Draft

Revisions to the Water Quality Control Plan for the Lahontan Region

to

Clarify Beneficial Uses for the Mojave River, Update Site Cleanup, Land Disposal and Bishop Underground Tank Policy Sections, and Other Editorial Revisions

3/11/2022

The entirety of the following text, except the Introduction and the italicized annotations, is proposed to be adopted as the Basin Plan Amendment to Clarify Beneficial Uses for the Mojave River and Other Editorial Revisions. In addition, several editorial revisions would be made when this Basin Plan amendment is incorporated into the Water Quality Control Plan for the Lahontan Region. Editorial revisions may include, but are not limited to, changes to the title page, table of contents, appendices, page numbers, table and figure numbers, footnote numbers, headers and footers, and other non-substantive changes to improve accessibility of the document.

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 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. Additionally, to aid in the accessibility of this document, the words in italic text *Begin proposed text* are at the start of text to be added and the words in italic *End proposed text* are the end of the added text. Similarly, the words in italic text *Begin strikeout* are at the start of the text to be deleted and the words in italic *End strikeout* are at the end of the text to be deleted and the mords in the Basin Plan of each proposed change is described in more detail in italics prior to the proposed change.

Proposed Changes to the Preface

The following text will be inserted into the Preface, in the section "Record of Amendments to the 1995 Water Quality Control Plan for the Lahontan Regio", with the appropriate dates for Item 20 added when available, as follows:

Begin	proposed text			
<u>17.</u>	Amendment to remove the prohibition on new pier construction in sensitive areas along the California side of Lake Tahoe	<u>3/13/2019</u>	<u>R6T-2019-</u> <u>0010</u>	<u>10/29/2019</u> <u>By Office of</u> <u>Administrative</u> <u>Law</u>
<u>18.</u>	Amendment to modify the beneficial uses for the Mojave River and its tributaries and other minor revisions	<u>6/10/2019</u>	<u>R6T-2019-</u> <u>0246</u>	<u>3/3/2020</u> <u>By Office of</u> <u>Administrative</u> <u>Law</u>
<u>19.</u>	Amendment to add definitions for three new beneficial uses: Tribal Traditional Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence	<u>5/18/2021</u>	<u>R6T-2020-</u> <u>0057</u>	<u>9/22/2021</u> <u>By Office of</u> <u>Administrative</u> <u>Law</u>

Fishing (SUB).

 20.
 Amendment to clarify
 TBD
 TBD
 TBD End

 beneficial use designations
 for the Mojave River,
 proposed text

 update Site Cleanup, Land
 Disposal and Bishop
 Underground Tank policy

 vections and other editorial
 revisions

Proposed Changes to Chapter 1, Introduction

The following text will be inserted and removed from Chapter 1, Introduction, in the first two paragraphs of the section 'Regional Setting':

Regional Setting

The following is a brief overview of the environmental and socio-economic setting of the Lahontan Region.

The Lahontan Region is defined in terms of drainage basins by Section 13200(h) of the Porter-Cologne Act. For planning purposes, it has historically been divided into North and South Lahontan Basins at the boundary between the Mono Lake and East Walker River watersheds, as shown in Figures 1-1 and 1-2. It is about 570 miles long and has a total area of *Begin strikeout* 39,210 *End strikeout Begin proposed text* <u>approximately 32,792</u> *End proposed text* square miles.

Proposed Changes to Chapter 2, Present and Potential Beneficial Uses

The following text will be removed and inserted in Chapter 2, Table 2-1, Beneficial Uses of Surface Waters 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.

										E	BEN	IEF	ICI/	LU:	SES	;									
HU No.	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER		AGR	PRO	ND	GWR	FRSH	NAV	POW	REC-1	REC-2	COMM	WARM	COLD	SAL	WILD	BIOL			SPWN	WOF	FLD	RECEIVING WATER	
627.00	CUDDEBACK HYDROLOGIC UNIT				_		_																		
	MINOR SURFACE WATERS		Х	Х			Х			Т	Х	Х	Х	Х			Х								
	MINOR WETLANDS	WETLANDS	Х				X	X			X	X		X			X								
628.00	MOJAVE HYDROLOGIC UNIT																								
CO0 40			_			_	_	_	_	_			_	_	_	_		_				_			
628.10	EL MIRAGE HYDROLOGIC AREA		1					T	1 1							1 1			Т	Т		-	-	EL MIRAGE VLY GW BASIN, EL MIRAGE I	
	SHEEP CREEK	PERENNIAL STREAM	Х	Х			Х				Х		Х	Х	Х		Х							LK	
	HEATH CANYON CREEK	PERENNIAL STREAM	Х	Х			X				X	Х	Х	X	Χ		Χ							SHEEP CREEK	
	MINOR SURFACE WATERS		Х	Х			X	_				Х		Х			Х		(EL MIRAGE VLY GW BASIN	
	MINOR WETLANDS	WETLANDS	Х	Х			Х	Х			X	X		X			X	2	(X	Х	EL MIRAGE VLY GW BASIN	
628.20	UPPER MOJAVE HYDROLOGIC AREA																								
	MOJAVE RIVER Begin proposed text (MOJAVE FORKS DAM TO BEAR VALLEY RD) End proposed text (See Figure 2-1.1)		х	X			X	Γ			Х	Х	х	X	х		Х		Τ	Т				UPPER MOJAVE R. VLY GW BASIN, SOD LK, CRONESE LAKES	
	MOJAVE RIVER (BEAR VALLEY RD TO Begin proposed text <u>ONE MILE</u> DOWNSTREAM OF THE HWY 66 BRIDGE (See Figure 2-1.1)End proposed text Begin strikeout HELENDALE) End strikeout		х	х			х				х	х	x	х	х		х	x 2	(UPPER MOJAVE R. VLY GW BASIN, SOD LK, CRONESE LAKES	
	Begin proposed text MOJAVE RIVER (ONE MILE DOWNSTREM OF THE HWY 66 BRIDGE TO HELENDALE) (See Figure 2-1.1)		<u>x</u>	X			<u>x</u>				X	X	X	<u>x</u>			X	X	<u>(</u>					UPPER MOJAVE R. VLY GW BASIN, SOL LK, CRONESE LAKES_End proposed text	
	LOWER NARROWS OF MOJAVE R. WETLANDS	WETLANDS	Х	X			Х				X	X		Х	Х		X	2	(K			Х	MOJAVE RIVER, UPPER MOJAVE R. VLY BASIN	
	TURNER SPRINGS	SPRINGS	Х	Х			Х				Х	Х		Х			Х					X	Х	MOJAVE RIVER	
	WEST FORK MOJAVE RIVER	INTERMITTENT STREAM	Х	X			X				X	Х	Х	X	Х		X	X	(SILVERWOOD LK, MOJAVE RIVER, UPP MOJAVE R. VLY GW BASIN	
	EAST FORK OF WEST FORK OF MOJAVE RIVER	PERENNIAL STREAM	Х	Х							Х	Х	Х		Х		Χ)	X			SILVERWOOD LAKE	
	LAKE GREGORY	LAKE	Х	Х			Х		Х		Х	Х	Х		Х		Х)	X			HOUSTON CREEK	
	SEELEY CANYON CREEK	PERENNIAL STREAM	Х	Х							Х	Х	Х		Х		Х							EAST FORK OF WEST FORK	
	HOUSTON CREEK	PERENNIAL STREAM	Х	Х							Х	Х	Х		Х		Х							EAST FORK OF WEST FORK	
	DART CREEK	PERENNIAL STREAM	Х	Х			Х				Х	Х	Х	Х	Х		Х							HOUSTON CREEK	
	DEEP CREEK	PERENNIAL STREAM	Х	Х			Х				Х	Х	Х		Х		Χ	X	(FORKS RESERVOIR, MOJAVE RIVER	
	SAWPIT CREEK	PERENNIAL STREAM	Х	х			Х				х	х	Х	Х	Х		Х							WEST FORK MOJAVE	
	WILLOW CREEK	INTERMITTENT STREAM	Х	Х							_		Х		Х		Х							DEEP CREEK	
	TROY CREEK	INTERMITTENT STREAM	X	X	-		X						X	Х	X		X							DEEP CREEK	
	TROY POND	INTERMITTENT POND	Х	Х			Х						х	Х			Х							DEEP CREEK	
	HOLCOMB CREEK	INTERMITTENT STREAM	Х	Х									х		Х		Х							DEEP CREEK	
	LITTLE BEAR CREEK	INTERMITTENT STREAM	Х	Х							Х	Х	Х		Х		Х							DEEP CREEK	
	LAKE ARROWHEAD	LAKE	Х	Х			Х		Х		Х	Х	Х		Х		Х							WILLOW CREEK	
	ARROWBEAR LAKE	LAKE	Х	Х			Х		Х			Х	Х	Х	Х		Х							DEEP CREEK	
	HOOKS CREEK	PERENNIAL STREAM	Х	Х	_			1					Х		Х		Х							LITTLE BEAR CREEK	
	TWIN PEAKS CREEK	PERENNIAL STREAM	Х	Х			Х				Х	Х	Х	Х	Х		Х							(UPPER) GRASS VALLEY CREEK	
	SHAKE CREEK	PERENNIAL STREAM	Х	Х			T					Х	Х		Х		Х)	x			DEEP CREEK	
	SHEEP CREEK	PERENNIAL STREAM	Х	Х			Х				Х	Х	Х	Х	Х		Х							DEEP CREEK	
	CRAB CREEK	PERENNIAL STREAM	Х	Х			1	1			Х	Х	Х		Х		Х)	X			DEEP CREEK	
	GREEN VALLEY LAKE	LAKE	Х	Х			Х	1			Х	Х	Х		Х		Х							GREEN VALLEY CREEK	
	GREEN VALLEY CREEK	PERENNIAL STREAM	Х	Х			Х				Х	Х	Х	Х	Х		Х							GREEN VALLEY LAKE, DEEP CREEK	
	SILVERWOOD LAKE	RESERVOIR	Х	Х			Х	1			х	Х	Х		Х		Х							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.

			BENEFICIAL USES																					
	HYDROLOGIC UNIT/SUBUNIT	WATERBODY									BEN	EFI	JAL	05	5									RECEIVING
	DRAINAGE FEATURE	CLASS MODIFIER	MUN	AGR	PRO	GWR	FRSH	NAV	POW	REC-1	REC-2	COMM	WARM	COLD	SAL	WILD	BIOL	RARE	MIGR	SPWN	WQE			WATER
	GRASS VALLEY LAKE	LAKE	X	Х)	x			Х	Х	Х		X		X						+	GRASS VAL	LEY CREEK
	GRASS VALLEY CREEK	PERENNIAL STREAM	Х	Х)	x			Х	Х	Х)	X		X						T	GRASS VAL MOJAVE RI	LEY LAKE, WEST FORK
	UPPER MOJAVE RIVER, LOWER SLOUGH	WETLANDS																	+			+	MOJAVE RI	
	MINOR SURFACE WATERS		х	Х)	x		Х	Х	Х		X	X		X			1			+	UPPER MO	JAVE R VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X	Χ)	XX			X	X)	X		X		X			Х	X	UPPER MO	JAVE R VLY GW BASIN
628.30	MIDDLE MOJAVE HYDROLOGIC AREA																							
	MOJAVE RIVER (See Figure 2-1.1)		X	Х)	X			Х	Х	Х)	X		X	ſ					Т		JAVE R VLY GW BASIN, SO
	MINOR SURFACE WATERS			X	+)			х	X	X	~)			X			+			+		NESE LAKES DAVE R VLY GW BASIN
	MINOR WETLANDS	WETLANDS		x			x x		^	X	X)			X		X			Х	(X		JAVE R VLY GW BASIN
628.40	LOCKHART HYDROLOGIC AREA		_																					
020.40																								
628.41	GRASS VALLEY HYDROLOGIC SUBAREA																							
	MINOR SURFACE WATERS			Х			X		Х	Х	Х)			X							HARPER VA	ALLEY GW BASIN
	MINOR WETLANDS	WETLANDS	X	Х)	XX			X	X)	X		Х		Х			Х	(X	HARPER V	ALLEY GW BASIN
628.42	HARPER VALLEY HYDROLOGIC SUBAREA																							
	BIRD SPRINGS	SPRINGS	Х	Х)	X			Х	X		>	X		X					Х		HARPER VA	ALLEY GW BASIN
	HARPER LAKE	ALKALI LAKE	Х	Χ)	X			Χ	Х)	X		X							INTERNALL	Y DRAINED LAKE
	OPAL MTN. SPRINGS	SPRINGS																			Х			
	HARPER LAKE WETLANDS	WETLANDS		X)				Х	Х)			X	_				Х	(X		
	MINOR SURFACE WATERS			X			X			X	X)			X	_					+		ALLEY GW BASIN
	MINOR WETLANDS	WETLANDS	X	X			XX	1		Х	X)	X		X		X			Х	X	HARPER VA	ALLEY GW BASIN
628.50	LOWER MOJAVE HYDROLOGIC AREA																							
	MOJAVE RIVER (See Figure 2-1.1 and 2-1.2)		Х	Х		3	x			X	X	X)			X							LOWER MO	DJAVE R VLY GW BASIN, SO NESE LAKES
	MOJAVE RIVER, CAMP CADY WILDLIFE AREA		х	Х)	x			Х	х	х)			х	х	x						JAVE R VLY GW BASIN, SOI NESE LAKES
	MINOR SURFACE WATERS		Х	χ			X			Χ	Χ)	X		X							LOWER MC	JAVE R VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X	Х)	XX			X	X)	X		X		X			Х	X	LOWER MC	JAVE R VLY GW BASIN
628.60	NEWBERRY SPRINGS HYDROLOGIC AREA																							
628.61	KANE WASH HYDROLOGIC SUBAREA																							
	MINOR SURFACE WATERS		X	Х			x			Х	X		X	X		X						Т	KANE WAS	H AREA GW BASIN
	MINOR WETLANDS	WETLANDS		Χ			XX			X	X)	X		X		X			Х	X	KANE WAS	H AREA GW BASIN
628.62	TROY VALLEY HYDROLOGIC SUBAREA																							
	MINOR SURFACE WATERS		X	Х)	X			Х	X		X	X		X	Ι		Ι			Т	TROY VLY	GW BASIN
628.62	MINOR WETLANDS	WETLANDS	Х	Х)	ΧХ			Х	Х		X	X		Х		Х			Х	(X	TROY VLY	GW BASIN

1

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.

	Unless otherwise specified, benefic											~							
								BEN	EFIC		USE	S							
	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	AGR	IND PRO	FRSH GWR	NAV	REC-1 POW	REC-2	COMM	WARM	COLD	SAL	WILD	BIOL		MIGR	SDIWN	FLD	RECEIVING WATER
628.70	AFTON HYDROLOGIC AREA																		
628.71	CAVES HYDROLOGIC SUBAREA																		
	MOJAVE RIVER (See Figure 2-1.1)		хx		X		X	Х		Х			X						CAVES CYN VLY GW BASIN, SODA LA CRONESE LAKES
	MOJAVE RIVER, AFTON CANYON		x x		х		х	х		Х	٠		х	х	Х				CAVES CYN VLY GW BASIN, SODA LA CRONESE LAKES
	MINOR SURFACE WATERS		XX		X		Х	_		Х			Х						CAVES CYN VLY GW BASIN
	MINOR WETLANDS	WETLANDS	XX		XX		X	X		X	X		X		X		Х	X	CAVES CYN VLY GW BASIN
628.72	CRONESE HYDROLOGIC SUBAREA																		
020112	BITTER SPRINGS	WETLANDS	X X		X		X	X		X	X	1	Х				Х	X	CRONESE VALLEY GW ASIN
	CRONESE LAKES (EAST AND WEST)	WETLANDS	X X		Х		Х	Х		Х			х				Х	X	INTERNALLY DRAINED LAKES, CRON VLY GW BASIN
	MINOR SURFACE WATERS		X X		X		X	Х		X	X		Х						CRONESE VALLEY GW BASIN
	MINOR WETLANDS	WETLANDS	XX		XX		X			X			X		X		Х	X	CRONESE VALLEY GW BASIN
628.73	LANGFORD HYDROLOGIC SUBAREA																		
	MINOR SURFACE WATERS		X X		X		X	X		X	X	Γ	X		Т				LANGFORD VLY GW BASIN
	MINOR WETLANDS	WETLANDS	XX		XX		Х	Х		Х	X		X		X		Х	X	LANGFORD VLY GW BASIN
628.80	BAKER HYDROLOGIC AREA																		
628.81	SILVER LAKE HYDROLOGIC SUBAREA										-			_					
	SILVER LAKE	ALKALI LAKE	X X		X		Х	Х		Х	х	Х	Х						INTRNL DRN LK/SILVER LK VLY GW BASIN
	HALLORAN SPRING	SPRING/EMERGENT	XX		X		Х			X	Х		X						SILVER LAKE VLY GW BASIN
	MINOR SURFACE WATERS		XX		X		Х	_		X	_		X						SILVER LAKE VLY GW BASIN
	MINOR WETLANDS	WETLANDS	X X		XX		X	X		X	X		X		X		Х	X	SILVER LAKE VLY GW BASIN
628.82	SODA LAKE HYDROLOGIC SUBAREA																		
	SODA LAKE	ALKALI LAKE	X X		X		Х	Х	Х	Х	Х		Х				Х	(INTERNALLY DRAINED LAKE, SILVER LAKE, SODA LAKE VLY GW BASIN
	ZYZYX SPRING	SPRING	X X		X		Х	Х	Х	X	Х		Х	Х	Х				SODA LAKE VLY GW BASIN
	MOJAVE RIVER (See Figure 2-1.1)		X X				Х	Х		X			Х						SODA LAKE, SODA LAKE VLY GW BA
	MOJAVE RIVER, AFTON CANYON		XX				Х			Х			X	X	X				SODA LAKE, SODA LAKE VLY GW BA
	INDIAN SPRING	SPRING	XX		XX		Х			Х	-		Х						SODA LAKE VLY GW BASIN
	CANE SPRING	SPRING	XX		XX		Х			X			Х						SODA LAKE VLY GW BASIN
	GRANITE SPRING	SPRING	XX		XX		X	_		X			Χ	\square					SODA LAKE VLY GW BASIN
	HENRY SPRING	SPRING	XX		XX		X	_		X		<u> </u>	X						SODA LAKE VLY GW BASIN
	MESQUITE SPRINGS	SPRINGS	X X		X		X			X		<u> </u>	X				Х		MOJAVE RIVER SINK
ſ	MINOR SURFACE WATERS		XX		X		X	_		X		<u> </u>	X				-		
	MINOR WETLANDS	WETLANDS	X X		ХХ		Х	х		X	Х	1	х	1	х		X	X	

The Chapter 2, Figure 2.1-1 on Page 2-43 titled "Map showing locations where the COLD and WARM freshwater habitat beneficial uses apply for the Mojave River", shown below, will be replaced with a revised version of Figure 2.1-1 and additional explanatory text will be inserted below the figure, as shown on the next page.





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

Begin proposed text The location on the Mojave River identified in Figure 2-1.1 as "1 mile downstream of Hwy 66 Bridge" below which COLD no longer applies corresponds with the coordinates 34°34'36.8"N, 117°20'10.3"W. End proposed text

The following text will be deleted and inserted from Chapter 2, Table 2-2, "Beneficial Uses for Ground Waters of the Lahontan Region:

BASIN		BENEFICIAL USES											
						AQUA							
DWR NO.	BASIN NAME	MUN	AGR	IND	FRSH	POND	WILD						
6-44	Antelope Valley	х	х	х	х								
6-45	Tehachapi Valley East	х	х	х	х								
6-46	Fremont Valley	х	х	х	х								
6-47	Harper Valley	х	х	х	х								
6-48	Goldstone Valley	х		х	х								
6-49	Superior Valley	х											
6-50	Cuddback Valley	х	х	х	х								
6-51	Pilot Knob Valley	х	х	х	х								
6-52	Searles Valley (see note #1 below)	х		х									
6-53	Salt Wells Valley (see note #2 below)	х		х									
6-54	Indian Wells Valley (see note #2 below)	х	х	х	х								
6-55	Coso Valley	х											
6-56	Rose Valley	х	х	х	х								
6-57	Darwin Valley	х											
6-58	Panamint Valley	х		х									
6-59	Granite Mountain Area	х	х		х								
6-60	Fish Slough Valley	х	х	х	х								
6-61	Cameo Area	х											
6-62	Race Track Valley	х					х						
6-63	Hidden Valley	х											
6-64	Marble Canyon Way	х	х		х								
6-65	Cottonwood Spring Area	х	х		х								
6-66	Lee Flat	х											
6-67	Martis Valley	х	х		х								
6-68	Santa Rosa Flat	х											
6-69	Kelso Lander Valley	х	х		х								
6-70	Cactus Flat	Х	х	х									
6-71	Lost Lake Valley	х											
6-72	Coles Flat	х											
6-73	Wild Horse Mesa Area	х											
6-74	Harrsiburg Flats	х											
6-75	Wildrose Canyon	х											
6-76	Brown Mountain Valley	х		х									
6-77	Grass Valley	х		х									
6-78	Denning Spring Valley	х	х		х								
6-79	California Valley	х	х	х	х								
6-80	Middle Park Canyon	х		х									
6-81	Butte Valley	х	х		х								

Note #1: The MUN designation does not apply to ground water under the Searles Lake bed, or to the groundwater surrounding Searles Lake within the boundaries shown in Figure 2-2.1. The PRO (Industrial Process Supply) use applies to the ground water under the Searles Lake bed.

Note #2: The MUN designation does not apply to the ground waters located beneath the Salt Wells Valley and those within the shallow groundwater (above the top of the low-permeability lacustrine clay sediments) in the eastern Indian Wells Valley groundwater basins as shown on Figure 2-2.2.

BASIN		BENEFICIAL USES											
DWR NO.	BASIN NAME	MUN	AGR	IND	FRSH	AQUA POND	WILD						
6-82	Spring Canyon Valley	x	x		х								
6-83	Furnace Creek Area	x					х						
6-84	Greenwater Valley	х					х						
6-85	Gold Valley	х	х		х								
6-86	Rhodes Hill Area	х	х		х								
6-87	Butterbread Canyon Valley	х											
6-88	Owl Lake Valley	х											
6-89	Kane Wash Area	х	х	х	х								
6-90	Cady Fault Area	х	х	х	х								
6-91	Cow Head Lake Valley	x	х		x								
6-92	Pine Creek Valley	х	х		х								
6-93	Harvey Valley	х	х		х								
6-94	Grasshopper Valley	х	х										
6-95	Dry Valley	х	х										
6-96	Eagle Lake Valley	х	х		х								
6-97	Horse Lake Valley	х	х										
6-98	Tuledad Canyon Area	х	х										
6-99	Painters Flat	х	х										
6-100	Secret Valley	х	х										
6-101	Bull Flat	х	х										
6-102	Modoc Plateau Recent Volcanic Areas	х	Х										
6-103	Modoc Plateau Pleistocene Volcanic Areas	х	Х										
6-104	Long Valley	х	х	х	х								
6-105	Slinkard Valley	Х	Х		Х								
6-106	Little Antelope Valley	х	х		х								
6-107	Antelope Valley	Х	Х		Х								
	BASIN NUMBERS 6-108 TO 6-345 ARE UN-N	AMED, S	EE PLA	TES 2A	<u>& 2B FO</u>	R LOCAT	ION						
6-108		X											
6-109		X											
6-110		X											
6-111		Х											
6-112		X											
6-113		X											
6-114		X											
6-115		Х											
6-116		X											
6-117		X											
6-118		X											
6-119		X											
6-120		X											
6-121		X											
6-122		X											
6-123		x											
6-124		Х											

BASIN		BENEFICIAL USES								
DWR NO.	BASIN NAME	MUN	AGR	IND	FRSH	AQUA POND	WILD			
6-125		x								
6-126		X								
6-127		х								
6-128		x								
6-129		х								
6-130		х								
6-131		х								
6-132		х								
6-133		х								
6-134		х								
6-135		х								
6-136		х								
6-137		х								
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6-149		Х								
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6-155		Х								
6-156		Х								
6-157		Х					· · · · ·			
6-158		Х								
6-159		Х								
6-160		Х								
6-161		Х								
6-162		Х								
6-163		Х								
6-164		Х								
6-165		Х								
6-166		Х								
6-167		X								
6-168		Х								

BASIN		BENEFICIAL USES								
DWR NO.	BASIN NAME	MUN	AGR	IND	FRSH	<u>AQUA</u> POND	WILD			
6-169	B) (GITTIN WIE	x								
6-170		x								
6-171		x								
6-172		x								
6-173		х								
6-174		х								
6-175		х								
6-176		х								
6-177		х								
6-178		х								
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6-205		х								
6-206		х								
6-207		х								
6-208		х								
6-209		х								
6-210		х								
6-211		х								
6-212		Х								

Proposed Changes to Chapter 3, Water Quality Objectives

The following text will be inserted into Chapter 3, Water Quality Objectives, in the section titled "WATER QUALITY OBJECTIVES FOR SURFACE WATERS", in "Water Quality Objectives That Apply to All Surface Waters" as follows:

Water Quality Objectives for Surface Waters

Water quality objectives for surface waters are divided into the three categories of:

1. Water Quality Objectives That Apply to All Surface Waters.

Listed alphabetically below, these narrative and numerical water quality objectives apply to all surface waters (including wetlands) within the Lahontan Region:

Ammonia Bacteria. Coliform **Biostimulatory Substances Chemical Constituents** Chlorine, Total Residual Color **Dissolved Oxygen Floating Materials** Begin proposed text Mercury (Statewide water quality objective) End proposed text Oil and Grease Non-degradation of Aquatic Communities and Populations bН Radioactivity Sediment Settleable Materials Suspended Materials Taste and Odor Temperature Toxicity Turbidity

The following text will be inserted into Chapter 3, Water Quality Objectives, in the section titled "WATER QUALITY OBJECTIVES THAT APPLY TO ALL SURFACE WATERS" after "Floating Materials" and before "Oil and Grease" as follows:

Floating Materials

Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.

For natural high quality waters, the concentrations of floating material shall not be altered to the extent that such alterations are discernable at the 10 percent significance level.

Begin Proposed Text Mercury (fish tissue)

Statewide water quality objectives for mercury in fish tissue were established via the "Tribal

Subsistence Beneficial Uses and Mercury Provisions" (State Water Board Resolution No. 2017-0027) ("Mercury Provisions") for the reasonable protection of people and wildlife that consume fish and apply to all the inland surface waters, enclosed bays and estuaries of the State designated with the applicable beneficial uses. The Mercury Provisions should be consulted in their entirety for a complete accounting of the water quality objectives and associated implementation provisions. The applicability of the water quality objectives are summarized below.

The water quality objectives that protect people who consume fish apply to waters with the COMM, CUL, T-SUB, and SUB beneficial uses. The water quality objectives that protect wildlife that consume fish apply to waters with WILD, RARE, WARM, and COLD beneficial uses.

The Mercury Provisions contains five mercury fish tissue water quality objectives, which are formulated for one or more of the applicable beneficial uses, depending on the consumption pattern (which includes consumption rate, fish size, and species) by individuals and wildlife. Additionally, different sizes and species of fish contained at a water body will, in some cases, affect whether a particular water quality objective may be utilized to evaluate whether one or more beneficial uses are supported. Therefore, the fish in a particular water body would dictate which water quality objective(s) must be evaluated to ensure all the applicable wildlife beneficial uses are supported.

The Mercury Provisions can be found on the State Water Board's Plans and Policies web page at the following address: https://www.waterboards.ca.gov/plans_policies/_End proposed text

Oil and Grease

Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses.

For natural high quality waters, the concentration of oils, greases, or other film or coat generating substances shall not be altered.

The following text will be deleted and inserted in Chapter 3, Water Quality Objective, in the section "WATER QUALITY OBJECTIVES FOR CERTAIN WATERBODIES", in the sub-section "East Walker River Hydrologic Unit", in "Water Body SAR (Annual Average)":

Water Body SAR (Annual Average)

East Walker River 2

The Lahontan Regional Board recognizes that SAR may be higher than the value above in *Begin strikeout* certainsurface *End strikeout Begin proposed text* <u>certain surface</u> *End proposed text* waters of the East Walker River watershed due to natural sources of sodium, including geothermal sources. Where higher SAR values occur only as a result of natural sources, the affected water bodies or water body segments will not be considered to be in violation of the applicable SAR objective.

Proposed Changes to Chapter 4, Implementation

 The following text will be deleted and inserted in Chapter 4, Implementation, in Section 4.2, SPILLS, LEAKS, COMPLAINT INVESTIGATIONS, AND CLEANUPS in the subsection titled "Reportable Quantities Of Hazardous Waste And Sewage Discharges":

Reportable Quantities Of Hazardous Waste And Sewage Discharges

Water Code Section 13271 requires that the State Board and the Department of Toxic Substances Control adopt regulations establishing reportable quantities for substances listed as hazardous wastes or hazardous materials pursuant to Section 25140 of the Health and Safety Code. Reportable quantities are those which should be reported because they may pose a risk to public health or the environment if discharged to ground or surface water.

Similarly, the State Board was required to adopt regulations establishing reportable quantities for sewage. These requirements for reporting the, discharge of sewage and hazardous materials do not supersede waste discharge requirements or water quality objectives.

The regulations for reporting spills of hazardous materials are given in Sections *Begin strikeout* 2701, 2703, and 2705 of Chapter 2, Subchapter 3, *End strikeout Begin proposed text* 2630, 2631 and 2632 of Article 2, Chapter 4, Division 2 *End proposed text* of Title 19 of the California Code of Regulations and are incorporated by reference into this plan. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

The Water Code (Section 13272.1) requires Regional Boards to publish and distribute quarterly reports on methyl tert butyl ether (MTBE) discharges to public water system operators within their jurisdictions. The reports must list MTBE discharges which occurred within the quarter and locations where MTBE was detected in groundwater within the region.

• The following text will be inserted into Chapter 4, Implementation, in Section 4.2, SPILLS, LEAKS, COMPLAINT INVESTIGATIONS, AND CLEANUPS after the subsection titled "Proposition 65 List" and before the subsection titled "Requirements for Site Investigation and Remediation":

Begin proposed text Site Cleanup Program (SCP)

The SCP regulates and oversees the investigation and cleanup of illegal discharges, contaminated properties, and other unauthorized releases adversely impacting the State's waters but not covered by another program.

Sites managed within the SCP include sites with pollution from recent or historic spills, subsurface releases (e.g., pipelines, sumps), complaint investigations, and all other unauthorized discharges that pollute or threaten to pollute surface and/or ground waters. Site investigation and cleanup at SCP sites proceed as directed in State Board Resolution No. 92-49 described further below. End proposed text

• The following text will be inserted into Chapter 4, Implementation, Section 4.2, SPILLS, LEAKS, COMPLAINT INVESTIGATIONS, AND CLEANUPS, in the subsection titled "Soil Cleanup Levels" that follows the subsection titled "Groundwater Cleanup Levels":

Soil Cleanup Levels

The Regional Board will determine soil cleanup levels for the unsaturated zone based upon threat to *Begin proposed text* human health and the environment, and *End proposed text* water quality. In its determination, the Regional Board will use guidance from the USEPA, and Cal/EPA's Office of Health Hazard Assessment, and Department of Toxic Substances Control.

If it is unreasonable to clean up soils to background concentration levels, the Regional Board may consider site-specific recommendations for soil cleanup levels above background provided that applicable ground water quality objectives are met and health risks from surface or subsurface exposure meet current guidelines. The Regional Board may require follow-up ground water monitoring to verify that ground water is not polluted by chemicals remaining in the soil. The Regional Board may require that soils with remaining pollutants are covered and managed to minimize pollution of surface waters and/or exposure to the public. If significant amounts of waste remain onsite, the Regional Board may implement provisions contained in the California Code of Regulations, Title 23, Chapter 15 to the extent applicable.

• The following text will be deleted in Chapter 4, Implementation, Section 4.2, SPILLS, LEAKS, COMPLAINT INVESTIGATIONS, AND CLEANUPS following the subsection titled "Soil Cleanup Levels" in the subsection titled "SLIC Program":

Begin strikeout **Spills, Leaks, Investigations, and Cleanups (SLIC Program)** The SLIC Program was established by the State Board so that Regional Boards could oversee cleanup of illegal discharges, contaminated properties, and other unregulated releases adversely impacting the State's waters but not covered by another program.

Sites managed within the SLIC Program include sites with pollution from recent or historic spills, subsurface releases (e.g., pipelines, sumps), complaint investigations, and all other unauthorized discharges that pollute or threaten to pollute surface and/or ground waters. Investigation, remediation, and cleanup at SLIC sites proceed as directed in State Board Resolution No. 92-49 as described above. End strikeout

• The following text will be deleted and inserted in Chapter 4, Implementation, in Section 4.2, SPILLS, LEAKS, COMPLAINT INVESTIGATIONS, AND CLEANUPS, in the subsection titled "Use of the Cleanup and Abatement Account to Fund Cleanups":

Use of the Cleanup and Abatement Account to Fund Cleanups

The State Water Resources Control Board manages the Cleanup and Abatement Account (CAA) Fund. The CAA receives funds statewide as a result of *Begin proposed text*, <u>but not</u> <u>limited to</u>, *End proposed text* court judgments from civil and criminal actions and from administrative civil liabilities.

The California Water Code *Begin proposed text* <u>Section 13442</u> *End proposed text* provides for the disbursement of *Begin proposed text* grant *End proposed text* funds from the CAA *Begin*

proposed text to eligible entities if that entity has authority to undertake the activity, End proposed text including:

• Public agencies *Begin strikeout* with the authority to clean up waste or abate its effects; and *End strikeout Begin proposed text;*

• A Tribal government that is on the California Tribal Consultation list maintained by the Native American Heritage Communication and is a disadvantaged community; and

• Non-profits or community water systems serving a disadvantaged community. End proposed text Begin strikeout ;and

• Regional Boards attempting to remedy an actual or potential water pollution problem for which adequate resources have not been budgeted. End strikeout

The State Board has the authority to approve funding. Applicants do not have a right to these funds.

Begin proposed text State Board approved Cleanup and Abatement Account Funding Program Guidelines (adopted December 11, 2018). These Guidelines, and any future update or amendment to the Guidelines, establishes the process and criteria for the allocation and administration of Cleanup and Abatement Account (CAA) funding for eligible projects. The Guidelines are utilized in soliciting applications, prioritizing and evaluating project proposals, and awarding funding for projects that clean up waste or abate the effects of waste on waters of the State or address an urgent drinking water need. End proposed text

Begin strikeout

The Regional Board's Executive Officer, his/her designee, or a public agency may request emergency funds orally for amounts up to \$50,000. These requests are to be directed to the Chief Counsel. In the absence of that individual, other designated staff should be called in the order listed: the Executive Director, the Chief Deputy Director, or the Administrative Services Division Chief. Any of these four individuals may review and approve the request. Within one week following the oral request, the requesting agency shall submit the terms in writing. Nonemergency requests must be written to be considered by the State Board, and must include a specific Regional Board Resolution.

The agency or Regional Board receiving the funds shall notify the Office of Chief Counsel (OCC) upon project completion and submit a follow-up report. This report must describe the work accomplished and fund recoupment. OCC will review the report to verify that the agency performed the work.

OCC shall pursue the recovery of CAA funds expended for cleanup and abatement when a discharger refuses to perform or pay for the work.

Any funds not committed or expended within 12 months of encumbrance or approved project end date (whichever is later) shall be disencumbered. The agency has 90 days to submit a bill. The Executive Director may grant a time extension if no additional funding is required. Disencumbered funds become available for other projects.

If additional funding is required, approval must be given by the State Board or the designated approval authority (for emergency requests). End strikeout

• The following text will be inserted and deleted in Chapter 4, Implementation, Section 4.2, SPILLS, LEAKS, COMPLAINT INVESTIGATIONS, AND CLEANUPS in the subsection titled "Federal Superfund Program":

Federal *Begin strikeout* Superfund *End strikeout Begin proposed text* <u>CERCLA</u> *End proposed text* Program

Begin proposed text In 1980, End proposed text the federal Begin proposed text government End proposed text "Superfund" program was established Begin strikeout in 1980 with the passage of End strikeout the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Begin proposed text commonly known as Superfund End proposed text. The CERCLA provided funding and guidelines for the cleanup of Begin strikeout the most threatening hazardous waste sites in the nation End strikeout. High priority sites scheduled for cleanup under this program are placed on the National Priority List (NPL). Begin strikeout (see Section 4.12, "Military Installations") End strikeout

• The following text will be inserted and deleted in Chapter 4, Implementation, Section 4.5, SOLID AND LIQUID WASTE DISPOSAL TO LAND, in sections starting from the introduction of section 4.5 to the section before "Discharge Prohibitions that Apply to Solid Wastes":

4.5 SOLID AND LIQUID WASTE DISPOSAL TO LAND

The Regional Board regulates the disposal of waste to land under Chapter 15, Division 3, Title 23 of the California Code of Regulations, known as "Chapter 15" *Begin proposed text*, and under Title 27, of the California Code of Regulations, known as "Title 27." Chapter 15 applies to hazardous wastes and Title 27 *End proposed text* applies to wastes which cannot be discharged directly or indirectly to waters of the State and which therefore must be discharged to land for treatment, storage, or disposal.

Types of operations in the Lahontan Region which are subject to *Begin proposed text* <u>Title 27</u> *End proposed text Begin strikeout* Chapter 15 *End strikeout* include solid waste disposal sites (landfills), industrial wastewater ponds (surface impoundments), septage and sludge disposal (see *Begin strikeout* "Septage and Sludge Disposal" in Section 4.4 *End strikeout Begin proposed text* <u>sections 20200, 20220, and 20690 of Title 27End proposed text</u>), mining and geothermal operations (see *Begin strikeout* "Mining, Industry, and Energy Development" *End strikeout Begin proposed text* <u>sections 22470 through 22510 of Title 27End proposed text</u>), and some confined animal facilities (see "*Begin strikeout* "Agriculture" *End strikeout Begin proposed text* <u>sections</u> <u>22560 through 22565 of Title 27</u> *End proposed text*). This section contains: (1) a summary of the pertinent sections of *Begin strikeout* Chapter 15 *End strikeout Begin proposed text* <u>Title</u> <u>27End proposed text</u>, (2) a discussion of Region-specific requirements and prohibitions, and (3) a discussion of the Solid Waste Assessment Test Program.

Begin strikeout Chapter 15 End strikeout Begin proposed text Title 27 End proposed text

Begin strikeout Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text contains minimum, prescriptive standards for proper management of applicable wastes.

Regional Boards may impose more stringent requirements to accommodate regional and/or site-specific conditions.

Dischargers may propose alternatives to the construction or prescriptive standards contained in *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text if they can show that the prescriptive standard is not feasible (i.e., too difficult or costly to implement, or not likely to perform adequately under the given circumstances). The proposed alternative must be able to provide equivalent management of the waste, and must not be less stringent than the prescribed standards.

Discharges to land which may be exempt from *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text are Begin strikeout listed in Appendix D End strikeout Begin proposed text discussed in section 20090 of Title 27 End proposed text.

Wastes fall into four categories under the current classification system. These four categories are: Hazardous, Designated, Non-Hazardous, and Inert, and are defined in *Begin strikeout* Appendix D-End strikeout Begin proposed text <u>Title 27</u> End proposed text. Hazardous and Designated wastes can often be generated by the same source and may differ only by their concentrations of given constituents.

Wastes must be disposed of differently depending on their liquids content and the waste category into which they fall. A table containing the Summary of Waste Management Strategies for Discharge of Waste to Land (see *Begin strikeout Appendix D End strikeout Begin proposed text* <u>Table 2.1 in Title 27</u> *End proposed text*) shows the proper level of containment for the various categories of waste. A table containing Geologic and Siting Criteria for Classified Waste Management Units is included in *Begin strikeout Appendix D End strikeout Begin proposed text* <u>Table 3.1 in Title 27</u> *End proposed text*.

Receiving water monitoring is required at all waste management units. *Begin strikeout* Appendix D discusses End strikeout Begin proposed text Chapter 3, Subchapter 3, Article 1, and Chapter 7, Subchapter 1, Article 1, and Chapter 7, Subchapter 2, Article 1 of Title 27 discuss End proposed text the monitoring requirements for the various classes of waste management units and describes the progressive phases of monitoring.

The routine ground water monitoring conducted during the entire compliance period of a project's life is referred to as "detection monitoring." If a leak is detected during the course of detection monitoring, an "evaluation monitoring" program must be established. If the evaluation monitoring verifies the presence of a leak, a "corrective action program" must be established and conducted until the problem has been successfully corrected.

Vadose zone monitoring must be conducted at all waste management units. *Begin strikeout* Appendix D discusses End strikeout Begin proposed text <u>Title 27</u>, Sections 20415 and 20435 <u>discuss</u> End proposed text the minimum requirements for an acceptable vadose zone monitoring program.

Special requirements for confined animal facilities are discussed in *Begin strikeout* Article 6 of Chapter 15 End strikeout Begin proposed text Chapter 7, Subchapter 2, Article 1 of Title 27 End proposed text. These facilities are also subject to other portions of *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text as applicable. Begin strikeout Confined animal facilities are discussed in detail in the section entitled "Agriculture." End strikeout Under Begin strikeout Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text, mining waste discharges are only subject to the requirements of Begin proposed text <u>Chapter 7, Subchapter 1, Article 1</u> End proposed text Begin strikeout Article 7 End strikeout, or other portions of Begin strikeout Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text as referenced by Begin strikeout Article 7 End strikeout Begin proposed text <u>Article 1</u>. Mining wastes are also subject to regulation under the Surface Mining and Reclamation Act (SMARA, CA Public Resources Code, Title 14, Division 2, Chapter 9). Article 7 and SMARA are discussed in detail in the section entitled "Mining, Industry, and Energy Development."

An inactive waste management unit can still pose a threat to water quality. In fact, due to the nature of some wastes and the characteristics of some disposal sites, sometimes water quality problems do not become evident until years after a site has closed. Therefore, *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text requires that all waste management units have a plan for acceptable closure procedures and post-closure maintenance and monitoring.

Solid and Liquid Waste Requirements

Solid wastes are disposed of in a landfill or Solid Waste Disposal Site (SWDS). A landfill, as defined in *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text, is a waste management unit at which waste is discharged in or on land for disposal. A landfill may be classified as Class I, II, or III, depending on the type of waste being accepted, but the term "landfill" typically refers to a Class III municipal solid waste landfill which accepts only inert or non-hazardous, municipal solid waste. Landfills are an integral component of most communities in the Lahontan Region, except for those of the Lake Tahoe Basin. Solid waste generated in the Lake Tahoe Basin is exported out of the Basin.

"Hazardous" solid wastes must be disposed of in Class I landfills or waste piles. "Designated" solid wastes must be disposed of in Class I or II landfills or waste piles. Liquid wastes may not be disposed of to Class III waste management units. Rather, liquid wastes must be discharged to Class I or II surface impoundments, depending on their classification.

Discharges from solid and liquid waste management units can impact both ground and surface waters. The receiving water most likely to be at risk from a waste management unit is the ground water beneath the site. Precipitation or runoff may enter the unit and contact the waste, percolate through it, and travel to ground water, carrying constituents of the waste with it. Solid waste may contain enough free liquids to form a leachate and travel to ground water. Vapors may migrate from a waste management unit into the soils and ground water below the unit. Gases forming in a closed waste management unit may pressurize the unit and force contaminants into the ground water. A liquid waste impoundment may leak its contents into the soils and ground water below the unit. Liquids may exit a waste management unit and travel to nearby surface waters. Uncontained solid waste may also be transported to surface waters by wind.

The Regional Board regulates all the active waste management units and some of the closed units in the Region under waste discharge requirements which contain pertinent *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text regulations. Some of the applicable requirements include:

1. Waste management units must be sited in locations where they will not extend over a known Holocene fault or into areas with inadequate separation from ground water.

- 2. Waste management units must be constructed to minimize (Class III) or prevent (Class I and II) the possibility of leachate contacting ground water. This may be done by siting the unit in an area where the depth to ground water is very great or where natural geologic features will provide containment. A Class III waste management unit may also have a clay or synthetic liner with a leachate collection and removal system (LCRS), if there is a possibility that ground water could be impacted by leakage from the unit. Class I and II units must be lined. A discharger may propose engineered alternatives to the *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27End proposed text</u> containment requirements, but the alternatives must provide equal or greater protection to the receiving waters at the site, per Begin strikeout Article 1 End strikeout Begin proposed text <u>Section 20080(b)</u> End proposed text.
- 3. To minimize or prevent the formation of leachate, solid waste management units shall be covered periodically with soil or other approved materials. Runoff from offsite should be prevented from entering a waste management unit and contacting the wastes in the unit.
- 4. The potential receiving waters shall be monitored. A waste management unit shall have sufficient ground water monitoring wells at appropriate locations and depths to yield ground water samples from the uppermost aquifer to provide the best assurance of the earliest possible detection of a release from the waste management unit. Perched ground water zones shall also be monitored. Background monitoring should be conducted for one year prior to opening a new waste management unit.

Begin strikeout Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text requires that the vadose zone shall be monitored at all new sites and at any existing site, unless it can be shown to the satisfaction of the Regional Board that there are no vadose zone monitoring devices that would work at the site, or that installation of vadose zone monitoring devices would require unreasonable dismantling or relocating of permanent structures.

- 5. All operating waste management units must have an approved closure/post-closure monitoring and maintenance plan and their operators must provide the Regional Board with assurance that sufficient funds are irrevocably committed to ensure that the site will be properly reclaimed and maintained.
- 6. The operator of a waste management unit must obtain and maintain assurances of financial responsibility for foreseeable releases from the unit.

Municipal Wastewater Sludge Management

Wastewater sludge (biosolids) is a by-product of wastewater treatment. Raw sludge usually contains 93 to 99.5 percent water with the balance being solids that were present in the wastewater and that were added to or cultured by wastewater treatment processes. Most POTWs treat the sludge prior to ultimate use or disposal. Normally, this treatment consists of dewatering and/or digestion. In some cases, such as at Lake Arrowhead and Barstow, a portion of the sludge is incinerated.

Treated and untreated sludges may contain high concentrations of heavy metals, organic pollutants, pathogens, and nitrates. Storage and disposal of municipal sludges on land can result in degradation of ground and surface water if not properly performed. The Regional Board currently regulates handling and disposal of sludge pursuant to *Begin strikeout* Chapter 15 End

strikeout Begin proposed text <u>Title 27</u> *End proposed text* and Department of Health Services (DHS) standards for sludge management (Cal. Code of Regs., Title 22, Division 4, Section60301).

Sludge may be placed in a Class III landfill (see section on *Begin strikeout* Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text) if it can meet the following requirements, otherwise it must be placed in a Class II surface impoundment:

- 1. The landfill is equipped with a leachate collection and removal system, and
- 2. The sludge must contain at least 20 percent solids if primary sludge, or at least 15 percent solids if secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge, and
- 3. A minimum solids-to-liquid ratio of 5:1 by weight must be maintained to ensure that the codisposal will not exceed the initial moisture-holding capacity of the nonhazardous solid waste. The Regional Board may require that a more stringent solids-to-liquid ratio be maintained, based on site-specific conditions.

In addition to landfilling, sludge may be disposed of in a number of other ways, provided it meets the requirements specific to the given disposal method. Sludge may be incinerated, applied to land as a soil amendment, made into commercial fertilizer, or stockpiled in piles or drying beds. Generally, the Regional Board regulates the disposal of sludge under the requirements for the treatment plant which generates the sludge. However, for land application of sludge, separate waste discharge requirements for the landowner will be considered. The State's *Begin strikeout* Integrated Waste Management Board (CIWMB) End strikeout Begin proposed text Department of Resources Recycling and Recovery (CalRecyle) End proposed text also regulates the disposal of sludge.

The USEPA has promulgated a policy of promoting those municipal sludge management practices that provide for the beneficial use of sludge while maintaining or improving environmental quality and protecting public health. On February 19, 1993, the USEPA published final sewage sludge regulations in 40 CFR Part 503. The regulations are intended to assure that use and disposal of sewage sludges comply with federal sludge use and disposal criteria developed by USEPA. The State Board or *Begin strikeout* the CIWMB End strikeout Begin proposed text CalRecyle End proposed text may develop a state sludge management program consistent with the USEPA policy and criteria for land application, surface disposal, and incineration of sewage sludge. Applicable federal regulations for the disposal of sewage sludge in municipal solid waste landfills are contained in 40 CFR Parts 257 and 258 (Subtitle D).

Subtitle D

These federal regulations apply to municipal solid waste landfills (Class III landfills under California's "Begin strikeout Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text"). The Subtitle D regulations outline the classification of municipal landfills, siting criteria, design criteria, operation procedures, water quality monitoring parameters and standards, closure and post-closure care requirements, and financial assurance guidelines, similar to Begin strikeout Chapter 15 End strikeout Begin proposed text <u>Title 27</u> End proposed text. USEPA considers Subtitle D to be minimum standards for landfill operation. States may have equal or more stringent requirements, but may not have less stringent requirements. If a state's landfill

regulation program meets USEPA's approval, that state may apply to become a USEPA "approved state" for landfill regulation, and Subtitle D provisions do not apply. However, if all or a part of a state's regulations do not meet USEPA's approval, more stringent portions of Subtitle D take precedence until that state modifies its program and obtains approval. California has obtained approval from USEPA.

• The following text will be inserted and deleted in Chapter 4, Implementation, Section 4.6, GROUNDWATER PROTECTION AND MANAGEMENT in the subsection titled "Regional Board Control Measures for Ground Water Protection and Management":

Regional Board Control Measures for Ground Water Protection and Management

To protect ground water resources, the Regional Board allows few waste discharges to land. (See the "Solid and Liquid Waste Disposal to Land" section of this Chapter.) Those that are permitted (e.g., landfills) are closely regulated under existing laws and regulations to maintain and to protect ground water quality for beneficial uses. Another category of discharges to land is individual waste disposal systems (e.g., septic systems). In most instances, the Regional Board has waived its regulation of individual waste disposal systems provided that counties (and some cities) in the Region regulate the systems. Specific provisions of the regulation are included in Memoranda of Understanding (MOUs) with each county or city. The MOUs stipulate that regulation of the systems must comply with all Regional Board requirements (see "Wastewater" section of this Chapter).

Discharges of hazardous and nonhazardous waste, and the waste management units at which the wastes are discharged (e.g., landfills, surface impoundments), are regulated by the Regional Board through waste discharge requirements to properly contain the wastes, and to ensure that effective monitoring is undertaken to protect water resources of the Region (also see "Solid and Liquid Waste" section of this Chapter). These waste discharges are also concurrently regulated by other State and local agencies. Local agencies implement the State's solid waste management programs as well as local ordinances governing the siting, design, and operation of solid waste disposal facilities (usually landfills) with the concurrence of the California Begin strikeout Integrated Waste Management Board (CIMWB) End strikeout Begin proposed text Department of Resources Recycling and Recovery (CalRecycle) End proposed text. Begin strikeout The CIMWB End strikeout Begin proposed text CalRecyle End proposed text also has direct responsibility for review and approval of plans for closure and post-closure maintenance of solid waste landfills. The Department of Toxic Substance Control (DTSC) issues permits for all hazardous waste management, treatment, storage, and disposal facilities. The State Board, Regional Boards, Begin strikeout CIMWB End strikeout Begin proposed text CalRecyle End proposed text, and DTSC have entered into a Memorandum of Understanding to coordinate their respective roles in the concurrent regulation of these discharges.

The laws and regulations governing both hazardous and nonhazardous solid waste disposal have been revised and strengthened in recent years. Implementation of these laws and regulations through the following programs is summarized below: California Code of Regulations, Title 23, Chapter 15 *Begin proposed text* and Title 27 *End proposed text*; Resource Conservation and Recovery Act; Toxic Pits Cleanup Act; Solid Waste Assessment Tests. (See the "Solid and Liquid Waste" section of this Chapter for detailed control actions).

• The following text will be inserted and deleted in Chapter 4, Implementation in Section 4.6, GROUNDWATER PROTECTION AND MANAGEMENT in the subsection titled "California Code of Regulations, Title 23, Chapter 15" that follows the section titled "Regional Board Control Measures for Ground Water Protection and Management":

California Code of Regulations, Title 23, Chapter 15 begin proposed text, and Title 27 end proposed text

Begin strikeout Referred to as "Chapter 15," this is the most significant regulation End strikeout Begin proposed text Title 23, Chapter 15, referred to as "Chapter 15" and Title 27 are the most significant regulations End proposed text used by the Regional Board in regulating hazardous and nonhazardous waste treatment, storage, and disposal. Wastes are classified as either hazardous waste, designated waste, nonhazardous waste, or inert waste. These regulations include very specific siting, construction, monitoring and closure requirements for all existing and new waste treatment, storage, and disposal facilities Begin proposed text, known as Waste Management Units (WMUs). WMUs are classified as either Class I, II, or III depending on the type of waste to be disposed of or stored in the unit. Land disposal is regulated by Title 27. End proposed text Begin strikeout Chapter 15 End strikeout Begin proposed text Title 27 End proposed text requires operators to provide assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from their waste management units. Detailed technical criteria are provided for establishing water guality protection programs, and corrective action programs for releases from waste management units. Begin strikeout Chapter 15 requires End strikeout Begin proposed text Title 27 required End proposed text the review and update of waste discharge requirements for all hazardous waste treatment, storage, and disposal sites by January 1, 1993 and for all nonhazardous waste, storage, and disposal sites by July 1, 1994. Begin strikeout Chapter 15 defines waste types to include hazardous wastes, designated wastes, nonhazardous solid wastes, and inert wastes. End strikeout

• The following text will be inserted and deleted in Chapter 4, Implementation, in Section 4.6, GROUNDWATER PROTECTION AND MANAGEMENT in the subsection titled "Underground Storage Tank Program," and before the section "UST Remediation Goals":

Underground Storage Tank Program

Implementation of the Underground Storage Tank (UST) Program is unique, as the Health and Safety Code gives local agencies the authority to oversee investigation and cleanup of UST leak sites. The Corrective Action regulations (23 Cal. Code of Regs., Ch. 16, Article 11) use the term "regulatory agency" in recognition of the fact that local agencies have the option to oversee site investigation and cleanup, in addition to their statutory mandate to oversee tank permitting, leak reporting, and tank closure. *Begin proposed text* On and after July 1, 2013, a Local Oversight Program (LOP) may be implemented only by a city or county that the State Water Board has certified as qualified to implement a program for the abatement of, and oversight of the abatement of, unauthorized releases of hazardous substances from USTs. The State Water Board may enter into an agreement with a certified local agency to implement the LOP. End proposed text Begin strikeout Several local agencies now have the authority (through Local Oversight Program contracts with the State Board or Memoranda of Understanding with the

Regional Board) to act on the Regional Board's behalf in requiring investigations and cleanup. The Regional Board retains the authority to approve case closure. *End strikeout*

Reports of leaking USTs are submitted by local agencies (city, county, etc.) and by private parties to the Regional Board. Submittals are on a standard form that complies with Proposition 65 notification (Underground storage tank Unauthorized Releases [Leak]/Contamination Site Report). The local agencies forward copies of the leak reports to the Regional Board. (See also "Proposition 65 Program" in Section 4.2.)

Begin strikeout The cleanup and enforcement elements of the program are shared between the Regional Board and the local agencies. End strikeout Regional Boards Begin proposed text and LOPs End proposed text are responsible for oversight of investigation and remediation where unauthorized releases from USTs pose a threat to, or have impacted, water quality. Local agencies, such as Begin strikeout County Health Services End strikeout Begin proposed text county health services End proposed text, are responsible for tank permitting, monitoring, and removal. Begin strikeout, and the investigation and remediation of releases that do not pose a threat to water quality. Additionally, several local agencies have contracted with the State Board under the Local Oversight Program (LOP) to oversee the investigation and remediation of releases that threaten or have impacted water quality. End strikeout

The California Code of Regulations, Title 23, Division 3, Chapter 16, contains State regulations regarding underground tank construction, monitoring, repair, release reporting, and corrective action. The objectives of the regulations are to:

- Place all USTs storing hazardous substances, covered by law, under permit;
- Ensure that all existing USTs, covered by law, meet standards for the detection of releases of hazardous substances;
- At the time of application for an UST permit, ensure that all new USTs covered by law, meet standards to prevent releases of hazardous substances;
- Ensure that the UST program complies with the federal UST requirements and secure authorization from USEPA to regulate USTs in the State;
- Identify leaking USTs and decide whether the Regional Board or local implementing agency will have the lead for supervision of cleanup within 90 days of the discovery of a leak. Undertake cleanup supervision of 10-25% of existing backlogged and new leak cases each year. The annual caseload will depend on the severity of the water quality problems and the availability of Regional Board resources to oversee cleanup;
- Provide funding for eligible local agencies, under a local oversight program, for the oversight of leaking UST cleanup;
- Ensure that appropriate cleanup actions are undertaken in a timely manner at UST sites which have no identifiable Responsible Party (RP) or which have an insolvent RP (orphan site);
- Ensure that all tank integrity tests, conducted within the State, are performed by or under the direct supervision of a licensed tank tester;

- Require all existing underground pressurized piping to be equipped with an automatic leak detector;
- Ensure that all UST owners and operators shall maintain evidence of financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by a release;
- Require secondary containment for pressurized piping, corrosive protection for tanks, and spill and overfill prevention equipment for UST systems.

Begin strikeout Number of UST Cases in the Region

As of July, 1993, a total of 591 leaking USTs had been documented in the Lahontan Region. Of these 591 releases, approximately 150 (25%) have impacted ground water. A list of these UST releases and the status of investigation and remediation at each site is published quarterly by staff of the Regional Board. End strikeout

Areas With the Greatest Number of UST Releases Affecting Ground Water

Throughout the Lahontan Region several areas have been identified as containing a significant number of leaking USTs that have impacted ground water. Generally, these areas are light industrial/service areas that typically have shallow ground water and/or coarse soils. Because of the significant number of documented releases in these areas, a substantial amount of geologic and hydrologic data have been generated.

UST Cleanup Trust Fund (SB 2004)

In 1991 the State Legislature passed SB 2004, which required that *Begin strikeout* 0.006 cents *End strikeout Begin proposed text* a certain fee *End proposed text* be paid by tank owners to the State for each gallon of petroleum products stored in a UST. This tax program generates revenue to provide *Begin strikeout* a maximum of \$990,000 *End strikeout Begin proposed text* <u>up to \$1,500,000 of *End proposed text* grant money per claim for investigation and remediation to those persons who operated or owned USTs that have leaked. The fund reimburses monies that are spent by the discharger during investigation and cleanup. Staff of the Regional Board and State Board are responsible for reviewing technical proposals for investigation and remediation and remediation to ensure plans are technically and economically effective.</u>

Dischargers applying for the fund are separated into "A," "B," "C," and "D" categories. These categories are generally based on gross annual income, with "A" applicants having the least income. Since the fund is designed to assist those dischargers with the least financial ability to conduct investigation and remediation, "A" applicants have the highest priority for funding. Since many tank owners and operators lack resources, assistance from the fund increases opportunities for remedial actions.

• The following text will be inserted in Chapter 4, Implementation, Section 4.6, GROUNDWATER PROTECTION AND MANAGEMENT following the subsection titled "UST Remediation Goals" and before the subsection titled "Source Removal" as follows:

Begin proposed text Low-Threat UST Case Closure Policy

It has been well documented in the literature and through experience at individual UST release site that petroleum fuels naturally attenuate in the environment through adsorption, dispersion,

dilution, volatilization, and biological degradation. This natural attenuation slows and limits the migration of dissolved petroleum plumes in groundwater. In general, it is recognized that many petroleum release cases pose a low threat to human health and the environment.

The State Water Board established the Low-threat UST Case Closure Policy which became effective in August 2012. The purpose of the policy is to establish consistent statewide case closure criteria for low-threat petroleum UST sites. The policy establishes general criteria and media-specific criteria that if met, and in the absence of unique case or site-specific attributes, indicate that a case poses a low threat to human health, safety, or the environment and is appropriate for closure pursuant to Health and Safety Code 25296.10. The full text version of this policy can be found on the State Water Board's Plans and Policies webpage located at the following web address: https://www.waterboards.ca.gov/plans_policies/_ End proposed text

• The following text will be deleted from Chapter 4, Implementation, Section 4.6 GROUNDWATER PROTECTION AND MANAGEMENT in the subsection titled "City of Bishop", which follows the section titled "Cleanup Levels":

Begin strikeout The City of Bishop

The majority of documented releases in the Bishop area have occurred in the light industrial/service area along Hwy. 395 (Main Street). Depth to ground water along Main Street ranges from three to eight feet below ground surface (bgs). Ground water dominantly flows east toward the Owens River.

Soils in the Bishop area are variable. Coarse alluvial cobbles and boulders are present on the alluvial fan of the eastern Sierra Nevada range at the western edge of Bishop. However, throughout the City, soils appear to be predominantly clayey sands and clayey silts with low permeability characteristics. A shallow unconfined aquifer is present beneath the City of Bishop at depths ranging from three to eight feet below ground surface. The ground water gradient of this aquifer throughout the City of Bishop is gently sloping. Additionally, the low permeability soils result in slow ground water velocities.

Municipal supply wells for the City of Bishop are located east and north of known petroleum dispensing facilities. No known water supply wells are located in areas of known or suspected ground water pollution.

Dischargers at several UST sites in the City of Bishop have installed ground water monitoring wells. The results of well sampling indicate that pollution plumes have little or no natural degradation without active remediation, but these plumes also migrate very slowly.

UST Policy for Bishop. Based on the principles of State Board Resolution No. 92-49, Board staff has developed a policy to set time schedules for completing soil and ground water cleanup. To the extent feasible, schedules will be set to coincide with the availability of resources, including UST Trust Funds. The policy specifically applies to potential Trust Fund "A," "B," and "C" applicants in specific hydrogeologic areas of Bishop. The policy is as follows:

1. When USTs are removed, all identified soil pollution will be excavated to the property boundaries to the depth of the ground water table (depth to ground water in Bishop ranges from 3 to 8 feet below ground surface). Contaminated soil beneath existing onsite buildings will not be required to be removed at this time.

- 2. Soil samples will be collected from all excavation sidewalls to document effective removal of contaminated soils or the location of any remaining soil contamination that persists offsite.
- 3. The discharger will remove any fuel found floating on the water table surface.
- 4. Field investigation methods (such as Hydropunch[™] and cone penetrometers) can be effectively used to preliminarily define the lateral extent of ground water pollution. This data will then be used to locate a maximum of three ground water monitoring wells that approximately define the down gradient extent of ground water pollution. It is expected that these wells will be installed offsite.
- Monitoring of the ground water will be conducted by the discharger. Monitoring includes laboratory analysis of ground water samples collected from the installed monitoring wells. The discharger will continue to remove any identified fuel found floating on the water table surface.
- 6. The UST owner/operator would not be required to perform additional soil or dissolved phase ground water remediation until SB 2004 funding is available, provided that the discharger supplies the Regional Board documentation that a grant application has been filed with the State Board.
- 7. Dissolved phase ground water remediation would only be required prior to receiving SB 2004 funding if it becomes evident that the discharger will not qualify for SB 2004 funding, or the pollution poses an imminent threat to public health. This policy does not change the overall remedial goals of the Regional Board. End strikeout
- The following text will be deleted from Chapter 4, Implementation, Section 4.6 GROUNDWATER PROTECTION AND MANAGEMENT following the section titled "City of Bishop":

UST Discharges in Hydrogeologic Areas Other than Bishop

Ground water pollution plumes may migrate slowly in other areas of the Region besides Bishop. However, data must be generated in these additional areas that conclusively demonstrates that these conditions exist. In areas where it can be conclusively demonstrated that hydrological conditions similar to Bishop exist, the above policy may be applied to remediation of UST release sites. In areas where pollution plumes do not migrate slowly, failure to initiate ground water remediation in the short-term may result in a substantially more extensive condition of pollution, and may also increase the threat to public health and safety. End strikeout

• The following text will be inserted and deleted in Chapter 4, Implementation, Section 4.6, GROUNDWATER PROTECTION AND MANAGEMENT in the subsection titled "Spills, Leaks, Investigation and Cleanup (SLIC) Program" that follows the subsection titled "Aboveground Storage Tanks":

Begin strikeout **Spills, Leaks, Investigation, and Cleanup (SLIC) Program** End strikeout Begin proposed text **Site Cleanup Program (SCP)** End proposed text

Sites managed within the *Begin strikeout* SLIC Program End strikeout Begin proposed text <u>Site</u> <u>Cleanup Program (SCP)</u> End proposed text include sites with pollution from recent or historic spills, subsurface releases (e.g., pipelines, sumps), complaint investigations, and all other unauthorized discharges that pollute or threaten to pollute surface and/or ground waters. Investigation, remediation, and cleanup at SCP sites proceed as directed in State Board Resolution No. 92-49 as described below. *Begin strikeout* (For further details regarding the SLIC Program, see Section 4.2, "Spills, Leaks, Complaint Investigations, and Cleanups.") End strikeout

Begin proposed text Petroleum release sites managed under the SCP include pipelines and aboveground storage tanks. Because the threat to human health and water quality is similar to petroleum release from USTs, investigation, remediation, and closure criteria for petroleum contamination emanating from these release sites is addressed in a manner similar to the Low Threat UST Case Closure Policy. End proposed text

• The following text will be inserted and deleted in Chapter 4, Implementation, Section 4.6, GROUNDWATER PROTECTION AND MANAGEMENT in the subsection titled "Federal Superfund Program" that follows the subsection titled "Spills, Leaks, Investigation and Cleanup (SLIC) Program":

Federal *Begin strikeout* Superfund *End strikeout Begin proposed text* <u>CERCLA</u> *End proposed text* Program

Begin proposed text In 1980, End proposed text the federal Begin proposed text government End proposed text Begin strikeout "Superfund" program was End strikeout established Begin strikeout in 1980 with the passage of End strikeout the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Begin proposed text, commonly known as Superfund End proposed text. The CERCLA provided funding and guidelines for the cleanup of Begin strikeout the most threatening End strikeout hazardous waste sites Begin strikeout in the nation End strikeout. High priority sites scheduled for cleanup under this program are placed on the National Priority List (NPL).

To clean up pollution at federal military sites, the State has signed a Memorandum of Agreement with the Department of Defense which established procedures under which site investigation and cleanup will proceed. Investigation and cleanup at these sites must meet the requirements of the *Begin strikeout* USEPA "Superfund" hazardous waste End strikeout CERCLA cleanup program. *Begin strikeout* This involves End strikeout Begin proposed text These procedures involve End proposed text completion of a formal Preliminary Assessment, Site Investigation, and Remedial Investigation and Feasibility Study, leading to a Record of Decision on an acceptable Remedial Action Plan. (For further details, see Section 4.12, "Military Installations.")

Proposed Changes to Chapter 6, Plans and Policies

• The following text will be inserted and deleted in Chapter 6, Plans and Policies, in the introduction before the subsection "State Board Plans":

Chapter 6 PLANS AND POLICIES

The State Water Resources Control Board (State Board) has adopted a number of statewide or area specific water quality plans which complement the Regional Boards' Basin Plans and which may supersede previously adopted provisions of Basin Plans to the extent that any inconsistencies occur; the most stringent plan provisions take precedence. Both the State Board and Regional Boards may adopt policies, separate from the Basin Plans, which provide detailed direction on the implementation of certain plan provisions. A Regional Board plan, policy, or guideline adopted to implement, interpret or make specific the Basin Plan prior to October 14, 1994, is superseded by this revised plan unless it is expressly mentioned in this plan. The following is a summary of *Begin strikeout* <u>all</u> *End strikeout Begin proposed text* some *End proposed text* important plans and policies affecting the Lahontan Region Basin Plan. Citation of these documents is not meant to imply incorporation-by reference. Copies of *Begin proposed text* <u>some</u>, but not all *End proposed text* Regional and State Board policies are included in Appendix B of this plan.

• The following text will be inserted in Chapter 6, Plans and Policies, into the first paragraph in the section titled 'State Board Plans':

State Board Plans

Several of the State Board's plans concern types of water bodies not found in the Lahontan Region, and thus do not affect Regional Board activities. These include: the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin (December 2006, Res. 2006-0098, the Water Quality Control Plan for Ocean Waters of California (amended September 2009, Res. 2009-0072) and the Water Quality Control Plan for Enclosed Bays and Estuaries (Part 1 Sediment Quality, Res. 2008-0070 Begin proposed text amended April 6, 2011, Resolution No. 2011-0017, and amended June 5, 2018, Resolution No. 2018-0028.) Current information and full text versions of State Board Plans can be found on the State Water Board's Plans and following Policies webpage located at the web address: https://www.waterboards.ca.gov/plans policies/ End proposed text The following are summaries of Begin proposed text some, but not all End proposed text plans which are applicable to the Lahontan Region:

• The following text will be inserted in Chapter 6, Plans and Policies, into the first paragraph in the section titled 'State Board Policies':

State Board Policies

Again, certain State Board policies are not applicable to the water bodies of the Lahontan Region. These include: the Water Quality Control Policy for Enclosed Bays and Estuaries of California (Res. 74-43), and the Pollutant Policy Document for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Res. 90-67). *Being proposed text* <u>Current information and full text</u> versions of State Board Policies can be found on the State Water Board's Plans and Policies webpage located at the following web address: <u>https://www.waterboards.ca.gov/plans_policies/</u> *End proposed text* The following are summaries of *Begin proposed text* <u>some, but not all</u> *End proposed text* important policies that are applicable to the Lahontan Region: