# Department of the Interior logoBLM logoUnited States Department of the Interior

BUREAU OF LAND MANAGEMENT

El Centro Field Office

1661 So. 4th Street

El Centro, CA 92243

## Environmental Assessment

## CA-670-EA2004-45

Restoration and Signing for the Western Colorado Routes of Travel Plan (WECO) and Northern and Eastern Colorado Management Plan (NECO) areas within the El Centro Resource Area.

This EA is tiered to the WECO Route of Travel (ROT) EA for the geographic area previously addressed in the WECO ROT EA.

This EA is tiered to the NECO EIS for the geographic area previously addressed in the NECO EIS.

### Purpose and Need

The restoration project areas covered under WECO and NECO which includes the Plaster City Open Area and the Superstition Mountain open areas are located within a two to three hour drive from Los Angeles, Orange County, Riverside, San Diego (CA) and Tucson and Phoenix (AZ). These areas are popular and highly valued recreation resources that provide, in addition to OHV use, other recreational opportunities including hiking, horseback riding, wildlife and scenery viewing, picnicking, rock hounding, photography, nature study and environmental education, camping, sightseeing, and driving for pleasure. There are also unique destinations such as the de Anza Trail, special natural areas such as the Crucifixion Thorn Natural Area, and the historic Tumco mining town site. Also, opportunities abound to visit rare archaeological sites such as the Yuha Geoglyphs, or intaglios, and fossil-bearing outcrops such as the Yuha Desert Shell Beds and Fossil Canyon and geologic sites such as the Hauser Geo beds. However, the steadily increasing population growth in southern California and western Arizona metropolitan areas and the expanding popularity of OHV recreation have resulted in a major increase in visitation to all recreation areas managed by the El Centro Resource area.

The increase in use within the El Centro Resource area has resulted in proliferation of off-route driving in limited-use areas such as the ACECs and in development of unapproved routes. The results are threats to National Register Eligible cultural and archaeological resources and loss of habitat for the flat-tailed horned lizard (Phrynosoma mcallii – FTHL), Desert Tortoise (Gopherus agassizi), and the Peninsular bighorn sheep (Ovis canadensis cremnobates).

BLM in the WECO ROT EA and NECO EIS has now designated routes as open, limited or closed. As a part of the Biological Opinion, issued by the US Fish and Wildlife Service, for the WECO ROT EA, BLM is required to rehabilitate the areas of closed routes that cross open or limited routes. The US Fish and Wildlife Service believe that rehabilitating these closed routes would reduce the likeliness of someone using the closed route. As an alternative, BLM may sign the routes closed and maintain the signs. BLM is also required to sign the open and limited routes so that the recreational users may have a more enjoyable recreational experience and will be better able to stay on the open and limited routes. BLM would also like to rehabilitate the areas that have been impacted from illegal off route travel. Many of these illegal tracks are followed by other recreational users and have the potential to negatively impact cultural resources through which they may pass.

With restoration of closed routes and illegal impacts associated with motorized vehicles, improved habitat conditions will occur. Additionally installation of informational Kiosks and improved signing will help reduce off route of travel which will also help to improve habitat.

### Land Use Plan Conformance

The proposed project is in conformance with the California Desert Conservation Area (CDCA) and its Record of Decision, as amended.

### Alternatives

*Note: Public lands are intermingled with private lands and lands managed by other agencies. The alternatives considered only apply to lands managed by BLM. BLM decisions do not apply to land that is not managed by BLM. The owners and managers of other lands may allow, close or restrict the use of segments of routes that cross their land. Prior to BLM restoring any route that is closed to public use, U.S. land status records for the public domain will be reviewed to verify the status of the route and ensure that it has not been authorized by a right-of-way grant or temporary land use permit.*

**Proposed Action Alternative**

The proposed action restores routes closed under the WECO ROT EA and NECO EIS. It also would restore additional impacts caused by off route travel by motorized vehicles, install directional and other signs, install barriers where needed, install kiosks at key points, and protect sensitive archaeological resources with new fencing or barriers.

Listed below are techniques that may be used to perform restoration work:

Vertical/Horizontal Mulching:

Dead plant material placed at the beginning of closed routes, off of BLM-designated routes, can disguise these routes and deter additional vehicle traffic. Large down Ocotillo’s and desert shrubs on the soil surface act as barricades. Similarly, dead shrubs or branches planted upright in the soil make the site blend in with surrounding vegetation. Vertical mulch also benefits restoration by trapping wind-blown seeds and lessening wind erosion just above the ground surface. This work shall be primarily done with hand tools. Little soil disturbance would be needed except where mulch is “planted” and thus requires a small hole to anchor the material.

Barricading with Rice Straw Bales:

Certified weed-free bales of rice straw can be used to obstruct vehicle travel in areas used for hill climbs and on closed routes. The bales also help to lessen soil erosion and slow water flow down slopes. Over time, rice straw bales break down and act as mulch for plants that have grown from seeds trapped on the upslope side of the decomposing bale. Bales appear to be most effective as a barricade when partially buried Burying bales 6-10 inches in the soil makes them extremely difficult to move especially once a rain event has caused surrounding soil to settle in around the rice straw.

Fencing and Rocks:

Fences may be necessary to cut off travel on closed routes when the route is too wide to be effectively disguised with vertical mulch or blocked by hay bales. Other barricades may consist of a row of large rocks and boulders to deter use. Placement of rocks requires no equipment and little or no soil disturbance is associated with their use. Large Boulders may be used occasionally in high non-compliance areas. These boulders may necessitate the use of heavy machinery (e.g. backhoe, small crane). BLM will consider whether the use of heavy equipment and the associated impacts from using this equipment (soil compression, tracks, etc.) is outweighed by the benefit of their use. Fencing in some areas may be used to deter impacts.

Mechanical Ripping:

Closed routes with repeated vehicle traffic may require soil de-compaction to increase water infiltration. The use of a “backhoe” or “Bobcat” may be used to break up the surface compaction and to pull down berms. Improving water infiltration allows plants to become established and burrowing animals such as ants, rodents, and foxes, to inhabit the soil again. Soil de-compaction is also necessary for root penetration to adequate soil depths, mycorrhizal interactions, and microbial populations. Micro sites/habitats are also created with the roughening of some soil types, and re-vegetation may be accelerated with mechanical ripping. If ripping is required, caution should be utilized as to avoid unnecessary impacts. Ripping will be shallow, no more than 2” will be the limit. The distance ripped will also be short, no more that ten feet by ten feet maximum in an area to conserve the top soil.

After ripping, some sites will have ripping marks raked, others will be left with roughened soil, while others will have every other 10-foot segment raked out. Future restoration attempts may want to de-compact whole trespasses to speed up natural re-vegetation. If seed collection is successful in a given year, or over a number of years, broadcast seeding may be done at the time of ripping beyond line of sight to further accelerate re-vegetation. Ripping will be used minimally and only when necessary due to severe compaction of the soil as it is recognized that ripping in the desert environment may result in the loss of the top soil due to wind and erosion.

Biodegradable Fabric Ground Covers:

Perforated biodegradable cloth can cover ground surfaces subject to wind or water erosion and reduce the rate of erosion. Geotextiles also provide surface structure for trapping and holding wind- or water-borne seeds for natural germination and establishment.

Soil Pitting:

Soil pitting, contours the soil to direct water flow and draw wind-blown seeds to focal spots on the ground. Pitting involves creating bowls approximately one to two feet wide and six inches deep. This practice creates favorable micro-sites in the bowls that may increase seed germination and small plant growth. In conjunction with pitting, shovels will be used to shave topsoil from under surrounding shrubs (plugging) and transfer the material to the pit hole.

Rainfall Catchments:

A rainfall catchment is an ancient method of irrigation used by indigenous peoples in arid environments. These V-shaped, earth or rock, water flow barriers reduce soil erosion and focus water flow on certain spots to aid initial plant recruitment.

Soil Imprinting:

Soil imprinting entails raking small trenches to roughen the texture on surface soil and to collect wind-blown seed. Hand tools such as shovels and rakes are used.

Raking:

On closed routes and impacts formed by a single trespass (one person at one time) or routes without trampled vegetation or compacted soil, work crews shall rake, smooth (knock down berms) with the back of a rake, or sweep with a broom the top one inch of soil to hide evidence of tracks. Soils may also be contoured to match surrounding landscape, effectively camouflaging closed routes and impacts.

Terracing with Berms/Check dams:

To prevent the formation of gullies and disperse water to surrounding vegetation, workers may want to contour slopes of hill climb areas. Berms, rock check dams, or terraces slow and disperse water flow. Hand tools will be used to disturb the top one to six inches of soil.

Seeding:

Seed may be spread within rainfall catchments or soil pitting to accelerate natural regeneration. Raking underneath adjacent vegetation or collecting dried seedpods still attached to plants may collect seed. Broadcast seeding may also be done in highly denuded areas. Locally collected seeds will be used. Seeds should be collected from an area within 100 miles, 500 vertical feet, and two inches of annual precipitation of a restoration site. No more than ten percent of the seeds from one individual will be collected and multiple individuals will be harvested to guarantee genetic diversity.

Spraying Permion®:

Permion is desert varnish colorant that disguises hill climbs and other disturbed sites viewed from afar. Spraying the trail with Permion matches the color of a disturbed site to the color of the surrounding desert. Permion contains manganese, salts, and other ingredients to simulate the natural desert varnish found on rock surfaces in arid environments. This compound shall be used sparingly, using a backpack sprayer, and only on disturbed rock surfaces that contrast sharply with the surrounding landscape.

Signing and Kiosks:

Insufficient or ambiguous signs on BLM-designated routes cause responsible users to accidentally ride off designated routes. To help visitors to stay on designated routes BLM recreation staff will maintain the route markers and repair or replace as necessary. Various signs may be appropriate to site needs; and recreational, directional, special designation, or informational signs may be needed. Special designation signing shall also be used to differentiate the “Limited” routes from the “Open“ routes and to indicate the De Anza National Historic Trail and the California Back-Country Discovery Trail.

Removing Manufactured Materials and Structures:

The restoration crew will remove litter and other unsightly manufactured materials or structures of no historical or cultural significance. If the restoration team discovers materials that may have historical or cultural significance, they shall consult with the archaeologist at the El Centro FO. The archaeologist will assess whether removing any materials that may have historical or cultural significance is appropriate and what archeological documentation is required.

Eradicating Noxious Weeds:

The restoration crew will when applicable, weed out noxious non-native plants and perennial shrubs growing on closed routes and trails by hand or with hand tools. If the infestation of noxious weeds appears to require applications of herbicide, the restoration team shall consult with the BLM El Centro FO natural resource specialist coordinating the noxious weed program at the FO to arrange for herbicide treatments by an integrated pest management person licensed by the State of California.

Monitoring for presence of noxious weeds species is an important part of any management program. Preventative measures to ensure that soil disturbance do not promote weed infestation will be part of all restoration site management. Specific details for prevention of noxious weeds will depend on the eventual appearance of species and on consultations with BLM botanists and noxious weed specialists

PROTOCOL FOR REHABILITATION OF ROUTES

Soil & Water

The water holding capacity of soil is largely determined by 2 factors, organic debris and clay. Organic debris is responsible for holding approximately 80% of soil moisture, with clay making up the balance. It is important in this respect that organic debris is not lost, or is added, during the rehabilitation process.

Organic debris can be lost through ripping the soil, because of debris still lodged in compacted areas, or through a level substrate where topography fails to hold organic debris when deposited. This can be avoided by diversifying the terrain with pitting less than 3 inches, raking, vertical mulching, or all three methods.

Soil Decompaction

Rather than decompacting soil, a process in which valuable organic debris, minerals, and topsoil can be lost, building up soil substrate can work better in the long run, and is much less expensive. This method allows organic debris and windblown sediment to build up in an area, which in turn allows annual plant growth to break up compacted soil, resulting in a lower loss of nutrient to plants. In extreme cases, ripping to 2 inches can be used, but should only be used in short distances, and preferably with light equipment such as a sharp spring tooth or aerator. If ripping is to be used, a sheepsfoot imprinter shall be used shortly thereafter in order to provide light re-compaction.

Plant Growth

Biologically, three phases of rehabilitation should occur in this area, litter accumulation, annual plant growth, perennial plant growth, and bio-immigration. The first is the accumulation of litter on the surface as described above.

This can be achieved by shallow pitting, (< 3 inches) which allows wind blown seeds to accumulate naturally in depressions, or by applying vertical mulch, which will also allow litter to build up. Vertical mulch will also act as a deterrent to driving over the surface.

Perennial plant growth will take place after sufficient nutrients have entered the soil, while bio-immigration will occur when plants produce enough seed to attract insects, reptiles, and so on.

Ripping: In order to rip effectively, activity will be limited to hand tools when in aridisols (durids and calcids) which are mainly located in the Yuha basin and West Mesa This activity will not be performed by heavy equipment when aridisols are present. Ripping should be extremely shallow (<2.0Inches), be re-compacted slightly in order to trap organic matter, and only where the presence of the coleche layer is not present within at least 20”. Narrow OHV paths should be re-contoured when possible following the above rules and be re-compacted in order to avoid the loss or organic debris and soil moisture.

If ripping is required, a diagonal approach should be used. This method leaves approximately 60% of the compaction, while loosening the remainder.

For example, a long narrow road would be ripped 1-2 inches in depth at 45 degree angles, leaving a series of equilateral triangles of compacted soil with the triangle base along either edge of the road.

The following are a part of the proposed action and were incorporated into the proposed action as mitigation

Approval and Data:

All restoration activities shall be closely monitored by a BLM project lead. For each geographic area to be restored, all actions whether vertical mulching, ripping, approved straw bales, or other methods will be approved, prior to rehabilitation efforts, by a BLM employee team consisting of, at a minimum a manager, recreation specialist, botanist, archeologist, wildlife biologist and the project lead. This team will approve the planned action of any contractors or volunteers conducting rehabilitation work prior to the beginning of the project. Data forms, if not presently available, shall be developed prior to restoration efforts, with copies kept on file with the EL Centro Field Office, no later than 45 days after site restoration completion.

Copies of restoration generated data, including long term monitoring data forms, GIS layers, location data, and techniques used shall be kept on file with the El Centro Field Office project manager.

Wildlife:

To avoid “Take” including harassment injury, and or death, to wildlife species listed under the Endangered Species Act, or a management strategy, including those animals listed as “Sensitive”, all activities included in restoration sites shall first be approved by the El Centro staff as noted above.

Restoration activities will be curtailed between 05/31 & 08/31, when within 100 meters of San Sebastian Marsh Proper, in order to reduce impacts to Yuma Clapper Rail breeding activity.

The Flat-Tail Horned Lizard Rangewide Management Strategy will be followed. BLM will provide training to employees implementing restoration activities on how to identify sensitive species. Employees will utilize best management practices to ensure that impacts will be kept to a minimum. Workers will check under vehicles to avoid running over animals seeking shade underneath. When using heavy equipment, a trained worker will survey in front of equipment to ensure that animals are not harmed.

A flat-tailed horned lizard or desert tortoise monitor will be present during heavy equipment use, in order to move any lizards or tortoises encountered, or to provide direction to wait until the lizard or tortoise has left he area.

If working in Desert Tortoise habitat, all Desert Tortoise mitigation measures, per The Desert Tortoise Recovery Plan, shall be implemented. All stipulations in the NECO Biological Opinion, as well as the WECO Biological Opinion shall be adhered to.

Law enforcement for off route travel and unauthorized camping for all areas must be enforced. The public will not be allowed to take any protected species. An educational program that includes information about on route travel in limited areas and conservation of plants by avoidance is required. Clear signing of all routes is necessary.

Archaeology:

Actions, which occur through, plan implementation and which have the potential to affect cultural resources will be subject to review under Section 106 of the National Historic Preservation Act. The State Protocol Agreement between the Bureau of Land Management, California and the California State Historic Preservation Officer will be followed.

The restoration project areas will be surveyed at the Class III (100%) level. All cultural resources identified during surveys will be evaluated for eligibility to the National Register of Historic Places, and the effect of the project on those properties will be evaluated. Whenever possible, the scope of projects will be redesigned to avoid historic properties. If avoidance is not possible, BLM will consult with the State Office of Historic Preservation to resolve adverse effects. The Native American Tribes will also be consulted in the event of an adverse effect to a National Register Eligible a prehistoric, an ethnohistoric, or a sacred site.

Law enforcement for off-route travel and unauthorized camping for all areas should continue to be enforced.

### No Action Alternative

If no restoration, signing, and kiosk placements occurs degradation to lands managed by the El Centro Resource area will continue. Habitat for the Peninsular Bighorn Sheep, Flat Tailed Horned Lizard, and Desert tortoise will continue to degrade and the requirements of the biological opinion issued by the U.S. Fish and Wildlife Service for the WECO and NECO plans would not be implemented.

### Affected Environment

A review of the existing environment shows that the following list of critical elements of the human environment are not present or would not be effected by this proposed action(s); therefore they will not be addressed in this EA: Farm Lands (Prime or Unique), Floodplain, Wild and Scenic Rivers, & wilderness.

This EA is tiered to the NECO EIS and the WECO ROT EA. Both of these documents provide great detail of the affected environment. A brief summary of the parameters that have the most likelihood of being affected by this action are included below:

Vegetation:

The project area embraces several vegetation types. The Peninsular Ranges, covered by vegetation types such as chaparral and juniper woodlands, abruptly cascades down the east escarpment with its ecotones between chaparral and Sonoran desert scrubs. Riparian habitats and springs infrequently emerge in canyons and valleys.

The East Mesa area is dominated creosote bush scrub with an under story of Schismus barbatus, saltbush and burrobush (white bursage). In the Yuha and West Mesa are dominated by creosote as well, with white bursage as being predominant. Spanish needle, wooly plantain and sand verbenia are common annual plants, especially abundant in springs following wet winters. Other plant associations found include salt-bush scrub and small areas of desert dry wash.

The Salton Sea is surrounded by the ancient Lake Cahuilla lakebed that consists of alkaline and saline soils. Vegetation on these soils is dominated by open chenopod scrubs and washes with slightly higher plant diversity. Dominant, perennial plant species are saltbush, iodine bush, and inkweed. The many washes are dominated by saltbush, tamarisk, and coldenia with catclaw acacia and thornbush also commonly found. The San Felipe Creek, a major watershed of the western side of the Imperial Valley, also drains into the Salton Sea. Periodic flash flooding resulting in very low plant cover scours much of the San Felipe Creek. Some areas establish vegetation between flooding events. These areas are either dominated by tamarisk scrub and trees, saltbush, inkweed, and iodine bush, or by freshwater marsh dominated by cattails, bulrush, and reeds.

In years of good rainfall, the alluvial fans on the eastern slopes of the Jacumba Mountains exhibit spectacular, diverse wildflower display. There is a relatively large number of endemic species that are related to more widespread species. One of the most conspicuous species of these alluvial fans is ocotillo. Other perennial plant species are creosote bush, burrobush, dalea, buckwheat, mormon tea, rabbitbush, and brittlebush.

T&E Vegetation:

Vegetation: The project area embraces several vegetation types. The Peninsular Ranges are covered by vegetation types such as chaparral and juniper woodlands. This habitat abruptly cascades down the east escarpment with ecotones between chaparral and sonoran desert scrubs. Riparian habitats and springs infrequently emerge in canyons and valleys. Table 1 lists the plant species that can be found within the project area and their legal status.

Psammophytic scrub-This habitat occurs in active dune sands in the Algodones Dunes, on Superstition Mountain, and in scattered areas of the Yuha, and East and West Mesas. The vegetation occures most frequently between active dunes in bowls (depressions). As dunes shift, the bowls shift as well. This habitat is classified under the California Desert Plan as a very sensitive unusual plant assemblage (UPA). The soils are made up of fine Rosita sands. The dominant species are longleaf jointfir (Ephedra trifurca) and Colorado Desert buckwheat (Eriogonum deserticola).

Desert Dry Wash and Microphyll Woodland – These woodlands occupy areas where rainfall drains from distant mountain ranges or in desert washes. Plants commonly associated with this habitat are blue palo verde (Parkinsonia florida), desert ironwood (Olneya tesota), smoketree (Psorothamnus spinosus), and, to a lesser degree, western honey mesquite (Prosopis glandulosa var. torreyana). Shrubs associated with this habitat are creosote bush and brittlebush.

Creosote bush scrub- Creosote bush scrub generally occurs on alluvial fans, mesas, and sinks that occur throughout Imperial County. Creosote bush scrub is the dominant plant community in the planning area. This vegetation association contains creosote bush (Larrea tridentata), goldenhills (Encelia farinosa), and burrobush (Ambrosia dumosa), and numerous annuals that appear when rainfall is sufficient. Creosote bush scrub is associated with two special-status species of vertebrates, the flat-tailed horned lizard (Phrynosoma mcallii) and the Colorado Desert fringe-toed lizard (Uma notata).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 1. Native Plant Species of Management Concern in the BLM El Centro Field Office | | | | | | | | |
| Scientific Name | Family | CEQA Status | Federal  Status | Management Area | | | | Notes |
| E | I | W | Y |
| Eryngium aristulatum var. parishii | Apiaceae | CE | FE |  |  |  |  | not a Sonoran Desert species |
| Chaenactus carphoclinia var. peirsonii | Asteraceae | List 1B | - |  |  |  |  |  |
| Geraea viscida | Asteraceae | List 2 | - |  |  |  |  | not a Sonoran Desert species |
| Helianthus niveus ssp. tephrodes | Asteraceae | CE | BLMS |  |  |  |  |  |
| Hulsea mexicana | Asteraceae | List 2 |  |  |  |  |  |  |
| Malperia tenuis | Asteraceae | List 2 | - |  |  |  |  |  |
| Palafoxia arida var. gigantea | Asteraceae | List 1B | BLMS |  |  |  |  |  |
| Xylorhiza orcuttii | Asteraceae | List 1B | BLMS |  |  |  |  |  |
| Bursera simarouba | Burseraceae | List 2 | - |  |  |  |  | in the Ocotillo Wells area |
| Escobaria alversonii (=Coryphantha alversonii, Escobaria vivipara ssp. alversonii) | Cactaceae | List 4 | BLMS | ? | ? | ? | ? |  |
| Opuntia munzii | Cactaceae | List 1B | BLMS |  |  |  |  | only in Chocolate Mts. |
| Argythamnia claryana (=Ditaxis claryana) | Euphorbiaceae | List 2 | - |  |  |  |  |  |
| Chamaesyce platysperma | Euphorbiaceae | List 1B | BLMS |  |  |  |  |  |
| Croton wigginsii | Euphorbiaceae | CR | - |  |  |  |  |  |
| Astragalus douglasii var. perstrictus | Fabaceae | List 2 | - |  |  |  |  | not a Sonoran Desert species |
| Astragalus insularis var. harwoodii | Fabaceae | List 2 | - |  |  |  |  |  |
| Astragalus magdalenae var. peirsonii | Fabaceae | CE | FT |  |  |  |  |  |
| Calliandra eriophylla | Fabaceae | List 2 | - |  |  |  |  |  |
| Lotus haydonii | Fabaceae | List 1B | - |  |  |  |  |  |
| Lupinus excubitus var. medius | Fabaceae | List 1B | BLMS |  |  |  |  |  |
| Koeberlinia spinosa var. tenuispina | Koeberliniaceae | List 2 |  |  |  |  |  |  |
| Pholisma sonorae | Lennoaceae | List 1B | BLM |  |  |  |  |  |
| Eucnide rupestris | Loasaceae | List 2 | - |  |  |  |  |  |
| Mentzelia hirsutissima | Loasaceae | List 2 | - |  |  |  |  |  |
| Herissantia crispa | Malvaceae | List 2 |  |  |  |  |  |  |
| Ipomopsis effusa | Polemoniaceae | List 2 | - |  |  |  |  |  |
| Ipomopsis tenuifolia | Polemoniaceae | List 2 |  |  |  |  |  |  |
| Nemacaulis denudata var. gracilis | Polygonaceae | List 2 | - |  |  |  |  |  |
| Selaginella eremophila | Selaginellaceae | List 2 |  |  |  |  |  |  |
| Castela emoryi | Simaroubaceae | List 2 | - |  |  |  |  |  |
| Lycium parishii | Solanaceae | List 2 | - |  |  |  |  |  |

Wildlife:

Several distinct habitat types exist within the El Centro Resource area including dunes, desert playas, creosote flats, riparian, and desert woodland. Common mammals of the area include jackrabbit, badger, kit fox, gray fox, coyote, bobcat, mule deer, kangaroo rat, and round-tailed ground squirrel. Some of the common reptiles of the area are the flat-tailed horned lizard, desert iguana, western whiptail l, Colorado fringe-toed lizard, side-blotched lizard, zebra-tail lizard, leopard lizard, banded gecko, desert spiny lizard, sidewinder, patchnose snake, shovel- nosed snake, coachwhip. The close proximity to the Salton Sea and Imperial Valley agriculture results in a great number of waterfowl, and shorebirds (gulls, plovers, wimbrels, etc…) to pass through our resource area regularly. The most common bird species inhabiting the desert are black-tailed gnatcatcher, verdin, morning dove, housefinch, Say’s phoebe, ash-throated flycatcher, ladder-backed woodpecker, and Gambel’s quail. Numerous species of neotropical migrant migrate through the area during spring and fall.

Several federally or state-listed species occur in the project area: the desert pupfish, Cyprinodon macularius, (federal and state endangered) in San Felipe Creek, the Yuma clapper rail, Rallus longirostrus yumanensis, (federal endangered) and black rail, Laterallus jamaicensis, (state threatened) along the All-American Canal, the Peninsular Ranges population of bighorn sheep, Ovis Canadensis cremnobates, (state threatened, federally endangered), the least Bell’s vireo, Vireo belli pussillus, (federally endangered), southwestern willow flycatcher, Empidonax extimus trailli, (federally endangered), and lowland leopard frog (Rana yavapiensis) The last three species may occur in San Felipe Creek and along the All-American Canal, as well as in small isolated drainages in the Peninsular Ranges’ eastern slope, such as Jacumba Jim Canyon in the In-ko-pah Mountains, where the vireo was seen in 1993 (Wright and Watkins, personal observation). Table 2 lists sensitive animal species in the El Centro resource area and their legal status

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 2. Sensitive Animal Species in the El Centro Resource Area | | | | | | | |  |  |  |  |
| Scientific Name | Common Name | CEQA Status | Federal  Status | Management Area | | | | | | | Notes |
| E | I | W | Y | | | |
| Anomala carlsoni | Carlson’s dune beetle |  |  |  |  |  |  | | | |  |
| Anomala hardyorum | Hardy’s dune beetle |  |  |  |  |  |  | | | |  |
| Pseudocotalpa andrewsi | Andrew’s dune scarab beetle |  | BLMS |  |  |  |  | | | |  |
| Cyprinodon macularis | desert pupfish |  | FE |  |  |  |  | | | |  |
| Gila elegans | bonytail chub |  | FE |  |  |  |  | | | | ???in Imperial Co. |
| Ptychocheilus lucius | Colorado squawfish |  | FE |  |  |  |  | | | |  |
| Xyrauchen texanus | razorback sucker |  | FE |  |  |  |  | | | |  |
| Scaphiopus couchi | Couch’s spadefoot |  | BLMS |  |  |  |  | | | |  |
| Rana yavapaiensis | San Sebastian leopard frog |  | BLMS |  |  |  |  | | | | - |
| Phrynosoma mcalli | flat-tailed horned lizard | ???? | BLMS/PFT |  |  |  |  | | | |  |
| Uma notata ssp. notata | Colorado Desert fringe-toed lizard |  | BLMS |  |  |  |  | | | |  |
| Sauromalus obesus | chuckwalla |  |  |  |  |  |  | | | |  |
| Coleonyx switaki | barefoot banded gecko | CT | BLMS |  |  |  |  | | | |  |
| Charina trivirgata ssp. rosafurca | rosy boa |  | BLMS |  |  |  |  | | | |  |
| Gopherus agassizi | desert tortoise | CE | FT |  |  |  |  | | | |  |
| Gavia immer | common loon | special concern #1 | \_ |  |  |  |  | | | | - |
| Phalacrocorax auritus | double-crested cormorant | special concern #2 | \_ |  |  |  |  | | | | - |
| Ixobrychus exilis ssp. hesperis | western least bittern | special concern #3 | BLMS |  |  |  |  | | | | - |
| Pelecanus erythrorhychos | American white pelican | special concern #1 | \_ |  |  |  |  | | | | - |
| Pelecanus occidentalis californicus | California brown pelican | CE | FE |  |  |  |  | | | | - |
| Plegadis chihi | white-faced ibis | special concern #1 | \_ |  |  |  |  | | | | - |
| Dendrocygna bicolor | fulvous whistling-duck | special concern #1 | \_ |  |  |  |  | | | | - |
| Accipiter striatus | sharp-shinned hawk | special concern #3 | \_ |  |  |  |  | | | | winter resident and migrant |
| Accipiter cooperi | Cooper’s hawk | special concern #3 | \_ |  |  |  |  | | | | winter resident and migrant; possibly nesting in microphyll woodland |
| Haliaeetus leucocephalus | bald eagle | SE | FPD |  |  |  |  | | | | no habitat on BLM lands |
| Buteo regalis | ferruginous hawk | special concern #3 | BLMS |  |  |  |  | | | | migrant and winter resident |
| Buteo swainsoni | Swainson’s hawk | ST | - |  |  |  |  | | | | migrant only |
| Parabuteo unicinctus | Harris’ hawk | special concern #1 | - |  |  |  |  | | | | formerly bred in the Imperial Valley, now extirpated |
| Circus cyaneus | northern harrier | special concern #2 |  |  |  |  |  | | | | sparse winter resident and migrant |
| Aquila chrysaetos | golden eagle | special concern #3 | BLMS |  |  |  |  | | | |  |
| Falco columbarius | merlin | special concern #1 |  |  |  |  |  | | | | winter resident |
| Falco peregrinus ssp. anatum | peregrine falcon | ST | R |  |  |  |  | | | | winter resident mostly near water |
| Falco mexicanus | prairie falcon | special concern #3 |  |  |  |  |  | | | | winter resident |
| Gymnogys californicus | California condor | CE | FE |  |  |  |  | | | | possible vagrant |
| Rallus longirostris ssp. yumanensis | Yuma clapper rail |  | FT |  |  |  |  | | | | potential habitat in San Sebastian Marsh |
| Laterallus jamaicensis ssp. cotumiculus | California black rail | CT | BLMS |  |  |  |  | | | | potential habitat in San Sebastian Marsh |
| Charadrius montanus | mountain plover | special concern #3 | PFT |  |  |  |  | | | | not on BLM lands; frequents irrigated fields in the Imperial Valley and shores of the Salton Sea in winter |
| Numenius americanus | long-billed curlew | special concern #3 |  |  |  |  |  | | | | not on BLM lands; frequents irrigated fields in the Imperial Valley and shores of the Salton Sea in winter |
| Larus atricilla | laughing gull | special concern #1 |  |  |  |  |  | | | | - |
| Sterna antillarum spp. browni | California least tern |  | FE |  |  |  |  | | | | - |
| Sterna nilotica ssp. vanrossemi | Van Rossem’s gull-billed tern | special concern #2 | BLMS |  |  |  |  | | | | - |
| Rynchops niger | black skimmer | special concern #3 |  |  |  |  |  | | | | - |
| Coccyzus americanus ssp. occidentalis | western yellow-billed cuckoo | CE |  |  |  |  |  | | | |  |
| Athene cunicularia | burrowing owl | special concern #2 | BLMS |  |  |  |  | | | |  |
| Asio flammeus | short-eared owl | special concern #2 |  |  |  |  |  | | | | - |
| Asio otus | long-eared owl | special concern #2 |  |  |  |  |  | | | | winter resident, possibly breeding in microphyll woodland |
| Micrathene whitneyi | elf owl |  |  |  |  |  |  | | | |  |
| Melanerpes uropygialis | Gila woodpecker |  |  |  |  |  |  | | | |  |
| Colaptes chrysoides | gilded woodpecker | special concern #1 |  |  |  |  |  | | | | in Colorado River valley; not found in microphyll woodland |

Wetland/Riparian:

Riparian and wetland areas are rare in the area, the most notable being San Felipe Creek and San Sebastian Marsh. San Sebastian Marsh and San Felipe Creek are located in Western Imperial County. They are bounded on the north by State Highway 78, on the east by State Highway 86, on the southeast by the Superstition Hills, and on the south and west by the Lower Borrego Valley. Approximately 11 miles of San Felipe Creek, Carrizo Wash, and Fish Creek Wash have been designated as critical habitat for the endangered desert pupfish by the United States Fish &Wildlife Service (USFWS). This critical habitat also includes a 100-foot riparian buffer zone. Other riparian areas include the wetlands along the All-American Canal and small isolated drainages in canyons of the Peninsular Ranges.

ACECs:

Eight ACECs are within the area of this action. The Federal Land Policy and Management Act (FLPMA), in Section 103(a), defines an Area of Critical Environmental Concern as an area “…within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or possesses, or to protect life and safety from natural hazards.” With the exception of the West Mesa ACEC, various activity plans exist for the ACECs.

Each of the Areas of Critical Environmental Concern (ACEC) within the project and the primary reason for being an ACEC are listed in the following table. Nearby ACECs that are outside the area of this action area (e.g., Coyote Mountains Fossil Site) are not included in the table. Most ACECs contain other important resources in addition to the primary reasons.

|  |  |  |  |
| --- | --- | --- | --- |
| AREAS OF CRITICAL ENVIRONMENTAL CONCERN | | | |
| ACEC  Number | ACEC | Primary Reason(s) for Establishment | Acreage |
| 61 | San Sebastian Marsh/San Felipe Creek | Cultural Resources, Riparian habitat, and Wildlife habitat (Desert Pupfish) sensitive plants | 6,565 |
| 64 | Yuha Basin | Cultural Resources and Wildlife habitat (Flat-tailed Horned Lizard), sensitive plants | 40,069 |
| 65 | Lake Cahuilla # 2 | Cultural Resources | 1,214 |
| 66 | Lake Cahuilla # 3 | Cultural Resources | 2,528 |
| 69 | Lake Cahuilla # 5 | Cultural Resources | 5,592 |
| 70 | East Mesa Flat-tailed Horned Lizard Habitat | Wildlife habitat (Flat-tailed Horned Lizard) and Cultural Resources | 42,768 |
| 71 | Lake Cahuilla # 6 | Cultural Resources | 4,724 |
| 82 | West Mesa | Cultural Resources and Botanical & Wildlife Resources (Flat-tailed Horned Lizard habitat) | 20,295 |
| 73 | Pilot Knob | Cultural resources and native American values. | 820 |
| 68 | Indian Pass | Cultural resources. | 1,765 |
| 67 | Singer Geoglyphs | Cultural resources | 1,885 |
| Source: Table 15, p. 104, California Desert Conservation Areas Plan 1980 As Amended (08/17/1999) | | | |

Cultural Resources:

Approximately 8,500 archaeological and cultural sites have been recorded within Imperial County. A review of approximately 2,859 archaeological site records and about 100 technical documents revealed that the largest majority of the prehistoric archaeological and cultural sites within the Imperial Valley or Salton Trough are associated with Lake Cahuilla (See figure-1), a name given to successive freshwater lakes formed when the Colorado River flowed north into the Salton Trough.

Prehistoric cultural resources tend to be located along shorelines of Lake Cahuilla and within the Yuha Desert. A sample pedestrian survey of the east and west shoreline areas (Gallegos 1980) found that the majority of the prehistoric archaeological sites, particularly those that are eligible for inclusion to the National Register of Historic Places, are located within 0.4 to 0.5 miles of one of the last shorelines of Lake Cahuilla. The exception is the Yuha Basin Area of Critical Environmental Concern where significant cultural resources are located throughout the basin. Archaeological investigations conducted since 1980 continue to support this hypothesized pattern of prehistoric occupation.

The historic sites reflect early exploration, travel, and development of water conveyance systems and agriculture, and minerals extraction. Because of the presence of the US/Mexico International Border, some of the historic sites also reflect political changes regarding immigration and military strategy.

Previous Investigation

The restoration planning area includes three archaeological districts listed on the National Register of Historic Places (NRHP):

The Lake Cahuilla Recessional Shoreline

The Yuha Basin Discontiguous District

The In-Ko-Pah Discontiguous District

The Yuha Geoglyph is also listed on the NRHP, and the All-American Canal, Coachella Canal, East Highline Canal, and Southern Pacific Railroad line have been determined to be eligible for listing on the NRHP. Approximately 139 prehistoric and 9 historic sites have been evaluated through the Section 106 process and determined eligible or potentially eligible for listing on to the NRHP.

The restoration planning area contains eight Areas of Critical Environmental Concern (ACEC) that were created to protect natural and cultural values:

Lake Cahuilla

East Mesa

West Mesa

Yuha Basin

San Sebastian March

Indian Pass

Pilot Knob

Singer Geoglyphs

Soils:

The beds of routes have reduced habitat value by compacting soils and removing vegetation with its associated cover. This may result in increased erosion and changes in hydrological processes along the route. All of the principle, natural, soil protective elements in the desert are highly vulnerable to disturbances such as vehicle use. A single vehicle pass on undisturbed soil can destroy many types of annuals, perennials, desert pavement, microfloral and mechanical crusts. Rates of disturbance from erosion, sedimentation, and modification of surface-runoff patterns are highly variable.

Recreation:

The California desert is a regional recreation resource, attracting not only local residents, but visitors from an area encompassing all of southern California, and to a lesser degree, other regions of the United States and Canada. The five activities in the project area and on BLM managed land in Eastern San Diego and Imperial counties receiving the most visits in fiscal year 1996 were:

Driving for pleasure (104,500 visits)

OHV use (98,800 visits)

Rock hounding (36,200 visits)

Hiking and walking (33,800 visits)

Camping (23,000 visits)

The five activities that visitors spent the most visitor hours participating in were:

Camping (980,800 visitor hours)

OHV use (939,200 visitor hours)

Backpacking (810,000 visitor hours)

Driving for pleasure (398,900 visitor hours)

Hiking and walking for pleasure (203,200 visitor hours)

While driving for pleasure or using an OHV accounts for most of the visits, campers spend the most time. Other common activities were nature studies, photography, viewing wildlife and scenery, visiting interpretive displays, backpacking, target practice, mountain bike riding, hunting, horseback riding, and fishing.

Some uses are localized. For example, driving for pleasure is generally done in a two wheel drive vehicle and is restricted to paved or graded roads. The small number of paved and graded roads in the Yuha and West Mesa areas account for a relatively low amount of driving for pleasure in the area, but OHV use is popular. There is a limited amount of equestrian type recreation activities in the east and west mesa areas. Desert Cavalcade, an equestrian event that is periodically done by various organizations, is held to reenact/honor the De Anza Expedition. With the incorporation of the De Anza Historic Trail it is anticipated that these uses may become more popular. The use of mountain bicycles is also increasing in popularity in portions of this planning area. Fishing is popular along the canal banks in the East Mesa area. Except for driving for pleasure, most activities generally use routes of travel to obtain reasonable access to areas of interest. Even wilderness use generally involved visitors utilizing a route of travel to reach the wilderness boundary.

Visitor use occurs primarily from October to May. Visitation is very low during the summer months due to the high temperatures.

### Analysis of impacts

The proposed action and the no action alternative have been analyzed to assess direct, indirect, and cumulative impacts to critical elements of the human environment listed below. Those critical elements that may be notably affected by the action are marked ‘yes’ in the table below. However, if the action may be mitigated so that the critical element is not notably affected the table is marked ‘no’. Those critical elements that are not notably affected by the action are marked ‘no’. In addition, those elements that are not present are marked ‘no’ on the table below. Each of the critical elements is discussed in further detail following the table. Please note that detailed analyses of cumulative affects are in the EA and EIS to which this document is tiered.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Critical Element | Proposed action | | No Action  Alternative | | Subject Area Expert |
| Notable Effect? | Yes | No | Yes | No |  |
| Air Quality |  | X | X |  |  |
| ACECs | X + |  | X- |  |  |
| Cultural Resources  Native American | X+ |  | X- |  |  |
| Farmlands, Prime / Unique |  | X |  | X |  |
| Floodplains |  | X |  | X |  |
| Social Economic |  | X |  | X |  |
| T&E Wildlife | X+ |  | X- |  |  |
| T&E Vegetation | X+ |  | X- |  |  |
| Water Quality  Wetlands  Riparian Zones | X+ |  | X- |  |  |
| Wastes, Hazardous/Solid |  | X |  | X |  |
| Wild and Scenic Rivers |  | X |  | X |  |
| Wilderness |  | X |  | X |  |
| Visual | X+ |  | X- |  |  |
| Recreation | X+ |  | X- |  |  |
| Environmental Justice |  | X |  | X |  |
| Energy Policy |  | X |  | X |  |

#### **Air Quality**

Proposed Action

Compared to existing conditions, the air quality should increase during the activity period due to the use of vehicle to travel to the project site and the level of raking types of movement during the project. Long term, air quality should improve under this alternative since closed routes would no longer be used illegally and releasing dust during use and also dust would not be released from the wind blowing across the closed roads once they are restored and vegetated or crusted over. In addition the signing of open and limited routes and the enforcement of the designation and land use should result in less off route travel. The off route travel creates new roads which increases the particulate matter emissions due to vehicular use and wind. This alternative also includes the mitigation requirement to restore closed roads to a natural desert landscape. This will result in fewer emissions due to the inability to easily use closed roads and the reduction in emissions due to wind.

No Action Alternative

Air quality would remain as is or possibly degrade under this alternative due to the continuing release of dust from driving on closed routes or wind action.

#### **ACECs**

Proposed Action

The proposed action would affect ACECs be improving their condition.

No Action Alternative:

The no action alternative would negatively affect ACECs by encouraging the continued off route travel since the ACECs would not have signed routes and people would continue to use closed routes and illegal trails.

#### **Cultural Resources and Native American Concerns**

Proposed action:

The proposed action alternative could have a positive affect on cultural resources if the route signing and restoration keeps people on the open and limited routes.

No Action Alternative:

The no action alternative would negatively affect cultural resources by encouraging the continued off route travel since the land would not have signed routes and people would continue to use closed routes and illegal trails.

#### **T & E Wildlife and Vegetation**

Proposed action:

The proposed action alternative could have a positive affect on wildlife and vegetation if the route signing and restoration keeps people on the open and limited routes.

No Action Alternative:

The no action alternative would negatively affect wildlife and vegetation by encouraging the continued off route travel since the land would not have signed routes and people would continue to use closed routes and illegal trails.

#### **Hazardous and Solid Waste**

Proposed action:

The proposed actions do not involve the generation of hazardous or solid waste. The proposed action does not involve land that contains hazardous or solid waste. Waste is occasionally encountered in the area of the project due to illegal dumping. Typical waste that is found in the area is general domestic trash and tires. If waste is found during this project, the BLM will arrange for legal disposal.

No Action Alternative:

The no action alternative does not involve the generation of hazardous or solid waste. The proposed action does not involve land that contains hazardous or solid waste. Waste is occasionally encountered in the area of the project due to illegal dumping. Typical waste that is found in the area is general domestic trash and tires. If waste is found during this project, the BLM will arrange for legal disposal.

#### **Water Quality and Wetlands**

Proposed action:

The proposed action alternative could have a positive affect on water quality if the route signing and restoration keeps people on the open and limited routes and out of the marsh.

No Action Alternative:

The no action alternative would negatively affect water quality by encouraging the continued off route travel since the land would not have signed routes and people would continue to use closed routes, illegal trails and illegally drive into the marsh.

#### **Visual**

Proposed action:

The proposed action alternative could have a positive affect on visual resources if the route signing and restoration keeps people on the open and limited routes. This would prevent the damage that occurs to visual resources from off route travel.

No Action Alternative:

The no action alternative would negatively affect visual resources by encouraging the continued off route travel since the land would not have signed routes and people would continue to use closed routes and illegal trails. The illegal tracks that would be created would have a negative visual affect.

#### **Recreation**

Proposed action:

The proposed action alternative could have a positive affect on recreation if the route signing and restoration allows people to travel on well marked routes with nice visual areas adjacent to the route being traveled. This would create a more enjoyable experience.

No Action Alternative:

The no action alternative would negatively affect on recreation by encouraging the continued off route travel since the land would not have signed routes and people would continue to use closed routes and illegal trails. It would be a less enjoyable recreational use since people would tend to get lost without a well signed route.

#### **Environmental Justice**

Title IV of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal assistance on the basis of race, color, national origin, age, sex, or disability. Executive Order 12898 on Environmental Justice directs that programs, policies, and activities not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations.

Proposed action:

Individuals of all social and economic levels have access to the designated routes of travel and camping areas. There are no fees associated with using the routes of travel. The fees for camping are generally significantly less than fees charged by other agencies and private campgrounds. The social economic profile for the project area, Imperial County, is provided in the social economic section of the WECO EA to which this EA is tiered. It is not believed that either alternative would reduce the total number of recreational users in Imperial County, rather the proposed action alternative may result n a more enjoyable experience with restored areas and signed routes to enjoy.

No Action Alternative:

Individuals of all social and economic levels have access to use the designated routes of travel and camping acres. There are no fees associated with using the routes of travel. The fees for camping are generally significantly less than fees charged by other agencies and private campgrounds. The social economic profile for the project area, Imperial County, is provided above in the social economic section. It is not believed that either alternative would reduce the total number of recreational users in Imperial County. Use of the limited use areas as open areas will be more likely to continue under this alternative.

#### **Energy Policy**

Proposed action:

This proposed action has been reviewed to determine if it would have either a direct or indirect adverse impact on energy development, production, supply, and/or distribution as required by Executive Orders 13211 and 13212 of May 18, 2001, pursuant to Instruction Memorandum Number 2002-053 of December 12, 2001. It was determined that the proposed action would not result in any adverse impact.

No Action Alternative:

This proposed action has been reviewed to determine if it would have either a direct or indirect adverse impact on energy development, production, supply, and/or distribution as required by Executive Orders 13211 and 13212 of May 18, 2001, pursuant to Instruction Memorandum Number 2002-053 of December 12, 2001. It was determined that the proposed action would not result in any adverse impact.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reviewer:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gary Taylor, Environmental Coordinator Date

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

CALIFORNIA DESERT DISTRICT

EL CENTRO FIELD OFFICE

FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD.

I approve the proposed action as described in the Environmental Assessment.

The proposed action is to restore routes closed under the Western Colorado Routes of Travel Management Plan (WECO ROT) and Northern and Eastern Colorado Management Plan (NECO), restore additional impacts caused by motorized vehicles, install directional signs, barriers and fences where needed, install kiosks at key points, and protect sensitive archaeological resources with new fencing or barriers. The mitigations identified as a part of the proposed action will be followed.

Environmental impacts associated with the proposed action and alternatives have been assessed. Based upon the analysis provided in the attached EA, I conclude the approved action is not a major federal action and will result in no significant impacts to the environment under the criteria in Title 40 Code of Federal Regulations 1508.18 and 1508.27. Preparation of an Environmental Impact Statement to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

APPROVED BY:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Field Manager Date El Centro Field Office