



**Date:** January 30, 2013

Dear Interested Party,

The USDA Forest Service, Inyo National Forest is initiating scoping and requesting comments on a proposal to conduct restoration on 209 unauthorized routes where motor vehicle use is prohibited. The project goals are to re-establish a more natural condition on the routes through restoration activities that promote native plant revegetation, reduce compaction, soil erosion and subsequent stream sedimentation and protect riparian areas. This project is an element of the 2009 Travel Managements Record of Decision's Implementation Strategy, which indicated that decommissioning of routes outside of activities authorized under that decision, requires additional site-specific analysis.

The project area is contained within the Upper Owens and Bishop Creek Hydrologic Unit Code (HUC) 5 watersheds, within all four Ranger Districts of the Inyo National Forest. The proposed project will include mechanical and hand treatments which are discussed in detail in Attachment A.

This project also includes adding six previously unauthorized routes to the Forest Service Transportation System in the Coyote the Glass/Deadman Area and Redding Canyon Focus areas. The routes proposed for inclusion to the Forest Service Transportation System are 08S144, 02S346, N2146, N2197, N3769, and N1002. Monitoring since the 2009 decision has shown that these routes would facilitate a logical Forest transportation system, ensure resource protection and provide for an enhanced recreational experience.

The attached project area map depicts the general project area. More detailed maps of the project areas that show the location and proposed restoration treatment of each unauthorized route are available at the following locations:

a)The Inyo National Forest website at:

<http://www.fs.usda.gov/detail/inyo/landmanagement/projects/?cid=stelprdb5407462>

b)The Supervisor's Office, White Mountain Ranger District, and Mammoth Ranger District Offices at the following addresses:

Supervisor's Office  
351 Pacu Ln.  
Bishop, CA 93514

Mammoth Ranger District  
2520 Main St.  
Mammoth Lakes, CA 93546

White Mountain Ranger District  
798 North Main St.  
Bishop, CA 93514



c) On a CD by request from the project leader, Todd Ellsworth at 760-873-2404.

The Forest is also planning on holding two public meeting to discuss this and other related OHV restoration projects at the following locations and times. Maps will be available at the meetings:

1. Tuesday, February 12, 6-7:30 p.m. at the Inyo National Forest, Supervisors Office. 351 Pacu Ln., Bishop, CA.
2. Wednesday, February 20, 6-7:30 p.m. at the Mammoth Community Center, 1000 Forest Trail in Mammoth Lakes, CA.

### **Project Purpose and Need**

The purpose of the Upper Owens and Bishop Creek Restoration Project is to evaluate and where needed, improve resource conditions on 439 unauthorized routes mostly in the Upper Owens and Bishop Creek HUC 5 watersheds. The project is being split into two phases. This scoping period is for Phase I which includes the Coyote, Redding Canyon, Mammoth Creek, Glass-Deadman-Inyo Craters and Bishop Creek-Horton Creek Focus Areas.

Phase II will consist of the Smokey Bear-Bald Mountain Road, Mono Mills-Hwy. 120 East, East Bishop, Watterson, Little Hot Creek, Long Valley, Convict-McGee and June Lake-Devils Punch Bowl Focus Area. The Proposed Action/Scoping letter will follow when evaluations have been completed for the remaining approximately 230 unauthorized routes within the next several months.

Restoring unauthorized routes in these areas is essential to enhancing/maintaining Forest resources as well as providing a safe and sustainable OHV experience to Forest users. This project will also evaluate and determine access needs on a limited number of previously determined unauthorized routes that were identified during monitoring since the 2009 Travel Management decision.

The unauthorized routes within the project area were not added to the National Forest Transportation System per the 2009 Travel Management Environmental Impact Statement and Record of Decision (2009 TM ROD). There is a need to restore these unauthorized routes due to one or more resource concerns such as: soil erosion, impacts to riparian/aquatic habitat, sensitive plant populations, route density, heritage resources, or others. Some unauthorized routes have been blocked and restored under the 2009 TM ROD and need no further action, while other routes need intensive restoration to address resource concerns. In this project area, 209 routes were found to be in need of restoration actions, while the remaining 230 routes are expected to recover naturally.

There is also a need to provide administrative, permitted or public access on a small number of unauthorized routes to improve the function of the National Forest Transportation System. Overall, this project will facilitate restoration of unauthorized routes and improve current access needs in the process leading to an improvement in resource conditions and a sustainable system of OHV routes.

### **Proposed Action**

The proposed action is to restore unauthorized routes and address a small number of access needs in the Upper Owens and Bishop Creek HUC 5 watersheds. The proposed treatments on

the 209 routes in need of restoration are described in the table in Attachment C of this letter. The routes can be found on the maps using the grid number shown in the table. Routes with no proposed restoration treatment other than what was prescribed in the 2009 TM ROD are shown as green on the maps. They are not located on the enclosed tables.

For the routes that require active restoration, methods would include: vertical mulch, native mulch, waterbars, revegetation, chunking, ripping, outsliping, removing fills and culverts, recontouring natural slopes or other site specific restoration. A detailed description of these treatments is found in Appendix A. Surveys and analysis of the routes have been conducted to gather data supporting our analysis and help design treatment parameters (design criteria, included in Appendix B) to protect critical resources and still achieve project objectives. Much of the restoration activity is expected to occur within the next 5 years dependent on future funding. The Inyo National Forest has secured funding to complete any restoration activities identified in the Redding Canyon and Mammoth Creek watershed areas and implementation will occur by 10/31/2013 in this area.

**Request for Comments**

If you have information the Forest Service may not be aware of, or have issues (points of dispute, debate, or disagreement) regarding the potential effects of the proposed action, please send those in writing to: Inyo National Forest Supervisors Office, Attn. Todd Ellsworth, 351 Pacu Ln. Bishop, CA. 93514. You may also email comments to [tellsworth@fs.fed.us](mailto:tellsworth@fs.fed.us). Hand delivered comments may be submitted to the Supervisors Office during business hours, 08:00-4:30, Monday through Friday, excluding Holidays.

While public participation in this analysis is welcome at any time, comments received by March 8th will be especially useful in the preparation of the environmental assessment.

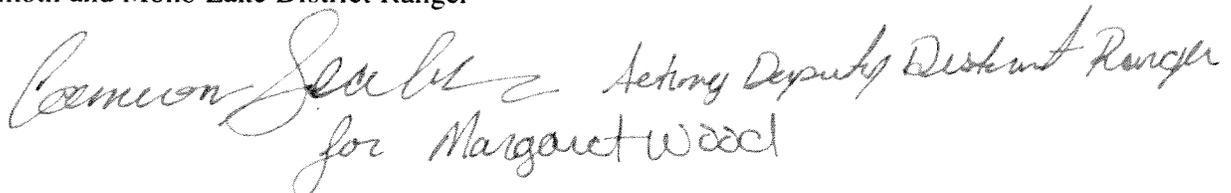
If you have questions about the proposed project, please contact Todd Ellsworth at 760-873-2404 or by email at [tellsworth@fs.fed.us](mailto:tellsworth@fs.fed.us). Thank you for taking the time to read this information and for your continued interest in the management of the National Forest System.

Sincerely,



JON C. REGELBRGGE  
Mammoth and Mono Lake District Ranger

and



Acting Deputy District Ranger  
for Margaret Wood

MARGARET WOOD  
White Mountain and Mt. Whitney District Ranger

## **Attachment A:**

### **Description of Decommissioning Prescriptions:**

1 – **Block entrance:** Implement block and disguising as described in the Travel management decision. This could include additional blocking needs or an alternative blocking technique.

2- **Vertical Mulch:** The collection and vertical placement of dead and downed plant matter to resemble brush. This process is capable of producing woody perennial growth in as little as two years for the following reasons: (a) It creates a visual barrier. By blending vertical mulch with the surrounding landscape people will not confuse these routes for those authorized routes. b) It helps to simulate the growing cycle of the desert. The desert grows primarily beneath nurse plants—large plants who have enough mass to produce a microclimate. These plants also act as wind blocks, so seeds have a chance to take root. Although brush used for vertical mulch is not living plants, it performs most of the functions of actual nurse plants.

3 – **Native Mulch:** This includes placing native duff/litter and fine branches and needles on the route. This could include raking mulch on the trail. This treatment protects the route surface from surface erosion, rainfall splash and creates a microclimate for native plants to re-establish.

4 - **Waterbarring:** Water bars are berms of soil or bedded logs that channel water off roads and trails to avoid the creation of gullies. Water bars are angled down the slope to the outlet side. These bars can divert water to a vegetated slope below. On-site soils and the road grade will dictate spacing. Since these routes are closed, the waterbars need to be “self-cleaning” for long term efficacy. Water bars can be constructed using native soil or “straw wattles” if site conditions preclude the use of native soils.

5 - **Revegetation** (seeding and/or live native plant material): This treatment is generally implemented following disturbance such as chunking or ripping. In some cases revegetation is recommended to retard to the invasion of non-native species such as cheat grass.

#### **6 – Soil Decompaction**

**6a –Chunking:** This treatment was recommended for steep routes were ripping (subsoiling) would not be effective or operationally feasible. This treatment uses an excavator to “chunk” the road, alleviating compaction and rendering the road surface undrivable.

**6b – Ripping** (subsoiling): This treatment involves utilizing an excavator or bulldozer pulling tynes on the back to alleviate compaction. In some cases, periodic waterbars are necessary to ensure water doesn't flow down the furrows created by the ripping.

7 – **Outsloping:** This treatment involves removing the outside berm to allow for natural road drainage. A tractor or excavator is generally utilized to implement this treatment.

8- **Removing fills and culverts:** This treatment involves removing culverts and fill slopes from stream crossings utilizing a tractor or excavator to allow for an unimpeded passage of water. In some cases this can be accomplished utilizing hand tools. This treatment is uncommon on the Forest.

9- **Full recontour and complete restoration of natural slopes:** This treatment involves removing the cut and fill slope and contouring the road prism to the natural slopes. This involves utilizing an excavator and a bull dozer. This treatment is uncommon on the Forest.

10- **Other:** Other recommended treatments not covered above, such as hand raking.

## **Attachment B:**

### **Design Criteria**

These design criteria are methods that will be used to prevent detrimental resource impacts, beyond what is identified in the treatment prescription for individual routes.

#### *Soils/Hydrology:*

- Implement applicable BMP's to prevent excessive soil loss and stream sedimentation. These are located in Forest Service Handbook 2509.22 Water Quality Management Handbook.

#### *Aquatic:*

- Implement applicable BMP's to prevent excessive soil loss and stream sedimentation. These are located in Forest Service Handbook 2509.22 Water Quality Management Handbook.

#### *Wildlife*

- Limited Operating Period (LOP): Sage Grouse Leks: No heavy equipment use two miles from an established Sage Grouse Lek from April 1 to June 15
- Limited Operating Period (LOP): Deer Winter Range: No heavy equipment use within deer winter range from May 1 to June 15.

#### *Botany*

- **Weeds:** Equipment and clothing shall be cleaned before beginning of the project. Equipment will be considered clean when visual inspection of tires, tracks, and underbody does not reveal soil, seed, plant material or other such debris.
  - If the following high priority weeds are known or found, weeds should be removed before prescription implementation, site will be monitored annually, and treatment shall continue until the infestation is eradicated.

Toadflax (currently known from 04S106);

May be found: salt cedar, perennial pepperweed, tree of heaven, cardaria (lenspod or hairy whitetop), diffuse knapweed, spotted knapweed, yellow star-thistle, bouncing bet, Spanish broom.

- **Rare plants:** Botany will monitor rare plant populations on unauthorized roads (73 known) where ground disturbing treatments are the prescription. Many of the areas where rare plants are found have ongoing monitoring.

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Bishop Creek	G4, G5	U-N2046	Highly visible, risk of trespass. Actively eroding, compacted, contains grades up to 10% slope. Permitted access needed.	*Note: SCE requires access on this route- change RX to gate for their access; Native mulch, waterbars, chunking, leave parking spaces and footpath to creek
Bishop Creek	F9	U-N2964	Highly visible, risk of trespass.	Block with boulders, vertical mulch, leave parking space
Bishop Creek	H4	U-N2047	Highly visible, risk of trespass. Route compacted.	Block with small boulders
Bishop Creek	E7	U-N2039	Route is actively eroding with grades up to 10% slope.	Natural obliteration parallel to 07S01, waterbars, chunking, other soil stabilization actions
Bishop Creek	E7, E8	U-N2187	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, grades up to 14%. The stream crossing can divert water onto route.	Natural obliteration to the eastern end, waterbars, restore stream crossing, leave parking space
Bishop Creek	E7	U-N2040	The dump/shooting range is compacted.	Natural obliteration, other soil stabilization actions
Bishop Creek	E5, F5	U-08S109	Permitted access needed	Special use access for SCE
Bishop Creek	F5, G5	U-N2034	Permitted access needed	Special use access for SCE
Bishop Creek	E5	U-08S104	Route highly visible, risk of trespass.	Vertical mulch
Bishop Creek	E7	U-N2181	Route highly visible, risk of trespass.	Vertical mulch, revegetation, Add south half of route to system for administrative access
Bishop Creek	E7	U-N2697	Route highly visible, risk of trespass. Route incised, and actively eroding.	Vertical mulch, waterbars
Bishop Creek	E7	U-N2186	Route highly visible, risk of trespass. Route incised, and actively eroding.	Vertical mulch, waterbars, chunking, remove asphalt
Coyote	D2	U-08S144	Through monitoring, this route was identified as needed to facilitate a safe and sustainable OHV system. This route was identified as fulfilling critical recreation needs.	Add route to system as public OHV trail
Coyote	C5	U-N2196	Through monitoring, this route was identified as needed to facilitate a safe and sustainable OHV system. This route was identified as fulfilling critical recreation needs.	Add route to system as public OHV trail, contain campsites with barriers and native mulch
Coyote	C5	U-N2197	Through monitoring, this route was identified as needed to facilitate a safe and sustainable OHV system. This route was identified as fulfilling critical recreation needs.	Add route to system as public OHV trail, contain campsites with barriers and native mulch
Coyote	C1	U-07S112	Route highly visible, risk of trespass. Route in compacted.	Block with large boulders, revegetation, ripping, fencing, move kiosk to entrance
Coyote	C1	U-N10000	Route highly visible, risk of trespass. Route in loose soil, actively eroding, contains grades up to 35%.	Block with large boulders, straw wattles, revegetation, chunking, fencing
Coyote	C1	U-N10001	Route highly visible, risk of trespass. Route in loose soil, actively eroding, contains grades up to 35%.	Block with large boulders, straw wattles, revegetation, chunking, fencing
Coyote	C1	U-N10003	Route highly visible, risk of trespass. Route in loose soils, actively eroding , grades up to 20%.	Block with large boulders, waterbars, revegetation

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Coyote	B5, C5	U-08S122	Route highly visible, risk of trespass. Route in incised, actively eroding, compacted , contains grades up to 15% slope.	Block with large boulders, waterbars, revegetation, chunking
Coyote	C1	U-07S110	Route highly visible, risk of trespass. Route in loose soil, actively eroding, contains grades up to 35%.	Block with large boulders, waterbars, revegetation, chunking, fencing
Coyote	C1, C2	U-07S109	Route highly visible, risk of trespass. Route in compacted, and actively eroding.	Gate entrance, revegetation and chunking SW half, special use access for SCE on NE half
Coyote	C1	U-07S117	Permitted access needed	Gate entrance, special use access for SCE
Coyote	C1	U-N2073	Permitted access needed	Gate entrance, waterbars, special use access for SCE
Coyote	D8	U-N2217	Route highly visible, risk of trespass.	Log barrier, native mulch
Coyote	A6	U-08S142	Route highly visible, risk of trespass. The beginning part of the route is actively eroding, compacted , contains grades up 15% slope.	Native mulch
Coyote	F7, F8	U-N2212	Route highly visible, risk of trespass. Route compacted.	Native mulch
Coyote	A7	U-N2700	Route highly visible, risk of trespass.	Native mulch
Coyote	B4, C3, C4	U-08S114	Route highly visible, risk of trespass. Route compacted , contains grades up to 25% slope.	Native mulch initial 100 ft. of route, waterbars, seeding, chunking
Coyote	B3	U-08S113	Route highly visible, risk of trespass. Route compacted , contains grades up to 30% slope.	Native mulch initial 100 ft. of route, waterbars, use pinyon pines for block/disguise
Coyote	E7	U-N2210	Route highly visible, risk of trespass.	Natural obliteration on south end, native mulch initial 100 ft., leave parking space
Coyote	B4	U-08S111	Route highly visible, risk of trespass.	Natural obliteration, vertical mulch initial 200 ft. of route
Coyote	D4	U-N2648	The stream crossing is in degraded condition, with raw banks and an unimproved ford.	Restore stream crossing, issue right-of-way access to landowner
Coyote	C4	U-N1770	Route highly visible, risk of trespass. Route in compacted.	Vertical mulch
Coyote	B3, B4	U-N2064	Route highly visible, risk of trespass.	Vertical mulch
Coyote	F8, G8	U-N2213	Route highly visible, risk of trespass. Route compacted.	Vertical mulch, seeding, chunking with hand tools
Coyote	C1	U-N10004	Route highly visible, risk of trespass. Route in loose soils, contains grades up 20% slopes.	Vertical mulch, straw wattles, revegetation
Coyote	C8, D8	U-09S105	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, contains grades up to 25% slope.	Waterbars, chunking
Coyote	C1	U-07S114	Route highly visible, risk of trespass. Route compacted , contains grades up to 15% slope.	Waterbars, seeding
Coyote	C4	U-08S117	Route highly visible, risk of trespass. Route incised, actively eroding, compacted , contains grades up to 25% slope.	Waterbars, seeding, chunking
Coyote	B4, C4, C5	U-08S123	Route highly visible, risk of trespass. Route incised, actively eroding, compacted , contains grades up to 30% slope.	Waterbars, seeding, chunking

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Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Coyote	D6	U-08S138	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, contains grades up to 35% slope.	Waterbars, seeding, chunking
Coyote	E6, E7	U-08S140	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, contains grades up to 35% slope.	Waterbars, seeding, chunking
Coyote	C1, C2	U-N10002	Route highly visible, risk of trespass. Route in loose soils, incised, actively eroding, compacted, contains grades up to 30% slope.	Waterbars, seeding, chunking
Coyote	C5, D5, D6	U-N2198	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, contains grades up to 30% slope.	Waterbars, seeding, chunking
Coyote	E7	U-09S101	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, contains grades up to 35% slope.	Waterbars, seeding, revegetation, chunking
Coyote	C1	U-07S115	Route highly visible, risk of trespass. Route incised, and compacted	Waterbars, seeding, revegetation, chunking, leave turnaround at FS boundary
Glass-Deadman-Inyo Craters	E3	U-02S346	Through monitoring, this route was identified as needed to facilitate a safe and sustainable OHV system. This route was identified as fulfilling critical recreation needs.	Add route to system as public OHV trail
Glass-Deadman-Inyo Craters	E3	U-N3769	Through monitoring, this route was identified as needed to facilitate a safe and sustainable OHV system. This route was identified as fulfilling critical recreation needs.	Add route to system as public OHV trail
Glass-Deadman-Inyo Craters	D2	U-02S274	Route highly visible, risk of trespass.	Block with large boulders
Glass-Deadman-Inyo Craters	B8, C7, C8	U-03S106	Route highly visible, risk of trespass. Permitted access is needed	Gate entrance, special use access for MMSA mountain bike trail
Glass-Deadman-Inyo Craters	D2	U-02S159	Permitted access needed	Gate entrance, special use access for SCE
Glass-Deadman-Inyo Craters	F5	U-N958	Route highly visible, risk of trespass. Route incised.	Log barrier, native mulch
Glass-Deadman-Inyo Craters	E6	U-N1051	Route highly visible, risk of trespass. Route incised with grades up to 20% slope.	Log barrier, native mulch waterbars
Glass-Deadman-Inyo Craters	D5	U-N3002	Route highly visible, risk of trespass.	Log barrier, native mulch, remove campsite
Glass-Deadman-Inyo Craters	E4, F4	U-02S149	Route highly visible, risk of trespass. Route incised, actively eroding and compacted.	Native mulch
Glass-Deadman-Inyo Craters	E4	U-02S394	Route highly visible, risk of trespass. Route incised, and compacted with grades up to 12% slope. Route also impacting riparian vegetation.	Boulder barrier, Native mulch
Glass-Deadman-Inyo Craters	D6	U-03S156	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	F5	U-03S218	Route highly visible, risk of trespass. This route has slight compaction.	Native mulch
Glass-Deadman-Inyo Craters	F5	U-03S219	Route highly visible, risk of trespass. This route has grades up to 20% slope.	Native mulch

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<b>Focus Area*</b>	<b>Map Key</b>	<b>U-Route #</b>	<b>Need for change/Existing condition</b>	<b>Proposed Action</b>
Glass-Deadman-Inyo Craters	E5	U-03S242	Route highly visible, risk of trespass. Route incised and actively eroding.	Native mulch
Glass-Deadman-Inyo Craters	F7	U-03S338	Route highly visible, risk of trespass. This route contains loose soils where vehicles turn around, is incised, actively eroding, compacted, contains grades up 12% slope.	Native mulch
Glass-Deadman-Inyo Craters	D5	U-N10054	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	E6	U-N10056	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	E6	U-N1020	Route highly visible, risk of trespass. This route has slight compaction and grades up to 8% slope.	Native mulch
Glass-Deadman-Inyo Craters	E6	U-N1028	Route highly visible, risk of trespass. Route incised.	Native mulch
Glass-Deadman-Inyo Craters	E7	U-N1041	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	E7	U-N1067	Route highly visible, risk of trespass. Route incised, actively eroding and compacted with grades up to 18% slope.	Native mulch
Glass-Deadman-Inyo Craters	F6	U-N1199	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	G6	U-N1205	Route highly visible, risk of trespass. Route incised, compacted , contains grades up to 18%.	Native mulch
Glass-Deadman-Inyo Craters	G6	U-N2585	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	G7	U-N2597	Route highly visible, risk of trespass. Route incised.	Native mulch
Glass-Deadman-Inyo Craters	D6	U-N2812	Route highly visible, risk of trespass. Route incised, actively eroding , contains grades up to 10% slope.	Native mulch
Glass-Deadman-Inyo Craters	D5	U-N3006	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	E6	U-N3037	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	F7	U-N3042	Route highly visible, risk of trespass. Route incised, actively eroding, compacted, contains grades up to 15% slope.	Native mulch
Glass-Deadman-Inyo Craters	D4	U-N775	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	D5	U-N797	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	D7	U-N857	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	D7	U-N858	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	E4	U-N908	Route highly visible, risk of trespass. Route incised, and compacted.	Native mulch
Glass-Deadman-Inyo Craters	F4	U-N960	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	F5	U-N973	Route highly visible, risk of trespass.	Native mulch

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Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Glass-Deadman-Inyo Craters	F5	U-N979	Route highly visible, risk of trespass.	Native mulch
Glass-Deadman-Inyo Craters	E6	U-N1021	Route highly visible, risk of trespass. Route incised, actively eroding, and compacted with grades up to 12% slope.	Native mulch, chunking
Glass-Deadman-Inyo Craters	F6	U-03S324	Route highly visible, risk of trespass. Route incised, and compacted with grades up to 15% slope.	Native mulch, chunking, restore disturbed site being used as a dispersed campsite
Glass-Deadman-Inyo Craters	G7	U-03S325	Route highly visible, risk of trespass. Route incised, and compacted with grades up to 18% slope.	Native mulch, chunking, restore disturbed site being used as a dispersed campsite
Glass-Deadman-Inyo Craters	D6	U-03S137	Route highly visible, risk of trespass. Route incised.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	D6	U-03S139	Route highly visible, risk of trespass. Route incised.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	D7	U-03S161	Route highly visible, risk of trespass. Route incised.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	C7	U-03S343	Route highly visible, risk of trespass. Route incised , contains grades up to 12% slope.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	D5	U-N805	Route highly visible, risk of trespass.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	D5	U-N806	Route highly visible, risk of trespass.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	D6	U-N848	Route highly visible, risk of trespass. Route incised, contains grades up to 20% slope.	Native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	C7	U-03S329	Route highly visible, risk of trespass. Route incised, actively eroding , contains grades up to 12% slope; permitted access needed	Native mulch, rake out OHV tracks, special use access for MMSA mountain bike trail
Glass-Deadman-Inyo Craters	F5	U-N969	Route highly visible, risk of trespass. Route incised , contains grades up to 25% slope.	Native mulch, remove trash
Glass-Deadman-Inyo Craters	C5, D5	U-03S126	Route highly visible, risk of trespass. Route incised, actively eroding. Route adjacent to Deadman Creek.	Native mulch, revegetation, ripping
Glass-Deadman-Inyo Craters	D5	U-N793	Route highly visible, risk of trespass. Route incised, actively eroding, contains grades up to 12% slope. Route adjacent to Deadman Creek.	Native mulch, revegetation, ripping, restore disturbed site being used as dispersed campsite
Glass-Deadman-Inyo Craters	E7	U-03S267	Route highly visible, risk of trespass. Route incised, and compacted.	Native mulch, ripping
Glass-Deadman-Inyo Craters	E7	U-N1063	Route highly visible, risk of trespass. Route incised, compacted with grades up to 12% slope.	Native mulch, ripping
Glass-Deadman-Inyo Craters	E6	U-N1019	Route highly visible, risk of trespass. Route incised, contains grades up to 25% slope.	Native mulch, waterbars
Glass-Deadman-Inyo Craters	G7	U-N1211	Route highly visible, risk of trespass. Route incised, contains grades up to 20% slope.	Native mulch, waterbars
Glass-Deadman-Inyo Craters	C7, D7	U-N865	Route highly visible, risk of trespass. Route incised, actively eroding, contains grades up to 30% slope.	Native mulch, waterbars
Glass-Deadman-Inyo Craters	C7, D6, D7	U-N814	Route highly visible, risk of trespass. Route incised, actively eroding, contains grades up to 20% slope.	Native mulch, waterbars, rake out OHV tracks

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Glass-Deadman-Inyo Craters	C7	U-N815	Route highly visible, risk of trespass. Route incised, actively eroding , contains grades up to 20% slope.	Native mulch, waterbars, rake out OHV tracks
Glass-Deadman-Inyo Craters	D7	U-N853	Route highly visible, risk of trespass. Route incised, actively eroding, contains grades up to 10% slope.	Native mulch, waterbars, rake out OHV tracks
Glass-Deadman-Inyo Craters	C5	U-03S125	Route highly visible, risk of trespass. Route incised, actively eroding, contains grades up to 10% slope. There is evidence of erosion into Deadman Creek.	Native mulch, waterbars, seeding, ripping
Glass-Deadman-Inyo Craters	C7, D7	U-03S169	Route highly visible, risk of trespass. Route incised, and actively eroding with grades up to 10% slope.	Special use access for MMSA (mountain bike trail), rake out OHV tracks
Glass-Deadman-Inyo Craters	F6	U-N1167	Permitted access needed	Special use access for USGS
Glass-Deadman-Inyo Craters	F5	U-03S350	Route highly visible, risk of trespass. Route incised.	Vertical and native mulch
Glass-Deadman-Inyo Craters	F5	U-N1013	Route highly visible, risk of trespass. Route incised and compacted.	Vertical and native mulch
Glass-Deadman-Inyo Craters	E6	U-N1017	Route highly visible, risk of trespass. Route incised and compacted.	Vertical and native mulch
Glass-Deadman-Inyo Craters	F4, F5	U-N961	Route highly visible, risk of trespass. Route incised and compacted with grades up to 30% slope.	Vertical and native mulch, rake out OHV tracks
Glass-Deadman-Inyo Craters	G6	U-N1179	Route highly visible, risk of trespass. Route incised and compacted with grades up to 18% slope.	Vertical and native mulch, ripping on south end
Glass-Deadman-Inyo Craters	E3, E4, F4	U-N911	Route highly visible, risk of trespass. Route incised.	Vertical mulch
Glass-Deadman-Inyo Craters	E5	U-N955	Route highly visible, risk of trespass.	Vertical mulch
Glass-Deadman-Inyo Craters	F5	U-N983	Route highly visible, risk of trespass. Route incised and compacted.	Vertical mulch, ripping
Glass-Deadman-Inyo Craters	B6, C6	U-03S103	Route highly visible, risk of trespass. Route incised, and actively eroding with grades up to 12% slope.	Waterbars
Glass-Deadman-Inyo Craters	C7	U-03S171	Route highly visible, risk of trespass. Route incised, actively eroding, compacted with grades up to 20% slope.	Native mulch, Waterbars
Glass-Deadman-Inyo Craters	E6	U-N1048	Route highly visible, risk of trespass. Route incised, and actively eroding with grades up to 20% slope.	Waterbars
Glass-Deadman-Inyo Craters	E6, E7	U-N1054	Route highly visible, risk of trespass. Route incised, and actively eroding with grades up to 18% slope.	Waterbars
Glass-Deadman-Inyo Craters	D3	U-02S183	Route highly visible, risk of trespass. Route incised, compacted with grades up to 12% slope.	Waterbars, ripping
Horton Creek	F2	U-07S470	This route is highly visible and there is continuing risk of trespass. This route is incised with grades up to 30% slope.	Block with large boulders, waterbars on the western side of the route

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Horton Creek	G3	U-N1977	This route is highly visible and there is continuing risk of trespass. This route is incised in the landscape and compacted.	Block with large boulders, ripping, seeding
Horton Creek	G3,H3	U-N1981	Route is highly visible with continued risk of trespass. This route is incised and compacted.	Plant with appropriate native species, outslope and recontour road prism; leave parking space/turn around.
Horton Creek	G3,H3	U-N1982	This route is highly visible and there is continuing risk of trespass.	Define parking area with large boulders
Mammoth Creek	E3	U-N1116	The tread is incised and active erosion. Defining the authorized route will reduce confusion for recreational users.	Block and contain open route with boulders, revegetation
Mammoth Creek	E3	U-N1114	Route highly visible and a continued risk of trespass. Route incised and compacted; this is a signed mountain bike route	Block motorized access, native mulch, leave mountain bike trail
Mammoth Creek	D6	U-04S106	Route compacted with grades over 25%. The steeper parts of the route are incised and active erosion occurring. It is highly visible from town and recognized Mountain bike use.	Block motorized access, waterbars, weed removal, ripping, leave mountain bike trail
Mammoth Creek	E2	U-N1106	Route highly visible, risk of trespass.	Enhance closure, native mulch
Mammoth Creek	E5	U-N3050	Active erosion present and permitted access needed.	Gate entrances, cap route with gravel, special use access for MCWD
Mammoth Creek	G4	U-N1145	Corrected in Travel Management Errata #2 issued January 2013	Install barrier and native mulch
Mammoth Creek	A3	U-N890	Corrected in Travel Management Errata #2 issued January 2013	Install barrier, native mulch
Mammoth Creek	E2	U-N1105	Route highly visible and a continuing risk of trespass. Route incised and compacted.	Install barrier, native mulch, waterbars, seeding, chunking
Mammoth Creek	G4	U-N1150	Route highly visible and a continuing risk of trespass. Route compacted with grades over 10% slope.	Install barrier, native mulch, waterbars, seeding, chunking
Mammoth Creek	E3	U-N1112	Route incised and compacted. It is highly visible from Shady Rest Park.	Install barrier, native mulch, waterbars, seeding, chunking, leave parking at ball field, move bike path signs to open route
Mammoth Creek	E3	U-03S284	Route highly visible, risk of trespass. Tread is incised and compacted	Native mulch
Mammoth Creek	B2	U-N1033	Route highly visible, risk of trespass.	Native mulch
Mammoth Creek	B2	U-N1036	Route highly visible, actively eroding , contains grades up to 15%.	Native mulch
Mammoth Creek	B2	U-N1037	Route highly visible, actively eroding , contains grades up to 35%.	Native mulch
Mammoth Creek	B1	U-N1042	Route highly visible , contains grades up to 12%.	Native mulch
Mammoth Creek	B1, C1	U-N1060	Route highly visible and a continuing risk of trespass. Route incised , contains grades up to 10% slope.	Native mulch
Mammoth Creek	C1	U-N1061	Route highly visible and a continuing risk of trespass. Route incised.	Native mulch
Mammoth Creek	C1	U-N1062	Route highly visible and a continuing risk of trespass. Route incised.	Native mulch

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Mammoth Creek	B1, B2, B3, C2, C3	U-N1068	Route highly visible, risk of trespass.	Native mulch
Mammoth Creek	B3	U-N1080	Route highly visible and a continuing risk of trespass.	Native mulch
Mammoth Creek	B3	U-N1081	Route highly visible and a continuing risk of trespass.	Native mulch
Mammoth Creek	D3	U-N1082	Route highly visible and a continuing risk of trespass.	Native mulch
Mammoth Creek	E3	U-N1088	Route highly visible and a continuing risk of trespass.	Native mulch
Mammoth Creek	E3	U-N1092	Route highly visible and a continuing risk of trespass. Route slightly incised, contains grades up to 8% slope.	Native mulch
Mammoth Creek	E3	U-N1094	Route highly visible and a continuing risk of trespass.	Native mulch
Mammoth Creek	E2, F2	U-N1121	Route incised, compacted and actively eroding.	Native mulch
Mammoth Creek	F2, F3	U-N1122	There is a continuing risk of trespass along this route. Route incised and compacted.	Native mulch
Mammoth Creek	E3, F3	U-N1123	There is a continuing risk of trespass along this route. Route incised and compacted.	Native mulch
Mammoth Creek	E3, F2, F3	U-N1124	There is a continuing risk of trespass along this route. Route incised.	Native mulch
Mammoth Creek	F3	U-N1134	Route highly visible, risk of trespass.	Native mulch
Mammoth Creek	F3, G3	U-N1140	There is a continuing risk of trespass along this route. Route incised.	Native mulch
Mammoth Creek	G4	U-N1153	Route highly visible, risk of trespass.	Native mulch
Mammoth Creek	E2	U-N1173	Route highly visible, risk of trespass.	Native mulch
Mammoth Creek	E2	U-N1174	There is a continuing risk of trespass along this route. Route incised with grades up to 12% slope.	Native mulch
Mammoth Creek	E3	U-N2581	There is a continuing risk of trespass along this route. Route incised with grades up to 25% slope.	Native mulch
Mammoth Creek	F2	U-03S300	This route contains loose soil, is incised, contains grades up to 15%.	Native mulch initial portion of route
Mammoth Creek	C1	U-N1064	Route highly visible with a continuing risk of trespass. This route actively eroding, incised, contains grades up to 18% slope.	Native mulch, chunking
Mammoth Creek	D3	U-N1083	Route highly visible and a continuing risk of trespass along this route. Route compacted.	Native mulch, partial special use access for MCWD
Mammoth Creek	F3	U-N10057	Route highly visible with a continuing risk of trespass. This route actively eroding, incised, and compacted.	Native mulch, ripping
Mammoth Creek	B2	U-N1035	Route highly visible with a continuing risk of trespass. This route actively eroding, incised, contains grades up to 12% slope.	Native mulch, ripping
Mammoth Creek	B2	U-N1038	Route highly visible with a continuing risk of trespass. This route is incised, and is compacted.	Native mulch, ripping
Mammoth Creek	B2	U-N1040	This route has a continuing risk of trespass, is incised, actively eroding, has grades up to 15%.	Native mulch, ripping

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Mammoth Creek	E3	U-N1090	Route highly visible, continuing risk of trespass. Route incised, actively eroding and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1091	Route highly visible, continuing risk of trespass. Route incised, actively eroding and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1095	Route highly visible, continuing risk of trespass. Route incised, actively eroding and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1107	Route highly visible, continuing risk of trespass. Route incised, actively eroding and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1108	Route highly visible, continuing risk of trespass. Route incised, and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1109	Route highly visible, continuing risk of trespass. Route incised, and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1111	Route highly visible, continuing risk of trespass. Route incised, and compacted.	Native mulch, ripping
Mammoth Creek	E3	U-N1115	Route highly visible, continuing risk of trespass. Route incised, and compacted.	Native mulch, ripping
Mammoth Creek	F3	U-N1130	Route highly visible, continuing risk of trespass. Route and compacted.	Native mulch, ripping
Mammoth Creek	F3	U-N1131	Route highly visible, continuing risk of trespass. Route compacted.	Native mulch, ripping
Mammoth Creek	C2	U-N10052	Route highly visible, compacted , contains grades up to 10%.	Native mulch, waterbars, chunking
Mammoth Creek	B2	U-N1039	Route actively eroding, incised, compacted and has grades up to 12% slope.	Native mulch, waterbars, chunking
Mammoth Creek	C7, C8	U-N1476	Route highly visible, actively eroding, incised, compacted and contains grades up to 20% slope.	Native mulch, waterbars, revegetation, chunking, leave equestrian trail
Mammoth Creek	E3	U-N1087	Route highly visible with a continuing risk of trespass. This route actively eroding, incised and compacted.	Native mulch, waterbars, ripping
Mammoth Creek	F3	U-N1139	Permitted access needed	Natural obliteration east entrance, special use access for ORMAT west entrance
Mammoth Creek	D5, E5	U-04S104	Route highly visible, continuing risk of trespass. Route incised, actively eroding, compacted , contains grades up to 15% slope. Popular equestrian route. Permitted access needed	Seeding, revegetation, chunking, leave equestrian trail
Mammoth Creek	E5	U-04S110	Route highly visible, continuing risk of trespass. Route incised, actively eroding, compacted , contains grades up to 15% slope. Popular equestrian route. Permitted access needed	Seeding, revegetation, chunking, leave equestrian trail
Mammoth Creek	G4	U-03S429	The route is incised, compacted, with grades up to 10%.	Vertical and native mulch, seeding, ripping
Mammoth Creek	G4	U-N1154	Route highly visible, risk of trespass.	Vertical mulch
Mammoth Creek	D3, E2, E3	U-N1084	Route highly visible, continuing risk of trespass. Route incised, actively eroding, compacted , contains grades up to 17% slope.	Waterbars, chunking

**Attachment C. Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action**

Focus Area*	Map Key	U-Route #	Need for change/Existing condition	Proposed Action
Mammoth Creek	C6, D6	U-N1257	Route highly visible, continuing risk of trespass. Route incised, actively eroding, compacted , contains grades up to 10% slope. Popular hiking route near Snow Creek in Mammoth.	Waterbars, chunking, leave hiking path
Mammoth Creek	F5	U-N10055	Route highly visible, continuing risk of trespass. Route incised, actively eroding, compacted. Adjacent to Mammoth Crk and impacting riparian vegetation.	Waterbars, seeding, chunking, leave parking space
Mammoth Creek	E5	U-04S112	Route highly visible, continuing risk of trespass. Route incised, actively eroding, compacted , contains grades up to 12% slope.	Waterbars, seeding, revegetation, chunking
Mammoth Creek	G4	U-N1152	Route highly visible, continuing risk of trespass. Route compacted.	Waterbars, seeding, ripping
Redding Canyon	A3, B3	U-N10021	Through monitoring, this route was identified as needed to facilitate a safe and sustainable OHV system. This route was identified as fulfilling critical recreation needs.	Add route to system as public OHV trail
Redding Canyon	E3, F3	U-N10016	Route highly visible, continuing risk of trespass.	Block with large boulders, vertical mulch
Redding Canyon	D4	U-N10010	Route highly visible, continuing risk of trespass.	Natural obliteration, leave parking spot
Redding Canyon	G4	U-N2831	Route highly visible, continuing risk of trespass.	Vertical and native mulch
Redding Canyon	F2, G2	U-07S131	Route highly visible, continuing risk of trespass.	Vertical mulch
Redding Canyon	D3, E3	U-N10089	Route highly visible, continuing risk of trespass. Incised, actively eroding and compacted with grades up to 20% slope.	Vertical mulch, waterbars, chunking with hand tools, pull in berm
Redding Canyon	B3	U-N2078	Route highly visible, continuing risk of trespass. Route incised, and actively eroding, with grades up to 35% slope.	Waterbars
Redding Canyon	D4	U-N2687	Route highly visible, continuing risk of trespass. Route incised, and compacted, with grades up to 13% slope.	Waterbars
Redding Canyon	D4, E4, F3, F4	U-N2098	Route highly visible, continuing risk of trespass. Route incised, actively eroding and compacted with grades over 50% slope. Route impacting wet meadow systems and riparian vegetation.	Waterbars, outsloping, rake out OHV tracks

**\*\*\*Note: The four routes highlighted in yellow (all in the Horton Creek Watershed) were mistakenly omitted from the version mailed to the public. They were added on Monday, February 4<sup>th</sup>, to this version.\*\*\***

**\*Heading Definitions:**

**Key Area:** OHV Focus Area as defined in the 2009 Travel Management EIS

**Map Key:** Grid number as shown on maps that can be found at Ranger Stations or on the website: <http://www.fs.usda.gov/land/invo/landmanagement/projects/?cid=stelprdb5407462>

**U-Route #:** Unauthorized Route number as shown in the 2009 Travel Management EIS.

**Need for change/Existing Conditions:** The condition making restoration necessary.

**Attachment C.** Routes in the Upper Owens Bishop Creek Restoration Project and their proposed action

**Proposed Action:** The restoration or other action proposed on the route. For a more detailed explanation of restoration techniques, see Appendix A.



United States Department of Agriculture  
Forest Service

# Inyo National Forest



## Upper Owens, Bishop Creek & Horton Creek - Phase I Project Areas

January 2013

