ENVIRONMENTAL ASSESSMENT, FONSI AND DECISION RECORD

BLM, Bishop Field Office
351 Pacu Lane, Suite 100
Bishop, CA 93514

I. EA Number: CA-170-07-19

II. Lease/Serial/Case File No.: Soil and Vegetation Resources (1010)

III. Proposed Action Title/Type:

Bodie/Coleville Soil Inventory – Soil Pit Installation & Rehabilitation

IV. Location of Proposed Action:

Bodie, Bridgeport and Coleville Management Areas, as described in the Bishop Field Office Resource Management Plan

V. Applicant (if any): BLM, Bishop Field Office and National Resource Conservation Service (NRCS)

VI. Plan Conformance:

The proposed action is subject to the Bishop Resource Management Plan, approved March 25, 1993. The proposed action was developed to implement RMP guidance and is designed to ensure conformance with General Policies, Area Manager's Guidelines, Valid Existing Management, Standard Operating Procedures, Decisions and Support Needs prescribed in the Bishop RMP. The proposed action has been reviewed and is in conformance with the plan.

Since a portion of the proposed action is located within several Wilderness Study Areas (WSAs), it is also subject to the Interim Management Policy and Guidelines for Lands under Wilderness Review 1995 (IMP) wilderness non-impairment criteria. The subsequent assessment of the project's impacts identifies the project is in conformance with the required IMP criteria.

VII. Purpose and Need for Proposed Action:

The purpose of the proposed action is to provide the Bureau of Land Management with comprehensive soil data in order to make informed resource decisions. The BLM Bishop Field Office requires this specific soil information to; 1) perform ecological correlations to vegetation composition and productivity, 2) determine site recovery potential following disturbance or resource treatment, and 3) provide a consistent geographic data set for the northern portion of BLM managed public lands that

replicates the soil inventory methods and analyses provided in the Benton/Owens Valley Soil Inventory (NRCS, 1999).

The proposed action was also developed to facilitate implementation and achievement of Bishop RMP (BLM, 1993) Desired Plant Community Plant (DPC) objectives. The proposed action would also help achieve the following RMP Decisions;

1. Monitor resource conditions to define present conditions and evaluate if resource condition objectives are being achieved (BLM, 1993, p. 23).

2. Update the Fuelwood Management Plan (BLM, 1993, p. 23).

VIII. Description of Proposed Action Alternative:

The proposed project would be to excavate 63 temporary 24" wide x 6' long x 5' deep soil pits within the Bodie Hills and Coleville Management Areas (See Attachments 1 and 2). Implementation is proposed to begin in the spring of 2007 and is projected to continue through the fall of 2008 (2 field seasons).

The pits would be excavated using a truck mounted backhoe -" Bradco" unit. The backhoe is mounted on a 1-1 ½ ton truck chassis with a dual wheel on the rear. The truck would use existing roads and routes to get as close as possible to each proposed soil pit site. The vehicle would then leave the road/route and travel cross country, the shortest distance possible, to the actual pit location. No proposed soil pit location would be further than 100 ft. from an existing road/route and most would be within 20 – 50 ft. of an existing road/route. Vehicle tires would exert approximately 60 psi. weight during travel over vegetation and soils. Some vegetation would be broken or temporarily compressed, but not destroyed by passage of the vehicle overland. The maximum size of each pit would be 24 inches wide by 6 feet long by 5 feet deep. Only the footprint of the soil pit (12 sq. feet) would have vegetation removed from it; an additional 20 sq. foot area would contain some crushed brush where the excavated soil would be stockpiled in separate soil layers, adjacent to the pit on top of vegetation. Vegetation would be covered by soil for a few hours, but would not be destroyed. Excavation of each soil pit would take approximately 1 hour. NRCS would describe the soil layers; the soil pit would then be refilled. Total operation at each site would last 2-3 hours. All sites would be rehabilitated by backfilling the pit with the backhoe, followed by shovel and rake work to re-contour the soil surface at the site. Multiple pits would be excavated in a particular area in one day. It is anticipated that the majority of the sites would not require revegetation due to the limited removal and destruction of vegetation at the site and the proximity of surrounding vegetation stands that would provide viable seed sources for natural revegetation to occur.

Total disturbance area within the entire proposed project area would be less than ¼ acre.

The following protective measures would be applied during project implementation to

reduce the probability of residual impacts and the need for subsequent mitigation:

1. Vehicular access to the proposed project area would occur on existing roads/vehicle routes. Travel cross country, from the road/route to the proposed pit site would be the shortest distance possible and limited to one round trip in and out following the same route in order to minimize impact to vegetation and soil.

2. Prior to any ground disturbing activity, proposed soil pit locations would be surveyed for archaeological resources. Project design would be adjusted to avoid identified cultural properties and ensure their protection. If previously undiscovered surface or subsurface cultural resources are found during project implementation, project activities in the area would be stopped and evaluated by the Bishop Field Office Archaeologist prior to resumption of activity in that location.

3. Prior to any ground disturbing activity, each proposed soil pit locations would be surveyed to ensure the proposed pit location would not impact an existing population of Special Status Plant species.

4. Surveys for invasive weed infestations would be completed prior to, and upon project completion. If any invasive weeds are identified post-project implementation they would be removed by hand or with a weed-torch.

5. All vehicles, tools and material used pre and post project implementation would be pressure-washed prior to transport to the project site to avoid the spread of noxious weeds.

6. Prior to any ground disturbing activity, each proposed soil pit location would be surveyed to ensure the proposed pit location would not destroy any previously unidentified pygmy rabbit burrow system. Any soil pits found to occur within or immediately adjacent to any pygmy rabbit burrow system will be relocated to avoid any impacts to pygmy rabbit habitat.

7. No backhoe operations would occur between 3/1 and 6/30 within two miles of any active sage grouse lek in the Bodie Hills and Bridgeport Valley Management Areas to prevent disturbance to breeding and nesting sage grouse.

8. Backhoe operations would not occur between 11/1 and 4/1 in the Coleville Management Area to prevent disturbance to wintering mule deer.

9. No soil disturbing equipment or vehicles would occur on wet, poorly drained or erosive soils.

10. Soil layer separation and topsoil stockpiling would occur during soil pit construction.

11. Sites in close proximity to dense cheat grass infestations would be seeded with native grass and shrub species to avoid the spread of noxious weeds.

12. Access to soil pits would follow Occupational Safety and Health Administration (OSHA) Confined Space Entry Regulations (29 CFR 1910.146), BLM Policy on Confined Space Entry (IM 95-19), and Mine Safety and Health Administration regulations (Public Law 91-173 as amended by Public Law 95-164).

IX. Other Alternatives

No Action

No project implementation would occur.

Alternative Considered But Dropped From Further Analysis

An alternative to hand-dig the 23 soil pit sites that are proposed in Wilderness Study Areas was considered in order to reduce impacts to those sites from cross country travel incurred by backhoe access. This alternative was dropped from further analysis because hand digging the soil pits would significantly decrease the accuracy of soil interpretations because the proper depths and consistency in bulk soil removal would be compromised. The ability to properly salvage the soil layers to put back in the pit, following soil interpretation would also be significantly compromised. Hand digging would also increase safety hazards to the inventory crew because of the risk of falling debris when digging to the required depths. Lastly, the physical impact of walking around the pit to hand dig and subsequent labor to fill the pit would cause as much vegetation breakage and soil compaction in the immediate area of the pit as utilizing equipment. Some temporary damage to vegetation from cross country travel, limited to one round trip per site, via the truck mounted backhoe, was found to be the minimum tool for digging soil pits located within Wilderness Study Areas.

X. Affected Environment

Cultural

Each proposed soil pit location would be visited by the Bishop Field Office archaeologist and the NRCS project supervisor. The route to the pit and the pit location plus a 10 meter buffer will be subjected to a complete, Class III inventory. If access routes or soil pits are found to occur within archaeological sites they will be relocated to avoid any impacts to cultural resources. Fourteen of the soil pits are proposed to be excavated within the Dry Lakes Plateau National Register District (DLP). It has been determined that the majority of the proposed project would pose no effect to cultural resources, but a no adverse effect determination would be rendered for the pit locations on the DLP as cultural properties would be avoided. During excavation soil pits would be monitored

for sub-surface archaeological deposits and if encountered excavation would be discontinued and the discovery evaluated. All evaluations and findings will be documented in Cultural Resource Inventory Report: CA-170-07-08.

Invasive Weed Species

Invasive weed species composition and cover varies greatly between Management Areas and within the proposed project area. The Coleville Management Area, especially west of U.S. Hwy. 395 contains the highest weed densities and cover due to recent wildfire activity. Cheat grass (*Bromus tectorum)* and tansy mustard (*Sisymbrium altissisima)* are the dominant invasive weed species. The Bridgeport Management Area contains localized concentrations of cheat grass in association with historic sheep bedding locations. Weeds are generally confined to these locations. The Bodie Hills Management Area contains moderate cover and densities of cheat grass on the lower elevations and on south and west aspect slopes. Above 8,000 ft., cheat grass is currently sparse due to the vigor and cover of native species as well as higher availability of soil moisture.

Vegetation and Soils

Plant communities within the proposed project area encompass a wide-range of Great Basin community types to include; sagebrush steppe (big sage, Wyoming sage, mountain big sage, and low sage), pinyon/juniper, mixed mountain shrub, mountain mahogany, aspen, meadow and riparian (Attachment 3, and Appendix 1). Large scale soil parent material sources are granitic and volcanic (Appendix 1).

Wildlife and Wildlife Habitats

The proposed project area provides habitat for a diverse guild of resident and migratory wildlife species associated with a variety of Great Basin upland, riparian and wetland plant communities. Plant communities of special interest from a wildlife habitat management concern in the proposed project area include: sagebrush steppe, mixed mountain shrub, pinyon/juniper, mountain mahogany, aspen, meadow, and streamside riparian. Sagebrush obligate wildlife species of management concern occurring in the proposed project area include Greater sage-grouse (*Centrocercus europhasianus*), pygmy rabbit (*Brachylagus idahoensis*), pronghorn (*Antliocapra americana*) and wide-variety of resident and migratory songbirds. The proposed project area also provides important summer, winter, and migratory habitat for mule deer (*Odocoileous hemionus*) from the West Walker, East walker, and Mono Lake interstate herds.

Wilderness Study Areas (WSAs)

Twenty-three of the 63 proposed pit locations would occur within Wilderness Study Areas (Table 2 and Attachment 1). These WSAs total 67,700 acres of the Bodie, Bridgeport, Coleville Management Areas. As proposed the 23 soil pits would disturb less than ¼ acre collectively.

Table 2. Number of proposed soil pit locations by WSA.

WSA	Number of Proposed Soil Pits
Bodie Mountain (CA-010-99)	8
Bodie (CA-010-100)	4
Masonic Mountain (CA-010-102)	5
Mormon Meadow (CA-010-094)	4
Mt. Biedeman (CA-010-095)	2

The Final Wilderness Inventory (December 1979) describes these WSA's wilderness values in detail:

Bodie Mountain (CA-010-99) – The WSAs' combination of natural features provides numerous scenic and picturesque panoramas. Vegetation is variable within the unit. Road sever and divide the eastern portion of the unit, while the remainder of the unit remains primarily affected by natural forces. Several non-maintained vehicle routes and abandoned wood-pole powerlines are substantially unnoticeable.

Bodie (CA-010-100) – The WSA generally appears to have retained its primeval character and influence, with the imprint of man's work substantially unnoticeable. Man made features have little effect on overall naturalness (several unimproved vehicle routes and a few wildlife habitat improvement projects in the western portions).

Masonic Mountain (CA-010-102) – The WSA is characterized by gentle to moderately rolling hills that slope toward Bridgeport Valley. The varied physiography, ample vegetation and considerable size blend together and result in outstanding opportunities for solitude and naturalness. A few primitive vehicle routes traverse the unit.

Mormon Meadow (CA-010-094) – The WSA has retained its natural character providing outstanding opportunities for solitude within its many enclosed canyons and small interior valleys.

Anthropogenic impacts include a few widely separated unimproved vehicle routes.

Mt. Biedeman (CA-010-095) – The WSA has generally retained its primeval character and naturalness. A few unimproved vehicle routes and some fence lines traverse the unit. Mining and associated roads near Sugarloaf Mountain display the greatest obtrusive impact on the wilderness character. Rugged hills, scenic quality and natural character of the unit provide outstanding opportunities for solitude.

WSAs are subject to the Interim Management Policy for Lands under Wilderness Review (IMP) with emphasis to protect wilderness values. The IMP has provided management guidance for WSAs since the 1980's. In general, new proposals are required to meet a non-impairment standard for wilderness values in any WSA. The non-impairment standard requires that proposals and their associated impacts be temporary, be substantially unnoticeable in the WSA as a whole, and project impacts do not constrain or limit Congress's ability to designate the area wilderness.

XI. ENVIRONMENTAL CONSEQUENCES

ACEC's

Two Areas of Critical Environmental Concern (ACECs) occur within the greater project area: Conway Summit (2,700 acres) and Bodie Bowl (5,935 acres). No soil pits are proposed within these ACEC's and those that are proposed are not adjacent to or in the vicinity of the ACEC's. ACEC's will be dropped from further analysis.

Air Quality

No impact - The proposed action is not within a federal air quality non-attainment area. The action would not result in the emission of $PM_{10.}$ Air Quality will be dropped from further analysis.

Cultural resources

All cultural resources would be avoided by the proposed project; therefore there would be no effect to the majority of cultural properties as a result of the proposed undertaking. Within the DLP area a no adverse effect determination would be rendered. Every effort to minimize impacts on the DLP will be taken and pit excavations carefully monitored by the Bishop Field Office archaeologist. Steps will be taken to ensure none of the qualities of the DLP that contribute to its National Register status are compromised by the proposed undertaking. Pit rehabilitation will be carefully completed to disguise each pit and minimize the vegetative and visual impacts on the DLP and other sites. Because of these required stipulations, cultural resource impacts will be dropped from further analysis.

Environmental Justice

There would be no disproportionate impacts to low income or minority groups, per Executive Order 12898 (2/11/94).

Farmlands, Flood Plains, and Water Quality

There would be no impacts to prime farm lands, flood plains, or water quality (including ground or surface waters). These resources will be dropped from further analysis in this EA.

Invasive, non-native species

Proposed Action

The proposed action would occur in small locations within large expanses of intact sagebrush-steppe vegetation. The limited size of the disturbance and site access frequency, e.g. one ingress and egress as well as, the intact nature of the surrounding vegetation would limit weed invasion. Adherence to Project Implementation Stipulations would further limit weed invasion risk.

No Action

No soil pits would be dug and no vegetation would be disturbed which would reduce small bare-ground openings within vegetation stands. This would reduce weed ingress into those locations where weeds are in closer proximity to proposed pit locations (primarily at the lower elevations of the project area).

Native American

No anticipated impact. All Tribes will be notified via a Notice of Proposed Action (NOPA) and provided the opportunity to comment on the proposed action. As the proposed project area on the DLP National Register District is within the Bridgeport Indian Colony area they will be further consulted via meetings or phone to determine if the Tribe has any concerns regarding the proposed undertaking. Because of these required stipulations, Native American impacts will be dropped from further analysis.

Soils and Vegetation

Proposed Action

The proposed action would occur in small locations within large expanses of intact sagebrush-steppe vegetation. Only the footprint of the soil pit would have vegetation removed from it, the remaining approximately 20 square foot area would contain scattered crushed brush. All sites would be rehabilitated by backfilling the pit with the backhoe, combined with shovel and rake work to re-contour and clean up the site.

Revegetation would occur as per Project Implementation Stipulations. It is anticipated that the majority of the sites would not require revegetation due to top soil retention and surrounding vegetation stands that would provide viable seed sources for natural revegetation to occur.

No Action

No disturbance to the vegetation would occur.

Wildlife and Wildlife Habitats

Proposed Action

The proposed action would result in the temporary disturbance and/or displacement of resident and migratory wildlife from the immediate project vicinity due to human activity and noise during pit excavation, soil inventory, pit backfill and site rehabilitation. This impact would be short term, usually lasting only 2-3 hours per site. No long-term disturbance and/or displacement of resident or migratory wildlife would occur. No disturbance and/or displacement of sage-grouse during the critical breeding and nesting period would occur due to the seasonal restriction that prohibits pit excavation within 2 miles of active leks from 3/1 to 6/30 in the Bodie Hills and Bridgeport Valley Management Areas. This seasonal restriction would also eliminate disturbance to breeding song birds in the majority of the project area. No disturbance and/or displacement of wintering mule deer would occur due to the seasonal restriction that prohibits pit excavation from 11/1 to 4/30 in the Coleville Management Area.

The proposed action would result in the direct modification of approximately 0.0007 acres (32 square feet) of wildlife habitat in the vicinity of each pit location. This direct modification would be primarily restricted to changes in vegetative cover and structure due to vegetation loss from pit excavation and vegetation crushing from pit access. This habitat modification would be widely distributed and impact less than 0.05 acres (2016 square feet) within the overall project area. Over the long-term, modified habitats would progress towards pre-project vegetative cover and structure as natural revegetation and rehabilitation occurs. No impacts to pygmy rabbit burrow systems would occur due to pre-project surveys and avoidance requirements that will ensure that proposed pit locations will not destroy any previously unidentified pygmy rabbit burrow system.

Desired Plant Community (DPC) descriptions and objectives provide the foundation for most wildlife habitat management actions identified in the Bodie Hills, Bridgeport Valley, and Coleville Management Areas. The proposed action would provide valuable information that would facilitate and improve BLM’s ability to implement and achieve RMP DPC objectives.

No Action

No temporary disturbance and/or displacement of resident and migratory wildlife and their habitat resulting from the proposed project would occur. Soil inventory data needed to support improved wildlife habitat management actions in the Bodie Hills, Bridgeport Valley and Coleville Management Areas would continue to be limited.

T and E Fauna/Flora

No impact. This resource does not occur within the project area and will be dropped from further analysis.

Waste – Hazardous/Solid

No impact. Hazardous waste would not be a result of the proposed action, nor do any known hazardous waste sites occur within the project area. Waste and Hazardous Waste will be dropped from further analysis in this EA.

Wetlands/Riparian

No impact. The proposed action would not occur in wetlands or riparian areas. This resource will be dropped from any further analysis in this EA.

Wild and Scenic Rivers

No impact. The proposed action would not be adjacent to or in the vicinity of any Wild Scenic Rivers. This resource will be dropped from any further analysis in this EA.

WSA's

Proposed Action

The project's impacts to wilderness characteristics would be negligible. Up to 12 sq. ft of vegetation would be removed to dig each soil pit and an additional 20 sq. feet of vegetation would potentially be crushed when soil is stockpiled next to the pit for several hours. The soil layers would be restored in the order they were dug out and the crushed vegetation would again be uncovered. Impacts to naturalness would be temporary, as it is expected that revegetation would quickly occur at each of the excavated soil pit sites. Vegetation that was crushed when covered with the stockpiled soil for a few days, would recover as soon as the plants were uncovered and the soil placed back in the soil pit. Vegetation that was broken or crushed when cross country travel occurred to access the site would also recover quickly. Impacts would remain substantially unnoticeable in the immediate area and in each WSA as a whole.

Long term, the sites would be indistinguishable from the surroundings and the area's physical features.

Outstanding opportunities for solitude and a primitive or unconfined type of recreation in the WSAs would be slightly compromised for a short period of time when the equipment was in operation. Digging of each soil pit would take up to 1 hour and once the soil profile was described by NRCS, it would take approx ½ hour to fill the pit and restore it. The impact to solitude would be temporary noise generated by the digging that could be heard by someone in the immediate area.

The project would enhance wilderness values by improving scientific knowledge and understanding of the soils in the Bodie, Bridgeport, Coleville Management Areas. The additional knowledge would provide potential resource management applications to WSA management. This would further benefit and improve understanding and management of ecosystems and affirms the importance and necessity wilderness values contribute to the human environment.

If any of the WSA parcels were to be designated wilderness in the future, the implementation of the soil survey would not have a negative effect upon the areas wilderness values and characteristics that would constrain Congress's decision to do so.

If the proposed soil inventory had existed at the time of the intensive inventory, its impacts would not have disqualified the areas from WSA designation.

The proposed project meets the non-impairment criteria because it is 1) temporary in that the vegetative disturbance is short-lived, will rehabilitate with native vegetation and have no impact to wilderness values; 2) soil pits would be substantially unnoticeable in the WSAs because of their small size, their proximity to the edge of the road and the number of pits in relation to the 5 WSA's collective 67,700 acres; 3) it would not constrain Congress' ability to designate the area as wilderness since the project is temporary in nature and will not alter the naturalness of the area; and 4) the project contributes to wilderness by asserting the unique role and necessity wilderness contributes to scientific knowledge and resource management decisions for the betterment of society.

Since the proposed action is not within a designated Wilderness there would be no effects on any lands so designated.

<u>No Action</u>

The No Action alternative would avert the disturbance of up to ¼ acre of vegetation and maintain existing naturalness as no disturbance would occur. This alternative would avert the temporary crushing of vegetation due to short distance cross country travel of equipment into each site. The value wilderness plays in our society would be adversely diminished by the loss of scientific knowledge derived from studying these soil and

vegetation resources. This loss would limit advancements in the area of understanding ecological relationships in order to make better resource decisions that could benefit society, and have application to the management of the five affected WSAs as well.

Visual resources

No impact. VRM Resource Management (VRM) classes acknowledge existing visual contrasts. The proposed action would not affect the existing character of the WSA's landscape of the Bodie, Bridgeport, Coleville Management areas and as such would conform to VRM Class 1 standards. Some of the proposed pit locations are in areas where the designated VRM Class is 2 or 3, a management designation that allows for more visual impacts to occur. As proposed the project would conform to the highest visual standard throughout the project area. VRM's will be dropped from any further analysis in this EA.

Cumulative effects

Cumulative actions consist of digging 63 proposed soil pits on public land through out the Bodie, Bridgeport, Coleville Management Areas. Twenty three of the 63 proposed sites are in WSAs. The analysis of the proposed projects' cumulative effects anticipated over the next decade within the context of past and present actions would not cause a significant environmental impact throughout the management areas.

Beneficial components of the proposed action include;

- Landscape-level soil information to assist in project design and implementation
- Consistent soil-classification mapping across jurisdictional and Field Office-wide locations

The small size of each pit and the magnitude of the proposed action and associated environmental impacts would not contribute to current or future negative cumulative effects associated with project implementation. The vegetation that would be removed to excavate the soil inventory pits would regenerate in each site over the long term, and crushed or broken vegetation would recover quickly. Some short term impact would occur at each site during the digging of the pits, but would cease as soon as the equipment is removed.

The WSAs naturalness, with outstanding opportunities for solitude and a primitive and unconfined type of recreation would remain unaffected by this proposal. This proposal does not contribute any unnatural features to the 5 WSAs affected.

This project would cumulatively advance knowledge of the soils in the Bodie, Bridgeport, and Coleville Management areas by completing a major gap in the data set necessary to make informed resource decisions.

Description of Mitigation Measures and Residual Impacts:

Protective measures were incorporated into the proposed project design and implementation requirements (Pages 3 and 4) to reduce the probability of residual impacts and the need for subsequent mitigation. No residual impacts are anticipated and no additional mitigation measures are needed or proposed.

Implementation Monitoring:

Bishop Field Office Botanist, Archaeologist and Recreation Staff would direct and monitor project implementation to ensure conformance with project design and implementation requirements identified in the proposed action.

Effectiveness Monitoring:

Post-soil pit installation monitoring would include pre and post photographs of the sites to assess rehabilitation success and would be attached to this document upon project completion.

Public Input:

To date several methods have been employed to receive public input to the proposed project; Wilderness NOPA, posting of the project on the California BLM website. No comments were received during the 4-week comment period.

Persons/Agencies Consulted:

Friends of the Inyo
California Native Plant Society
Toyaibe National Forest
Bodie State Parks
Eastern Sierran Native American Tribes

References:

Bureau of Land Management. 1993. Bishop Resource Management Plan Record of Decision. U.S. Department of the Interior, Bureau of Land Management, California State Office, Sacramento, CA

Preparer(s):

Anne Halford, Botanist
Diana Pietrasanta, Outdoor Recreation Planner/Wilderness Specialist
Kirk Halford, Archaeologist
Steve Nelson, Wildlife Biologist
Terry Russi, Supervisory Wildlife Biologist

Date:
Reviewed By:_____ Date: _____
Terry Russi, Environmental Coordinator

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FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. The proposed Bodie/Coleville Soil Inventory Project involving the installation of soil pits is designed to incorporate protective measures and implementation requirements that substantially reduce the potential for significant environmental impacts and no additional mitigation measures are required. I have determined that the proposed action with the mitigation measures described below would not have any significant impacts on the human environment and that an EIS is not required.

There would be no negative effect on threatened or endangered species as a result of the action.

The project's authorization will benefit the human environment by providing scientific data to advance the ecological understanding of soil and vegetation interrelationships. These long term gains exceed the limited adverse impact the soil survey pits will have on the affected WSA's immediate natural characteristics. The implementation and rehabilitation of the soil survey pits will meet IMP non-impairment standard for lands under wilderness review.

I have determined that the proposed project is in conformance with the Bishop Resource Management Plan, which was approved March 25, 1993. This plan has been reviewed, and the proposed action conforms to the land use plan terms and conditions as required by 43 CFR 1610.5.

It is my decision to implement the project with the mitigation measures identified below.

Implementation Stipulations:

The following protective measures will be applied during project implementation to reduce the probability of residual impacts and the need for subsequent mitigation:

1. Vehicular access to the proposed project area will occur on existing roads/vehicle routes. Travel cross country, from the road/route to the proposed pit site will be the shortest distance possible and limited to one round trip in and out following the same route in order to minimize impact to vegetation and soil.

2. Prior to any ground disturbing activity, proposed soil pit locations will be surveyed for archaeological resources. Project design will be adjusted to avoid identified cultural properties and ensure their protection. If previously undiscovered surface or subsurface cultural resources are found during project implementation, project activities in the area will be stopped and evaluated by the Bishop Field

Office Archaeologist prior to resumption of activity in that location.

3. Prior to any ground disturbing activity, each proposed soil pit locations will be surveyed to ensure the proposed pit location will not impact an existing population of Special Status Plant species.

4. Surveys for invasive weed infestations will be completed prior to, and upon project completion. If any invasive weeds are identified post-project implementation they will be removed by hand or with a weed-torch.

5. All vehicles, tools and material used pre and post project implementation will be pressure-washed prior to transport to the project site to avoid the spread of noxious weeds.

6. Prior to any ground disturbing activity, each proposed soil pit location will be surveyed to ensure the proposed pit location will not destroy any previously unidentified pygmy rabbit burrow system. Any soil pits found to occur within or immediately adjacent to any pygmy rabbit burrow system will be relocated to avoid any impacts to pygmy rabbit habitat.

7. No backhoe operations will occur between 3/1 and 6/30 within two miles of any active sage grouse lek in the Bodie Hills and Bridgeport Valley Management Areas to prevent disturbance to breeding and nesting sage grouse.

8. Backhoe operations will not occur between 11/1 and 4/1 in the Coleville Management Area to prevent disturbance to wintering mule deer.

9. No soil disturbing equipment or vehicles will occur on wet, poorly drained or erosive soils.

10. Soil layer separation and topsoil stockpiling will occur during soil pit construction.

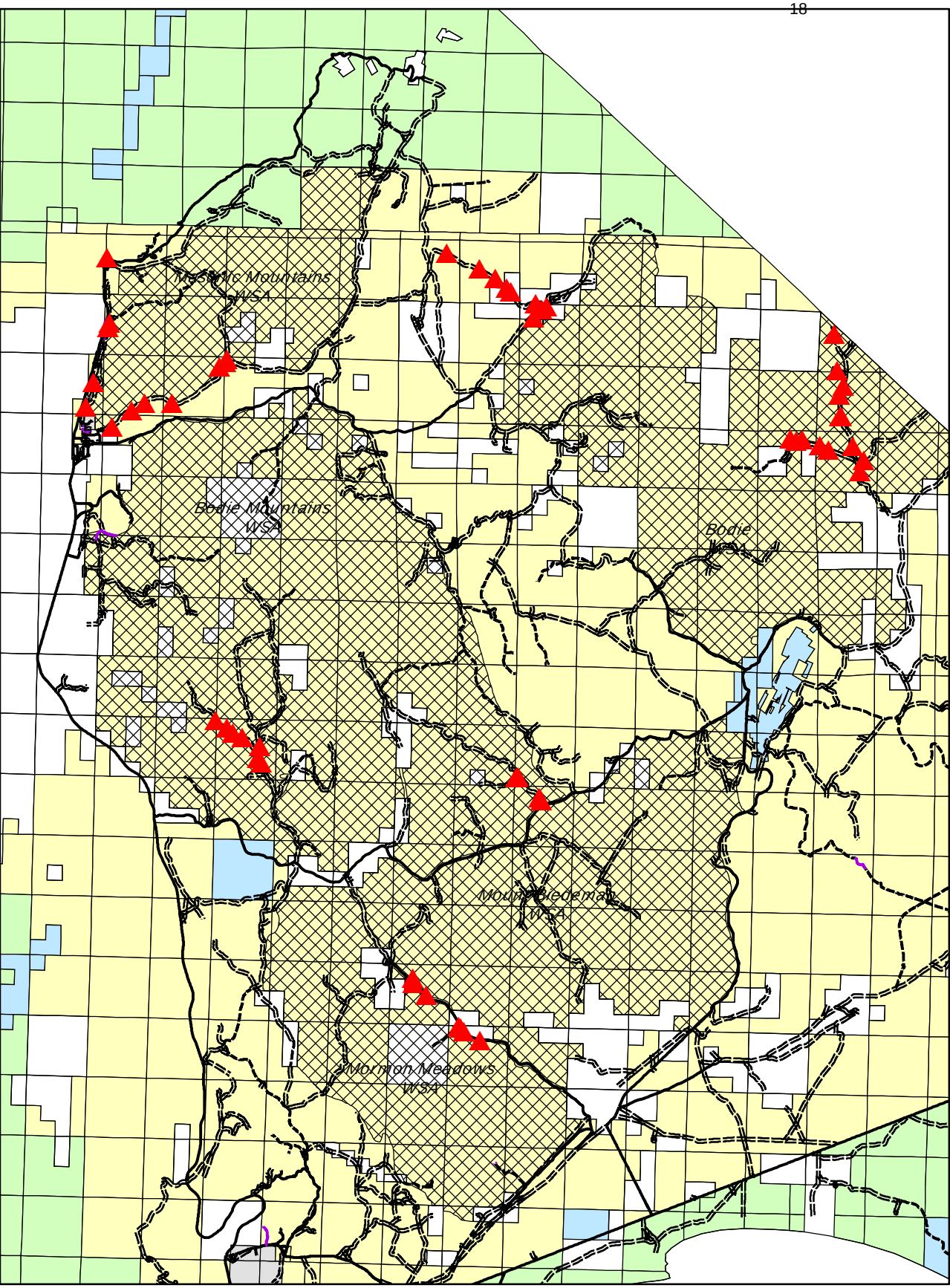
11. Sites in close proximity to dense cheat grass infestations will be seeded with native grass and shrub species to avoid the spread of noxious weeds.

12. Access to soil pits will follow Occupational Safety and Health Administration (OSHA) Confined Space Entry Regulations (29 CFR 1910.146), BLM Policy on Confined Space Entry (IM 95-19), and Mine Safety and Health Administration regulations (Public Law 91-173 as amended by Public Law 95-164).

Authorized Official: _____
Bill Dunkelberger, Field Office Manager

Date: _____

NRCS/BLM Proposed Soil Inventory Pit Locations - Bodie Hills Management Area



Land Status

- Wilderness Study Area
- Bureau of Land Management
- Forest Service
- State
- County
- Private

Note: This Map is Not a Legal Lands Status Report

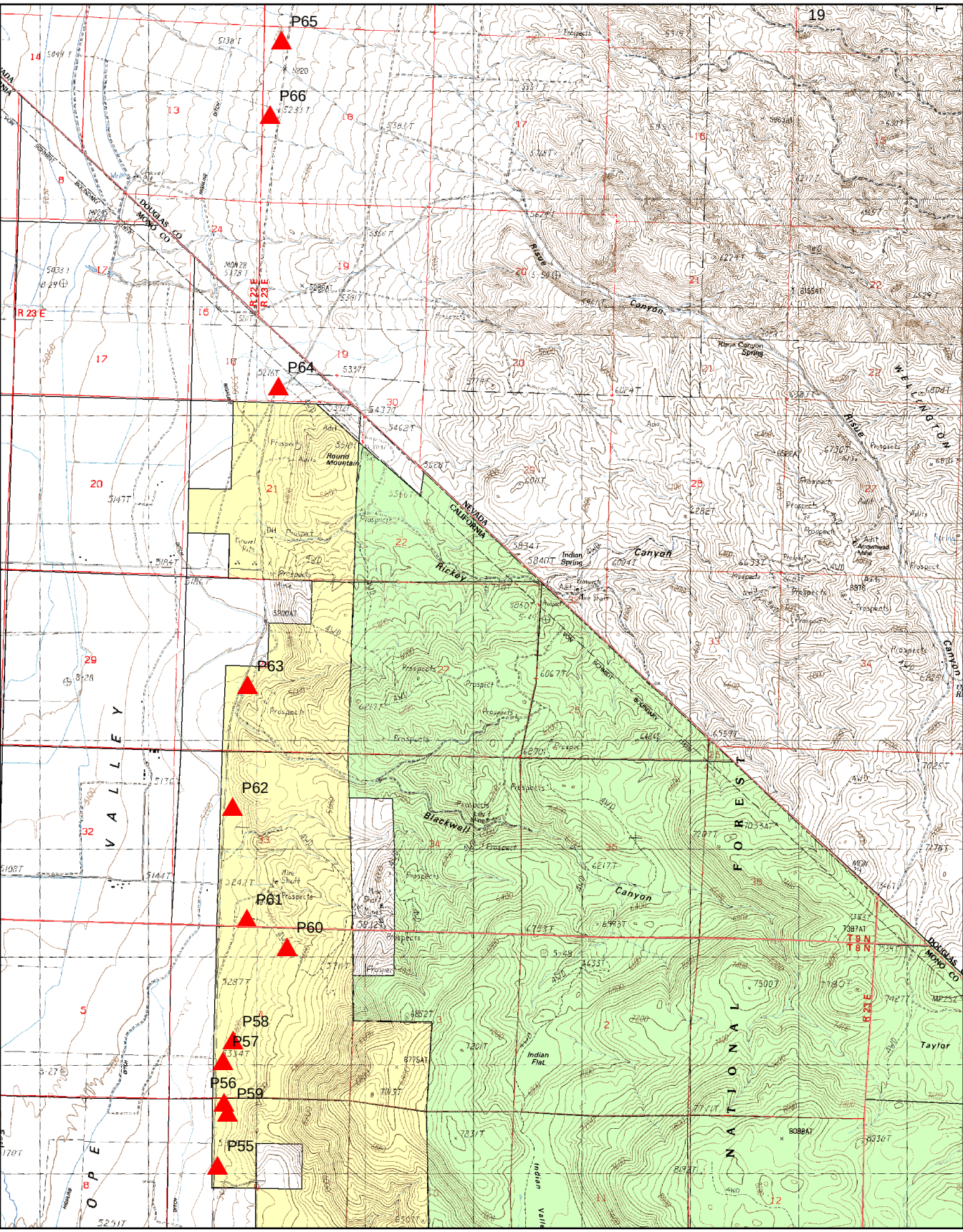
Proposed Backhoe Pit Locations

- Backhoe Pits

0 1.5 3 6 Miles

1:150,000

NRCS/BLM Proposed Soil Inventory Pit Locations - Coleville Managment Area



Legend

- Backhoe Pits
- Bureau of Land Management
- Forest Service
- Private

Note: This Map is Not a Legal Lands Status Report

0 0.5 1 2 Miles

1:50,000

Appendix 1. Vegetation Community and Soil Descriptions

The following are descriptions of the plant communities and general soils that occur within the three Management Areas addressed in this EA. Information is based on two baseline vegetation/soils inventories that were completed in 1997 by the BLM, in 1996 by the National Resource Conservation Service (NRCS) for Inyo County and a BLM Site Vegetation Inventory Method (SVIM) inventory that was completed for Mono County in 1984. Both inventories were completed to document plant cover and composition as well as develop ecological site descriptions.

Sagebrush Scrub and Sagebrush/Bitterbrush

Great Basin sagebrush scrub is dominated by *Artemesia tridentata* ssp. *tridentata* with inclusions of buck brush (*Ceanothus greggii* and *C. cordulatus*). Sagebrush/bitterbrush communities can be dominated by a wide variety of sagebrush species to include; (*Artemisia arbuscula, A. tridentata* ssp. *vaseyana*, *A. tridentata* ssp. *tridentata*, *A. tridentata* ssp. *wyomingensis* and *A. tridentata* ssp. *parishii*), and bitterbrush (*Purshia tridentata* var. *tridentata)*. Wyoming sagebrush is generally restricted to lower elevation portions of the above-mentioned Management Areas. Understory grasses such as Indian rice grass (*Achnatherum hymenoides*), desert needlegrass (*Achnatherum speciosum*), needle and thread (*Hespirostipa comota*), western needlegrass (*Achnatherum occidentalis*), and Thurber's needlegrass (*Achnatherum thurberianum*) can make up 15-20% of the overstory cover at the higher elevations of the allotments (Barbour and Major 1977). Additional species include, but are not limited to: oceanspray (*Holodiscus discolor),* snowberry (*Symphoricarpus rotundifolius)*, currant and gooseberry species; (*Ribes cereum, R. inerme, R. velutinum)*, service berry (*Amelanchier utahensis),* bittercherry (*Prunus emarginata),* spiny hop sage (*Grayia spinosa),* horsebrush (*Tetradymia canescens),* Nevada and green ephedra (*Ephedra nevadensis.* and *E. viridis),* and yellow and curly-leaved rabbitbrush (*Chrysothamnus nauseosus and C. viscidiflorus).* During years of high precipitation annual forbs are abundant and include, but are not limited to, species from the following genera: Astragalus, Arabis, Cryptantha, Eriogonum, Gilia, Lupinus, Onagaraceae, Phacelia, Phlox as well as genera in the Asteraceae Family.

Conifer Communities

Pinyon Woodland

Pinyon woodland communities occur throughout all the Management Areas and are dominated by an overstory (15-40% cover) of singleleaf pinyon pine (*Pinus monophylla)* with a sagebrush/bitterbrush understory. Perennial forbs include species from the following genera: Astragalus, Cryptantha, Eriogonum, and Phlox. Other conifer species include; western juniper (*Juniperus occidentalis* var. *australis*, Utah juniper (*Juniperus osteosperma*), and isolated stands of lodgepole pine (*Pinus contorta),* Jeffrey pine (*Pinus jeffreyi)*, limber pine (*Pinus flexilis)* and white pine (*Pinus monticola*).

White Fir

White fir (*Abies magnifica)* stands are isolated to approximately 370 acres in the Coleville Management Area and consist of old-growth trees with a diverse shrub understory of bittercherry (*Prunus emarginata*), snowberry (*Symphoricarpus parishii*), wild rose (*Rosa woodsii* var*. ultramontana*), and yellow currant (*Ribes aureum*).

Aspen

Aspen groves are a unique and important plant community type within the Coleville, Bridgeport, and Bodie Hills Management Areas. They range in size from small scattered stands to large, >5 acre complexes. Age-class distribution within these complexes is generally even-aged with moderate to low juvenile (sucker recruitment). Understory vegetation is dominated by California brome (*Bromus carinatus)*, *Hordeum jubatum,* hawksbeard (*Crepis acuminata*), *Descurania sophia,* currant (*Ribes velutinum)* and occassional snowberry (*Symphoricarpos rotundifolius*). In more impacted groves, understory vegetation is dominated by *Bromus tectorum,* mullein (*Verbascum thapsus),* Canada thistle (*Cirsium arvense)* and nettle (*Urtica dioica)*.

Riparian

Low to mid elevation Riparian areas within the Granite Mountain, Long Valley, Benton and Owens Valley Management Areas include the following plant communities (Barbour 1977): Transmontane Freshwater Marsh (permanently flooded), Freshwater Seep, Transmontane Alkali Marsh (seasonally flooded), Alkali Seeps, and Alkali Meadow (saturated soils). The wetland community types integrade following a gradient of moisture and alkalinity.

Lower Montane Meadow

The two dominant ecological meadow types within the Bridgeport Valley and Bodie Hills Management Area are mesic graminoid and dry graminoid (Weixelman, Zamudio 1999). Mesic graminoid meadows are wet to moist well into the growing season. Depth to saturation averages 34 cm. The most common soil taxa are Typic Cryaquoll with a peat or muck rich surface layer. This type is most common on drainage ways, but can also be found on floodplains. Dominant species in the mesic graminoid meadow include, but are not limited to: Nebraska sedge (*Carex Nebrascensis), Carex simulata, Carex lanuginosa, Carex utriculata*, *Deschampsia cespitosa, Hordeum brachyantherum, Muhlenbergia filiformis, Epilobium ciliatum, Stellaria longipes var longipes* and *Aster occidentalis.* Willow stands can border these communities and include such species as, *Salix geyeriana*, *S. lemmonii, S. lutea* and *Salix exigua*.

Dry graminoid meadows are most commonly found on trough drainage ways and stream terraces. Soils lack saturation and the most common soils are Haplocryolls indicated by dark, mollic surface horizons. Dominant species in the dry graminoid

meadow include, but are not limited to: *Poa secunda* ssp. *juncifolia, Muhlenbergia richardsonis, Carex praegracilis,* thin-stemmed wheatgrass (*Elymus trachycaulus), Carex filifolia,* Baltic rush (*Juncus balticus), Penstemon rydbergii, Gayophytum diffusum, Trifolium monanthum,* and yarrow (*Achillea millefolium).*

Soils

Coleville/Bridgeport/Bodie

Dominant soils are grouped into four main types and are derived from metamorphic, volcanic and granitic parent materials. The first soil type occurs on nearly level to gently slopes with cooler soils occurring in closed, drained to internally-drained basins that are sometime saline to alkaline. The second type occurs on moderately sloping to steeply sloping sites and comprise well-drained cool and cold soils of the Bodie Hills; many are very rocky to cobbly in texture. The third type occurs on nearly level to steeply sloping sites on high terraces of Mono Lake and low foothill slopes or alluvial fans of the Bodie Hills and are mostly sandy or very gravelly in texture. The fourth type occurs on moderately to steeply sloping sites and are comprised of the cold soils on the Sierra Foothill-slopes and glacial deposits.

Soils that are sandy, strong cobbly, and/or very gravelly may tend to limit the establishment of seeds and seedling development. Very shallow soils may also restrict water infiltration and plant rooting. These soils occur primarily on slopes and ridges.

There is potential water erosion mainly along stream banks, in stream channel bottoms, in meadows, and at springs. Potential wind erosion problems would more likely exist in the Mono Basin in soils with high surface concentrations of fine sand.