Appendix 2

Proposed Changes to the Water Quality Control Plan for the Lahontan Region

Introduction

The following Basin Plan Amendment language, shown below, and organized by Chapter, is intended to be removed or added from the Basin Plan. Text indicated in bold/underline format is intended to be inserted into the Basin Plan. Text indicated in strikeout format is intended to be removed from the Basin Plan. The location of each change is described in more detail below in italics.

Changes to Chapter 2 Present and Potential Beneficial Uses

The following text will be inserted into and removed from Chapter 2, Table 2-1, "Beneficial Uses of Surface Water of the Lahontan Region."

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

Unless otherwise specified, beneficial uses also apply to all tributaries of surface waters identified in Table 2-1.

HU No.	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	BENEFICIAL USES																				RECEIVING WATER
			MUN	AGR	PRO	IND	GWR	FRSH	NAV	POW	REC-1	REC-2	COMM	AQUA	WAR	COLD	SAL	WILD	BIOL	RARE	MIGR	SPWN	WQE	FLD	
627.00	CUDDEBACK HYDROLOGIC UNIT																								
	MINOR SURFACE WATERS		X	X			X				X	X	X		X			X							
	MINOR WETLANDS	WETLANDS	X				X	X			X	X			X			X							
628.00	MOJAVE HYDROLOGIC UNIT																								
628.10	EL MIRAGE HYDROLOGIC AREA																								
	SHEEP CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							EL MIRAGE VLY GW BASIN, EL MIRAGE DRY LK
	HEATH CANYON CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							SHEEP CREEK
	MINOR SURFACE WATERS		X	X			X	X			X	X			X			X		X					EL MIRAGE VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X			X		X			X	X	EL MIRAGE VLY GW BASIN
628.20	UPPER MOJAVE HYDROLOGIC AREA																								
	MOJAVE RIVER (See Figure 2-1.1)		X	X			X				X	X	X		X	X		X							UPPER MOJAVE R. VLY GW BASIN, SODA LK, CRONESE LAKES
	MOAVE RIVER (BEAR VALLEY RD TO HELENDALE)		X	X			X				X	X	X		X	X		X	X	X					UPPER MOJAVE R. VLY GW BASIN, SODA LK, CRONESE LAKES
	LOWER NARROWS OF MOJAVE R. WETLANDS	WETLANDS	X	X			X				X	X			X	X		X		X	X		X	X	MOJAVE RIVER, UPPER MOJAVE R. VLY GW BASIN
	TURNER SPRINGS	SPRINGS	X	X			X				X	X			X			X					X	X	MOJAVE RIVER
	WEST FORK MOJAVE RIVER	INTERMITTENT STREAM	X	X			X				X	X	X		X	X		X	X	X					SILVERWOOD LK, MOJAVE RIVER, UPPER MOJAVE R. VLY GW BASIN
	EAST FORK OF WEST FORK OF MOJAVE RIVER	PERENNIAL STREAM	X	X							X	X	X			X		X				X			SILVERWOOD LAKE
	LAKE GREGORY	LAKE	X	X			X		X		X	X	X			X		X				X			HOUSTON CREEK
	SEELEY CANYON CREEK	PERENNIAL STREAM	X	X							X	X	X			X		X							EAST FORK OF WEST FORK
	HOUSTON CREEK	PERENNIAL STREAM	X	X							X	X	X			X		X							EAST FORK OF WEST FORK
	DART CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							HOUSTON CREEK
	DEEP CREEK	PERENNIAL STREAM	X	X			X				X	X	X			X		X	X	X					FORKS RESERVOIR, MOJAVE RIVER
	SAWPIT CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							WEST FORK MOJAVE
	WILLOW CREEK	INTERMITTENT STREAM	X	X							X	X	X			X		X							DEEP CREEK
	TROY CREEK	INTERMITTENT STREAM	X	X			X				X	X	X		X	X		X							DEEP CREEK
	TROY POND	INTERMITTENT POND	X	X			X				X	X	X		X	X		X							DEEP CREEK
	HOLCOMB CREEK	INTERMITTENT STREAM	X	X							X	X	X			X		X							DEEP CREEK
	LITTLE BEAR CREEK	INTERMITTENT STREAM	X	X							X	X	X			X		X							DEEP CREEK
	LAKE ARROWHEAD	LAKE	X	X			X		X		X	X	X			X		X							WILLOW CREEK
	ARROWBEAR LAKE	LAKE	X	X			X		X		X	X	X		X	X		X							DEEP CREEK
	HOOKS CREEK	PERENNIAL STREAM	X	X							X	X	X			X		X							LITTLE BEAR CREEK
	TWIN PEAKS CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							(UPPER) GRASS VALLEY CREEK
	SHAKE CREEK	PERENNIAL STREAM	X	X							X	X	X			X		X				X			DEEP CREEK
	SHEEP CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							DEEP CREEK
	CRAB CREEK	PERENNIAL STREAM	X	X							X	X	X			X		X				X			DEEP CREEK
	GREEN VALLEY LAKE	LAKE	X	X			X				X	X	X			X		X							GREEN VALLEY CREEK
	GREEN VALLEY CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							GREEN VALLEY LAKE, DEEP CREEK
	SILVERWOOD LAKE	RESERVOIR	X	X			X				X	X	X			X		X							WEST FORK MOJAVE RIVER, UPPER MOJAVE R. VLY GW BASIN

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

Unless otherwise specified, beneficial uses also apply to all tributaries of surface waters identified in Table 2-1.

	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	BENEFICIAL USES																				RECEIVING WATER
			MUN	AGR	PRO	IND	GWR	FRSH	NAV	POW	REC-1	REC-2	COMM	AQUA	WARM	COLD	SAL	WILD	BIOL	RARE	MIGR	SPWN	WQE	FLD	
	GRASS VALLEY LAKE	LAKE	X	X			X				X	X	X			X		X							GRASS VALLEY CREEK
	GRASS VALLEY CREEK	PERENNIAL STREAM	X	X			X				X	X	X		X	X		X							GRASS VALLEY LAKE, WEST FORK MOJAVE RIVER
	UPPER MOJAVE RIVER, LOWER SLOUGH	WETLANDS																							MOJAVE RIVER
	MINOR SURFACE WATERS		X	X			X			X	X	X			X	X		X							UPPER MOJAVE R VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	UPPER MOJAVE R VLY GW BASIN
628.30	MIDDLE MOJAVE HYDROLOGIC AREA																								
	MOJAVE RIVER (See Figure 2-1.1)		X	X			X				X	X	X		X	X		X							MIDDLE MOJAVE R VLY GW BASIN, SODA LAKE, CRONESE LAKES
	MINOR SURFACE WATERS		X	X			X			X	X	X			X	X		X							MIDDLE MOJAVE R VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	MIDDLE MOJAVE R VLY GW BASIN
628.40	LOCKHART HYDROLOGIC AREA																								
628.41	GRASS VALLEY HYDROLOGIC SUBAREA																								
	MINOR SURFACE WATERS		X	X			X			X	X	X			X	X		X							HARPER VALLEY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	HARPER VALLEY GW BASIN
628.42	HARPER VALLEY HYDROLOGIC SUBAREA																								
	BIRD SPRINGS	SPRINGS	X	X			X				X	X			X	X		X					X		HARPER VALLEY GW BASIN
	HARPER LAKE	ALKALI LAKE	X	X			X				X	X			X	X		X							INTERNALLY DRAINED LAKE
	OPAL MTN. SPRINGS	SPRINGS																					X		
	HARPER LAKE WETLANDS	WETLANDS	X	X			X				X	X			X	X		X					X	X	HARPER LAKE
	MINOR SURFACE WATERS		X	X			X				X	X			X	X		X							HARPER VALLEY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	HARPER VALLEY GW BASIN
628.50	LOWER MOJAVE HYDROLOGIC AREA																								
	MOJAVE RIVER (See Figure 2-1.1 and 2-1.2)		X	X			X				X	X	X		X	~~X~~		X							MIDDLE MOJAVE R VLY GW BASIN, SODA LAKE, CRONESE LAKES
	MOJAVE RIVER, CAMP CADY WILDLIFE AREA		X	X			X				X	X	X		X			X	X	X					MIDDLE MOJAVE R VLY GW BASIN, SODA LAKE, CRONESE LAKES
	MINOR SURFACE WATERS		X	X			X				X	X			X	X		X							LOWER MOJAVE R VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	LOWER MOJAVE R VLY GW BASIN
628.60	NEWBERRY SPRINGS HYDROLOGIC AREA																								
628.61	KANE WASH HYDROLOGIC SUBAREA																								
	MINOR SURFACE WATERS		X	X			X				X	X			X	X		X							KANE WASH AREA GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	KANE WASH AREA GW BASIN
628.62	TROY VALLEY HYDROLOGIC SUBAREA																								
	MINOR SURFACE WATERS		X	X			X				X	X			X	X		X							TROY VLY GW BASIN
628.62	MINOR WETLANDS	WETLANDS	X	X			X	X			X	X			X	X		X		X			X	X	TROY VLY GW BASIN

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Unless otherwise specified, beneficial uses also apply to all tributaries of surface waters identified in Table 2-1.

	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	BENEFICIAL USES																			RECEIVING WATER
			MUN	AGR	PRO	IND	GWR	FRSH	NAV	POW	REC-1	REC-2	COMM	AQUA	WARM	COLD	SAL	WILD	BIOL	RARE	MIGR	SPWN	WQE	FLD	
628.70	AFTON HYDROLOGIC AREA																								
628.71	CAVES HYDROLOGIC SUBAREA																								
	MOJAVE RIVER (See Figure 2-1.1)			X	X			X			X	X			X	~~X~~		X							CAVES CYN VLY GW BASIN, SODA LAKE, CRONESE LAKES
	MOJAVE RIVER, AFTON CANYON			X	X			X			X	X			X			X	X	X					CAVES CYN VLY GW BASIN, SODA LAKE, CRONESE LAKES
	MINOR SURFACE WATERS			X	X			X			X	X			X	X		X							CAVES CYN VLY GW BASIN
	MINOR WETLANDS	WETLANDS		X	X			X	X		X	X			X	X		X		X			X	X	CAVES CYN VLY GW BASIN
628.72	CRONESE HYDROLOGIC SUBAREA																								
	BITTER SPRINGS	WETLANDS		X	X			X			X	X			X	X		X					X	X	CRONESE VALLEY GW ASIN
	CRONESE LAKES (EAST AND WEST)	WETLANDS		X	X			X			X	X			X	X		X					X	X	INTERNALLY DRAINED LAKES, CRONESE VLY GW BASIN
	MINOR SURFACE WATERS			X	X			X			X	X			X	X		X							CRONESE VALLEY GW BASIN
	MINOR WETLANDS	WETLANDS		X	X			X	X		X	X			X	X		X		X			X	X	CRONESE VALLEY GW BASIN
628.73	LANGFORD HYDROLOGIC SUBAREA																								
	MINOR SURFACE WATERS			X	X			X			X	X			X	X		X							LANGFORD VLY GW BASIN
	MINOR WETLANDS	WETLANDS		X	X			X	X		X	X			X	X		X		X			X	X	LANGFORD VLY GW BASIN
628.80	BAKER HYDROLOGIC AREA																								
628.81	SILVER LAKE HYDROLOGIC SUBAREA																								
	SILVER LAKE	ALKALI LAKE		X	X			X			X	X			X	X	X	X							INTRNL DRN LK/SILVER LK VLY GW BASIN
	HALLORAN SPRING	SPRING/EMERGENT		X	X			X			X	X			X	X		X							SILVER LAKE VLY GW BASIN
	MINOR SURFACE WATERS			X	X			X			X	X			X	X		X							SILVER LAKE VLY GW BASIN
	MINOR WETLANDS	WETLANDS		X	X			X	X		X	X			X	X		X		X			X	X	SILVER LAKE VLY GW BASIN
628.82	SODA LAKE HYDROLOGIC SUBAREA																								
	SODA LAKE	ALKALI LAKE		X	X			X			X	X	X		X	X		X					X		INTERNALLY DRAINED LAKE, SILVER LAKE SODA LAKE VLY GW BASIN
	ZYZYX SPRING	SPRING		X	X			X			X	X	X		X	X		X	X	X					SODA LAKE VLY GW BASIN
	MOJAVE RIVER (See Figure 2-1.1)			X	X						X	X			X	~~X~~		X							SODA LAKE, SODA LAKE VLY GW BASIN
	MOJAVE RIVER, AFTON CANYON			X	X						X	X			X				X	X					SODA LAKE, SODA LAKE VLY GW BASIN
	INDIAN SPRING	SPRING		X	X			X	X		X	X			X	X		X							SODA LAKE VLY GW BASIN
	CANE SPRING	SPRING		X	X			X	X		X	X			X	X		X							SODA LAKE VLY GW BASIN
	GRANITE SPRING	SPRING		X	X			X	X		X	X			X	X		X							SODA LAKE VLY GW BASIN
	HENRY SPRING	SPRING		X	X			X	X		X	X			X	X		X							SODA LAKE VLY GW BASIN
	MESQUITE SPRINGS	SPRINGS		X	X			X			X	X			X	X		X					X		MOJAVE RIVER SINK
	MINOR SURFACE WATERS			X	X			X			X	X			X	X		X							
	MINOR WETLANDS	WETLANDS		X	X			X	X		X	X			X	X		X		X			X	X	

Figure 2-1.1
Map showing locations where the COLD and WARM freshwater habitat beneficial uses apply for the Mojave River

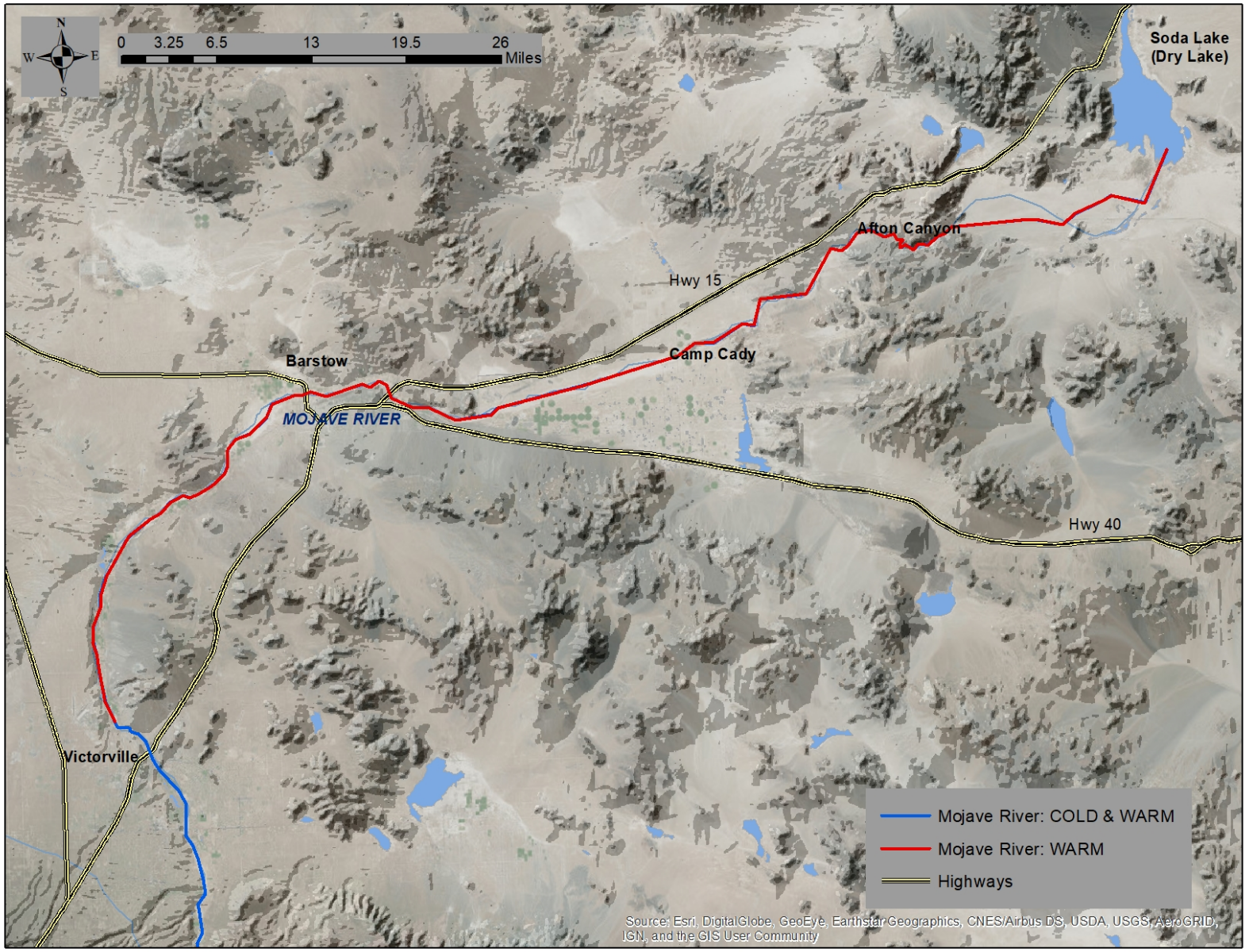

Figure 2-1.2

Map showing delineation of the Mojave Fringed-toed Lizard Bureau of Land Management-designated Area of Critical Environmental Concern

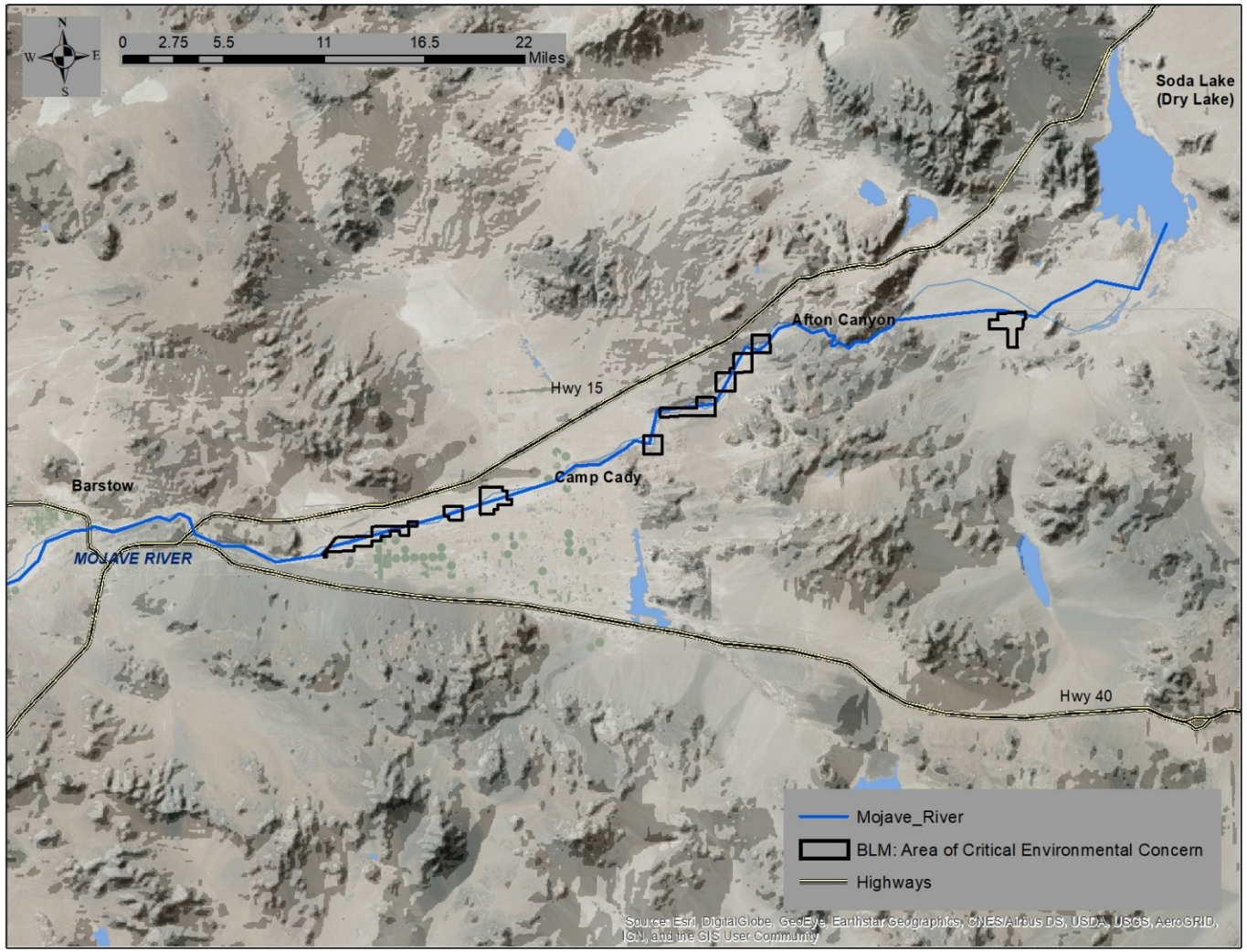

Figure 2-1.2 shows the Mojave Fringed-toed Lizard Area of Critical Environmental Concern (ACEC) as designated by the Bureau of Land Management. The reaches of the Mojave River that pass through these ACEC units are designated with the BIOL beneficial use.

The following text will be inserted into and removed from Chapter 2, Figure 2-1, "Boundary of Area Within Searles Valley Ground Water Basin Where MUN Use Designation Does Not Apply" and its accompanying text

FIGURE 2-2.-1 BOUNDARY OF AREA
WITHIN SEARLES VALLEY GROUND WATER
BASIN WHERE MUN USE DESIGNATION DOES NOT APPLY

The area shown in Figure 2-2.-1, within which the Municipal and Domestic Supply beneficial use does not apply to ground water, is as follows:

The following text will be inserted into and removed from Chapter 2, Figure 2-2, "Boundary of Area Within Salt Wells Valley Ground Water Basin Where MUN Use Designation Does Not Apply" and its accompanying text

FIGURE 2-2.2
BOUNDARY OF AREA WITHIN SALT WELLS VALLEY GROUND WATER BASIN
WHERE MUN USE DESIGNATION DOES NOT APPLY

The area shown in Figure 2-2.2, within which the Municipal and Domestic Supply beneficial use does not apply to ground water is as follows:

Changes to Chapter 3 Water Quality Objectives

The following Basin Plan Amendment language will be inserted in Chapter 3, Table 3-20, Water Quality Objectives for Certain Water Bodies Mojave Hydrologic Unit.

Table 3-20

WATER QUALITY OBJECTIVES FOR CERTAIN WATER BODIES
MOJAVE HYDROLOGIC UNIT

See Fig. 3-13	Surface Waters (Station 2) Ground Waters (Stations 1, 3, 4, 5, & 6)	Objective (mg/L)(Maximum)	
		TDS	NO_3 as NO_3
1[b]	West Fork Mojave River	245	6
2[a]	Mojave River (at Lower Narrows)	312	5
3[b]	Mojave River (at Barstow)	445	6
4[b]	Mojave River (upstream side of Waterman Fault)	560	11
5[b]	Mojave River (upstream side of Calico-Newberry Fault)	340	4
6[b]	Mojave River (just upstream of Camp Cady Ranch Building Complex)	300	1

[a] Objectives for reaches of the Mojave River which normally flow above ground. ~~underground, but, under high flow conditions will surface.~~

[b] Objectives for reaches of the Mojave River which flow underground in a confined channel.

NO3 as NO3 Nitrate as Nitrate
TDS Total Dissolved Solids (Total Filterable Residue)

Changes to Chapter 4, Section 4.9 Resource Management and Restoration

The following Basin Plan Amendment language will be inserted into Chapter 4.9, Table 4.9-1, List of rivers in Lahontan Region determined eligible for National Wild & Scenic River designation by federal land management agencies.

Table 4.9-1
List of rivers in Lahontan Region determined eligible for National Wild & Scenic River designation by federal land management agencies

Hydrologic Unit Number	Name of river/creek followed by managing agency	NF = National Forest; RA =USBLM Resource Area
601	Lee Vining Creek	Inyo NF
601	Mill Creek	Inyo NF
601	South Fork Mill Creek	Inyo NF
601	Upper Parker Creek	Inyo NF
603	Walker Creek	Inyo NF
603	Convict Creek	Inyo NF
603	Cottonwood Creek (Sierra Nevada)	Inyo NF
603	Fish Slough	Bishop RA
603	George Creek	Bishop RA
603	Glass Creek	Inyo NF
603	Hot Creek	Inyo NF & Bishop RA
603	Independence Creek	Bishop RA
603	Laurel Creek	Inyo NF
603	Lone Pine Creek	Inyo NF
603	McGee Creek	Inyo NF
603	Rock Creek	Inyo NF & Bishop RA
603	South Fork Bishop Creek	Inyo NF
603	Upper Owens River	Inyo NF
604	Cottonwood Creek (White Mountains)	Inyo NF
628	**Mojave River (Afton Canyon)**	**Barstow RA**
630	Atastra Creek	Bishop RA
630	Dog Creek	Bishop RA
630	East Walker River	Toiyabe NF
630	Green Creek	Bishop RA
630	Rough Creek	Bishop RA
630	Virginia Creek	Bishop RA
631	West Walker River	Toiyabe NF
632	East Fork Carson River	Toiyabe NF
634	Cold Creek	Tahoe NF
634	Martis Creek	Tahoe NF
634	Upper Truckee River	LTBMU
635	Alder Creek	Tahoe NF
635	Lower Truckee River	Tahoe NF

636	Independence Creek	Tahoe NF
636	Little Truckee River	Tahoe NF
636	Perazzo Canyon	Tahoe NF
636	Sagehen Creek	Tahoe NF

Changes to Chapter 4, Section 4.11 Recreation

The following Basin Plan Amendment language will be inserted into Chapter 4.11, in the section "Offroad Vehicles," after the section "Boating and Shorezone Recreation," and before the section "Ski Area."

Offroad Vehicles

Offroad vehicles (ORVs), (also called "off-highway" vehicles or OHVs), include, but are not limited to, any of the following: bicycles, motorcycles, "all terrain vehicles," snowmobiles, and any other vehicle (including passenger trucks and cars) operated off of paved roads. While the impacts of "mountain" bicycles are still being debated, motorized vehicles can cause serious erosion problems, directly (through soil detachment, compaction, or creation of ruts) or indirectly (through damage to vegetation or by starting wildfires). Operation of over-the-snow vehicles can also disturb soils and vegetation if there is insufficient snow cover.

Control Measures for Offroad Vehicles

1. The U.S. Forest Service and Bureau of Land Management designate ORV routes on public lands and prohibit operation away from these routes. ORV use may be further restricted during extremely dry conditions in order to prevent fires, and during wet (i.e., winter/spring) conditions when excessive soil disturbance is likely. However, illegal use can and does occur. Compliance should be encouraged via well planned and targeted public education efforts, as well as strict enforcement of regulations.
2. Regional Board staff should continue to review and comment on proposed changes in ORV management plans of public agencies. These agencies should be encouraged to monitor the water quality impacts of legal ORV use, and to modify or close routes where water quality problems are occurring. Modifications could include rerouting of trail segments away from surface waters and wetlands **and sensitive desert riparian habitat,** or installation of bridges at stream crossings. Closed routes should be stabilized and revegetated.
3. Some local governments have ordinances regulating ORV use, although these may be directed at problems unrelated to water quality (e.g., noise). All local governments in the Region should be encouraged to adopt and enforce ordinances which will prevent erosion from ORV use on private lands.
4. Although waste discharge requirements are generally an infeasible means of controlling the impacts of private ORV use, the Regional Board can issue requirements or cleanup orders to landowners whose property is contributing to water quality problems as a result of ORV damage. Waste discharge requirements can also be issued to commercial ORV facilities to ensure proper operation (e.g., to ensure that snowmobiles are operated over snow deep enough to prevent soil damage).