

Bureau of Land Management
WEMO Quarterly Report
December 31, 2012

1. Route Monitoring and Compliance

a. Baseline of Routes Geodatabase

A baseline inventory of routes in the Western Mojave area has nearly been completed. The inventory is stored in a geodatabase geographic information systems (GIS) data format. This is a specially modified Access database containing route features and tables containing information about the routes. There is one record per line segment. Information stored in each record includes the route number for legal routes and the type of surface material, the type of vehicle expected to be able to move on the route, and the current WEMO designation, if any. If the route is undesignated at this time, that is also included.

This data layer, as it is regularly referred to, will be utilized to assist with a designation process in which the team will review each line inventoried for conflicts or coincidence with landscape features and the purposes for which routes are used or established. Some of the coincidence or conflict data will be analyzed using GIS overlay techniques, in which areas of known landscape features such as steep slopes, areas near springs, and areas of rare plant habitat will be overlaid with the inventory lines so that the new information is also stored in the inventory table. In doing so, a permanent record of the route, its purpose, and the landscape features through which it passes will be established for future reference, including the designation process and any future reviews of that process.

b. Summary of Monitoring Effort

In the Barstow Field Office area a GIS specialist developed a data dictionary with attributes options that depict on the ground occurrences to establish a baseline for route monitoring. This data dictionary was then placed in our handheld GPS units with pull down menus to document and address actual conditions found in the field. Our GIS Specialist then placed a map in the GPS units that depicted each open route and its conditions. Route monitoring in the Ridgecrest Field office Area an individual drove along the designated routes and recorded a GPS point where the route intersected a non-designated route. They also completed a paper map monitoring form for every incursion they came across.

Our field staff, working in teams of two people, drove each route in every sub-region, and recorded the incursions or unauthorized routes observed. They recorded the width of the unauthorized routes, the frequency of use (low, moderate, or high use). We have a very good understanding of where the incursions are occurring and the impacts of these incursions on our resources.

Armed with these data, we can now develop a plan to increase our monitoring, using LE Ranger patrols who routinely contact the recreating public in these sub regions.

(Data Dictionary and Route Monitoring Table attached at end of report)

c. Maintenance Actions – summary of completed actions

Barstow Field Office

October through December 2012 Maintenance and Restoration

Afton Canyon: BLM installed two miles of post and cable barrier fencing to prevent encroachment and damage to critical riparian areas caused by OHV riding within the Afton Canyon Campgrounds and surrounding areas. BLM rehabilitated closed routes with the use of vertical mulching techniques.

Rattlesnake Canyon: BLM had four projects in Rattlesnake Canyon. We installed 150 feet of “t-post” fencing to prevent incursion into wilderness from RC3329, rehabilitated the unauthorized trail. We installed 2,000 feet of post and cable fencing to prevent incursion into wilderness, and rehabilitated an unauthorized route. BLM installed 600 feet of post and cable fence and 300 feet of “t-post” fencing and rehabilitated one-half miles of route. Two kiosks were reconditioned in the same area.

Bighorn Wilderness: BLM installed 500 feet of post and cable fencing at the wilderness boundary.

Juniper Flats: BLM installed post and cable fencing to close off illegal hill climb areas near Arrastre Canyon.

Ridgecrest Field Office

October through December 2012 Maintenance and Restoration:

Performed mechanized road repair on eight (8) lane miles of designated route RM143, within the South Searles subregion. The section of road that was improved spans from the Navy Road to the railroad tracks to the southwest of the Trona Pinnacles.

Kiosks: Within the Ridgecrest, El Paso, Red Mountain, and Rand subregions, BLM posted new copies of maps and the legal Notice required by the Court’s January 29, 2011 Remedy Order.

In late October 2012, four Student Conservation Association (SCA) desert restoration corps teams arrived in Ridgecrest for a six to eight month intern service seasons. The corps teams are currently carrying out restoration and other land management actions within the Rand and Jawbone subregions and along the boundaries of the Owens Peak, Kiavah, El Paso Mountains, Golden and Grass Valley wilderness areas.

d. Monitoring Compliance with Route Closures at a Statistically Significant Level

The January 29, 2011, Remedy Order requires BLM to "...provide the Court with a monitoring plan to determine (a) compliance with route closures and (b) whether new illegal routes are being created. The monitoring plan should demonstrate that the effort will be adequate to determine compliance at a statistically significant level."

To accomplish this objective, the BLM sought technical assistance to produce a monitoring protocol that, when applied, would evaluate public compliance with the BLM-designated route network in the West Mojave (WEMO) Plan area at the Court-required statistically significant level in a way that provides both statistical reliability and a monitoring program that is within BLM's capability to implement. The sampling protocol will help BLM develop determine the frequency of monitoring on individual routes.

On November 19, 2012, BLM announced the availability for bid of "GRANTS.gov" of a Cooperative Agreement between the BLM and a member of the Cooperative Ecosystem Studies unit (CESU) to develop the protocol. The bids were open until December 10, 2012. No bids were received. BLM re-announced this protocol for competitive proposals through all sources. The procurement process closes on January 3, 2013. The BLM will then immediately hire a firm to develop the protocol, test the protocol, and develop a draft Plan for review and approval. is in the process of seeking other sources of assistance to provide expertise in statistics.

To prepare for developing the monitoring protocol, BLM Field Office staff in Barstow and Ridgecrest monitored designated open routes in the WEMO area to identify unauthorized routes observed along their length. The results of that monitoring effort are shown on table for West Mojave (WEMO) Plan Route Monitoring Results – December 2012. The table also shows the miles of designated open routes in each subregion. These data were used as a baseline for the existing level of non-compliance. The objective of the monitoring protocol is to enable BLM to sample (drive and observe unauthorized routes) a portion of the open routes, and to use the results of that monitoring to indicate the level of non-compliance with open routes to the remainder of open routes in sampled areas in other portions of the WEMO Plan area.

Where noncompliance appears to be increasing, the BLM has evidence indicating the type and frequency for additional monitoring and rehabilitation. .

e Monitoring of vehicle-limited use routes in WEMO area

The West Mojave Resource Management Plan (WEMO) outlined two classes of Limited Use routes within the route Network. These are Class C for race courses which require specific authorization and which will not be addressed in this monitoring plan. The other class of Limited Use Route is Class M, which strictly addresses motorcycle routes. Motorcycle riders much prefer single track trails with numerous ups and downs and switchbacks, which challenge their riding skills.

MONITORING

Monitoring of Limited Use Motorcycle Routes is being conducted periodically, at minimum twice yearly by BLM Resource staff. The BLM is further committed to use motorcycle-certified staff to drive along/through the motorcycle routes, at minimum twice yearly.

Additionally, the BLM Law Enforcement Rangers are also assisting in monitoring the Motorcycle Routes when patrolling in the areas to identify issues: tracks from other vehicle types; route proliferation; access control issues; signage; kiosk signage/maps. Rangers report to Field Managers. Their observations are helping the BLM to determine effective locations to install motion detector cameras or additional kiosks, etc. along the Motorcycle Routes. The results of this type of monitoring provide information to assist BLM in developing an approach to address the noncompliance.

The BLM continues to work with friends groups e.g., The Friends of Juniper Flats and The Friends of Jawbone, to solicit their help in monitoring compliance with these limited Motorcycle Routes and to assist in rider education programs.

ACCESS CONTROL

To control and enforce Class M single track routes (e.g. motorcycle) and exclude four track (e.g. quads and side-by-side) vehicles, the BLM proposes to construct entry portals consisting of post and cable fencing or similar materials, with end panels that are parallel and separated by 30 inches, to allow motorcycle access only, excluding other types of vehicles.

Jawbone is the Ridgecrest Field Office's sub-region that has designated Motorcycle Only routes. Limitation barriers on these routes have already been built.

Juniper Flats is the Barstow Field Office sub-region with Motorcycle Only limited use routes. The BLM hired conservation youth corps that will install vehicle restricting gates on open routes in Juniper Flats in February of 2013. The crews will also install signs indicating that the route is restricted to single track (Class M) vehicles. BLM Law Enforcement Rangers, who are on routine patrols and who make frequent public contact with recreational riders, are now inspecting these areas. If the gates are compromised, they report information to the Field Manager(s) who schedules repairs.

REHABILITATION

As funding is available, the BLM will schedule rehabilitation of single track routes, which had been adversely impacted, to their base / original status and close any unauthorized routes that propagated from them. Vertical mulching, or other methods that disguise unauthorized routes will be used. Before and after pictures will document the success of BLM's restoration efforts.

2. Kiosks – Barstow and Ridgecrest Kiosk maps attached at end of report

WEMO Area – Proposed New Kiosk Locations		
Field Office	Subregion- Location	Priority <u>1/</u>
Bartow	Amboy Road at Utah Trail	1 st
	Utah Trail at Highway 62	1 st
	Fremont Peak on FP5400	1 st
	Fremont Peak on FP5255	1 st
	Iron Mountain on IM4800	1 st
	El Mirage on EM4800	1 st
	Kramer Hills on KH4800	2 nd
	Kramer Hills on KH6159	2 nd
	Pisgah Crater on PC7623	2 nd
	Broadwell Lake on BL7865	2 nd
	Broadwell Lake on BL8685	2 nd
	Cronese Lake on CL8315	2 nd
	Cronese Lake on CL7684	2 nd
	Harper Lake on HL7159 @ HL6285	3 rd
	Harper Lake on HL7140	3 rd
	Black Mountain on BL7480	3 rd
	Black Mountain on BL6381	3 rd
	Mitchell Mountain on MM7159	3 rd
	Joshua Tree on JT1934	3 rd
	Newberry/Rodman on NR8535	3 rd
Newberry/Rodman on NR8535 at Camp Rock Road	3 rd	
Stoddard Valley on SV8555	3 rd	
Ridgecrest	South Searles on RM143 & Navy Road	1 st
	El Paso at Brown Road Trailhead	1 st
	Darwin on SE19	2 nd
	Sierra on SE1	2 nd
	North Searles on P68	2 nd
	Middle Knob on MK10	2 nd
Ridgecrest at Trona Road and Spangler South	2 nd	

	Darwin on SE75	3 rd
	Ridgecrest on RC21	3 rd
	Middle Knob on MK24	3 rd

1/ These priorities are set in highest (1st), moderate (2nd) and next(3rd) priority of importance in terms of need to inform the public of where they can ride. All locations represent recognized needs. These kiosks will be constructed and installed based on available funding. For that reason, no schedule for installation can be provided at this time

3. Proper Functioning Condition – Seeps and Springs

Proper Functioning Conditions (PFC) is a measure to characterize the condition of various types of water-related features. It is not used for “monitoring.” BLM, as a general practice, does not conduct PFC assessments on “all springs and seeps.”

PFC is a qualitative assessment tool developed by the BLM and other federal agencies to establish a coarse filter approximation of stream/spring and associated riparian condition and is used to determine if these unique habitats are functional, functional at risk, or nonfunctional. This tool is used by the BLM as part of a broader program of Riparian Health Assessments to support grazing permit renewal, and is also applied to other BLM management activities to qualitatively determine any level of impact that may be present. It is not recognized nor utilized by the BLM as a monitoring tool due to its qualitative basis. If a riparian system is found to be “functioning at risk” or “non-functional,” the underlying causes for that condition are identified and appropriate measures put in place to ultimately shift condition to the “proper functioning” category. In general, it is the goal of the BLM to have all riparian systems “properly functioning.”

Proper Functioning Condition assessments are to be completed by qualified Interdisciplinary Teams (IDTs) that, at a minimum, contain technical skills and experience in hydrology, soils and vegetation resources. To ensure BLM employees conducting PFC assessments were working with the most recent PFC tools and interpretations, a four- day training session was hosted in Barstow, CA in March 2012 by the BLM’s National Riparian Service Team (NRST). A total of 15 BLM employees are now trained to conduct or participate in PFC assessments.

The exact extent of the riparian resource (miles and acres) in the WEMO area is not known. Although staff with local knowledge generally can speak to the local extent, no region-wide database exists to easily quantify or provide this information. To address this concern, the BLM contracted with the U.S. Fish and Wildlife Service (FWS) and the California Department of Fish and Game to systematically map and geo-reference riparian and stream habitat to standards established under the National Wetlands Inventory (NWI). The NWI is the standard for federal and state agencies; it is mapped and verified. The NWI is made available to the public through a web-based portal (see <http://www.fws.gov/wetlands/>). At the close of fiscal year 2012, additional funding was secured by the BLM to support this contract. A total of \$555,000 dollars was

awarded to the FWS to map riparian habitat on 90, 1-24,000 USGS quadrangles within the Barstow and Ridgecrest Field Offices.

Pending the completion of the NWI report, there is a GIS database that spatially locates water features on the landscape. The National Hydrography Dataset (NHD) streams layer, developed by US Geological Survey (USGS) to federal standards, provides reasonably accurate mapping of springs and seeps, particularly in arid environments such as those found in the WEMO landscape. A GIS mapping analysis was completed of seeps and springs within the WEMO area using the NHD. The NHD contains springs and seeps locations as mapped by the USGS, but does not have any attributed information on them (for example, size of riparian zone, quantity of flow, etc.). The NHD stream and spring layer represents the best available information, developed under a common standard, available to BLM.

The NHD layer identifies 183 spring and seep features, with 66 of these in designated BLM wilderness areas. To prioritize sampling efforts where impacts are most likely to occur, a 100-meter buffer was placed around all springs that have a nexus with an Off Highway Vehicle route. When that was done, only 152 of the 183 springs remained in the data layer. Given that a PFC assessment takes a minimum of two (2) days (one day in the office assembling background information, and one day in the field accessing and evaluating the site), the workload represents a formidable commitment in time and staff expense. .

Eleven (11) PFC assessments were completed in the Ridgecrest Field Office and 14 in the Barstow Field Office in FY 2012 despite the formidable workload. Of those 25, 16 were properly functioning, seven (7) were functioning at risk, and two (2) were non-functional. The seven that were functioning at risk were due to water developments and/or manmade channel features associated with water rights; it is unlikely these sources can be brought up to the “proper functioning” category without elimination of those state-authorized uses and decommissioning of the diversion structures. The two springs that were classified as “non-functional” were due to route alignments (Stoddard Valley and Furnace Spring). Realignment of those routes would remedy the situation, and with disturbance eliminated, the springs could restore to “proper functioning.” Furnace Springs in non-functioning due to discharge into closed pipeline system. Water is unavailable (indirectly only) to wildlife. It is only potentially available for wildlife.

The Table below shows the results of PFC assessments completed.

WEMO – Seeps & Springs, Riparian Areas and Proper Functioning Condition (Dec. 2012)

Ridgecrest Field Office				
PFC inventory 2012:				
Number	General area	Specific Location	Finding	Notes
839	Sierra Canyon	5 Mile Canyon	PFC	Upper canyon
830	Sierra Canyon	5 Mile Canyon	PFC	Lower canyon
841	El Paso Mountains	Coffee Can Spring	PFC	
827	El Paso Mountains	Bob & Shelly Springs	PFC	Salt Cedar
826	El Paso Mountains	La Moureaux Spring	PFC	
824	El Paso Mountains	Midway Spring	PFC	
823	El Paso Mountains	Unnamed	PFC	Salt Cedar
822	El Paso Mountains	Louise Spring	PFC	Fenced
821	El Paso Mountains	Sheep Spring 2	PFC	Salt Cedar
820	El Paso Mountains	Sheep Spring	PFC	
829	El Paso Mountains	Upper Goler Canyon Holland Springs	PFC	Salt Cedar
PFC inventory previous years				
002	Rudnick Allotment	Willow Spring *	PFC	Fenced
102	“	Sage Canyon	PFC	
117	“	Dove Springs Wash	Nonfunctional	OHV. Has been fenced
146	“	Upper Jawbone	PFC	In vehicle closure
149	“	Kelso Creek *	Functional at risk	Fenced to exclude cattle & OHVs
187	“	Lower Dove Wash	Functional at risk	OHV Has been fenced now
189	“	Nudist Spring	PFC	Fenced 20+ years
195	“	Alphie Canyon	Nonfunctional	OHV & Salt cedar: OHV barricade installed & salt cedar removed
198	“	Rock Spring	PFC	
205	“	Unnamed Near Burning Moscow Spring	PFC	Upstream from Piute Mountain Road. Burned over in Piute Fire Year of Piute Fire
206	“	Burning Moscow Spring	PFC	
207	“	Boulder Spring	PFC	
210	“	Hoffman Spring	Nonfunctional	Very large flood event. OHVs fenced out now
211	“	Lower Butterbredt Canyon	PFC	Salt cedar removed
212	“	Mohawk Buddy Mine Spring (Butterbredt Canyon)	Functional at risk	Head cut is now healing and vegetating (9/2012) was nonfunctional (10/2000)
213	“	Butterbredt Spring	PFC	All fenced mostly private
221	“	Nichol Spring	PFC	

222	“	Unnamed North of Nichol Spring	PFC	
223	“	Lower Kelso Creek	PFC	
224	“	Upper Shoemaker Spring *	Functional at risk	Dry site. Water diverted in pipeline
225	“	Willow Spring*	Functional at risk	Same as #002
226	“	Williams Spring*	Functional at risk	
227	“	Unnamed SW of Cowboy Spring *	PFC	
228	“	Hoffman Well	Nonfunctional	OHV, Camping Dumping...Has been barricaded
66	Walker Pass	Morris Spring *	Functioning at risk	Grazing suspended
68	“	Glass Canyon *	PFC	Grazing suspended
74	“	Big Spring *	PFC	Fenced
84	“	Lower Indian Wells #3	Functioning at risk	Grazing suspended
87	“	5 Mile Canyon	Functioning at risk	Very Large Flood event
88	“	Nine Mile Canyon *	Functional at Risk	Cattle damage
89	“	No Name Canyon	PFC	
93	“	Grapevine #1	PFC	Grazing suspended
96	“	Powers holding Corral Spring *	PFC	Grazing suspended
98	“	Stone Cabin Spring *	PFC	Grazing suspended
107	“	S. Fork Sand Canyon *	PFC	Grazing suspended
108	“	Nine Mile #2	Functional at risk	Flood damage
177	“	Short Canyon Riparian	PFC	ACEC Fenced
179	“	Indian Wells Canyon *	PFC	Grazing suspended
182	“	Lower Five Mile Canyon	Functioning at risk	Very Large Flood Event
184	“	Mid Indian Wells Canyon *	PFC	Grazing suspended
214	“	S. Fork Grapevine Canyon *	PFC	Grazing suspended
215	“	Coyote Spring *	PFC	Grazing suspended
217	“	N. Fork Grapevine Canyon *	Functional at risk	Grazing suspended
219	“	Grapevine #2 *	Nonfunctional	Grazing suspended
250	“	Indian Wells#2 *	Nonfunctional	Grazing suspended
232	Olancha	Olancha Creek *	Nonfunctional	Salt Cedar (has been fenced)
238	“	Indian Springs *	PFC	
73	Tunawee	Sacatar Canyon *	PFC	

162	LCM	Lower Centennial Spring *	Nonfunctioning	Salt Cedar
166	"	Black Spring	Nonfunctioning	Flood damage
Barstow Field Office				
Number	General area	Specific Location	Finding	Notes
1	Juniper Flats SR	Furnace Spring	PFC	Non-functional Most of the spring(s) discharge is captured in a closed pipeline system. On-going disturbance.
2	Juniper Flats SR	Stone Spring *	PFC	Riparian exclosure fence needs maintenance.
3	Juniper Flats SR	TV Creek *	PFC	
4	Juniper Flats SR	Arrastre Creek (VP Mine area) *	PFC	Riparian habitat at full potential.
5	Juniper Flats SR	Arrastre Creek (Tahiti Falls reach) *	Functioning-at-Risk: Upward trend	Stream channel needs rip-rap to further stabilize.
6	Juniper Flats SR	Cottonwood Creek *	PFC	Riparian exclosure fence inspected and found to be in good condition.
7	Juniper Flats SR	Round Mountain Spring *	Functioning-at-Risk: Upward trend	Riparian habitat at full extent but portions of discharge piped to trough for cattle and wildlife.
8	Juniper Flats SR	Greenwalt #1 *	Functioning-at-Risk	Source flow partially confined to pipeline system.
9	Afton Canyon SR	Mojave River (Afton Canyon)	Functioning-at-Risk	Channelization
10	Rattlesnake Canyon SR	Willow Spring *	Functioning-at-Risk	All of the spring discharge piped to trough for cattle and wildlife. Source fenced.
11	Rattlesnake Canyon SR	Vaughan Spring *	Functioning-at-Risk	Most of the spring flow diverted to water tank.
12	Rattlesnake Canyon SR	Unknown Spring * (Section 22)	PFC	
13	Rattlesnake Canyon SR	Rock Corral Spring	Functioning-at-Risk	Most of the spring flow diverted to water tank.
14	Stoddard Valley SR	SV2630 Seep	Non-functional	Designated route through wetland. Recommend re-aligning route.
PFC inventoried previous years				
15	Ord Mountain SR	Upper Sweetwater *	Functioning-at-Risk	Need to exclude from cattle.
16	Ord Mountain SR	Lower Sweetwater *	Functioning-at-Risk Upward trend	Source excluded from cattle.
17	Ord Mountain SR	Willow Spring*	Functioning-at-Risk	Source not fenced.

18	Ord Mountain SR	Kane Spring *	Functioning-at-Risk Upward trend	Source protected but most of the water is diverted to troughs used by cattle and bighorn sheep.
19	Ord Mountain SR	Badger Spring *	Non-functional	Source obliterated or un-locatable. 100% of the water diverted to cattle trough.
20	Rattlesnake Canyon SR	Lower Rattle Spring *	Non-functional	Source not protected from livestock impacts. Adjacent to RC3331. Needs riparian enclosure.
21	Rattlesnake Canyon SR	Mound Spring *	PFC	Source fenced, a portion of the water piped to trough.
22	Rattlesnake Canyon SR	One Hole Spring *	PFC	Source fenced, a portion of the water piped to trough.
23	Rattlesnake Canyon SR	Two Hole Spring *	PFC	Source fenced, a portion of the water piped to trough.
24	Rattlesnake Canyon SR	Rattlesnake Spring *	PFC	Source fenced, a portion of the water piped to trough.
25	Rattlesnake Canyon SR	Kynna Spring *	Unknown	Spring and associated wetland obliterated during flash flood.
26	Rattlesnake Canyon SR	Dove Spring(s) *	PFC	Source and ponds excluded from livestock use.
27	Rattlesnake Canyon SR	Viscera Spring *	Functioning-at-Risk Upward trend	Source fenced, a portion of the water piped to trough.
28	Juniper Flats SR	Vine Spring *	PFC	Source protected by natural barriers.
29	Black Mountain SR	Opal Spring	Unknown	Spring is adjacent to BM7403.
30	Stoddard Valley SR	Horse Spring	Unknown	Spring is adjacent to SV2602.
31	Stoddard Valley SR	Quail Spring	Unknown	Spring is adjacent to SV2605.
32	Rattlesnake Canyon SR	Rattlesnake Complex	Unknown	Springs are adjacent to RC3442.

Barstow FO Salt Cedar Control 2012:

The Barstow Field Office treated a total of 50 acres of salt cedar during FY 2012 using an integrated weed management approach. Populations were treated along the Amargosa River and along the Mojave River at Point-of-Rocks and Afton Canyon.

*Located within a grazing allotment

4. Air Quality

On November 7, 2012, BLM representatives met with representatives of the Mojave Desert Air Quality Management District (MDAQMD) to discuss Air Quality monitoring in the WEMO Plan area. The following summarizes the results of that meeting:

1. The WEMO Planning area includes all or portions of five air quality districts. The air districts are the MDAQMD, the Antelope Valley Air Quality Management District (AVAQMD), the East Kern Air Pollution Control District (EKAPCD), the Great Basin Unified Air Pollution Control District (GBUAPCD), and the South Coast Air Quality Management District (SCAQMD).
2. The MDAQMD, the AVAQMD, and the EKAPCD collaborated with the California Air Resources Board (ARB) and other air districts in California to prepare an EPA required report evaluating the air quality monitoring in the state. This report was published in June 2012. The report does not relate specifically to WEMO but it covers the WEMO plan area.
3. The GBUAPCD and SCAQMD prepared and submitted their own reports to the EPA.
4. The reports show that there are approximately 35 official air quality monitoring stations in the WEMO Plan area. The reports conclude that there is adequate air quality monitoring being conducted in the area.
5. In our meeting we discussed possible tasks for the MDAQMD to perform the tasks listed below:
 - a. pull together data for all of the air districts.
 - b. discuss the nature of emissions and how to monitor them.
 - c. summarize existing monitoring data
 - d. evaluate the existing monitoring network's ability to provide data on emissions from OHVs and Open Areas.

BLM is planning to formalize an agreement with the Mojave Desert Air Quality Management District to complete a report for the BLM on air quality monitoring which specifically addresses those items listed in section 5 and "a" through "d" above.

5. Mojave fringe-toed lizard

Introduction

The Mojave fringed-toed lizard (*Uma scoparia*) is a sand adapted lizard with modified scales on its feet, ears, nostrils, and upper lips. The Mojave fringed-toed lizard (MFTL) is considered a Species of Special Concern by the California Department of Fish and Game due to small disjunct populations.

The West Mojave Plan Amendment to the California Desert Conservation Area plan designated six parcels as Areas of Critical Environmental Concern (ACEC). These ACECs protect suitable habitat for the MFTL along the Mojave River.

The MFTL ACEC was established by the West Mojave Plan in 2005. The ACEC is comprised of eight parcels of land. Seven of these parcels occur along the Mojave River. One occurs near Dale Lake east of the town of Twentynine Palms.

The majority of lands between Interstate 15 and Interstate 40 are privately owned. There are few public lands where MFTL habitat occurs along the Mojave River. Therefore the BLM has designated the only public lands where suitable habitat occurs along the Mojave River channel.

For each parcel, a substantial percentage of the designated land is river channel. The Mojave River channel varies in width throughout its length. The active river channel varies from only 120 meters wide in the west portion of parcel 1 to 1,475 meters wide in parcel 2. Parcel 7 is located in the Mojave River Wash near Soda Lake.

The Mojave River is not perennial between Helendale, CA and Afton Canyon. Between Helendale and Afton Canyon the Mojave River channel is affected only by flood events which typically occur in winter and spring. Parcel 7 also is affected by flood events.

Site visits have not been made to parcels 4, 5, 6, 7, or 8. Investigation into these parcels so far is limited to a review of aerial photographs. Parcels 4, 5, and 6 are similar to the parcels 1-3. Parcels 7 and 8 require site visits.

Methods

On June 27th and 28th of 2012, two surveyors conducted initial investigations on three parcels of the MFTL ACEC. The investigation was conducted late in the survey season and was limited to a small survey window where sand temperatures were appropriate. Aerial photos and a Desert Access Guide were used to locate the parcels while GPS units and compasses were used to orient and record transects. Transects were generally oriented east-west. Surveys included both sand bars and river channel.

Ten 750-meter transects were walked. For each transect surveyors recorded the following data: begin point, end point, begin temp, and end temp. All MFTLs within 10 meters of a transect centerline were recorded. Transects were walked between 0800 and 1100 hours. Sand temperatures ranged from 28.3 C° (83 F°) to 48.8 C° (120 F°).

Results

Six MFTLs were encountered on ten transects. Three MFTLs were detected on parcel 1 and three on parcel 3. MFTLs detected on parcels 1 and 3 were located on or near vegetated sand bars.

Six transects had negative results, i.e., no MFTLS were found. Two of these transects were located on parcel 1 and two were located on parcel 3. Zero MFTLS were detected on parcel 2 (two transects). Transects with negative results had a significant portion of the transects in the Mojave River channel.

Discussion

The absence of MFTLS in the river channel may be a result of many factors including a lack of vegetation, sand size or substrate type. The active river channel in parcels 1 and 3 are mostly sandy and bare, with vegetated sand bars and gravel bars. Parcel 2 has mesquite growing in the river channel. The river channel in parcel 2 is braided among sand dunes. The channel is more than 1,400 meters wide. Large single sand hummocks develop in the river channel on parcel 2. A more complete description of existing habitat will be completed for each parcel.

There is some OHV activity in the Mojave channel. However, this activity doesn't seem to be extensive. The river channel is treacherously sandy and likely a deterrent for most drivers.

Investigation of the MFTL ACEC will continue in the spring of 2013 with the following activities:

- a. Review aerial photographs
- b. Develop plant lists and a description of habitat quality for all parcels
- c. Establish and conduct transects on remaining parcels (4-8) and repeat transects for parcel 2.

Other Conservation Activities:

The Barstow Field Office staff installed 9.5 miles of Post and Cable Fencing at the Dumont Dunes OHV Area to protect the MFTL dune habitat. While Dumont Dunes is outside the WEMO area boundary, the 9.5 miles of fence serves to protect the species from impacts due to OHV use in a nearby part of the California Desert Conservation Area within the Barstow Field Office.

6. Chronology

October 9, 2012: Desert Advisory Council (DAC) Subgroup on the West Mojave Route Designation Project held a public meeting in the Barstow Field Office (2601 Barstow Road, Barstow, CA 92311) at 5:00 to 8:00 PM on Travel Management Area (TMA) 6.

October 25, 2012: BLM held a public meeting on the El Paso Collaborative Access Planning Area (CAPA) was held from 6:00 pm to 9:00 pm at the Heritage Inn in Ridgecrest.

October 30, 2012: Kiosk maps for both Barstow and Ridgecrest Field offices were provided to plaintiffs as called for is the District Court Civil Minutes of October 24, 2012 Proceeding Regarding Enforcement of Remedies Order.

November 5, 2012: Two new Field Managers report for duty: Carl Symons now manages the Ridgecrest Field Office; Katrina Symons now manages the Barstow Field Office.

November 7, 2012: The WEMO Task Group (a subunit of the DAC Subgroup on WEMO) held a public meeting on TMA 7 at the Jawbone Station Visitor Center from 5:00 to 8:00 pm, 28111 Jawbone Canyon Road, Cantil, CA 93519.

November 7, 2012: BLM met with a representative of Mojave Desert Air Quality Management District (MDAQMD).

November 7-9, 2012.BLM held a training class for BLM staff in Lenwood (near Barstow) on the BLM Travel and Transportation Management Program from

November 13, 2012: Desert Advisory Council (DAC) Subgroup on the West Mojave Route Designation Project held a public meeting in the Barstow Field Office (2601 Barstow Road, Barstow, CA 92311) at 5:00 to 8:00 PM on Travel Management Area (TMA) 7.

November 14, 2012: Workshop on the El Paso Collaborative Access Planning Area (CAPA) in BLM's Bakersfield Field office, 3801 Pegasus Drive, Bakersfield, CA from 6:00 to 9:00 pm. The CAPA process for routes in the TMA 7 area will include public input in a similar fashion as current WEMO route designations that are proceeding to comply with current court order. The process will also include publically announced meetings/work sessions to enable affected communities and publics to provide local knowledge and concerns that will facilitate a collaborative solution to routes in this area. The public was asked to submit written comments by January 25, 2013.

November 15, 2012: Workshop on the CAPA at Jawbone Station, Highway 14 & Jawbone Canyon Road, Cantil CA.

November 16, 2012: Workshop on the CAPA at Carriage Inn, 901 N. China Lake Blvd, Ridgecrest, CA.

November 19, 2012: BLM issued Solicitation for assistance from a Cooperative Ecosystem Study Unit (CESU) to seek assistance in developing and validating monitoring protocols associated with determining the degree of non-compliance with route closures in the West Mojave plan area. Closing date: December 10, 2012.

November 26-29, 2012: BLM presented an internal air quality training session to staff.

December 4, 2012: Desert Advisory Council (DAC) Subgroup on the West Mojave Route Designation Project held a public meeting at the Desert Discovery Center, 831 Barstow Road, Barstow, CA from 4:30 to 8:00PM on Travel Management Area (TMA) 5 and 8, wrap-up.

December 5-20: BLM worked with attorneys, court, plaintiffs on plan of action for a three day site tour of areas identified by plaintiffs. The tour is scheduled for February 12-15, 2013.

December 17, 2012: No bids were received from the November 19 Solicitation for statistical services from a CESU. BLM issued a Request for Proposal (RFP) based on the same Statement of Work to a broader audience of potential bidders. Bid process closes on January 3, 2013

December 21, 2012: Monitoring Plan or Vehicle Limited Routes was filed with the Court.

7. Attached Files

Data Dictionary PDF
WEMO Plan Route Monitoring Results PDF
Barstow Kiosk Locations PDF
Ridgecrest Kiosk Locations PDF