legal behaviors within the project area through information boards located at primary staging areas and popular dispersed camp areas. Information kiosks at the staging areas would include safety information, a list of appropriate behaviors and trail courtesy guidelines, ethics for users of the area, and Federal and State rules and regulations. Existing educational programs, such as Leave No

Trace and Tread Lightly would be utilized. Interpretive signs would describe the historical importance of the Santiam Wagon Road and how to identify and protect it while using the area.

The sign boards would also advise the user on minimizing harassment to the wildlife in the area and how to avoid damaging wildlife habitat. Users would be informed about fire precautions to prevent wildfires. Guidelines would be listed on preventing the spread of noxious weeds. Road system maps, Forest Orders, and other rules and regulations would be made available at staging areas, the McKenzie River District office, and other commercial venues.

Enforcement of the State Vehicle Code would be provided by Federal Law Enforcement officers, Linn County officers, and the Oregon State Police. The same agents would also enforce Forest Orders created as a result of this initiative which pertain to Forest road and trail restrictions. Notices of violations and applicable fines would be issued. Motorized recreation vehicles would be required to meet all applicable National and State OHV Regulations. Noise testing would be periodically offered at staging areas during heavy use weekends. The ATV noise limit of 99 decibels under Oregon State Law would be enforced.

Actions Specific to Alternative 2 – The Proposed Action

Alternative 2 – the Proposed Action, meets the project's purpose and need of providing a designated system of roads and trails for motorized recreation within the project area as directed by the Willamette Forest Plan and by agency policy, of rehabilitating existing motorized recreation vehicle-impacts to the Santiam Wagon Road and protecting this heritage resource from future impacts, and for providing recreation opportunities in the project area that offer a quality family-oriented experience.

Alternative 2 would include the actions described above beginning on page 33 that are common to all action alternatives, and it would implement the specific actions described below, which are displayed in Figures 5 and 6.

Non Significant Forest Plan Amendment #49

Alternative 2 includes Forest Plan Amendment # 49, which implements the following (see page 7 for more details):

- A one-time exemption of Management Area Standard and Guideline MA-5a-01 and MA-10b-01
- 2. Adding Management Area Standard and Guideline MA-10b-04a, and
- The Management Area designation change from MA-10e, to MA-10b along Forest Trail #3558.

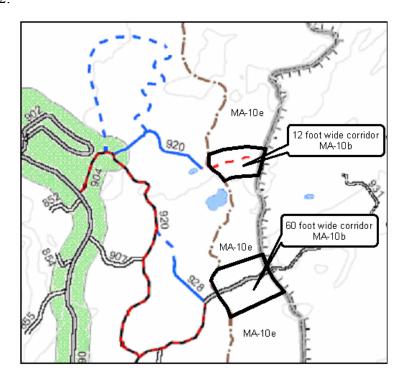
Alternative 2 adds a second change in Management Area designation from MA-10e, Dispersed Recreation, Semiprimative Nonmotorized, to MA-10b, Dispersed Recreation, Semiprimative Motorized at the following location (Willamette Forest Plan, page IV-184 to IV-195):

b) A 60 foot wide corridor would be designated to MA-10b along Forest road 2690-910 from the intersection of Forest road 2690-928 to the Forest boundary at the Cascade Crest, and it is designated for highway legal vehicles only.

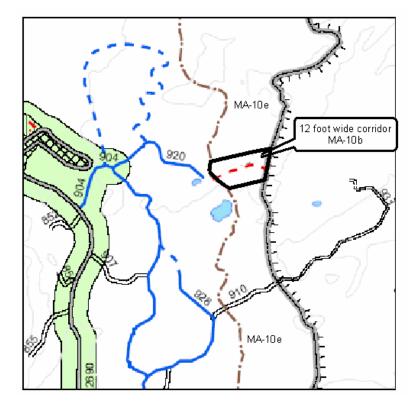
Figure 5 displays the Management Area changes for Alternative 2, and the changes specific to Alternatives 3 and 4.

Figure 5: Forest Plan Amendment #49, by Alternatives.

Alternative 2:



Alternatives 3 and 4:



(Figures not drawn to scale.)

Alternative 2 would also implement these following actions:

ATV Trail System Designation

- Designate 37.3 miles of Forest Road open to Motorized Mixed-Use.
- Designate 7.6 miles of Forest Road open to ATV Class I & III only.
- Close 16.3 miles of Forest Road to motorized use.
- Reconstruct 4.4 miles of user created tracks, which would be open to ATV Class I & III.
- Construct 7.9 miles of new motorized trails open to ATV Class I & III
- Close 5.6 miles of user-created tracks to all motorized use and rehabilitate.

Santiam Wagon Road

- Designate 6.0 miles of the Santiam Wagon Road open to Motorized Mixed Use.
- Rehabilitate all 6.0 miles of the Santiam Wagon Road to approximate historic route, profile, and width, close and rehabilitate user-created OHV crossings.
- Designate 8 clearly marked OHV crossings to protect the wagon road.
- Establish and post speed limits on the Santiam Wagon Road that apply to both HPMP road segments within the project area, and includes Forest road 2676-866 from the Eno road 2676 to the junction with 2690-810, Forest road 2690-810 from the junction of 2676-866 to the junction the Big Lake Road 2690, and Forest road 2690-811 from the junction of 2690 to the Forest boundary.

Staging Area Development

Established two day-use staging areas for off-loading OHVs from trailers at two central locations, one located along the Big Lake Road at the junction of Forest Road 2690 and south side of 2690-860, and the other near the junction of Forest Road 2690 and 2690-810, (Santiam Wagon Road) but outside the Santiam Wagon Road SIA. The staging areas would include a Kiosk to provide user education and information along with trail maps and a pad for toilet facilities. The constructed staging areas would be offset from the Big Lake Road to provide vegetative screening for noise reduction. Vehicle speed would be regulated adjacent to all staging areas.

Dispersed Camping in the Regulated Camping Zone

- Designate 34 dispersed campsites within the Regulated Camping Zone along Big Lake Road 2690, and Santiam Wagon Road along the 2690-810 and 811 segments. All designated campsites would access the motorized trail system.
- Block and rehabilitate 9 existing dispersed campsites along the Santiam Wagon Road that are not incorporated into this action (21.9 acres restored).

Open Play Area

• Establish an Open Play Area that permits cross-country travel off designated Forest roads and trails, on approximately 22 acres within the sand blowout feature that exists at the junction of the Sand Mountain lookout road 2690-810 and Santiam Wagon Road 2676-866. Play area boundary

markers would be established outside of the Sand Mountain Special Interest Area and the Santiam Wagon Road Special Interest Area. Entrance and exit trail access points would be designated to connect the play area to the rest of the trail system.

Kiddie Loop

• Establish a Kiddie Loop youth learning trail area on approximately 18 acres north of Big Lake Campground, between the Big Lake Road 2690 and Santiam Wagon Road, 2690-810. Construction of the youth learning trail, or Kiddie loop area, would provide a managed opportunity for beginning riders. A series of short loops and connective trails between existing dispersed camping areas and Big Lake Campground Complex would allow youth to develop ATV handling skills in a controlled open location. On-site adult supervision would be encouraged for those using the Kiddie Loop trail area through signing. The youth learning area would be designed for younger age riders to operate Class I and III ATVs at reduced speed. Tree and noise reducing vegetation would be established between the trail area and Big Lake Campground.

Key Forest Roads

Alternative 2 does not change current Forest road access on any Key Forest Roads as described in Appendix A, Transportation Systems Analysis.

Alternatives 2 as it Responds to the Significant Issues:

Issue 1. Santiam Wagon Road SIA

Alternative 2 does not limit OHV use of the Santiam Wagon Road. All 6.0 miles of the wagon road remains open to motorized mixed-use that includes ATV Classes I, II, III. Of all action alternatives, this is the least prohibitive for motorized vehicle use. This alternative rehabilitates all 6.0 miles of the Santiam Wagon Road within the project area to the historic route, profile, and width. It would provide for 8 OHV crossings and rehabilitate all user-created OHV crossings not incorporated into this action. Dispersed camping along the Santiam Wagon Road would be regulated and camping would be limited to 18 designated sites along the 2690-810 and 811 portions in the SIA. Approximately 17.3 acres of existing dispersed camping sites in the SIA would be made unavailable and rehabilitated. Speed limits would be posted and enforced on Forest road segments 2690-866, 2690-810, and 2690-811, which defines the historic Santiam Wagon Road within the project area.

Issue 2. OHV Spectrum of Opportunity

Alternative 2 would provide the widest spectrum of opportunity for OHV users. It has the most miles of managed motorized trail system of all alternatives by establishing approximately 57.2 miles of OHV routes. Routes are comprised of a combination of existing Forest roads, construction of trails that incorporate user-created tracks, and construction of new ATV Class I and III trails between Forest roads. Of the existing 68.2 miles of forest roads in the project area, approximately 37.3 miles would be open to Motorized Mixed-Use, 7.6 miles would be open to ATV Class I and III only and 16.3 miles

would be closed to all motorized use. Trail construction includes approximately 7.9 miles of new trail and 4.4 miles of user-created tracks, which would be open to ATV Class I and III.

One new day-use staging area would be located at the junction of Forest Road 2690 and 2690-860, and a second day use staging area would be constructed north of the Santiam Wagon Road SIA near the junction of the Big Lake Road. Both staging areas would provide a central point of contact for user education, trail information along with sanitation facilities as needed. Construction of the Kiddie Loop youth learning trail area between Forest Road 2690-891 and the Big Lake Road 2690 would provide a managed opportunity for beginning riders. A series of short loops and connective trails between existing dispersed camping areas and Big Lake Camp Ground would allow youth to develop ATV handling skills in a controlled open location. A 22 acre open play area would be established north of the Sand Mountain SIA where cross-country riding would be allowable.

Issue 3. Recreation User Conflicts

Alternative 2 would designate approximately 34 dispersed campsites within the regulated camping zone, with all 34 campsites having direct access to the ATV trail system, and would heavily favor those dispersed campers with ATVs. A combination of campsite configuration and site distribution would accommodate multi-family gatherings in addition to single family usage. Current campsites would be modified to establish campsite boundaries along with access to trail systems.

This Alternative would reduce the total number of motorized crossing along the Pacific Crest Trail from 9 to 4 to reduce potential for conflict. One crossing would be located along the Santiam Wagon Road, 2690-811, one along Forest road 2690-940 and one at the junction of 2690-920 and trail 3558. Informational signing and barrier placement would also help prevent unintentional motorized access along the Pacific Crest Trail corridor.

This alternative maximizes the available Forest road system for motorized recreation. Non-motorized user to the area would have few opportunities for recreational activities outside of the existing non-motorized trail system. Those users wanting to travel cross-country within the project area would continue to encounter motorized activity at trail or road crossings.

Noise and dust associated with ATV use around Big Lake Campground has been a source of user conflict. This alternative provides for two trail access points at Big Lake Campground and removes the parallel user created trail along the Big Lake Road north of the campground. The open area across from the entrance to Big Lake Campground would be rehabilitated to become a low speed trail access point. Establishment of the Kiddie Loop youth learner trail area would also reduce the noise and dust currently associated with high speed activities occurring in that area north of the campground and reduce potential for conflicts between non-motorized and motorized users.

An area education and enforcement plan would be developed and implemented with the purpose of actively promoting responsible, appropriate, and legal behaviors within the project area. Information boards would be located at primary staging areas and popular dispersed camp areas.

Figure 6. Map of Alternative 2.



Actions Specific to Alternative 3

Alternative 3 would implement the following actions, which satisfies the project purpose and need to provide a designated system of roads and trails for motorized recreation within the project area as directed by the Willamette Forest Plan and agency policy, to rehabilitate existing motorized recreation vehicle-impacts to the Santiam Wagon Road and to protect this heritage resource from future impacts, and to provide recreation opportunities in the project area that offer a positive, family-oriented experience.

Alternative 3 would include the actions described above beginning on page 33 that are common to all action alternatives, and it would implement the specific actions described below, which are displayed in Figures 6 and 8.

Non Significant Forest Plan Amendment #49

Alternative 3 includes Forest Plan Amendment # 49, which implements the following:

- A one-time exemption of Management Area Standard and Guideline MA-5a-01 and MA-10b-01
- 2. Adding Management Area Standard and Guideline MA-10b-04a, and
- 3. The Management Area designation change from **MA-10e**, to **MA-10b** along Forest Trail #3558.

For a complete description of this non-significant amendment see page 33.

Alternative 3 would also implement these following actions:

ATV Trail System Designation

- Designate 30.6 miles of Forest Road open to Motorized Mixed-Use.
- Designate 12.1 miles of Forest Road open to ATV Class I & III only.
- Close 18.5 miles of Forest Road to motorized use.
- Reconstruct 5.2 miles of user created tracks, which would be open to ATV Class I & III.
- Construct 9.8 miles of new motorized trails open to ATV Class I & III
- Close 4.8 miles of user-created tracks to all motorized use and rehabilitate.

Santiam Wagon Road

- Designate 3.8 miles of the Santiam Wagon Road open to Motorized Mixed Use; starting at the junction of Forest Road 2690-810 and 2690-860 and east to the Forest boundary.
- Close 2.2 miles of the Santiam Wagon Road to motorized mixed-use, which includes ATV Class I, II, and III, from the junction of the Eno Road 2676 and 2676-866, to the junction of Forest Road 2690-810 and 2690-860.
- Rehabilitate 6.0 miles of the Santiam Wagon Road to approximate historic route, profile, and width, close and rehabilitate user-created OHV crossings not incorporated in the trail system.
- Designate 5 clearly marked OHV crossings.

Establish and post speed limits on the Santiam Wagon Road that apply to road segments within
the project area, and include Forest road 2690-810 from the junction of 2676-866 to the junction
the Big Lake Road 2690, and Forest road 2690-811 from the junction of 2690 to the Forest
boundary.

Staging Area Development

Establish two day-use staging and parking areas for off-loading OHVs from trailers at convenient locations: one located along the Big Lake Road at the junction of Forest road 2690 and south side of 2690-860, and the other at a section of Ray Benson Sno Park for day-use staging and parking. The staging areas would include user education and information kiosks, and a concrete pad used in the summer for portable toilets.

Dispersed Camping in the Regulated Camping Zone

- Designate 20 dispersed campsites within the Regulated Camping Zone, along Big Lake Road 2690 and Santiam Wagon Road the 2690-810 and 811. All designated campsites would access the motorized trail system.
- Block and rehabilitate 13 existing dispersed campsites that are not incorporated into this action (29.2 acres restored).

Open Play Area

Alternative 4 does **not** include an Open Play Area.

Kiddie Loop

Establish two Kiddie Loop Trail Areas. One area would be south of the Santiam Wagon Road as
in Alternative 2, with an additional 4-acre Kiddie Loop in the northwest portion of Ray Benson
Sno Park.

Changes to Key Forest Roads

As described in Appendix A, Transportation Systems Analysis, a portion of Key Forest Road 2600-890 would be changed from a motorized mixed-use road to a designated ATV Class I and III route, also allowing administrative traffic. Key Forest Road 2676-866 would be closed to all but administrative traffic. The portion of Key Forest Road 2690-810 west of the junction with 2690-860 would also be closed to all but administrative traffic, which prohibits public access to Sand Mountain Lookout.

Alternatives 3 as it Responds to the Significant Issues:

Issue 1. Santiam Wagon Road SIA

Alternative 3 reduces OHV use on the Santiam Wagon Road to approximately 3.8 miles of the historic road. It allows motorized mixed-use for Class I, II, and III vehicles only on the Sand Mountain Segment (HPMP). Of all action alternatives, Alternative 3 would provide the most protection to the Santiam Wagon Road while still allowing OHV use. The extent of the Santiam Wagon Road where motorized mixed-use is allowed includes Forest road 2690-810 east of the junction with 2690-860, and

Forest road 2690-811 from 2690 to the Forest Boundary at the Cascade Crest. This alternative rehabilitates all 6.0 miles of the Santiam Wagon Road within the project area to the historic route, profile, and width. It would provide for 5 OHV crossings and rehabilitate all user-created OHV crossings not incorporated into this action. Dispersed camping along the Santiam Wagon Road would be regulated and camping would be limited to 15 designated sites along the 2690-810 and 2690-811 portions in the SIA. Approximately 18.9 acres of existing dispersed camping sites in the SIA would be made unavailable and rehabilitated. Speed limits would be posted and enforced on Forest roads 2690-810, and 2690-811 within the project area.

Issue 2. OHV Spectrum of Opportunity

Alternative 3 would provide a managed motorized trail system by establishing 57.5 miles of OHV routes. Routes are comprised of a combination of existing Forest roads, construction of trails that incorporate user-created tracks, and construction of new ATV Class I and III trails between Forest roads. Of the existing 68.2 miles of forest roads in the project area, 30.6 miles would be open to motorized mixed use, 12.1 miles would be open to ATV Class I and III only and 18.5 miles would be closed to all motorized use. Trail construction includes approximately 9.8 miles of new trail and 5.2 miles of user-created tracks, which would be open to ATV Class I and III.

This Alternative provides the greatest amount of ATV Class I and III trail system of any of the other Alternatives, with almost 10 miles of new ATV Class I and III trail development. One new day-use staging area would be located at the junction of Forest Road 2690 and 2690-860, and a second day use staging area would be established using the current parking facilities at Ray Benson Sno-Park. Both staging areas would provide a central point of contact for user education, trail information along with sanitation facilities as needed. Construction of the Kiddie Loop youth learning trail area between Forest Road 2690-891 and the Big Lake Road 2690 would provide a managed opportunity for beginning riders. A series of short loops and connective trails between existing dispersed camping areas and Big Lake Camp Ground would allow youth to develop ATV handling skills in a controlled open location. A second small Kiddie Loop youth learning trail area would be built near Ray Benson Sno Park.

Issue 3. Recreation User Conflicts

Alternative 3 would designate 20 dispersed campsites within the regulated camping zone, with all 20 sites having direct access to the ATV trail system. A combination of campsite configuration and distribution would be designed to provide multi family gatherings along with single unit usage. Current campsites would be modified to establish camp area boundaries along with access to trail systems. This Alternative would reduce the total number of motorized crossing along the Pacific Crest Trail from 9 to 3. One crossing located along the Santiam Wagon Road, Forest road 2690-811, one along 2690-940, one along 2690-910, and one near the junction of 2690-920 on winter trail #3558. Informational signing and barrier placement would help prevent unintentional motorized access along the Pacific Crest Trail corridor.

Opportunities for non-motorized recreational activities in the project area for Alternative 3 would generally be the same as they are for Alternative 2. ATV travel would still be prohibited along non-motorized trail corridors, and non-motorized cross-country travelers would still encounter ATV activity at motorized trail and road crossings.

Alternative 3 closes the Santiam Wagon Road to all motorized travel west of junction with Forest Road 2690-860, which would enhance non-motorized travel along that portion of the Santiam Wagon Road. Hikers, stock users, and mountain bicyclist would have access to Sand Mountain and the west portion of the Santiam Wagon Road, and be able to tie into non-motorized trails outside of the project area without encountering motorized users, reducing the potential for user conflict more than Alternative 2.

Dust and noise associated with ATV use adjacent to Big Lake Campground and on the eastern portion of the project area would be the same as Alternative 2. The open area across from the entrance to Big Lake Campground would be rehabilitated to become a low speed trail access point. Establishment of the Kiddie Loop youth learner trail area near Big Lake Campground would also reduce the noise and dust currently associated with high speed activities occurring in that area north of the campground. A second 4-acre Kiddie Loop youth loop at Ray Benson would be near the Hoodoo Recreation Residences, which has a low potential for conflict with those residences due to the low ATV speeds and adult supervision likely to be present.

An area education and enforcement plan would be developed and implemented with the purpose of actively promoting responsible, appropriate, and legal behaviors within the project area. Information boards would be located at the staging areas and popular dispersed campsite areas.

Figure 7. Map of Alternative 3.



Actions Specific to Alternative 4

Alternative 4 would implement the following actions, which satisfies the project purpose and need to provide a designated system of roads and trails for motorized recreation within the project area as directed by the Willamette Forest Plan and agency policy, to rehabilitate existing motorized recreation vehicle-impacts to the Santiam Wagon Road and to protect this heritage resource from future impacts, and to provide quality recreation opportunities in the project area that offer a positive, family-oriented experience.

Alternative 4 would include the actions described above beginning on page 33 that are common to all action alternatives, and it would implement the specific actions described below, displayed in Figures 6 and 9.

Non Significant Forest Plan Amendment #49

Alternative 4 includes Forest Plan Amendment # 49, which implements the following:

- A one-time exemption of Management Area Standard and Guideline MA-5a-01 and MA-10b-01
- 5. Adding Management Area Standard and Guideline MA-10b-04a, and
- 6. The Management Area designation change from **MA-10e**, to **MA-10b** along Forest Trail #3558.

For a complete description of this non-significant amendment see page 33.

Alternative 4 would also implement these following actions:

ATV Trail System Designation

- Designate 17.8 miles of Forest Road open to Motorized Mixed-Use.
- Designate 14.5 miles of Forest Road open to ATV Class I & III only.
- Close 24.3 miles of Forest Road to motorized use.
- Construct 6.6 miles of new motorized trails open to ATV Class I & III.
- Reconstruct 2.7 miles of user created tracks, which would be open to ATV Class I & III.
- Close 7.3 miles of user-created tracks to all motorized use and rehabilitate.

Santiam Wagon Road

- Designate 4.2 miles of the Santiam Wagon open to highway legal vehicles; including Forest road 2690-810 from the parking area below Sand Mountain Lookout to the junction of Forest Road 2690, and Forest road 2690-811 from the junction of 2690 to the Forest boundary.
- Close 1.8 miles of the Santiam Wagon Road to all motorized vehicles on Forest Road 2676-866 from the junction of 2676 to Forest road 2690-810.
- Rehabilitate all 6.0 miles of the Santiam Wagon Road within the planning area, to approximate historic route, profile, and width.

- Establish 2 clearly marked motorized trail crossings for the purpose of access to Big Lake Campground.
- Establish and post speed limits on the Santiam Wagon Road that apply to road segments within the project area, and include Forest road 2690-810 from the junction of 2676-866 to the junction of Big Lake Road 2690, and Forest road 2690-811 from the junction of 2690 to the Forest boundary at the Cascade crest.

Staging Area Development

Establish two day-use staging areas for off-loading ATVs from trailers at convenient locations:
 one located along the Big Lake Road at the junction of Forest Road 2690 and south side of 2690860, and the other utilizing a portion of Ray Benson Sno Park for both day-use staging and
 parking. The staging areas would include user education and information kiosks, and a concrete
 pad for portable toilet facilities.

Dispersed Camping in the Regulated Camping Zone and Overnight Fee Camping

- Designate 15 dispersed campsites within the Regulated Camping Zone, along Big Lake Road 2690 and Santiam Wagon Road the 2690-810. Only 4 campsites would have access to the motorized trail system.
- Block and rehabilitate 28 existing dispersed campsites that are not incorporated into this action (31.9 acres restored).
- Designate a section of Ray Benson Sno Park for overnight fee camping.

Open Play Area

• Alternative 4 does **not** include an Open Play Area.

Kiddie Loop

 Establish one Kiddie Loop youth learning trail area on approximately 4 acres northwest of Ray Benson Sno Park.

Changes to Key Forest Roads

As described in Appendix A, Transportation Systems Analysis, a portion of Key Forest Road 2600-890 would be changed from a mixed-use road to a designated ATV Class I and III route designation, also allowing administrative traffic. Key Forest Road 2676-866 would be closed to all but administrative traffic. All of Key Forest Road 2690-810 west of the junction with 2690-860 to the Sand Mountain Lookout would be open to highway legal vehicles only.

Alternatives 4 as it Responds to the Significant Issues:

Issue 1. Santiam Wagon Road SIA

Alternative 4 would prohibit OHV use on the all portions of the Santiam Wagon Road SIA. It would still allow use of highway-legal vehicles on the Forest road 2690-810 portion from the junction of the

2690-860 to the east, and on the 2690-811 portion from its junction with Forest road 2690 to the Cascade crest. By prohibiting OHV use on any segment of the road, Alternative 4 is the most restrictive of all action alternatives, and it provides the greatest protection of the historic wagon road from further ATV impacts.

This alternative rehabilitates all 6.0 miles of roadway to the historic route, profile, and width. It would construct and clearly mark 2 OHV trail crossings at existing crossing sites for access to the Big Lake Campground Complex. It removes all other user-built OHV crossings not incorporated into this action and it rehabilitates them. Dispersed camping along the Santiam Wagon Road would be regulated and camping would be limited to 10 designated sites along the 2690-810 and 2690-811 portions. Approximately 21.5 acres of existing dispersed camping sites in the SIA would be made unavailable and rehabilitated. Speed limits would be posted and enforced on Forest roads 2690-810, and 2690-811 within the project area.

Issue 2. OHV Spectrum of Opportunity

Alternative 4 would provide the smallest managed motorized trail system of all action alternatives. It establishes approximately 41.6 miles of OHV routes. Routes are comprised of a combination of existing Forest roads, construction of trails incorporating user created tracks, and construction of new ATV Class I and III trails between Forest roads. Of the existing 68.2 miles of forest roads in the project area, approximately 17.8 miles would be open to motorized mixed use, 14.5 miles would be open to ATV Class I and III only, and 24.3 miles would be closed to all motorized use. Trail construction includes approximately 6.6 miles of new trail and 2.7 miles of user-created tracks, which would be open to ATV Class I and III.

This Alternative maximizes utilization of the existing system roads for ATV Class I and III and has fewer miles of new motorized trail construction than in Alternative 2 or 3. Alternative 4 would close more of the existing road system to all motorized use, and it has the least miles open for motorized mixed-use.

One new day-use staging area would be located at the junction of Forest Road 2690 and 2690-860, and a second day-use staging area would be established using the current parking facilities at Ray Benson Sno-Park. Both staging areas would provide a central point of contact for user education, trail information along with sanitation facilities as needed. A small 0.4 acre Kiddie Loop youth learning trail area would be built near Ray Benson Sno Park.

Issue 3. Recreation User Conflicts

Alternative 4 would designate 15 dispersed campsites within the regulated camping zone. However, none of the designated dispersed campsites along the Santiam Wagon Road west of Forest Road 2690-895 would have ATV trail access. All campers with ATVs would be required to trailer their recreational vehicles to staging areas or trail access points. Designated dispersed campsites west of Forest Road 2690-895 would become more desirable to non-motorized users. A combination of camp site configuration and distribution would be designated to provide multi family gatherings along with

single family usage. This alternative reduces crossings over the PCT from 9 to 2, with one located at trail #3558 (Class I and III) and the other on the Santiam Wagon Road 2690-811 (highway legal vehicles only).

This alternative would close all Forest roads to motorized travel south of the Santiam Wagon Road, 2690-810 between the west end of Big Lake Campground and Sand Mountain, which would lower the potential for conflict with non-motorized users the most. Non-motorized users would be able to travel cross country and along the existing road system in this area without encountering motorized activity. Noise and dust associated with motorized use around Big Lake Campground would be notably reduced with most of the motorized trail system located north of the Santiam Wagon Road. Two clearly marked trails for Class I and III ATVs would cross the Santiam Wagon Road to provide access to the campground from the motorized trail system.

An area education and enforcement plan would be developed and implemented with the purpose of actively promoting responsible, appropriate, and legal behaviors within the project area. Information boards would be located at primary staging areas and popular dispersed camp areas.

Figure 8. Map of Alternative 4.



Mitigation Measures and Design Elements Common to All Action Alternatives

Mitigation Measures: Council of Environment Quality (CEQ) Regulations (§ 1508.20) defines Mitigation as:

- Avoiding the impact altogether by not taking a certain action or certain parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impacts by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of an action.
- Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation measures and design elements would be implemented and incorporated during project layout as contract specifications and through contract administration. Monitoring would be performed by Forest Service officers to assure these measures are implemented.

Mitigation Measures

Cultural Resources:

- 1. For all action alternatives, restore the 6.0 Miles of the wagon road from Eno Road to the Forest Boundary to its 1980s alignment, profile and width. In many places this means grading the road bed and narrowing the road to the 15-18 ft. range, and rehabilitating user-created crossings and play areas.
- 2. Within the Santiam Wagon Road SIA boundary, block and restore with native vegetation the dispersed campsites that are not designated within the regulated camping zone, and user-created tracks.
- 3. Speed limits will be posted on historic Santiam Wagon Road within the project area on Forest roads 2676-866, 2690-810, and 2690-811, when designated for OHV use, enforceable under a Forest Order.
- 4. Once on the Wagon Road, all motorized vehicles may get off only at designated crossings or at designated dispersed campsites within the regulated camping zones.
- Natural barriers will be constructed to protect sensitive resource areas from impacts by motorized vehicles within the project area.
- 6. In order to extend protection to heritage resources which have not yet been discovered, but which may be uncovered during the course of project activities, appropriate contract language must be included in all project prospectus and contracts which outlines the procedures to follow in the event heritage resources are inadvertently discovered or disturbed during project activities. If material is inadvertently discovered, suspend operations and consult the District Archaeologist.

7. For any modifications to the specified locations of facilities development (trails, crossings, and staging areas) that arise during implementation, consultation with the District Archaeologist will be required. When previously unknown cultural resources are discovered during ground-disturbing operations, work would be halted and the cultural resource site in question would be evaluated as to National Register of Historic Places (NRHP) eligibility by a qualified professional archaeologist.

A cultural site discovered during construction of roads or trails may require the redesign of the road or trail, use of protective overburden, or use of an alternative route. Other mitigations that may be utilized include a change in equipment or season of operation, which would require consultation with the State Historic Preservation Office (SHPO) and federally recognized Indian tribes before the project work can resume.

Mitigation Measures for Soils and Watershed Protection:

- 8. New routes will not be designated or constructed within Riparian Reserves.
- 9. Re-establishment of vegetation at existing disturbed sites will be through natural revegetation, or by seeding or planting of native species only.

Wildlife

10. Seasonal Restriction would be implemented on tree felling during OHV trail construction from March 1 – July 15 in proximity to TES habitat. Trees that are felled for this project are to be left on site with the exception of the smaller lodgepole pine trees at the proposed staging areas.

Noxious Weed Control

- 11. Disturbed areas (road shoulders, staging areas) would be re-vegetated with weed-free native seed to compete with noxious weed seed. Weed-free mulch would be used if necessary.
- 12. Off road, ground disturbing equipment during implementation will be washed prior to entering National Forest System land. Equipment will be free of all seed and debris that may contain plant seeds such as soil and vegetation.
- 13. Material brought in for construction, such as fill soil, gravel, and straw will be free of vegetative material and weed seed.

Design Elements

Cultural Resources:

- 1. Close the Eno Segment of the Santiam Road, from Eno Road east to the 860 road to all public motorized vehicles (represented in Alternative 3).
- Display signs on the Santiam Wagon road with a wagon road logo to inform user that they are on the historic road.

- 3. Create a brochure with a map, historic photos, remembrances of travel on the road and a clearly articulated historic preservation message.
- 4. Delineate and post the wagon road to allow for protection and enhancement of the corridor.
- Access into the dispersed campsites should be clearly marked and bounded with boulders or other natural barriers to help protect the Santiam Wagon Road and SIA from further adverse effects.
- 6. Regular monitoring of the Wagon Road, the SIA, and other heritage sites by the district archaeologist or other cultural resource personnel is essential to insure protection of the resource after implementation of this project.

Noxious Weed Control

7. Monitoring for changes in existing populations or new occurrences of noxious weeds will be done for the project area.

Other Actions Analyzed

The following actions would also occur within the project area. Site-specific information regarding these actions is available at the McKenzie River Ranger District.

Noxious Weeds – As described in Mitigation Measures above, noxious weeds would be treated with manual methods such as pulling and cutting. Treatments may occur along roads and user-created tracks where needed, and throughout the project area. Monitoring of the treated sites would occur to determine if multiple treatments are necessary.

Road Maintenance Presently Under Contract on the Santiam Wagon Road – The McKenzie River District has awarded a road maintenance contract to reshape the section of the Santiam Wagon Road between the Big Lake Road and Sand Mountain (2690-810, and a portion of 2676-866). The road maintenance work, scheduled for spring 2008, would involve a minimum of four passes using a grader to remove any irregularities (potholes or wash boarding), reprocess segregated materials, reestablish or re-define road width, and establish a minor crown (2%) for surface drainage in hopes to create some surface stability. Areas with the large corrugations or sand moguls may require ripping and reshaping to establish the correct road template.

OHV Use Monitoring Applicable to All Action Alternatives

The following types of implementation monitoring would be conducted to determine if actions moved forward from this analysis in the forthcoming decision manages recreation effectively within the project area to meets desired future conditions.

- 1. Recreationists would be periodically surveyed to aid in determining trends in total numbers and types of trail system users, changes in their levels of satisfaction with their recreation experience, and changes in the number of conflicts occurring.
- 2. Project activities would be monitored by the District Resource Specialists during project implementation for compliance with design criteria. Periodic monitoring of trail use,

application of mitigation measures, effectiveness of resource protection measures, user compliance, law enforcement needs, education efforts, maintenance and reconstruction needs, estimates of funding needs, and effects of other management activities on this project would be evaluated and documented.

- 3. Monitoring would also be conducted periodically to determine the compliance levels on newly designated trails and marked crossings on the Santiam Wagon Road. If noncompliance is a constant problem, it would be addressed through rerouting or closure of that trail segment.
- 4. Monitoring would be conducted to develop a history of accidents or near misses on roads designated as motorized mixed-use.

Comparison of Alternatives _____

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Table 2: Comparison of Roads Open or Closed by Alternative.

Comparison Criteria	Alt. 1, No Action	Alt. 2	Alt. 3	Alt. 4
Miles Open to Motorized Mixed Use	61.2	37.3	30.6	17.8
Miles Open to ATV Class I and III only	0	7.6	12.1	14.5
Miles Closed to All Motorized Vehicles	0	16.3	18.5	24.3
Miles Open to Highway Legal Vehicles	7.0	7.0	7.0	11.6

Table 3: Comparison of Trails by Alternative.

Comparison Criteria	Alt. 1, No Action	Alt. 2	Alt. 3	Alt. 4
Miles of User-Created Tracks Reconstructed as ATV Class I and III Trail	0	4.4	5.2	2.7
Miles of New ATV Class I and III Trail Construction	0	7.9	9.8	6.6
Miles of User-created Tracks Rehabilitated	0	5.6	4.8	7.3
Total Miles of Proposed ATV Class I and III Trails	0	12.3	15.0	9.3

Comparison of Alternatives by Significant Issues

Table 4: Comparison of Alternatives - Santiam Wagon Road SIA.

Issue 1. Santiam Wagon Road SIA						
Issue Measurement Criteria	Alternative 1 No Action	Alternative 2	Alternative 3	Alternative 4		
Miles of Santiam Wagon Road that is restored to the historic width and profile.	0 miles	6.0 miles	6.0 miles	6.0 miles		
Number of OHV designated crossings provided.	N/A	8 Crossings	5 Crossings	2 Crossings		
Number of designated dispersed campsites and acres of dispersed campsites removed and restored in SIA.	29 existing Campsites 0 acres Restored	18 Campsites Designated 17.3 acres Restored	15 Campsites Designated 18.9 acres Restored	10 Campsites Designated 24.5 acres Restored		

Table 5: Comparison of Alternatives – OHV Spectrum of Opportunity.

Issue 2. OHV Spectrum of Opportunity					
Issue Measurement	Units of Measure	Alternative 1 No Action	Alternative 2	Alternative 3	Alternative 4
ATV Class I & III (Roads)	Miles	61.2	44.6	42.7	32.3
ATV Class I & III (Trails)	Miles	0	12.3	15.0	9.3
ATV Class II (Roads)	Miles	61.2	37.3	30.6	17.8

Table 6: Comparison of Alternatives – Recreation User Conflicts.

Issue 3. Recreation User Conflicts						
Issue Measurement	Units of Measure	Alternative 1 No Action	Alternative 2	Alternative 3	Alternative 4	
Motorized crossings along the PCT	Each	9	4	3	2	
Dispersed Campsites with direct ATV trail access	Each	43	34	20	4	
Dispersed Campsites without direct ATV trail access	Each	0	0	0	11	