

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF JANUARY 16, 2019
APPLE VALLEY**

ITEM 7

**WORKSHOP – DRAFT BASIN PLAN AMENDMENT FOR MOJAVE RIVER
HYDROLOGIC UNIT BENEFICIAL USE DESIGNATIONS**

CHRONOLOGY

2018	California Environmental Quality Act (CEQA) Scoping Meeting held in Apple Valley on April 24, 2018 to solicit comments on the scope of the environmental analysis needed for the Basin Plan amendment.
2018	Triennial Review priority topics include completing a Basin Plan amendment revising beneficial use designations for specific Mojave River sections and tributaries (see Enclosure 1).

BACKGROUND

The Mojave River is formed by the confluence of the West Fork Mojave River and Deep Creek at the Mojave Forks dam. The Mojave River travels from the Mojave Forks dam through a desert environment to its terminus at Soda Lake, a dry lake bed. The Mojave River is ecologically important both as a water source for wildlife and for the riparian habitat it provides in the arid Mojave Desert. As such, it provides essential habitat for rare plant and animal species that are present along the Mojave River, as evidenced by the numerous observations of special status species found in the California Department of Fish and Wildlife's California Natural Diversity Database (see Enclosure 5).

The Mojave River is also an unusual river because for most of its length, due to geological conditions, water flow occurs below ground with perennial surface water present only at a few locations. Occasionally very large storm events can cause the Mojave River to flow continuously from its headwaters to its terminus at Soda Lake, approximately 110 miles downstream (see Mojave River watershed map in Enclosure 2). The last time this happened was in 2010. The Mojave River also serves an important groundwater recharge function, as the floodplain aquifer that underlies the river corridor is an essential water source for communities in the area and a key element of the Mojave River adjudication.

The 2018 Triennial Review List, in part, includes developing a Basin Plan amendment to revise surface water beneficial use designations for specific sections of the Mojave River and its two primary tributaries. The content of and rationale for the recommended revisions (described briefly below) will be presented to the Water Board and the public during the workshop.

ISSUES

Are the proposed revisions to beneficial use designations for specific sections of the Mojave River and its tributaries appropriate?

DISCUSSION

Water Board staff developed recommendations to address the Mojave River Basin Planning topics in the Water Board's 2018 Triennial Review List. One of staff's key recommendations is to amend the Basin Plan to incorporate the following revisions:

- De-designate the Cold Freshwater Habitat Beneficial Use (COLD) for the Mojave River downstream of the Lower Narrows
- Designate the Preservation of Biological Habitats of Special Significance Beneficial Use (BIOL) for specific sections of the Mojave River and its tributaries
- Designate the Rare, Threatened, or Endangered Species Beneficial Use (RARE) specific sections of the Mojave River and its tributaries
- Clarify the application of water quality objectives for surface waters in the Mojave River
- Add the Mojave River - Afton Canyon segment, to the Basin Plan's list of rivers eligible for federal Wild and Scenic Status
- Add language to the Offroad Vehicles section of Chapter 4.11 to highlight the need to protect sensitive desert riparian habitat

De-designating COLD Beneficial Use

The overall basis for staff's recommendation to de-designate the COLD beneficial use is that conditions within the Mojave River below the Lower Narrows have not and will not support a cold water ecosystem. This has been and continues to be reflected by warmer water temperatures and the absence of cold water aquatic species.

Designating BIOL and RARE Beneficial Uses

The overall basis for staff's recommendation to designate the BIOL and RARE beneficial uses for specific sections of the Mojave River and its two primary tributaries (Deep Creek and West Fork Mojave River) is that these areas have been identified as special areas of biological significance by other agencies, and that rare, threatened, and/or endangered species have by identified by other agencies as being present and relying upon the existing habitat for survival.

Clarifying Language Regarding Surface Water Objectives

The Basin Plan includes Table 3-20, which identifies site-specific objectives for total dissolved solids (TDS) and nitrate as nitrate. The table identifies in general terms specific river sections where the site-specific objectives apply. The manner in which Table 3-20 identifies the applicability of the site-specific objectives has created some uncertainty that can be addressed through clarifying amendments.

Adding Afton Canyon Section to the List of Waters Eligible for Federal Wild and Scenic Status

Since the Basin Plan was last updated, the Bureau of Land Management identified the Afton Canyon section of the Mojave River as being eligible for federal Wild and Scenic status. Basin Plan Chapter 4.9 (Resources Management and Restoration) would be amended to reflect this change in federal Wild and Scenic status eligibility.

Offroad Vehicles and Desert Riparian Habitat

Staff is recommending adding desert washes and riparian habitat to the list of areas (surface waters and wetlands) where land management agencies should consider modifying offroad vehicle routes and use when water quality problems associated with such use are identified.

This workshop will provide additional context and background information regarding the basis for the Basin Plan amendment and provide an opportunity for questions and comments from Board members.

PUBLIC OUTREACH/INPUT

Agenda items were posted to the Water Board's webpage; and noticed (Enclosure 4) via the Board Meeting, Basin Planning Regionwide, and Basin Planning – Mojave River email list serves (Lyris lists). Staff also contacted agencies with interest in Mojave River resource protection issues including, but not limited to, local municipalities, utility districts, CDFW, BLM, San Bernardino County and interested Native American Tribes.

Staff conducted a CEQA scoping meeting in May 2018, and is currently engaged in consultation with a Native American Tribe, pursuant to AB 52 requirements

RECOMMENDATION

This workshop is an information item only The Water Board may provide direction to staff, as appropriate.

ENCLOSURE	ITEM	BATES NUMBER
1	Excerpt from the 2018 Triennial Review Priority List	7-5
2	Mojave River Watershed Map	7-9
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ENCLOSURE 1

2018 TRIENNIAL REVIEW ADOPTED PRIORITY LIST (Excerpt)

Priority	Project	Description	Prioritization	Next Steps
5	Mojave River Surface Water Beneficial Use Revisions	<p>Basin Plan amendment involving the following revisions.</p> <ul style="list-style-type: none"> • Add BIOL and RARE to specific reaches of Mojave River and its tributaries • Remove COLD from specific reach <p>Clarify use of existing water quality objectives for the floodplain aquifer.</p>	<ul style="list-style-type: none"> • Underway/near completion • Regulatory clarity • Stakeholder support 	<p>Complete work in Year 1:</p> <ul style="list-style-type: none"> • Complete Staff Report and Use Attainability Analysis • Complete Substitute Environmental Document • Public workshop <p>Adoption hearing</p>
6	Site-Specific Water Quality Objectives for Mojave Ground Water	<p>Staff will evaluate groundwater quality information to determine whether it is appropriate to set specific WQOs.</p>	<ul style="list-style-type: none"> • Underway • Regulatory clarity • Stakeholder support 	<p>Continue work in Year 1:</p> <ul style="list-style-type: none"> • Prioritize ground water sub-basins for evaluation • Evaluate available data/information and determine if it is adequate for determining the need for and ability to develop new water quality objectives • Develop strategy, including stakeholder involvement and schedule, to develop new water quality objectives where appropriate

ENCLOSURE 2

Mojave River Watershed Map

Proposed Revisions to Beneficial Use Designations



ENCLOSURE 3

Lahontan Regional Water Quality Control Board

*****PUBLIC NOTICE*****

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTON REGION**

NOTICE OF PUBLIC SCOPING MEETING

**BASIN PLAN AMENDMENT TO MODIFY MOJAVE RIVER
BENEFICIAL USES**

NOTICE IS HEREBY GIVEN that the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) will hold a California Environmental Quality Act (CEQA) scoping meeting at the following time and location:

**Tuesday, April 24, 2018
1:30 p.m. to 3:00 p.m.**

**Mojave Water Agency Meeting Room
13846 Conference Center Drive
Apple Valley, CA 92307**

The proposed Basin Plan Amendment involves adding Preservation of Biological Habitats of Special Significance (BIOL Beneficial Use) and Rare, Threatened, or Endangered Species (RARE Beneficial Use) to Deep Creek and specific locations along the Mojave River including Camp Cady, Afton Canyon, and the reach of the Mojave River between Bear Valley Road and Helendale. It also includes removing Cold Freshwater Habitat (COLD Beneficial Use) for the Mojave River downstream of the Lower Narrows because natural conditions in this portion of the river are not conducive to cold water species.

The purpose of the scoping meeting is to seek input from public agencies and members of the public regarding the proposed Basin Plan Amendment and the scope of the environmental assessment. Public comments can be made at the scoping meeting or can be submitted in written form by May 25, 2018 to Jennifer Watts at the contact information provided below.

A quorum of Board members may be present at the meeting, but no action will be taken at that time.

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

BACKGROUND INFORMATION

During the 2015 Triennial Review of the *Water Quality Control Plan for the Lahontan Region* (Basin Plan), the Lahontan Water Board identified, as a top priority, evaluating potential changes to the beneficial uses assigned to the Mojave River. Lahontan Water Board staff has conducted its evaluation and is recommending the changes referenced, above. More information regarding the Lahontan Water Board's Triennial Review Process is available at the link below:

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/#triennial

Additional information regarding the proposed Basin Plan Amendment will be available at:

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/

This web site will be updated as new documents (e.g., Draft Basin Plan Amendment, Staff Technical Report) are developed and made available for public review.

PARKING AND ACCESSIBILITY

The meeting room at the Mojave Water Agency is accessible to persons with disabilities. The facility also has public parking and is accessible via public transit.

CONTACT INFORMATION

Please direct any written comments, questions, or concerns regarding the scoping meeting or the Basin Pan Amendment process to Jennifer Watts at (530) 542-5491, or by email to

Jennifer.Watts@waterboards.ca.gov.

If you would like to receive further correspondence related to this project, please subscribe to the "Basin Planning – Mojave River" mailing list at:

https://www.waterboards.ca.gov/resources/email_subscriptions/reg6_subscribe.html

ENCLOSURE 4

Lahontan Regional Water Quality Control Board

December 14, 2018

****NOTIFICATION****

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

NOTICE OF BOARD WORKSHOP FOR THE DRAFT MOJAVE RIVER BASIN PLAN AMENDMENT

NOTICE IS HEREBY GIVEN that the Lahontan Regional Water Quality Control Board (Water Board) will host a workshop at its January 2019 meeting in Apple Valley regarding a draft amendment to the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). The Basin Plan includes water quality standards and control measures for surface and ground waters within watersheds east of the Sierra Nevada crest, from the Oregon border down into the northern Mojave Desert. The draft Basin Plan amendment involves adding the BIOL and RARE beneficial uses to specific segments of the Mojave River and to its two main tributaries. The proposed Basin Plan amendment also involves removing the COLD beneficial use from a segment of the Mojave River, and adding clarifying language to address the application of water quality objectives to surface water in the Mojave River. The purpose of the workshop is to share information regarding the draft Basin Plan amendment with Water Board members and the public, and to answer questions regarding this project. Water Board members may also provide direction regarding the draft Basin Plan amendment.

In April 2018, staff held a public scoping meeting in Apple Valley regarding the draft Basin Plan amendment to solicit comments on the scope of the environmental analysis required by the California Environmental Quality Act. Materials from the April 2018 scoping meeting are available at

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/#other.

The Water Board will host the workshop during its regularly scheduled meeting at the location shown below.

DATE: January 16, 2019
TIME: 1:00 PM

PLACE: Mojave Water Agency
13846 Conference Center Dr.
Apple Valley, CA 92307

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

The Water Board will release the Substitute Environmental Document in early 2019 for a 45-day public review and comment period. The Water Board will hold a public hearing, followed by a consideration to approve this project, anticipated in summer 2019. The Water Board will provide notification of the public hearing 45 days in advance of the hearing date.

The approximate time will be identified in the Water Board's agenda, which is posted on the Water Board's web site at: www.waterboards.ca.gov/lahontan, a minimum of 10 days prior to the meeting. The meeting room will be accessible to people with disabilities. Individuals who require special accommodations or have special language needs are requested to contact Katrina Fleshman at (530) 542-5414 or katrina.fleshman@waterboards.ca.gov, at least five working days prior to the meeting. TTY/TTD/Speech to Speech users may dial 7-1-1 for the California Relay Service.

Please bring the above information to the attention of anyone you know to be interested in this matter.

DS/cdw/T: Lahontan Water Board-Mojave River Basin Plan Amendment Workshop
File Under: ECM / Mojave River Surface Water BPA/Jan 2019 workshop

ENCLOSURE 5

Special Status Species in the Mojave River Watershed – Data sourced from the California Department of Fish and Wildlife California Natural Diversity Database

Type	Scientific Name	Common Name	Fed Status	State Status	CDFW Status	Lake Arrowhead	Apple Valley South	Hesperia	Victorville	Helendale	Wild Crossing	Hodge	Hinkley	Barstow	Nebo	Yermo	Harvard Hill	Manix	Hidden Valley	Dunn
Amphibian	Anaxyrus californicus	arroyo toad	Endangered	None	SSC	X	X		X				X	X						
Amphibian	Rana draytonii	California red-legged frog	Threatened	None	SSC	X			X											
Amphibian	Rana muscosa	southern mountain yellow-legged frog	Endangered	Endangered		X														
Bird	Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP	X														
Bird	Piranga rubra	summer tanager	None	None	SSC	X														
Bird	Setophaga petechia	yellow warbler	None	None	SSC	X		X	X											
Bird	Athene cunicularia	burrowing owl	None	None	SSC	X	X	X	X	X	X				X	X				X
Bird	Empidonax traillii	willow flycatcher	None	Endangered		X	X	X	X											
Bird	Empidonax traillii extimus	southwestern willow flycatcher	Endangered	Endangered		X			X						X					
Bird	Vireo vicinior	gray vireo	None	None	SSC		X	X												
Bird	Toxostoma lecontei	Le Conte's thrasher	None	None	SSC		X	X	X				X	X	X	X				
Bird	Asio otus	long-eared owl	None	None	SSC			X												
Bird	Aquila chrysaetos	golden eagle	None	None	FP				X						X	x				
Bird	Buteo swainsoni	Swainson's hawk	None	Threatened					X											
Bird	Coccyzus americanus occidentalis	western yellow-billed cuckoo	Threatened	Endangered					X			X								
Bird	Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP				X											
Bird	Agelaius tricolor	tricolored blackbird	None	Candidate Endangered	SSC				X											
Bird	Lanius ludovicianus	loggerhead shrike	None	None	SSC				X		X		X							
Bird	Toxostoma bendirei	Bendire's thrasher	None	None	SSC				X											
Bird	Icteria virens	yellow-breasted chat	None	None	SSC				X	X						X				
Bird	Contopus cooperi	olive-sided flycatcher	None	None	SSC				X											
Bird	Pyrocephalus rubinus	vermillion flycatcher	None	None	SSC				X								X	X		X
Bird	Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	-				X	X										
Bird	Ixobrychus exilis	least bittern	None	None	SSC											X				
Bird	Piranga rubra	summer tanager	None	None	SSC															X
Fish	Siphateles bicolor mohavensis	Mohave tui chub	Endangered	Endangered	FP	X	X	X	X				X	X	X	X	X	X		X
Fish	Gila orcuttii	arroyo chub	None	None	SSC				X											X
Mammal	Taxidea taxus	American badger	None	None	SSC	X							X							
Mammal	Glaucomys oregonensis californicus	San Bernardino flying squirrel	None	None	SSC	X														
Mammal	Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None	None	SSC		X		X											
Mammal	Xerospermophilus mohavensis	Mohave ground squirrel	None	Threatened			X	X	X	X	X	X	X	X	X					
Mammal	Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC		X		X						X	X			X	
Mammal	Antrozous pallidus	pallid bat	None	None	SSC			X											X	X
Mammal	Euderma maculatum	spotted bat	None	None	SSC															X
Mammal	Microtus californicus mohavensis	Mohave river vole	None	None	SSC				X	X										
Mammal	Ovis canadensis nelsoni	desert bighorn sheep	None	None	FP														X	X
Reptile	Anniella stebbinsi	southern California legless lizard	None	None	SSC	X														
Reptile	Thamnophis hammondii	two-striped gartersnake	None	None	SSC	X														
Reptile	Phrynosoma blainvillii	coast horned lizard	None	None	SSC	X														
Reptile	Aspidoscelis tigris stejnegeri	coastal whiptail	None	None	SSC	X														
Reptile	Phrynosoma blainvillii	coast horned lizard	Threatened	None	SSC		X	X	X											
Reptile	Gopherus agassizii	desert tortoise	Threatened	Threatened			X		X	X	X	X	X	X	X	X	X		X	X
Reptile	Emys marmorata	western pond turtle	None	None	SSC				X	X				X		X	X	X		X
Reptile	Thamnophis hammondii	two-striped gartersnake	None	None	SSC				X											
Reptile	Uma scoparia	Mojave fringe-toed lizard	None	None	SSC								X	X		X			X	

Special Status Species in the Mojave River Watershed – Data sourced from the California Department of Fish and Wildlife California Natural Diversity Database

Scientific Name	Common Name	CA Rare Plant Rank	Lake Arrowhead	Apple Valley South	Hesperia	Victorville	Helendale	Wild Crossing	Hodge	Hinkley	Barstow	Nebo	Yermo	Harvard Hill	Manix	Hidden Valey	Dunn
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	1B.1									X						
<i>Acanthoscyphus parishii</i> var. <i>parishii</i>	Parish's oxytheca	4.2	X														
<i>Androsace elongata</i> ssp. <i>acuta</i>	California androsace	4.2	X														
<i>Androstephium breviflorum</i>	small-flowered androstephium	2B.2															X
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's mariposa-lily	1B.2	X														
<i>Canbya candida</i>	white pygmy-poppy	4.2	X		X	X					X						
<i>Castela emoryi</i>	Emory's crucifixion-thorn	2B.2										X	X				X
<i>Castilleja lasiorhyncha</i>	San Bernardino Mountains owl's-clover	1B.2	X														
<i>Chorizanthe spinosa</i>	Mojave spineflower	4.2			X			X		X	X	X					
<i>Cleomella brevipes</i>	short-pedicelled cleomella	4.2														X	
<i>Diplacus mohavensis</i>	Mojave monkeyflower	1B.2				X	X		X		X	X	X				
<i>Dudleya abramsii</i> ssp. <i>affinis</i>	San Bernardino Mountains dudleya	1B.2	X	X													
<i>Eriophyllum mohavense</i>	Barstow woolly sunflower	1B.2									X	X					
<i>Ivesia argyrocoma</i> var. <i>argyrocoma</i>	silver-haired ivesia	1B.2	X														
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated humboldt lily	4.2	X														
<i>Lilium parryi</i>	lemon lily	1B.2	X														
<i>Lycium torreyi</i>	Torrey's box-thorn	4.2				X			X		X					X	
<i>Menodora spinescens</i> var. <i>mohavensis</i>	Mojave menodora	1B.2									X	X					
<i>Mentzelia tricuspis</i>	spiny-hair blazing star	2B.1									X						
<i>Muilla coronata</i>	crowned muilla	4.2		X						X							
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail	1B.2			X												
<i>Pediomelum castoreum</i>	Beaver Dam breadroot	1B.2	X			X	X	X	X		X	X	X				
<i>Perideridia parishii</i> ssp. <i>parishii</i>	Parish's yampah	2B.2	X														
<i>Phacelia parishii</i>	Parish's phacelia	1B.1									X		X	X			
<i>Plagiobothrys parishii</i>	Parish's popcornflower	1B.1													X		
<i>Sclerocactus polyancistrus</i>	Mojave fish-hook cactus	4.2				X	X	X	X	X	X						
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	southern mountains skullcap	1B.2				X											
<i>Symphotrichum defoliatum</i>	San Bernardino aster	1B.2				X											
<i>Wislizenia refracta</i> ssp. <i>refracta</i>	jackass-clover	2B.2												X			

Glossary of Special Status Plant and Animal Designations

California State Designations

Endangered	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
Threatened	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
Candidate Endangered	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.

California Department of Fish and Wildlife Designations (Animals Only)

Fully Protected (FP)	This classification was the State of California's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals.
Species of Special Concern (SSC)	It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Federal Designations

Endangered	The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
Threatened	The classification provided to an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.

California Rare Plant Ranks (Plant Status Ranks developed by California Native Plant Society)

1B.1	Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
2B.1	Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
2B.2	Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California
4.1	Plants of limited distribution, seriously threatened in California
4.2	Plants of limited distribution, fairly threatened in California

ENCLOSURE 6

Item 7

Workshop Draft Basin Plan Amendment for Mojave River Hydrologic Unit Beneficial Use Designations

Meeting of the
Lahontan Regional Water Quality Control Board
Apple Valley

January 16, 2019

Jennifer Watts, Ph.D.
Environmental Scientist



1

Presentation Overview

- History of Mojave River Basin Plan topics
- Summary of Basin Plan amendment elements
- Overview of Mojave River basin
- Basis for Basin Plan amendment elements
- Schedule
- Board questions and comments

2

Mojave River Basin Planning Topics

- Add BIOL Beneficial Use to portions of Mojave River and tributaries*
- De-designate COLD Beneficial Use from portion of the Mojave River*
- Revise site specific water quality objectives*
- Evaluate measures to protect groundwater quality in the Mojave Basin



Summary of Basin Plan Amendment

- Chapter 2 Present and Potential Beneficial Uses
 - Add BIOL and RARE Beneficial Uses to portions of the Mojave River and its two main tributaries
 - De-designate COLD Beneficial Use for the Mojave River downstream of the Lower Narrows

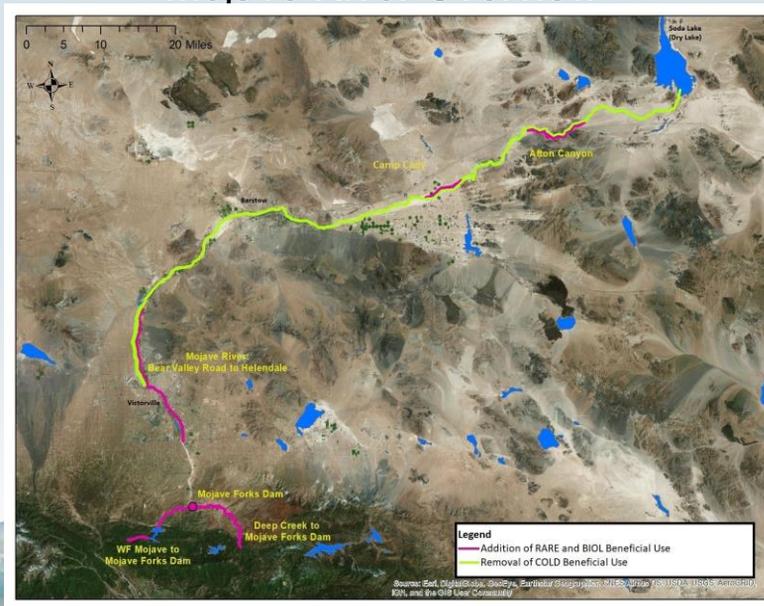


Summary of Basin Plan Amendment

- Chapter 3 Water Quality Objectives
 - Add clarifying language to Table 3-20 for the Mojave Hydrologic Unit
- Chapter 4 Implementation
 - Add the Mojave River (Afton Canyon) to Table 4.9-1 (Federal Wild and Scenic-eligible rivers)
 - Add language to section on Offroad Vehicles that highlights protection of desert riparian habitat



Mojave River Overview



Designating BIOL and RARE BUs Mojave Basin Designations

- Deep Creek
 - Wild Trout Stream, California Fish and Game Commission
- West Fork Mojave River
 - Western pond turtle (Species of Special Concern) population, California Dept. of Fish and Wildlife



Designating BIOL and RARE BUs Mojave Basin Designations

- Mojave River
 - Two Areas of Biological Resource Mitigation, Mojave River Adjudication/California Dept. of Fish and Wildlife
 - Camp Cady Wildlife Area, California Dept. of Fish and Wildlife
 - Afton Canyon - Area of Critical Environmental Concern, Bureau of Land Management



Deep Creek

- Perennial stream
- Designated as Wild Trout Stream



- Popular hiking and fishing area
- Healthy wildlife and riparian habitat



9

West Fork Mojave River



Downstream of Silverwood Reservoir

- Rare population of western pond turtles located by USGS biologists
- Only native freshwater turtle in California



10

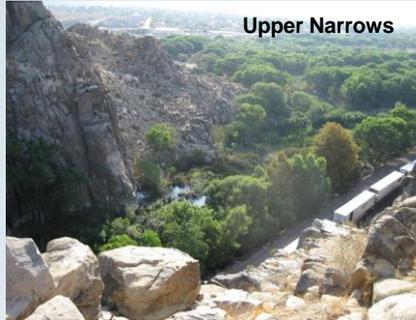
Mojave River from Bear Valley Rd to Helendale

- Two sections with perennial flow:
- Designated by CDFW in adjudication as riparian corridor with restoration potential

Downstream of VVWRA



Upper Narrows



Lower Narrows



Camp Cady CDFW Wildlife Area

- Designated in 1980 to preserve desert riparian habitat
- No surface water since the mid-90s
- Identified in adjudication for restoration
 - Goal to re-establish riparian vegetation
 - Groundwater targets not yet achieved



Road to Camp Cady

Afton Canyon

- Perennial surface water present
- BLM Area of Critical Environmental Concern
- Part of Mojave Trails National Monument



- Numerous wildlife species utilize riparian habitat
- Unique geological features

13

De-designating COLD BU

- Cold Freshwater Habitat (COLD) and Warm Freshwater Habitat (WARM) Definition

Beneficial uses of waters that support cold (or warm) water ecosystems including, but not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates

- Mojave River currently designated for COLD and WARM

14

De-designating COLD BU

- Evaluating COLD designation
 - Temperature Water Quality Objective for COLD:
No change in receiving water temperature
 - Temperature Water Quality Objective for WARM :
Allows 5 °F water temperature change up or down
- Difficult to assess temperature impacts due to discontinuous flow



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Findings

No evidence that aquatic species in or near the Mojave River need cold water for their life cycle



Downstream of VVWRA's Discharge Point



VVWRA's Mojave River Discharge Point

Water temperature based on seasonal changes in air temperature and flow

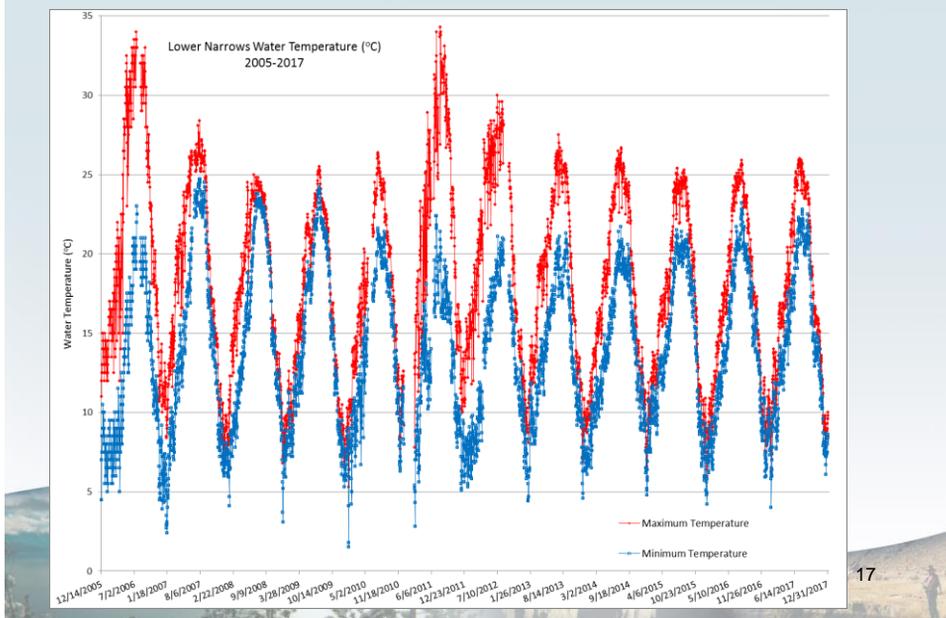
- Maximum summer water temps over 86 °F (30 °C)



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Findings

Lower Narrows Water Temperature Exhibits Large Annual Fluctuations



De-designating COLD Beneficial Use

- De-designate COLD BU from the Mojave River
 - Segment begins one mile downstream of Route 66 to the river's terminus at Soda Lake
 - Most of this segment is dry except near VVWRA and at Afton Canyon
- Removal of COLD BU requires completion of a Use Attainability Analysis (UAA) per Clean Water Act requirements



Clarify Mojave River WQOs

- Ambiguity regarding applicability of site specific objectives for Mojave River
- Consider revising and/ or adding clarifying language



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Chapter 4: Implementation

- Afton Canyon segment of the Mojave River is now eligible for federal Wild and Scenic designation
- Consider Update of Table 4.9
- Offroad vehicles can damage desert riparian habitat
- Consider adding limited new language highlighting need to protect sensitive desert riparian habitat



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Schedule

- April 2018 – Scoping
- May 2018 – Tribal Consultation Begins
- January 2019 – Board Workshop
- Winter 2019 - Public Review (Draft Basin Plan Amendment and CEQA)
- April 2019 – Hearing Notice and Proposed Document Release
- June 2019 – Hearing and Consideration
- Fall 2019 – State Board Consideration
- Fall 2019 – Transmittal to OAL, USEPA

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Thank you

Questions or comments?

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Mojave River in Afton Canyon

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