

Mono County General Plan Policies and Conceptual Water Transaction Program in the Mono County Portion of the Walker River Basin CEQA Initial Study Checklist APRIL 2019



717 Markset Street, Suite 650 San Francisco, CA 94103 650-373-1200 www.panoramaenv.com

Mono County

General Plan Policies and Conceptual Water Transaction Program in the Mono County Portion of the Walker River Basin

CEQA Initial Study Checklist

APRIL 2019

Prepared for: Mono County Community Development Department Post Office Box 347 Mammoth Lakes, CA 93546

Prepared by: Panorama Environmental, Inc. 717 Market Street, Suite 650 San Francisco, CA 94103 650-373-1200 tania.treis@panoramaenv.com



717 Markset Street, Suite 650 San Francisco, CA 94103 650-373-1200 www.panoramaenv.com

TABLE OF CONTENTS

Acro	Acronyms and Abbreviationsiii			
1	Intro	duction1-1		
	1.1	Project Overview and Background1-1		
	1.2	Environmental Analysis1-9		
2	Proje	ect Description		
	2.1	Introduction2-1		
	2.2	Project Objectives2-1		
	2.3	Policy Development Process2-2		
	2.4	Water Transaction Types Considered2-2		
	2.5	Proposed General Plan Policies2-5		
	2.6	Conceptual Program Targets for Water Acquisition within Mono County2-7		
	2.7	Required Permits and Approvals		
3	Envir	onmental Impacts Checklist3-1		
	3.1	Introduction		
	3.2	Environmental Factors Potentially Affected		
	3.3	Environmental Determination		
	3.4	Focused EIR Content		
	3.5	Impacts Assessment		
4	Refe	r ences Error! Bookmark not defined.		

Appendix A Water Transactions Consistency with General Plan Polices

List of Tables

Table 1.1-1 Table 2.4-1	Surface Water Rights, Locations, and Quantities in Mono County Potential Water Transactions	
Table 2.5-1	Proposed Amendments to the Conservation/ Open Space Element of the General Plan	
Table 2.6-1 Table 2.6-2	Surface Water Rights, Locations, and Quantities in Mono County Calculation of Maximum Potential Impact on Mono County Water Rights	
	Acreage	2-10
Table 3.4-1	Anticipated Content of the EIR	3-3
Table 3.5-1 Table 3.5-2	Rare and Threatened Plant Species in the Walker River Basin Rare and Threatened Wildlife Species in the Walker River Basin	

TABLE OF CONTENTS

List of Figures

Figure 1.1-1	Walker River Basin	1-:	3
Figure 1.1-2	Walker River Basin and Project Areas	1-4	4

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AF	acre-foot
AG	Agriculture
AVMWC	Antelope Valley Mutual Water Company
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CA DOT	California Department of Transportation
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
cfs	cubic feet per second
CH ₄	methane
CNDDB	California Natural Diversity Database
CO ₂	carbon dioxide
County	Mono County
dB	decibels
DTL	Desert Terminal Lake
EIR	Environmental Impact Report
ESA	Endangered Species Act
FWM	Federal Water Master

ACRONYMS AND ABBREVIATIONS

- GBUAPCD Great Basin Unified Air Pollution Control District
- GHG greenhouse gas
- HCP Habitat Conservation Plan
- ICR Incremental Capitalization Ratio
- IS Initial Study
- LADWP City of Los Angeles, Department of Water and Power
- MOU Memorandum of Understanding
- NO_x Nitrogen oxides
- NFWF National Fish and Wildlife Foundation
- PM particulate matter
- RCD Resource Conservation District
- RPS Renewables Portfolio Standard
- SWRCB State Water Resources Control Board
- TDS Total Dissolved Solids
- USFS U.S. Forest Service
- VMT Vehicle Miles Travelled
- WBC Walker Basin Conservancy
- WBRP Walker Basin Restoration Program
- WRID Walker River Irrigation District

1.1 PROJECT OVERVIEW AND BACKGROUND

1.1.1 Project Overview

Mono County (County) is assessing the feasibility of County water rights holders participating in the Walker Basin Restoration Program (WBRP), which is the water transaction program that is managed by the Walker Basin Conservancy (WBC). The County is evaluating existing General Plan policies and proposing policy amendments that could allow transactions that would not cause adverse effects to County resources.

The proposed policy amendments would define the framework and conditions under which the WBRP could operate in the County and define the types of transaction agreements that would be permissible.

The project analyzed in this Initial Study (IS) (referred to as the project) consists of the new policies and actions and a conceptual water transaction program for water rights holders in Mono County. The conceptual transaction program is considered as part of the project in order to analyze the potential environmental effects of the policies and does not in any way represent the intentions of the County or the WBC.

The following types of water transactions are analyzed as part of the project:

- 1. Long-term leasing (2 or more years) and/or permanent transfer of decree rights that include the acquisition of the associated water righted land;
- 2. Temporary lease of decree flow rights and storage rights for no more than 1 year; and
- 3. Purchase of surplus storage water.

The separation of flow rights from the water-righted land is viewed as too risky for the future management of County agricultural, wetland, and biological resources. Consequently, the Proposed Amendments explicitly precludes the Walker Basin Conservancy from entering into flow-rights only transactions.

1.1.2 Lead Agency Name and Address

Mono County Community Development Department Post Office Box 347 Mammoth Lakes, CA 93546

1.1.3 Contact Person and Phone Number

Contact: Bentley Regehr Planning Analyst 760-924-4602 bregehr@mono.ca.gov

1.1.4 General Plan and Zoning Designation

Mono County has an integrated land use designation and zoning code. Land with associated decree water rights in the East and West Walker Rivers are generally designated as Agriculture (AG).

1.1.5 Project Location

The project location encompasses the Walker Basin in Mono County, including Antelope Valley, Bridgeport Valley, and all connected tributaries, lakes, and reservoirs (Figure 1.1-1). The County is located in east-central California, on the eastern slopes of the Sierra Nevada mountains.

The County covers approximately 3,030 square miles of land area, but is sparsely settled, with a 2010 population of 14,202. More than half of the County's residents reside in the town of Mammoth Lakes (the only incorporated city). The remaining residents live in unincorporated communities that include Antelope Valley, Swauger Creek/Devil's Gate, Bridgeport Valley, Mono Basin, June Lake, Mammoth vicinity, Upper Owens, Long Valley, Wheeler Crest, Tri-Valley, Benton Hot Springs Valley, and Oasis.

The County shares a long common boundary with the state of Nevada, and also borders four Nevada counties (Douglas, Lyon, Mineral and Esmeralda) and five California counties, including the counties of Inyo, Fresno, Madera, Tuolumne, and Alpine. Bridgeport is the Mono County seat.

1.1.6 Project Area

The following section describing the project area is summarized from the 2014 Resource Conservation District preliminary studies of potential impacts of water transaction program (Ciotti, Aylward, Merrill, & Young, 2014)

1.1.6.1 Walker River Basin

The Walker River Basin drains from the Sierra Nevada range in California south of Lake Tahoe to the terminal Walker Lake in the Great Basin area of Nevada, as shown in Figure 1.1-2. The Walker River Basin covers a 2,525,184-acre area. The East and West Walker Rivers and their tributaries are the headwaters of the Basin in northern Mono County, CA. The West Walker River flows northeast from the Sierras through the Antelope Valley and past the Topaz Lake reservoir, and into Nevada. The East Walker River flows from its headwaters northeast through Bridgeport Valley and into Bridgeport Reservoir. The outflow from Bridgeport Reservoir passes through a small canyon and into Nevada. The two forks join to form the Walker River just before the town of Yerington, in Lyon County, Nevada.







Figure 1.1-2 Walker River Basin and Project Areas

The project area includes all irrigated areas within the California portion of the Walker Lake Basin. This is not only the Bridgeport and Antelope Valley floors, but also surrounding meadows such as Little Antelope Valley, Huntoon Valley, Sinnamon Meadows, and Upper and Lower Summers Meadows. Antelope and Bridgeport Valleys are two meadow valleys that occur in California along the western and eastern forks of the Walker River. East and West Walker Rivers receive the majority of their water as runoff from the Sierra Nevada. Direct precipitation is a far less critical hydrologic input than surface flows from upstream and subsurface groundwater inputs. The bottoms of both valleys can be considered impermeable so that subsurface recharge comes from the valley sides, and primarily from the western slopes. Elevations of the contributing areas range from 10,007 feet for Antelope Valley; elevations for the valley itself range from 5,000 to 5,800 feet. Bridgeport Valley is a little higher, at 6,450 to 6,750 feet, and with a contributing area that reaches 12,303 feet along the Sierra Crest. Private land in the area of interest is almost exclusively used for agriculture, most of it irrigated (Ciotti, Aylward, Merrill, & Young, 2014).

1.1.6.2 Antelope Valley

The Antelope Valley encompasses 31,925 acres at the northern end of Mono County, and extends north from Walker Canyon to the Nevada State Line and east-west across the valley floor, as shown in Figure 1.1-2. The area includes the communities of Walker, Coleville, and Topaz. The West Walker River flows through the valley floor to Topaz Lake, a manmade reservoir straddling the California-Nevada state line. The river is diverted for irrigation purposes throughout the valley and provides more than 60 percent of the available water in the entire Walker River system. Enough water is diverted from the river to irrigate 17,000 acres of agricultural land in California and 19,500 acres of land in Nevada (Mono County, 2008). In Antelope Valley the majority of the ground is cattle pasture, with alfalfa as the second most common land use. There are also hay and row crops. Little Antelope Valley is currently grazing pasture.

Topography within the region is characterized by the relatively flat floor of the valley, gently sloping alluvial fans along the sides of the valley floors, and steep slopes above the alluvial fans. Vegetation in the area is primarily sagebrush scrub on the slopes surrounding the valley floor, irrigated agricultural land on the valley floor, and riparian scrub along the West Walker River. Water bodies in the planning area include Topaz Lake, West Walker River, and Mill Creek (Mono County, 2008).

1.1.6.3 Bridgeport Valley

Bridgeport Valley is located at the eastern base of the Sierra Nevada just south of the California-Nevada State Line and north of Mono Lake in northern Mono County, as shown in Figure 1.1-2. Bridgeport Valley is about 6,500 feet in elevation and fairly flat. The valley lies generally in a north-south direction and terminates at its northerly end near Bridgeport Reservoir. The East Walker River flows along the eastern side of Bridgeport Valley and is the confluence of many streams draining the eastern slopes of the Sierra Nevada. The East Walker River is the only stream exiting the valley and eventually drains into Walker Lake, Nevada (SWRCB, 2004). Bridgeport Valley and surrounding meadows are exclusively used as pasture.

1.1.7 Walker River Basin Restoration Program and County's Role

This section provides background information on historical water use, the Walker Basin Restoration Program, and the County's role in the program.

1.1.7.1 Water Use in the Walker River Basin

The following section describes the history of water rights in the Walker Basin and the Walker Basin Restoration Program. This section is summarized from the 2014 RCD preliminary studies of potential impacts of water transaction program (Ciotti, Aylward, Merrill, & Young, 2014).

During the last quarter of the 19th century, farmers and cattlemen established communities in the Walker River Basin, part of the ancestral home of the Northern Paiute people. Natural flows from the Walker River were diverted to support hay, pasture, and other irrigated crops. In the 1920s, the newly formed Walker River Irrigation District (WRID) built a pair of dams on the east and west forks of the Walker River to store winter and early spring runoff for use later in the season when natural flows could not sustain the need of irrigated agriculture. In 1935, the Bureau of Indian Affairs (BIA) built Weber Dam on the lower Walker River to capture surplus flows for irrigation on the Walker River Paiute Tribe's Reservation. Diversions from the Walker River have sustained a strong agricultural economy for decades, but produced an unintended consequence: dramatically reduced freshwater inflows to Walker Lake, a natural desert terminal lake at the terminus of the Walker River in Nevada.

Water elevation in Walker Lake has dropped more than 150 feet and lost 80 percent of its volume from 1868 to 2010. Salinity and total dissolved solids (TDS) in Walker Lake have has increased to the point that the Lake can no longer support its native fish and wildlife populations (NFWF, 2011). As Walker Lake has declined, so has the economy that once benefited from fishing and tourism.

1.1.7.2 Purpose of Walker Basin Restoration Program

Public Law 111-85 established the Walker Basin Restoration Program. The goal of the WBRP is to restore and maintain Walker Lake, a terminal lake in western, central Nevada, as well as protecting agricultural, environmental, and habitat interests consistent with that primary purpose. The program is managed by the Walker Basin Conservancy (WBC), a non-profit organization established in 2014 to further the restoration and conservation of Walker Lake and the wider Walker River Basin. WBRP funds are provided to WBC under a grant agreement with the Bureau of Reclamation (BOR) and its Desert Terminal Lakes Program. To achieve the goal of the WBRP, WBC is tasked with acquiring water from willing sellers to restore and maintain Walker Lake. The WBRP includes priority initiatives in the areas of water rights acquisitions from willing sellers, demonstration water leasing, conservation and stewardship, research and evaluation, and implementation support. The WBRP includes priority initiatives in the area of water rights acquisitions from willing sellers, demonstration water leasing, conservation and stewardship, research and evaluation, and implementation support. WBRP funds are provided to WBC under a grant agreement with the Bureau of Reclamation (Reclamation) and its Desert Terminal Lakes program.

1.1.7.3 Mono County Role in the Program

In 2012, the County entered into a Memorandum of Understanding (MOU) with National Fish and Wildlife Foundation (NFWF), the predecessor to the WBC, for the management of the WBRP. The MOU gives the County the discretionary right to review and approve or deny the implementation of a water transfer transaction program in the Mono County portion of the Walker Basin.

The Resource Conservation District (RCD) of Mono County then initiated an effort to analyze the feasibility of water transactions in the California portion of the Walker River Basin. The RCD prepared the 2014 *Feasibility Assessment of a Water Transactions Program in the Walker River Basin, California* (Ciotti, Aylward, Merrill, & Young, 2014). The study was prepared to provide the RCD with objective information to assist the County in considering potential participation in the water transactions component of the WBRP.

1.1.8 Water Rights in the California Portion of the Walker River Basin

1.1.8.1 Introduction

Surface water and groundwater support water use in the Walker River Basin. Surface water rights comprise the majority of water rights in Antelope and Bridgeport Valleys and are primarily made of up appropriative rights adjudicated by a federal court decree (Ciotti, Aylward, Merrill, & Young, 2014).

1.1.8.2 Decree Flow Water Rights

The oldest water rights in the Walker River system are for the direct diversion of the natural flows (including return flows) of the Walker River and its tributaries as set forth in Decree C-125, which was issued in final amended form in 1940 (Ciotti, Aylward, Merrill, & Young, 2014).

Under the decree, Antelope Valley rights were generally granted 0.016 cubic feet per second (cfs) per acre and an irrigation season of 245 days (March 1 to October 31). Bridgeport Valley rights were also generally granted 0.016 cfs per acre; however, the irrigation season is only 199 days (March 1 to September 15). Total decreed irrigation water rights in California under the C-125 decree are 41,811 acres, of which 23,669 acres are on the East Walker drainage and 18,142 acres are on the West Walker drainage. A portion of these rights is found outside Antelope and Bridgeport Valleys proper, but the vast majority are in these valleys.

The Federal Water Master (FWM), also known as the Chief Deputy Water Commissioner of the U.S. Board of Water Commissioners, is appointed by the federal decree court and administers the delivery of water to authorized points of diversion on the Walker River.

In Antelope Valley, a vast majority (over 90 percent) of the surface water rights are held in the name of the Antelope Valley Mutual Water Company (AVMWC) and a minority are privately held. Many, if not all of the owners of privately held rights also have shares in the Antelope Valley Mutual Water Company. Antelope Valley Mutual Water Company patrons own shares that entitle them to a fraction of a cfs per share on any given day of the irrigation season. Private

rights, however, are only served based on the specific priority dates and cfs for their decree rights. In Bridgeport Valley, all the surface water rights are private and there is nothing similar to the AVMWC (Ciotti, Aylward, Merrill, & Young, 2014).

1.1.8.3 Storage Rights

Water users on the East and West Walker River have stored irrigation water available to supplement the natural surface flow during the irrigation season. The volumes and locations for the limited storage available above the Topaz and Bridgeport Reservoir are presented in Table 1.1-1 (Ciotti, Aylward, Merrill, & Young, 2014).

	-				
		Decreed	Water Rights	Decreed St	orage Rights
Location	Water Source	Acres	Rate (cfs)	AF	Rate (cfs)
West Walker Watershed					
Lobdell Lake	Deep Creek	-	-	- a	6
Black Reservoir	Black Creek	-	-	350	-
Poore Lake	Poore Creek	-	-	1,200	-
Subtotal Upstream of Antelope Valley	-	2,075	33	>1,550	-
Antelope Valley	West Walker River	16,067	251	-	-
East Walker Watershed					
Green Lakes	Green Creek	-	-	400	
Lower Twin Lake	Robinson Creek	-	-	4,050	
Upper Twin Lake	Robinson Creek	-	-	2,050	
Subtotal Upstream of Bridgeport Valley	-	-	-	6,410	-
Bridgeport Valley	East Walker River	23,669	376	-	-
California Walker Watersheds					
TOTAL		41,811	660	>7,960	6
Notos					

Surface Water Rights, Locations, and Quantities in Mono County Table 1.1-1

Notes:

cfs - cubic feet per second

AF – acre-feet

^a In the case of Lobdell Lake, the storage right is specified as a diversion rate with no reported storage capacity. Actual capacity is reported as 640 AF.

Source: (Alyward & Fisher, 2018)

1.2 ENVIRONMENTAL ANALYSIS

1.2.1 CEQA Process

1.2.1.1 Purpose of this Initial Study Checklist

The purpose of this Initial Study Checklist is to define the scope of the environmental impact analysis for the general plan policies and conceptual water transaction program that will be considered in an EIR.

Adoption and implementation of the Proposed Polices by the County are considered discretionary actions and are, therefore, subject to analysis under the California Environmental Policy Act (CEQA).

The County prepared this IS in accordance with CEQA (California Public Resources Code, Sections 21000-2117) and the Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Sections 15000-15387). This IS presents an evaluation of potential environmental impacts associated with the proposed policy changes. The County prepared this IS, pursuant to CEQA, to determine whether, based on substantial evidence, the adoption and implementation of the Proposed Amendments may have a significant adverse effect on the environment. The purpose of this IS is to identify potentially significant effects and to screen out topics that would not be subject to significant effects from further evaluation. Those environmental topics for which the plan would have no impact or a less than significant impact will not be analyzed further in the EIR, based on the analysis in this IS. Potentially significant environmental impacts identified in this IS will be the focus of the EIR.

1.2.1.2 Purpose of the EIR

The primary purpose of an EIR is to inform decision-makers and the public of the potential significant environmental effects that may be associated with implementation of the Proposed Policies, and to identify and set forth less-damaging alternatives, and possible ways to reduce or avoid the possible environmental damage. The EIR will also contain mitigation measures to reduce effects determined to be significant. Alternatives to the Policy Actions will also be addressed.

1.2.1.3 Lead and Responsible Agencies

Lead Agency

Mono County is the designated Lead Agency for the project. In order to implement the project, the County will be required to certify that the Final EIR has been prepared in compliance with CEQA and determine whether to approve the project or approve one of the other alternatives or approve the No Project alternative. The County would adopt findings that approve the proposed Mitigation Monitoring and Reporting Program (MMRP), and verify that water supplies are adequate to serve the project.

Responsible Agencies

The policies and actions addressed in the EIR would not be subject to permits from responsible or trustee agencies. Specific transactions, that may be implemented if these policies are approved, would require permits from the State Water Resources Control Board, and review by the California Department of Fish and Wildlife. Any action that could affect federally-listed species would also require a permit from the U.S. Fish and Wildlife Service.

1.2.2 Organization of Initial Study Checklist

This document is organized into the following sections:

- **Section 1: Introduction.** Provides an overview of the project and the Mono County process under CEQA, and the purpose of the IS Checklist.
- Section 2: Project. Provides information on the elements included in the project.
- Section 3: Environmental Impacts Checklist. Provides an analysis of impacts that would result from the project. Where these changes result in new significant impacts or a substantial increase in the severity of a significant impact, additional analysis will be provided in a Subsequent EIR.

2.1 INTRODUCTION

Mono County proposes to amend County General Plan policies to ensure that leasing or sale of water rights to support the restoration of Walker Lake as part of the WBRP would be consistent with the County General Plan. A water transactions program in the Mono County portion of the Walker River Basin would complement the ongoing water leasing and sales efforts in Nevada, currently led by WBC.

2.2 PROJECT OBJECTIVES

The National Fish and Wildlife Foundation (NFWF) and Mono County entered into a Memorandum of Understanding (MOU) in 2012, which requires Mono County to comply with CEQA prior to NFWF expenditure of Desert Terminal lake (DTL) funds for the lease or purchase of land, water appurtenant to the land, or related interests within Mono County. The Board of Supervisors retained discretionary approval and modification of proposed programs.

The following objectives are derived from the conditions identified in the MOU and the General Plan Open Space and Conservation Element:

- 1. Develop guidelines and actions to allow Mono County water rights holders to participate in the NFWF water transfer programs.
- 2. Identify feasible program elements that can operate within the County that would be consistent with the following County General Plan - Open Space Element Objectives:
 - a. Preservation of existing open space and scenic vistas.
 - b. Maintenance and restoration of botanical, aquatic and wildlife habitats in Mono County.
 - c. Protection of the Public Trust values of the resources of Mono County.
 - d. Preservation and maintenance, and enhancement of surface and groundwater resources to protect Mono County's water quality and water-dependent resources from the adverse effects of development and degradation of water-dependent resources.
 - e. Encourage the retention of agricultural and grazing lands.

2.3 POLICY DEVELOPMENT PROCESS

The development of the polices and analytical approach to the project was a multi-staged process. The development process relied on the following information:

- Existing analysis and modeling developed for WBC water transfer program in • Nevada;
- Discussions on the feasibility and sizing of a transaction program in Mono • County with the RCD and the current WBC water manager;
- Information provided by stakeholders in both the 2014 feasibility study and subsequently updated from discussions with stakeholders in 2018;
- The detailed environmental constraints analysis developed in the 2014 feasibility study; and
- The regulatory framework laid out in the 2014 feasibility study supplemented by ٠ recent court findings and discussions with the WRID general manager.

Potential types of water rights transactions were reviewed and divided into three categories. The categories were based on stakeholder input, environmental constraints, and the regulatory framework. The categories are presented Section 2.4.

The potential conflict between existing County polices and the transaction categories were used to develop new policies (Appendix A). The proposed new polices were designed to minimize conflicts between a WBC water transaction program and the policies in the County General Plan Open Space and Conservation Element. Proposed polices are presented in Section 2.5.

The proposed polices that ensure the East and West Walker Rivers in Mono County are adequately studied prior to the implementation of a water transaction program were developed from the gaps identified by the 2014 feasibility study and from information developed for the transaction program operating in Nevada. The polices are presented in Section 2.5.

CEQA requires the project description to contain sufficient information to allow evaluation and review of the environmental impacts (CCR Sec.15124(c)). Location, timing, extent, and intensity of impacts must be assessed. Therefore, the analysis of policies governing a water rights transfer program requires some quantification of the policy objectives, so that the effects of the policy can be analyzed. No water transaction program currently operates within Mono County; therefore, a conceptual transaction program was developed in collaboration with the WBC and RCD. The conceptual transaction program consists of water rights acquisition targets for the East and West Walker Rivers. The assumptions, estimation process, and targets are discussed in Section 2.6.

2.4 WATER TRANSACTION TYPES CONSIDERED

2.4.1 Introduction

Water transaction programs facilitate flexible, dynamic water use within a watershed through a combination of water rights acquisitions, leases, contracts, and voluntary agreements (Martin, et

al., 2017). Water in Mono County could be obtained via several different types of water transactions, as summarized in Table 2.4-1. The types of transactions considered as part of the project were based on the findings of the 2014 Feasibility Study (Ciotti, Aylward, Merrill, & Young, 2014), WBC practices and transactions in Nevada, and communications with stakeholders regarding transactions that would be feasible and acceptable to the community.

Transaction Type	Action
Decree flow water right transfer with land	Acquisition of both flow rights and the associated land
Decree flow water right transfer without land	Acquisition of the flow rights only The associated land would remain with the seller
Decree flow water right leasing	Long- or short-term leasing of water rights only No land leasing
Storage water right sale and leasing	Permanent (sale) or temporary (leasing) acquisition of storage rights from one of the reservoirs on the East and West Walker Rivers upstream from Topaz and Bridgeport reservoirs
Storage water sale	Acquisition of a specific volume of surplus water from reservoirs on the East and West Walker Rivers

Table 2.4-1Potential Water Transactions

2.4.2 Current Water Rights Transfer Procedures in Walker Basin

In developing the conceptual water transaction program, the County reviewed the current practices in the Walker Basin. The following section describing the project area is summarized from the 2014 RCD preliminary studies of potential impacts of water transaction programs (Ciotti, Aylward, Merrill, & Young, 2014).

Water rights within the Walker River Basin in Mono County are pre-1914 rights. Generally, pre-1914 rights are not subject to California regulatory requirements, including the filing of change petitions. Nevertheless, on the Walker River, the SWRCB serves in the role of Special Master to the Decree Court, and any petitions to change the place of use, manner of use, point of diversion, or to dedicate water for in-stream purposes in California must be filed in the manner directed by the SWRCB. To the extent the proposed place of use is solely Nevada, however, the Decree Court may have exclusive jurisdiction over such change petitions.

All transactions would need to assure that there is no injury to other users, primarily that the amount of water protected instream is the real consumptive use savings. The Decree Court has jurisdiction over changes to decree water rights and is likely to request recommendations from both the SWRCB and the Nevada State Engineer. Before any transaction can move forward in the California portion of the Walker River Basin, the U.S. Bureau of Reclamation must consult with U.S. Fish and Wildlife Service under Section 7 of the Federal Endangered Species Act regarding the effects to listed or candidate species and their habitat.

In May 2018, the 9th Circuit Court of Appeals (United States v. U.S. Board of Water Commissioners, 2018) upheld a water transfer threshold established by the Nevada State Engineer and California SWRCB that avoids injury to other water users. The Appeal Court agreed with the Nevada State Engineer that the consumptive portion of a water right, which was estimated as 53 percent of the total right, could be diverted to Walker Lake as part of the restoration program. The remaining 47 percent of the water right, consisting of the return water or non-consumptive portion, must remain part of the historic diversion to ensure no injury to downstream water users occurs.

2.4.3 Transaction Categories Considered in the Conceptual Program

Potential types of water rights transactions were reviewed and divided into three categories:

- 1. Permanent Water Rights Transfers or Long-term Leases
- 2. Temporary Water Rights Leases
- 3. Sale of Surplus Storage Water

The categories were based on stakeholder input, environmental constraints, and the regulatory framework.

2.4.3.1 Permanent Water Rights Transfers or Long-term Leases

Transfer of water rights in fee with the associated water-righted land, and leasing of water rights for 2 or more years would be considered as a longer-term transfer. Water rights transactions in California would also require a petition to the SWRCB under Water Code § 1701 to change place and purpose of diversion. The SWRCB must consider the effects of their decision in an environmental review under CEQA before any longer term or permanent transfer could occur.

The water rights holder would also be required to consult with wildlife agencies on both the Federal Endangered Species Act (ESA) and California Endangered Species Act (CESA) and, if necessary, develop mitigation prior to entering into a transaction to ensure no injury to wildlife.

2.4.3.2 Temporary Water Rights Leases

Leasing of decree natural flow water rights or storage rights entails developing an agreement with a water rights holder to transfer the water rights for a period of 1 year, after which the water rights would be returned to the owner. Land would not be transferred during that timeframe. The public law that authorized the WBC programs does not preclude the use of leasing as a method of water acquisition. Currently, WBC has not entered into, nor is considering, any leasing programs to achieve its goals (Adams, 2018).

Temporary transfers of water rights or change of diversion locations are permissible under Water Code § 1725 (water rights holder may temporarily change purpose) and § 1707 (water rights holder may petition to change purpose to preserve wetlands etc.) for change for instream purposes. Transfers or changes would require the filing of a petition to SWRCB and would not require CEQA review. Any changes would still require ratification by the Decree Court.

2.4.3.3 Sale of Surplus Storage Water

As with other temporary transfers, the sale of surplus storage water is permissible under Water Code § 1725 (water right holders may temporarily change purpose) and § 1707 (water right holder may petition to change purpose to preserve wetlands, etc.) for changes for instream purposes. Changes would require the filing of a petition with SWRCB. The petition burden would be less than for a permanent transfer because no CEQA compliance would be required. However, any changes would still require ratification by the Decree Court.

2.5 POTENTIAL GENERAL PLAN POLICIES

The project includes new policies as amendments to the Conservation/Open Space Element of the General Plan (see Table 2.5-1). The applicability of each amendment is identified, and whether the amendment is required for all water transactions or just a specific type of transaction.

Table 2.5-1 Proposed Amendments to the Conservation/ Open Space Element of the General Plan

Existing Policy Objective: 3.E:

Encourage the beneficial use of water resources while protecting local water users and biological resources from the adverse effects of water transfers.

Existing Policy 3.E.4:

Evaluate participation in the Walker Basin Restoration Program (WBRP). Add to Policy 3.E.4:

- Action 3.E.4.c Require the following information to help the assessment of potential impacts prior to entering into long-term water transactions including permanent transfer and long-term leasing of decree flow water rights and storage rights:
 - a) Quantify consumptive use and complete water budgets based on real flow measurements for both Bridgeport and Antelope Valleys, including diversion and return flow timing, location, and volume.
 - b) Investigate shallow groundwater levels, movement, and interactions with existing irrigation regimes in both Bridgeport and Antelope Valleys.
 - c) Canvas and identify willing sellers.

Rationale for adding/benefit: This action will ensure that the information informing transactions in Mono County is equivalent to that which has been developed for the Mason and Smith Valleys. Understanding the value, cost and benefits of the water available for transactions, will help ensure that other water users will not be adversely impacted by reduction or cessation of irrigation, or reduction in diverted water.

Add to Policy 3.E.4:

Action 3.E.4.d - Prior to permanent transfer or lease of flow water rights for more than one consecutive year, the project must demonstrate that:

- a. The transaction avoids potential significant impacts to local surface and groundwater resources, or mitigates impacts to a level of nonsignificance, unless a statement of overriding considerations is made through the EIR process.
- b. Transactions with the potential to significantly impact surface or aroundwater resources shall assess any potential impacts prior to project

approval.

Examples of potential significant impacts include:

- i. Substantially degrading or depleting surface or groundwater resources; and/or
- ii. Interfering substantially with groundwater recharge.
- The analysis shall:
 - i. Be funded by the applicant;
- ii. Be prepared by a qualified person under the direction of Mono County:
- iii. Assess existing conditions in the general project vicinity;
- iv. Identify the quantity of water to be used by the project. Quantities shall be estimated for annual totals, monthly averages, and peak day/peak month usage;
- v. Identify the source(s) of water for the project and provide proof of entitlement to that water. If the proposed source is to be a special district or mutual water system, a "will-serve" letter shall be required. If the proposed source is ground or surface water, the application shall indicate that the proponent has entitlement to the source and the quantity of water required;
- vi. Describe the impacts of the proposed development upon water resources within the project site and on surrounding areas, including a drawdown analysis of groundwater (when applicable) through pump test(s); and
- vii. Recommend project alternatives or measures to avoid or mitigate impacts to water resources.

Mitigation measures and associated monitoring programs shall be included in the project plans and specifications and shall be made a condition of approval for the project.

- c. The proposed transaction does not affect reasonable beneficial water uses, including uses in-stream, agricultural operations, and recreational purposes, within the Mono County portion of the Walker Basin; and
- d. The proposed transaction would not adversely affect water quality, instream flows, lake levels, riparian areas, vegetation types, sensitive/rare wildlife and habitat, and related resources such as the visual quality and character of the landscape; and is not likely to increase indirect effects such as flooding, wildfire, and/or sedimentation, or reduce groundwater recharge capacity. Transactions that do not adequately protect these resources shall be denied.
- e. The transaction will not lead to substitution of aroundwater for surface water in any activities for which surface water is currently used.

Rationale for adding/benefit: This action is designed to ensure that the WBRP does not enter into any transaction without assuring the County that beneficial uses, sensitive resources and groundwater are protected.

Add to Policy 3.E.4:

Action 3.E.4.e – For each water transfer transaction that involves conversion of irrigation water to instream use, the land owner shall develop an adaptive management plan. The plan shall ensure consistency with General Plan goals and objectives. The plan should, at minimum, include baseline assessment of resources, monitoring criteria, and adaptive management measures to ensure the following:

- a. No groundwater substitution will be used to maintain baseline or agreed upon conditions.
- b. Water quality impacts are minimized, avoided, and mitigated.
- c. No net loss of wetland.
- d. No significant loss of non-agricultural sensitive vegetation communities or change from one type of community to a drier community.
- e. No significant loss of habitat for sensitive species.
- f. Invasive and pest species and dust are managed to ensure no increase.

Rationale for adding/benefit: An adaptive management plan would ensure that no unforeseen adverse impacts to protected resources could occur following cessation or reduction in irrigation.

Add to Policy 3.E.4:

Action 3.E.4.f – Prior to sale or lease of storage water, the applicant must demonstrate that the proposed transaction does not adversely affect existing recreational uses of lakes and reservoirs within the Mono County portion of the Walker Basin.

Rationale for adding/benefit: This action is designed to ensure that the WBRP does not enter into any transaction without assuring the County that beneficial recreational uses associated with existing lakes and reservoirs are protected.

Recommended New Policy and Action

Policy 3.E.5. Identify WBRP water rights transactions that are permissible within the County. Action 3.E.5.a – The risk of water decree flow rights only transactions (i.e., the transfer of flow

rights without the transfer of associated land) to County environmental resources is considered too great. The County shall prohibit WBRP from

entering into decree flow rights only water acquisition transactions.

Rationale for adding/benefit:

All transfers of water rights without the associated land represent too great a risk or the risk is too unpredictable for County resources.

2.6 CONCEPTUAL PROGRAM TARGETS FOR WATER ACQUISITION WITHIN MONO COUNTY

2.6.1 Introduction

There are currently no water transfer programs operating in Mono County. The General Plan amendments would likely result in proposals to conduct water transactions. The County has therefore defined a conceptual transaction program to evaluate as part of the project description. The following section sets out the context, objectives, and budget under which a conceptual water program could operate. These parameters are then used to estimate a plausible upper bound to the likely quantity of water rights and by extension the likely volume of water that could be transferred for use downstream of the County.

It is assumed that the acquisition of water rights would be limited by the budget and the timescales. No assumptions are made about other factors that may influence the value of a given water right. For example, WBC would also consider the following factors when valuing different potential water right acquisitions:

- Type, seniority, and constraints of the water rights involved in the acquisition
- Proximity of point of diversion to Walker Lake

- Amount of water offered
- Costs and potential difficulties involved in acquiring and making use of land that is appurtenant to the water
- Potential benefits to environmental restoration in the Walker River Basin
- Potential for conflict with other owners or users of property and water rights
- Potential for conversion from agricultural to urban land uses

The following estimate is confined to the transfer of water rights either in fee or under lease from current holders. An assessment of the uses downstream of the water right was not conducted. More detailed analysis of the consumptive or non-consumptive uses downstream of the water rights were not assessed.

It should be emphasized that the conceptual program is no indication of intention by the WBRP but is simply a planning tool to enable analysis of the impacts of the project. In this conceptual program, acquisition of water rights is limited by the budget and the timescales. (Alyward & Fisher, 2018).

2.6.2 Estimate of Budget Available for Water Acquisitions

Based on the information available, funds remaining for acquisitions under the WBRP as of 2018 include the following:

- \$25 million for the WRID leasing program
- \$108.3 million for water rights acquisition and stewardship

The amount of funding that WBC and WRID would have available to purchase water rights on the California side of the Basin can be considered a reasonable upper bound for the extent of water transactions to be analyzed in the CEQA analysis.

The first step to estimate the amount of funds available, included apportioning WBRP funds across the California and Nevada sides of the basin in proportion to total rights (Table 2.6-1) available. The California side of the basin makes up 32% of the acreage with water rights for irrigation. Rough estimates of Nevada water righted acress already acquired by NFWF (as the predecessor to WBC) were developed and subtracted to arrive at acress on each side of the border that could be acquired under the program. This calculation leaves California with 35% of the remaining water righted acreage in the basin.

The second step is to estimate the likely amount of funds remaining in the future, after the CEQA process to evaluate the policy changes and potential transfer program has been completed and Mono County could decide to adopt the general plan updates. The CEQA process is scheduled to be completed in December of 2019. Thus, the earliest that Mono County would consider the CEQA analysis results and potentially approve policies for these water transactions is early 2020.

Type/Location of Water Rights	Acres	Estimates of Acres Acquired by WBC	Available Acres	Percent
Nevada				
Decree	55,857	6,000	49,857	42%
New Land	34,500	5,000	29,500	26%
Nevada Subtotal	90,357		79,357	68%
California				
West Walker	18,142		18,142	14%
East Walker	23,669		23,669	18%
Subtotals	41,834		41,811	32%
Totals All Rights	132,192		121,168	100%

Table 2.6-1 Surface Water Rights, Locations, and Quantities in Mono County

The WBC is now acting on NFWF's behalf in carrying out the implementation of the WBRP on the Nevada side of the Walker Basin. Given the lead time to undertake such complex property acquisitions it is unlikely that WBC could close any transactions in California until 2021. The legislation and the appropriation under which WBC is working both sunset in 2024. It is therefore likely that WBC will need to complete any purchases by 2023, in order to allow time for follow-on activities such as water right transactions. Consequently, of the six budget years remaining (2018-2023), a potential California program would be in operation only for only 3 years from 2020 to 2023. It is likely that there would be just \$54.2 million remaining for purchases and \$12.5 million for leases across the whole basin, given the rate of acquisition on the Nevada side of the basin. The legislation for the WRID leasing program specifies a 3-year program. It is, therefore, appropriate to prorate the expenditure of funds over the remaining period.

No acquisitions through the water rights purchase program have taken place in California to date. In the absence of more detailed information, a reasonable allocation method is to assume a proportional allocation of the remaining funding to California transactions. The funding can be apportioned by the portion of water righted acres in California. Proportional allocation of funding would suggest \$18.95 million for purchases and \$4.0 million for leasing. These amounts can be converted into the maximum quantity of acres that might be purchased or leased. Given the seniority of California decree rights, appraisal of these rights would suggest a duty of approximately 3.2 AF/acre at \$1,800/AF, based on the 2018 Walker Basin Program Appraisal (Warren 2016). For purchases, a maximum acreage purchased would be 3,290 acres or 7.9% of the water righted ground in Mono County (Table 2.6-2).

Items	Water Rights Purchase	Water Rights Leasing
Remaining as of 2018 (\$ million)	\$108.30	\$25.00
Remaining as of 2021 (\$ million)	\$54.15	\$12.50
Max Portion to California (at 35%)	\$18.95	\$4.00
Purchase Price per Wet Acre-Foot (\$/AF)	\$1,800.00	
Lease Price per Acre		\$288.00
Wet Duty (AF/acre)	3.2	
Max Acre-Feet Purchased/Leased	10,528	
Max Acres Purchased/Leased	3,290	13,889
Portion of Total CA Acreage Water Rights	7.9%	33%

Table 2.6-2	Calculation of Maximum Potential Impact on Mono County Water Rights
Acreage	

For the lease program, it is unknown what price WRID will pay farmers. Therefore, an effective price per acre is obtained by taking the per acre value of an average California decree right at \$5,760 (3.2 AF/acre * \$1,800/AF) and multiplying it by a 5% Incremental Capitalization Ratio or ICR. The ICR is based on the ratio of values between purchase price and lease price for water rights across a range of locations. There is no ICR available for the basin because there has been no water leasing in the basin to date. A review of ICRs in three western basins (in California and Washington) found ICRs ranging from 5.2% to 6.4% (Aylward et al. 2010, 28). A 5% ICR is used in this case to be conservative and thereby generate a lower price and a potentially greater impact of the program on county lands. This ICR would yield a potential one-time lease of 12,500 acres or 30% of the Mono County water righted acreage. Transactions related to this acreage may occur over a number of years and between East Walker and West Walker basins. Alternatively, over a three-year leasing program, up to 10% of the water rights (or 4,166 acres) in Mono County could be leased in any given year.

2.6.3 Summary of Water Transactions Targets in Conceptual Program

As shown in Table 2.6-2, available funding for water rights could result in the purchase of up to 8% or 3,290 acres of the total water righted acreage in the California portion of the Walker Basin. Funding for water leases could present the option for the purchase of leases for a further 12,500 acres of water righted land that can be used for a one time or multi-year lease. Assuming that acquisition is equally balanced between the East Walker and the West Walker, the conceptual program would acquire 1,440 Acres from the West Walker and 1,842 acres from the East Walker, resulting in the delivery of approximately 2,442.25 AF per year to Topaz Reservoir and 3,123 AF per year to Bridgeport Reservoir for transfer downstream to Walker Lake.

2.7 REQUIRED PERMITS AND APPROVALS

The policies and actions addressed in this EIR would not be subject to permits from responsible or trustee agencies. Specific transactions, that may be implemented if these policies are approved, would require permits from the State Water Resources Control Board, and review by the California Department of Fish and Wildlife. Any action that could affect federally-listed species would also require a permit from the U.S. Fish and Wildlife Service.

This page is intentionally left blank.

ENVIRONMENTAL IMPACTS CHECKLIST 3

3.1 INTRODUCTION

This IS includes analyses of the environmental issue areas listed below and the mandatory findings of significance that would result from changes in baseline physical conditions as a consequence of the project. These issue areas incorporate the topics presented in CEQA's Environmental Checklist (identified in Appendix G of the CEQA Guidelines). Mono County will use the analysis in this section to identify any specific impact criteria.

- 1. Aesthetics
- 2. Agricultural and Forestry Resources
- Air Quality 3.
- 4. **Biological Resources**
- 5. Cultural Resources
- 6. Energy
- 7. Geology and Soils
- 8. Greenhouse Gas Emissions
- Hazards and Hazardous Materials 9.
- 10. Hydrology and Water Quality

- 11. Land Use and Planning
- 12. Mineral Resources
- 13. Noise
- 14. Population and Housing
- 15. Public Services
- 16. Recreation
- 17. Transportation
- 18. Tribal Cultural Resources
- 19. Utilities and Service Systems
- 20. Wildfire

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

⊠ Aesthetics	 Agricultural and Forestry Resources 	⊠Air Quality
⊠ Biological Resources	□ Cultural Resources	Energy
\Box Geology and Soils	□ Greenhouse Gas Emissions	□ Hazards and Hazardous Materials
⊠ Hydrology and Water Quality	⊠ Land Use and Planning	□ Mineral Resources
□ Noise	\Box Population and Housing	⊠ Public Services
⊠ Recreation	\Box Transportation	ITribal Cultural Resources
□ Utilities and Service Systems	□ Wildfire	⊠ Mandatory Findings of Significance

3.3 ENVIRONMENTAL DETERMINATION

On the basis of this evaluation:

I find that the project COULD NOT have a significant effect on the environmental,	
and a NEGATIVE DECLARATION will be prepared	
I find that although the project could have a significant effect on the environment,	
there will not be a significant effect in this case because revisions in the project have	
been made by or agreed to by the project proponent. A MITIGATED NEGATIVE	
DECLARATION will be prepared.	
I find that the project MAY have a significant effect on the environment, and an	
ENVIRONMENTAL IMPACT REPORT is required	
I find that the project MAY have a "potentially significant impact" or "potentially	X
significant impact unless mitigated" impact on the environment, but at least one effect	<u>· ·</u>
1) has been adequately analyzed in an earlier document pursuant to applicable legal	
standards, and 2) has been addressed by mitigation measures based on the earlier	
analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT	
is required, but it must analyze only the effects that remain to be addressed.	
I find that although the project could have a significant effect on the environment,	
because all potentially significant effects (a) have been analyzed adequately in an	
earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b)	
have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE	
DECLARATION, including revisions or mitigation measures that are imposed upon	
the project, nothing further is required.	

<mark>[name]</mark> [title] Mono County Date

3.4 FOCUSED EIR CONTENT

This IS will be used to focus the content of the EIR on the resources where implementation of the project could result in impacts that are potentially significant, including resources where these impacts can be mitigated. Table 3.4-1 summarizes the resources and topics that are currently anticipated to be addressed in the EIR based on the impact assessment provided in Section 3.5 of this IS. Topics may be adjusted based on agency and public feedback on this IS during the scoping period.

Resources	Included in the EIR	Impact/Topic to be Addressed in the EIR
Aesthetics	Yes	 Substantially damage scenic resources within a state scenic highway substantially degrade the existing visual character or quality of public views
Agriculture and Forestry Resources	Yes	 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance Conflict with existing zoning for agricultural use or a Williamson Act contract Result in conversion of Farmland to nonagricultural use
Air Quality	Yes	 Obstruct implementation of the applicable air quality plan Result in a cumulatively considerable net increase of any criteria pollutant Expose sensitive receptors to substantial pollutant concentrations
Biological Resources	Yes	 Impacts to special-status species Impacts to sensitive natural communities Impacts to federally protected wetlands and waters Impacts to habitat used by migratory wildlife
Cultural Resources	No	• N/A
Geology and Soils	No	• N/A
Greenhouse Gases	No	• N/A
Hazards and Hazardous Materials	No	• N/A
Hydrology and Water Quality	Yes	 Violation of any water quality standards Substantially decrease groundwater supplies or interfere substantially with groundwater recharge Conflict with or obstruct implementation of a water quality control plan
Land Use and Planning	Yes	 Impact due to a conflict with land use plan, policy, or regulation
Mineral Resources	No	• N/A
Noise	No	• N/A

Table 3.4-1 Anticipated Content of the EIR

3 ENVIRONMENTAL CHECKLIST

Resources	Included in the EIR	Impact/Topic to be Addressed in the EIR
Population and Housing	No	• N/A
Public Services	No	• N/A
Recreation	Yes	Substantial degradation of recreational experiences
Transportation	No	• N/A
Tribal Cultural Resources	Yes	Impacts to tribal cultural resources
Utilities and Service Systems	No	• N/A
Wildfire	Yes	• N/A
Mandatory Findings	Yes	 Substantially degrade the quality of the environment Impacts that are individually limited, but cumulatively considerable Cause substantial adverse effects on human beings

3.5 IMPACTS ASSESSMENT

3.5.1 Aesthetics

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Have a substantial adverse effect on a scenic vista?				\boxtimes
B) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	\boxtimes			
C) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? In urbanized areas, would the project conflict with applicable zoning and other regulations governing scenic quality?				
D) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				X

A) Would the project have a substantial adverse effect on a scenic vista? and

B) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway or designated scenic roadway?

Scenic vistas are found throughout Mono County, and are enjoyed by tourists, community members, and recreationalists alike. No designated scenic vistas are located in the project area (Mono County, 2015e).

Mono County hosts a variety of visual resources including scenic highways and historical monuments outlined in the 2015 Mono General Plan. U.S. Route 395 traverses the full length of the eastside of the Sierra Nevada from San Bernardino County in the south to Modoc County and the Oregon border in the north. The highway traverses through Bridgeport and Antelope Valley, and crosses through the watersheds of both the East Walker River and West Walker River. U.S. Route 395 is an officially designated state scenic highway from the Mono County border with Inyo County to just south of the town of Walker and is eligible for state scenic highway designation from Walker to the Nevada border (Caltrans, 2011). U.S. Route 395 contains many scenic vistas as it runs through the mostly undeveloped areas of Owens River Valley with the high mountain ranges of the eastern Sierra Nevada as a backdrop (Caltrans, 2011). Further, U.S. Route 89 within Mono County is eligible as a state scenic highway. Many of the most scenic county roads have been designated as County Scenic Highways, which are subject to development restrictions and discussed in the Regional Transportation Plan (Mono County, 2015e).

The Scenic Combining District Land Development regulations were created by Mono County to ensure development does not affect the scenic quality of the area and that it is consistent with the goals of the scenic highway program. These policies regulate building color and materials, landscaping, grading, vegetation removal, topography, ridgeline construction, lighting, and fencing. The project would not conflict with the Scenic Combining District Land Development regulations or other applicable regulations governing scenic quality along the scenic highways.

The Design Handbook, prepared by Mono County for the National Scenic Byways application, identifies several scenic resources found along U.S. Route 395 within Mono County. The listed scenic resources include the grazing land in Bridgeport Valley, West Walker River-Antelope Valley area, the historic courthouse in Bridgeport, the Twin Lakes recreation area, Bodie Ghost Town, and the working landscapes and ranching in the Walker and Coleville Communities (Mono County, 2015a).

Implementation of the project could result in water transfer from existing irrigated farmland to the Walker River. The water transfers might increase fallowed farmland and vegetation types, which could adversely alter the character of the rangeland viewed from scenic highways, scenic byways, and vistas throughout the Antelope and Bridgeport Valleys.

The project could have a potentially significant impact on scenic resources within designated state scenic highway viewsheds through alteration of agricultural lands. Potential impacts on scenic resources with scenic highways will be addressed in the EIR.

C) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? In urbanized areas, would the project conflict with applicable zoning and other regulations governing scenic quality?

Approximately 94 percent of Mono County land is publicly owned and the federal government, U.S. Forest Service (USFS) and U.S. Bureau of Land Management (BLM) owns and manages 88 percent of the County land . Additional public land owners include the CDFW, the State Lands Commission, and the Los Angeles Department of Water and Power (LADWP).

The USFS manages the Inyo National Forest and the Humboldt-Toiyabe National Forest, and identified 16 places with unique scenic resource value in the Draft USFS Forest Plan (Mono County, 2015e). Over 85 percent of the Inyo National Forest has not been affected by development.

Due to the potential change in vegetation types and farming practices, the project could alter the visual character or quality of public views of the site and its surroundings. The project could have a potentially significant impact. Potential impacts on the visual character and quality of the project area will be addressed in the EIR.

D) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Mono County Dark Sky regulations protect night sky views and limit glare by restricting projection of light (Mono County, 2015e). The project would not require the modification, construction, or alteration of any infrastructure or facilities. As such, no new source of light or glare would be introduced. No impact would occur.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact			
A) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	\boxtimes						
B) Conflict with existing zoning for agricultural use or a Williamson Act contract?	\boxtimes						

3.5.2 Agriculture and Forestry Resources
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
C) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104 (g))?				\boxtimes
D) Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
E) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?	X			

A) Would the project convert Prime Farmland, Unique Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

and

B) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

In 2011, 13,165 prime agricultural acres and 118,974 non-prime (rangeland) acres of agricultural land were enrolled in Williamson Act contracts in Mono County (Sierra Nevada Conservancy, 2011) and 11,492.35 acres of farmland around Bridgeport are currently enrolled under the California Land Conservation Act contract (California Department of Conservation, 2017). The County and the project area are open space that is recognized as being of statewide significance under the California Open Space Subvention Act.

Transfer of water from the exiting irrigated farmland to the Walker River may increase fallowing of farmland, lead to loss of wetlands, and cause reversion of fallowed farm land to scrub. Such changes have the potential to degrade the quality and extent of rangeland, pasture and land used for forage crops enrolled under the Williamson Act and recognized as being of statewide importance. Consequently, the project could have a **potentially significant impact** to farmland. Potential impacts on designated farmland will be addressed in the EIR.

C) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104 (g))?

and

D) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Approximately 94 percent of all land within the County is public land managed by the USFS, BLM, and other agencies. The land is predominately managed for conservation rather than for timber production (Mono County, 2015e). Commercial timber production is limited within the County and is not a significant economic activity within the Walker River Valleys.

Water diverted from irrigation, or any changes to irrigation management, would not affect forestry or forestry activities. **No impact** on forestry or possibility for conversion of forestry to non-forest uses would occur.

E) Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?

Transfer of water from the existing irrigated farmland to the Walker River may increase fallowing of farmland, lead to loss of wetlands, and/or lead to reversion of fallowed farm land to scrub. Such changes have the potential to degrade of the availability and extent of rangeland, pasture, and forage crops. The project would have a **potentially significant impact** to farmland. Potential impacts from conversion of farmland will be addressed in the EIR.

3.5.3 Air Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
B) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal, state, or regional ambient air quality standard?	X			
C) Expose sensitive receptors to substantial pollutant concentrations?	\boxtimes			
D) Result in substantial emissions (such as those leading to odors) adversely affecting a substantial number of people?				X

A) Would the project conflict with or obstruct implementation of the applicable air quality plan? and

B) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard?

and

C) Would the project expose sensitive receptors to substantial pollutant concentrations?

The Great Basin Unified Air Pollution Control District (GBUAPCD) regulates air quality in the Great Basin Valleys, which encompasses Alpine, Mono, and Inyo Counties. Mono County is designated as a nonattainment area for the state fine particulate matter (PM10) and ozone standards.. For ozone, the California Air Resources Board concluded that ozone exceedance in the Great Basin Valley was caused by transport from the San Joaquin Valley Air Basin. The District adopted an Ozone Attainment Plan for Mono County that identified the County as an ozone-transport area, and required the adoption of a New Source Review Rule requiring Best Available Control Technology for emissions over 25 tons per year (Mono County, 2015d).

Potential air quality impacts of the project would be limited to dust emissions resulting from the fallow agricultural fields due to reduction in agricultural uses. No additional equipment uses, or other emissions sources would be related to the policy changes or the water transaction program. Mono County will use the results of the vegetation community/habitat change modeling and data on dust emissions from fallow agricultural fields in similar environments to evaluate the magnitude of potential dust emission impacts that could result from the water transfer program in Antelope and Bridgeport Valleys. Fallow agricultural areas and dust monitoring in the lower Walker Basin water transaction program may be used to gain information on potential dust impacts. Fine particulate matter emissions due to fallowing of once active farmland may result in a **potentially significant impact** on air quality and nearby sensitive receptors. Impacts on air quality will be addressed in the EIR.

D) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The management of the water flowing through the Antelope and Bridgeport Valleys could change due to the project. The project could result in the return of the natural annual hydrology through suspended irrigation withdrawal. The project would not result in construction or maintenance activities that would create objectionable odors. No impact of other emissions, such as those leading to odors affecting a substantial number of people, would occur.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?				

3.5.4 Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
B) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	\boxtimes			
C) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	\boxtimes			
D) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
E) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	\boxtimes			
F) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				\boxtimes

A) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

The Walker River Basin has 22 sensitive plant species associated with the affected vegetation types (Mono County Resource Conservation District, 2014). Five species are associated with moist grass, sedge or wetland vegetation types and are considered seriously rare or threatened in California. The rare and threatened plant species are listed in Table 3.5-1.

Any changes in irrigation that reduce volume of irrigation or limits and changes the timing and extent of irrigation may result in a transition to drier vegetation communities and result in adverse conditions for the species listed above. Implementation of the project could therefore adversely affect listed plant species and potentially result in a **potentially significant impact** on rare and sensitive plant species. The impacts will be addressed in the EIR.

Sensitive wildlife species associated with the Walker River Basin are listed in Table 3.5-2.

Species	Status
Smaller saltweed (Atriplex pusilla)	2B.1
Inyo star- tulip (Calochortus excavatus)	1B.1
Utah monkey flower (Mimulus glabratus utahensis)	2B.1
Frogbit buttercup (Ranunculus hydrocharoides)	2B.1
Paradox moonwort (Botrychium paradoxum)	2B.1

Table 3.5-1 Rare and Threatened Plant Species in the Walker River Basin

1B.1: Rare, threatened, or endangered in California.

2B.1: Rare, threatened, or endangered in California, but common elsewhere.

Sources: (CNPS, 2019; CalFlora, 2019)

Table 3.5-2 Rare and Threatened Wildlife Species in the Walker River Basin

Species	Status
Greater sage grouse (Centrocercus urophasianus)	Proposed FT/CSSC
Yellow warbler (Dendroica petechial)	-/CSSC
Pygmy rabbit (Brachylagus idahoensis)	FSofC/CSSC
Western white-tailed jack rabbit (Lepus townsendii townsendii)	-/-
American badger (Taxidea taxus)	-/CSSC
Mule deer (Odocoileus hemionius)	-/- (migratory species)
FE – Federally Endangered, FT -Federally Threatened,	FSofC – Federal Species of Concern

FE – Federally Endangered, FT -Federally Threatened, FSotC – Federal Species of Concern CE – California Endangered, CT – California Threatened, CSSC – California Species of Special Concern

Sources: (CDFW, 2018)

All of the wildlife species except yellow warbler are associated with upland habitats and vegetation types. Reduction in irrigation as a consequence of a water transaction program may result in increased drier scrub habitats that favor pygmy rabbit and mule deer. However, sage grouse rely on a mosaic of wetter sedge habitat for foraging and brooding chicks, and rely on upland sage scrub for cover. Effects on sage grouse is indeterminate and therefore considered a **potentially significant impact**.

The yellow warbler is associated with riparian vegetation and riparian woodlands such as cottonwood and willow vegetation types. Reduction in irrigation may lead to loss of habitat of habitat for yellow warbler along irrigation ditches, and a possible shift of habitat to river corridors. A **potentially significant impact** on the yellow warbler could occur due to loss of habitat. Potential impacts on special-status species will be addressed in the EIR.

B) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

Return to a more natural annual hydrology through reduced irrigation would positively affect native riparian vegetation along the West Walker River and the tributaries to the East Walker River. However, this change may result in less water for the early succession riparian vegetation that is supported by the irrigation and could lead to serial conversion of water-dependent grass communities (such as sedge and moist grassland) to drier vegetation communities. A **potentially significant impact** on wetlands supported by the current irrigation regime could occur. Potential impacts on sensitive vegetation communities will be addressed in the EIR.

C) Have a substantial adverse effect on state or federally protected wetlands as (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

State and federally protected wetlands occur throughout the County (Mono County, 2015b). Long-standing irrigation canals and ditches in the Walker and Bridgeport communities support native, riparian areas dominated by cottonwood and willow vegetation communities that may have protection as jurisdictional Waters of the United States under the Clean Water Act. Additionally, the Walker River Basin supports several naturally occurring wetlands and riparian plant communities including Great Basin Riparian Forest and Transmontane Alkaline Marsh (Mono County, 2015b). The Great Basin Riparian Forest plant community includes 17 vegetation alliances, all of which are ranked as sensitive by the CFDW. The Transmontane Alkaline Marsh plant community includes two vegetation alliances, one of which is ranked as sensitive by CDFW.

Implementation of the project could result in the reduction in water diverted for irrigation, and result in greater quantities of water flowing within the natural watercourses. Implementation of the project would not require the need to fill or result in the hydrological interruption of the Walker River, any of its tributaries or any connected wetland features. **No impact** on federally protected wetlands would occur.

D) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Walker River Basin currently supports native and non-native fish species including the Lahontan cutthroat trout and whitefish. Lahontan cutthroat trout is listed as threatened under the federal Endangered Species Act. Although the former range would have included most of the Walker River Basin, current populations are isolated to headwaters of the Walker River, and do not overlap with the irrigated lower valleys. The project would not affect existing populations of Lahontan cutthroat trout. Impacts would be **less than significant** on listed species.

Mule deer (*Odocoileus hemoinus*) are not designated as a species of concern in the California Natural Diversity Database (CNDD), but have experienced a species decline since the mid-1960s (Mono County, 2015b). CDFW created a statewide management plan for the species, followed by local plans for specific herds. Seven local migratory plans apply to resident and migratory deer of Mono County including the East Walker and West Walker herds (Mono County, 2015b). Mule deer follow learned migration routes and move semi-annually between higher and lower altitudes in the county for overwintering and fawning opportunities (Mono County, 2015b). CDFW consider mule deer an important harvest species. Scrub habitats in Mono County provides crucial resources for adult and fawn survival in late spring through early fall. Early spring migrating herds depend on the availability of high-quality bitterbrush to maintain good health and reproductive success. The project would lead to less irrigation and could lead to serial conversion of water-dependent communities (such as sedge and moist grassland) to drier vegetation communities in areas not currently frequented by migrating deer. The project may result in improved pastures on the valley floors that are too exposed and generally avoided by mule deer. The impact of the project would therefore be **less than significant** on wildlife corridors because effects would be located where mule deer do not migrate.

E) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

There are numerous County policies for other biological resources created to maintain the vegetation, aquatic, and wildlife resources for recreational use, natural diversity, scenic value, and economic benefits (Mono County, 2015b). Water divisions as a consequence of policy changes may conflict with County biological resources polices by reducing water available for terrestrial communities and adversely affecting the distribution of riparian communities, wetlands and other sensitive vegetation communities. Actions resulting from the project could cause a **potentially significant impact** by conflicting with local policies that protect biological resources.

F) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Mono County has not adopted a Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (Mono County, 2015b). **No impact** on HCPs would occur due to actions of the project.

	Potentially Significant	Less than Significant with Mitigation	Less than Significant	No
Would the project:	Impact	Incorporated	Impact	Impact
A) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?			X	
B) Cause a substantial adverse change in the significance of an archaeological resource as defined in § 15064.5?				X
C) Disturb any human remains, including those interred outside of formal cemeteries?				X

3.5.5 Cultural Resources

A) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Surface water is diverted to agricultural fields via irrigation ditches. Many of the surface water rights in the project area are pre-1914. It is likely that the ditches have been maintained since the original diversion date. The ditch system has the potential to be classified as a historically significant archeological resource.

The project could restore the historic hydrological regime, with less water being diverted for irrigation. The project would divert water from irrigation instream uses. Any an application for a water diversion is required to demonstrate no injury to other water users as part of the diversion process before the decree court. Other users or water rights holders on the same ditch can petition the Decree Court. If the other water rights holders believe that a diversion would leave them with an unfair burden of ditch maintenance or leave them otherwise injured. It is the Decree Court's responsibility to adjudicate such issues and make the party whole. Therefore, diversion of water is unlikely to result in abandonment or degradation of existing ditches.

The project would not adversely change the significance of a historical resource; the impact related to historical resources would be **less than significant**.

B) Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in § 15064.5?

and

C) Would the project disturb any human remains, including those interred outside of formal cemeteries?

The project could restore the historic hydrological regime, with less water being diverted for irrigation. It is assumed that irrigation head gates are currently operable and the project would not require any surface disturbance to install new or replacement infrastructure. The project would not require grading or other soil disturbance activities.

Existing historical buildings and structures would not be modified, or result in any other adverse effects to archeological, paleontological, or historic resources. Therefore, the project would not adversely change the significance of a historical or archaeological resource, or disturb any human remains. **No impact** on cultural resources would occur.

3.5.6 Energy

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			\boxtimes	
B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			$\overline{\times}$	

A) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Geothermal, hydroelectric, biomass, solar, and wind energy resources are found within Mono County (Mono County, 2015d). Geothermal resources are abundant, and geothermallyinfluenced pools, streams, and creeks in the Casa Diablo area play an integral role in the productivity of Hot Creek Fish Hatchery and the migration corridors used by deer herds (Mono County, 2015d). Several streams within Mono County are diverted for hydroelectric power, and the valley floors could be developed for solar projects. High wind speeds throughout the County could be utilized by future wind energy development projects. Biomass feedstock resources from timber operations including timber harvest residuals and urban wood waste could be used to generate heat and electricity.

The project could result in the reduction of water diverted for irrigation and could restore the natural hydrology of the Walker River. The diversions and ditch system are gravity fed and would require minimal change in energy use from existing baseline. No project construction or operation activities that would lead to wasteful, inefficient, or unnecessary consumption of energy resources would occur. There would be a **less than significant** impact on energy resources.

B) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The *Mono County Resource Efficiency Plan* details Mono County's energy and emission goals, policies, and actions to achieve by 2020 including a 20 percent reduction in GHG emissions compared to 2010 levels (Mono County, 2014). The two main objectives of the plan include a 10 percent reduction in emissions associated with energy use, water consumption, transportation, waste disposal, and agricultural practices compared to the 2005 emission levels, and a 30 megawatt gain in renewable energy over baseline conditions. Several renewable energy and energy efficiency-based state legislation and programs affect Mono County, such as the 2016 Building Energy Efficiency Standards, the California Renewables Portfolio Standard Program, and the 2019 California Energy Efficient Action Plan (Mono County, 2015e).

The project could result in the transfer of water from existing irrigated farmland to the Walker River, potentially increasing the amount of fallowed farmland. The possible increase in unused farmland could result in less energy consumption associated with cattle ranching, as farms and ranches consume energy directly in the form of gasoline, diesel, electricity, and natural gas associated with ongoing equipment use and truck trips, and indirectly in energy-intensive inputs such as fertilizer and pesticides (Hitaj & Suttles, 2016). The project would not conflict with or obstruct a state or local plan for renewable energy or energy and would have a **less than significant impact**.

3.5.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Directly or indirectly cause potential death involving:	substantial adv	erse effects, including th	e risk of loss, injı	Jry, or
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground-shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			\boxtimes	
B) Result in substantial soil erosion or the loss of topsoil?			X	
C) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			\boxtimes	
D) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
E) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
F) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes

A) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

Implementation of the project would not result in construction of structures and would not introduce a substantially greater number of people within the project area than ongoing activities.

Implementation of project activities would, therefore, not expose people or structures to strong seismic ground shaking, including from being located on an active fault or from seismic related ground failure, including liquefaction. Impacts would be **less than significant**.

B) Result in substantial soil erosion or the loss of topsoil?

In Antelope Valley and Bridgeport Valley the soil textures are loam, clay-fine, and sandy. The project would reduce irrigation and the likelihood of surface runoff. However, drying (through reduced irrigation) may result in wind erosion of soils or loss of soil during storm events because of changes in porosity. Risk of erosion due to fallowing arable land would be minimized by the adaptive management policies required by policy action 3.E.4.e of the project, which requires the management of exposed soils to reduce dust and soil loss. Impacts would be **less than significant**.

A) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

iv) Landslides? and

C) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

In Antelope Valley and Bridgeport Valley, most of the irrigated land is less than three percent slope, with only the peripheral edges of the irrigated land reaching a five percent slope (Ciotti, Aylward, Merrill, & Young, 2014). The main factors affecting slope stability are steepness, soil type, underlying geologic structure and type, vegetation, subsurface water content, and human activity such as excavation.

Implementation of the project would return water to instream use reducing irrigation of agricultural land and may result in the drying of soils. The project would not require any surface disturbance, grading or construction of new slopes or structures. The shallow slope characteristics, and lack of soil or ground disturbing activities of the project would not destabilize any existing unstable geological units or soil types that could lead to an increased risk of landslides. Therefore, impacts would be **less than significant**.

D) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils exhibit a shrink-swell behavior that results from the water-holding capacity of clay minerals. Expansive soils are extensively distributed throughout Mono County, including both Bridgeport and Antelope Valleys.

Implementation of the project would result in the return of irrigation water to instream use that may result in overall drying of soils in fallowed agricultural land. Expansive soil impacts affect structures built on top of expansive soils. The project would not involve the construction of structures and, therefore, would not increase risks to life or property from construction on expansive or collapsible soils. The project changes would not increase impacts from expansive soils. **No impact** would occur.

E) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project would not require a waste water disposal system. The project changes would not result in a new impact. **No impact** would occur.

F) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

A regional relationship between Mesozoic rocks in the White Mountains of central California and western Nevada suggest that a marine environment existed in the Early to Middle Triassic era in Mono County (Mono County, 2015b). Fossil evidence of a marine bivalve that required an estuarine habitat to support reproduction and recruitment further solidifies this theory (Herschler, 2009) . Numerous vertebrate fossils have also been found in Trench Canyon, however information on potential paleontological resources in the Walker River Basin is limited. The tectonic, volcanic, and glacial history of Mono County has formed unique geologic features including Black Point, Panum Crater, Mono-Inyo Craters, and Obsidian Dome (Mono County, 2015b). Unique geologic features within the Walker River Basin include numerous hot springs.

The project could restore the historic hydrological regime, with less water being diverted for irrigation. It is assumed that irrigation head gates are currently operable, and the project would not require any surface disturbance to install new or replacement infrastructure. Implementation of the project would not require grading or other soil disturbance activities; therefore, the project would not directly or indirectly destroy a unique paleontological resource, or unique geologic feature. **No impact** on a unique paleontological resource site or unique geologic feature would occur.

3.5.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
B) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?			\boxtimes	

A) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The project could result in the transfer of water from existing irrigated farmland to the Walker River. Irrigation diversion could lead to an increase of fallowed farmland, which could decrease the amount of cattle ranching and alfalfa farming in the region. While alfalfa production fixes carbon dioxide (CO₂) through photosynthesis, much of the CO₂ is released back into the atmosphere after harvesting (West, Bandaru, Brandt, Schuh, & Ogle, 2011).

The possible decrease in alfalfa production would not result in an increase in greenhouse gas (GHG) emissions. Transition of farming may result in vegetation communities that may transition to drier vegetation types, such as from wet grassland to drier scrub communities. This change in vegetation type is unlikely to increase in GHG emissions. Cattle ranching can release atmospheric methane (CH₄) emissions due to the ruminant digestive system of cattle and nitrogen oxides (NOx) emissions from livestock manure management systems (IPCC, 2006; Wolf, Asrar, & West, 2017). The project could feasibly reduce the amount of cattle ranching in the area, therefore decreasing cattle ranching induced GHG emissions. The project would not generate additional GHG emissions, and the impact would be **less than significant**.

B) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?

The *Mono County Resource Efficiency Plan* identifies Mono County energy and emission goals, policies, and actions to achieve by 2020 (Mono County, 2014). This plan includes over 120 actions to reduce GHG emissions within the County jurisdictional and operational control. These actions include implementing net-zero energy policies for County facilities and strategic measures to improve resource efficiency of residents, businesses, and visitors (Mono County, 2014). Several state programs involving local emissions in Mono County include the Pavley vehicle standards, Renewables Portfolio Standard (RPS), and Title 24 Energy Efficiency Standards (Mono County, 2014).

The project could alter the diversion of water for irrigation to restore the natural hydrology of the Walker River. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gases, and there would be a **less than significant impact**.

3.5.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
B) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				\boxtimes
C) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?				X
D) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment?				\boxtimes
E) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project corridor?				X
F) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
G) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

A) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

and

B) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

and

C) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The project could minimize irrigation water diversion from the Walker River. The project would not require the transport of hazardous materials or ground disturbance that may result in the

release of hazards emissions. The use of equipment such as farm or construction equipment that could emit hazardous emissions would not increase and could decrease.

The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. No accidents would occur involving the release of hazardous materials, and the project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. The project would result in no new hazardous materials being used, transported or disposed of within the project area. **No impact** would occur related to hazards and hazardous materials.

D) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment?

The project would change the management of water diversion for Walker River. The project area does encompass some hazardous material sites pursuant to Government Code section 65962.5, but no ground disturbing activities would occur. As such, the project would not create a significant hazard to the public or the environment. **No impact** would occur.

E) Would the project or a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project corridor?

Bryant Field Airport is located within the project area, adjacent to Bridgeport Reservoir. The land use compatibility and constraints related to Bryant Field are contained in the *Mono County General Plan Land Use Element* (Mono County, 2015f). The project would decrease the amount of water currently diverted for agricultural use from Walker River. Actions of the project would not result in safety hazards or excessive noise for people residing or working within the project corridor. Additionally, the project would not require the construction of any structures that would result in a safety hazard related to the airport. **No impact** related to a public airport, public use airport, or people residing or working in the project corridor would occur.

F) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would change management for water diversion for Walker River. The project would not require the construction of any structures or result in activities that could impair or interfere with emergency response or evacuation plans. No new or increased traffic would occur due to actions of the project that would interfere with an emergency response or evacuation plan. **No impact** on emergency response or evacuation plans would occur.

G) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The project would change the management for water diversion, which could modify timing and water diversion to irrigation systems. A long term, multi-year reduction in irrigation may result in successional changes of vegetation communities to drier grasslands and rabbit scrub. A transition to drier vegetation types could increase the number and severity of wildland fires

within the project area. The project could expose people or structures to a significant risk involving wildland fires resulting in a **potentially significant** impact. Potential impacts involving wildland fires will be addressed in the EIR.

3.5.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
A) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	\boxtimes				
B) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	\boxtimes				
C) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:					
i) result in substantial erosion or siltation on- or off-site;			X		
 ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 			\overline{X}		
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			\boxtimes		
iv) impede or redirect flood flows?				X	
D) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X	
E) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	\boxtimes				

A) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The project could restore the Walker River to a more natural annual hydrology through changes in irrigation withdrawal. This restoration could result in the changes to volume and timing in irrigation diversions. Depending on the extent to which irrigation is reduced, the flow across irrigated parts of Antelope and Bridgeport Valleys could be substantially different to present conditions. This reduction in water flow may result in changes to dissolved oxygen and total

dissolved solids in irrigation waters resulting in a **potentially significant impact** to water quality. Potential impacts on violation of water quality standards will be addressed in the EIR.

B) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Implementation of the project could reduce irrigation inputs and may result in a reduction in subsurface water levels (Stillwater Sciences, Inc., 2014). Reversion to instream use may negatively affect existing groundwater recharge by reducing the amount of recharge under irrigated lands. Reductions in near-surface groundwater would be **potentially significant impacts**.

C) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation on or off site:

i) Result in substantial erosion or siltation on- or off-site?

Implementation of the project could result in reduced irrigation of farmland and increased instream flows during the irrigation season. Reduced irrigation is likely to reduce the erosion from agricultural fields and the consequent siltation of water ditches. Increased instream flow may result in increased erosion within the natural river channel. However, such changes would be within the natural annual variance of the river hydrology. Further, implementation of policy actions 3.E.4.d and 3.E.4.e are intended to avoid potential adverse effects to existing beneficial uses, and specifically ensure existing water quality conditions are maintained. Action 3.E.4.d would require the WBRP to demonstrate that there would be no adverse effects of a transaction, including substantial increases in erosion and siltation. Action 3.E.4.e would require management of retired agricultural land to ensure substantial erosion or siltation does not occur as a consequence of a water transaction. Impacts would be **less than significant**.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Implementation of the project would not introduce new impervious surfaces to the project area that could increase the rate of surface runoff and result in increased flooding offsite. Implementation of policy actions 3.E.4.d and 3.E.4.e are intended to avoid potential adverse effects to existing beneficial uses, and specifically ensure existing water quality conditions are maintained. Action 3.E.4.d would require the WBRP to demonstrate that a water transaction would not adversely affect existing users, including substantial increases surface water runoff. Action 3.E.4.e would require management of retired agricultural land to ensure runoff does not exceed existing conditions. Impacts to surface runoff would be **less than significant**.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Implementation of the project would result in increased instream flows and reduced irrigation during the irrigation season. Increased instream flows would be limited to the natural creek and river system that are part of the Walker River. However, the reduction in irrigation may result

drier soils that are less able to absorb water during storm events. The change of instream flow would not use existing or planned stormwater systems. Implementation of policy actions 3.E.4.d and 3.E.4.e are intended to reduce adverse effects to existing beneficial uses, and specifically ensure existing water quality conditions are maintained. Action 3.E.4.d would require the WBRP to demonstrate that a water transaction would not adversely affect existing users, this would include adverse impacts to stormwater drainage systems. Action 3.E.4.e would require management of retired agricultural land to ensure runoff does not exceed existing conditions. Therefore, there would be **less than significant** to stormwater systems.

iv) Impede or redirect flood flows?

The project would not require the modification, construction, or alteration of any structures, infrastructure or facilities. Implementation of the project would not place housing within a 100-year flood hazard area, nor would it impede or re-direct flood flows. **No impact** would occur.

D) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Antelope and Bridgeport Valleys are more the 200 miles from the Pacific Ocean, and therefore not susceptible to tsunami. Mono County Safety Element states that there is no known evidence of seiching in Mono County lakes or reservoirs. Further, the project would not require the modification, construction, or alteration of any infrastructure or facilities. The project would not therefore increase any risk of inundation or mudflows. The project would therefore result in **no impact** as a consequence of tsunami, seiche or mudflow.

E) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The *Water Quality Control Plan for the Lahontan Region* outlines water quality standards for surface water and groundwater within the Lahontan Region (RWQCB Lahontan Region, 1995). Several of the waterbodies addressed in the Lahontan plan are within the project area.

The project could restore the Walker River to a more natural annual hydrology through changes in irrigation diversions. Changes to volume and timing of irrigation diversions may have an effect on the water quality standards outlined in the *Water Quality Control Plan for the Lahontan Region*. A sustainable groundwater management plan has not been prepared for the project area. The project would have a **potentially significant impact** and could conflict with or obstruct implementation of the water quality control plan for the region. Potential impacts on water quality control plans will be addressed in the EIR.

3.5.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Physically divide an established community?				\boxtimes
B) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	X			

A) Would the project physically divide an established community?

The project could restore the Walker River to a more natural annual hydrology through changes in irrigation withdrawal. The project would result in no new construction or activities that could physically divide established communities. **No impact** to established communities would occur.

B) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project area is predominately rural in nature. The areas that would be affected are the existing irrigated arable farmland and ranchland in Antelope Valley and Bridgeport Valley. The 2015 Land Use Element of the Mono County General Plan designates the project area that would be affected as Agriculture (AG) (Mono County, 2015f). Water transactions and reduction in irrigation may be inconsistent with many of the County policies and actions in the Conservation/Open Space Element of the County General Plan (See Appendix A). Specifically, County Policy 3.E.4, which requires evaluation of impacts of participation the WBRP, would not allow water transactions without environmental review of the change in polices that could allow water transactions.

Implementation of the project would involve incorporation of additional policies to the Mono County General Plan that could change the irrigation diversion from Walker River. Implementation of the project could cause a **potentially significant** environmental impact due to a conflict with a land use plan, policy, or regulation. Impacts related to land use policies will be addressed in the EIR.

3.5.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
B) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				\boxtimes

A) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state

and

B) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? Mineral production in Mono County has occurred since 1880, with gold and silver accounting for more than 75 percent of the production (Mono County, 2015b). Lead and zinc are found in the limestone layers of West Walker River along with copper, gold, and silver. Molybdenum and vermiculite have been found south of Coleville in the Walker River Basin.

Implementation of the project could restore the historic hydrologic regime, with less water being diverted for irrigation. The project would not require grading or other soil disturbance activities and would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Access to areas with mineral resources would not be restricted by project actions. The project would result in **no impact** to the availability of a known mineral resource or locally-important mineral resources.

3.5.13 Nois	е
-------------	---

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?			\boxtimes	\boxtimes
B) Result in generation of excessive groundborne vibration or groundborne noise levels?				X
C) Expose people residing or working in the project area to excessive noise levels, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport?				

A) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?

The Noise Element of the *Mono County General Plan* provides the foundation for local programs to control environmental noise (Mono County, 2015g). This document enables Mono County to identify noise sources that interfere with community safety and comfort, and establish policies and programs that limit the community's exposure to excessive noise levels (Mono County, 2015e).

Implementation of the project would result in the transfer of water from existing irrigated farmland to the Walker River, potentially increasing the amount of fallowed farmland. The possible increase in unused farmland could result in less ongoing equipment use and truck trips, potentially decreasing ambient noise levels in the vicinity of the project. Implementation of the project would not generate noise that would interfere with the standards set in the Noise Element of the Mono County General Plan. **Less than Significant** from conflict with noise standards would occur.

Implementation of the project could lead to increased residential development; however, development would be required to adhere to the Noise Element of the County General Plan development standards. The land use for the project area is designated as Agriculture (Ag). The permissible ambient noise standards for Agriculture are 10 dB higher than those for residential areas. Impacts to ambient noise from potential residential development would therefore be consistent with the General Plan noise element. Impacts to ambient noise would be **less than significant .B**) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Implementation of the project could alter current irrigation regimes that draw on water from Walker River to restore the natural hydrology of Walker Lake. The project would not require the use of equipment such as trains, buses, or construction equipment that would cause typical groundborne vibration or groundborne noise levels (FTA, 2006). **No impact** on groundborne vibrations or groundborne noise levels would occur.

C) Would the project expose people residing or working in the project area to excessive noise levels, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport?

Implementation of the project could restore the Walker River to a more natural annual hydrology through changes in irrigation withdrawal. Bryant Field Airport near Bridgeport Reservoir is within the project area. The project would not result in any increase in noise levels as a consequence of changes in usage of the airport . **No impact** would occur.

3.5.14 Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				\boxtimes
B) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

A) Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Mono County is rural and sparsely settled, with a population of 13,981 in the 2016 Census (U.S. Census, 2018). Topaz, Coleville, Walker, Bridgeport, are the primary townships within the Walker River basin.

The project would change the management of water rights, potentially change diversion to irrigation systems fed by Walker River. Implementation of the project would not involve construction of new homes or businesses which could indirectly induce population growth. Additionally, the project would not alter the current infrastructure of the area including roads, railways, walkways, bridges, and airports which could directly induce population growth.

Implementation of the project could lead to increased residential development, if land is retired from agricultural uses. However, development would be required to be consistent with existing land use planning requirements as defined in the Land Use Element of the General Plan (Mono County, 2015f). The land use designation in Antelope Valley allows minimum parcel size of 10 acres and development in Bridgeport Valley is limited by a credit system. Application of existing General Plan polices would ensure that development would remain within the limits of planned development.

Therefore, the project would not generate substantial, unplanned development and population growth in the area either directly or indirectly. The project would result in a **Less than significant** impact on population growth.

B) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Implementation of the project would possibly reduce the diversion of water from Walker Lake. The project would not displace substantial numbers of existing people or housing. **No impact** would occur.

3.5.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Result in substantial adverse physical in altered governmental facilities, or the nee construction of which could cause signific service ratios, response times, or other per	ed for new or phy cant environment	sically altered governm al impacts, in order to r	nent facilities, t maintain acce	the
i) Fire protection?			\times	
ii) Police protection?			X	
iii) Schools?			X	
iv) Parks?			X	
v) Other public facilities?			X	

A) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i) Fire protection?

Implementation of the project description could alter current irrigation regimes that withdraw water from Walker River to restore the hydrology of Walker Lake. Reduction in irrigation may result in drier vegetation communities such as sage scrub and rabbit scrub. The potential transition to drier vegetation could increase fuel load within the project description area. However, the project would not induce population growth over and above the growth and development anticipated by the General Plan Land Use Element (Mono County, 2015f), which would lead to a reduction in service ratios and response times. The need for additional government facilities would not be necessary. A **less than significant impact** on fire protection would occur.

ii) Police protection?

- iii) Schools?
- iv) Parks?
- v) Other Public Facilities?

The project could restore the Walker River to a more natural annual hydrology through changes in irrigation withdrawal. The project would not induce growth in the project area over and above the growth and development permitted under the Agriculture designation in the General Plan Land Use Element (Mono County, 2015f). Therefore, implementation of the project would not adversely affect ratios for police services, schools, parks, or other public facilities provided in the area. The project would not cause an increase in crime in the area warranting provision of additional police services, or attract more people such that new schools, parks, or other public facilities would be needed. A **less than significant impact** on police protection, schools, parks, and other public facilities would occur.

3.5.16 Recreation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
B) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				\boxtimes
C) Substantially degrade recreation experience	\boxtimes			

A) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

and

B) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? The project would not induce population growth, that could increase the use of existing neighborhood and regional parks or other recreational facilities. The project would not involve the addition or expansion of any recreational facilities. The project would have **no impact** related to the need for new recreational resources.

C) Would the project substantially degrade recreation experiences?

The Mono County Conservation/Open Space Element of the General Plan includes policies for the conservation, development, and utilization of natural resources. Water resources in the County including rivers, streams, lakes, and aquifers supply water support recreational fishing and are an important component of the aesthetic landscape. The first policy of the Mono County Conservation/Open Space Element is to preserve existing open space resources, and policy 1.A.8 has the goal of working with appropriate agencies to preserve open space for recreational uses. The project could alter the water levels at area reservoirs through sale of surplus water. Reduced recreation opportunities or reduced quality of recreational experiences would be a **potentially significant effect**. The effects on recreation will be addressed in the EIR.

3.5.17 Transportation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Conflict with a program, plan, ordinance or policy addressing the circulations system, including transit, roadway, bicycle and pedestrian facilities?				\boxtimes
B) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			\times	
C) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
D) Result in inadequate emergency access?				X

A) Would the project conflict with a program, plan, ordinance or policy addressing the circulations system, including transit, roadways, bicycle and pedestrian facilities?

The *Mono County Regional Transportation Plan*, in coordination with other local, regional, and state plans and programs, promotes the development of the transportation and circulation system for individuals and goods in the county (LTC, 2013).

The project could reduce the diversion of water for irrigation use. Farming and ranching activities may be diminished in response to the project, resulting in fewer truck trips for farming activities. The project would not conflict with the *Mono County Regional Transportation Plan* or other local, regional, or state transportation plans or programs, and would have a **less than significant** impact related to transportation policies.

B) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines section 15064.3, subdivision (b) (1) states that for land use projects, vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. CEQA section 15064.3 (b) applies to transit projects.

Implementation of the project would not result in increased traffic in the area. The project could cause fallowing of farm and ranch land, potentially leading to fewer vehicle and truck trips into the region and consequently fewer vehicles miles. The project would not increase vehicles miles traveled. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact. The impacts would be **less than significant**.

C) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project could restore the Walker River to a more natural annual hydrology through the changes in water withdrawal for irrigation. This action could result in fallowing of farmland and a decrease in agricultural activities. Truck and farm equipment trips within the project area

may decrease. The project would not require the construction of potentially hazardous geometric design features or the incompatible use of equipment, and there would be no impact on transportation hazards. The project would not affect access in or out of the area, and **no impact** on emergency access would occur.

D) Would the project result in inadequate emergency access?

The project would change the management of water diversion and increase instream uses of irrigation water. The project would not involve the construction of any structures or result in activities that could impair or interfere with emergency access. No new or increased traffic would occur due to actions of the project that would interfere with an emergency access. **No impact** on an emergency access would occur.

3.5.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Cause a substantial adverse change in the Resources Code section 21074 as either a site defined in terms of the size and scope of the California Native American tribe, and that is:	, feature, plac	e, cultural landscape t	hat is geograp	ohically
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k), or	\boxtimes			
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	\boxtimes			

A) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Impacts to tribal cultural resources are determined through consultation with tribal organizations that have requested government to government consultation. The following tribes have been notified as part of the AB 52 process because they have requested consultation:

- Mono Lake Kutzedika'a Tribe
- Washoe Tribe of California and Nevada

Tribal consultation is currently ongoing, and it is, as yet, not possible to determine whether tribal cultural resources would be affected by the project. As such, the project may have a **potentially significant impact** to tribal cultural resources. The impacts will be addressed in the EIR.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				\boxtimes
B) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				\boxtimes
C) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes

3.5.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
D) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				\boxtimes
E) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

A) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The project would change irrigation regimes that currently divert water from Walker River. Implementation of the project would not generate wastewater or stormwater drainage, or require the use of electric power, natural gas, or telecommunications facilities. **No impact** on current wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities would occur that would necessitate the relocation or construction of such facilities.

B) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The project could alter water rights to potentially limit the diversion of irrigation water taken out of Walker River. Implementation of the project would not require new water supplies, as the project would involve a change in policies of the Mono County General Plan. As part of these changes, leasing or sale of water rights could occur resulting in the diversion of water within Walker River. No new water rights are required as part of the project. **No impact** on water supplies would occur.

C) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The project would result in the diversion irrigation water to in stream uses, and would result the generation of no additional waste water. The project would not require wastewater treatment. There is, therefore, no requirement to demonstrate that a wastewater treatment provider is able to serve the project. **No impact** on wastewater treatment providers would occur.

D) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? and

Mono County General Plan Policies and Water Transactions Program Initial Study • April 2019 **3-34**

E) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Mammoth Disposal, a subsidiary of Waste Connections, Inc., and D&S Waste provide residential and commercial waste collection services in Mono County, and disposal of solid waste is conducted at three active landfills in the county (Mono County, 2015c). The project would allow for the alteration of the water rights used to divert water out of Walker River. No solid waste would be generated as part of the project. Therefore, the project would not generate solid waste in excess of the capacity of local infrastructure, State or local standards, or impair the attainment of solid waste reduction goals. The project would comply with federal, state, and local management related to solid waste, as no solid waste would be created by the project. **No impact** on solid waste would occur.

3.5.20 Wildfire

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
A) Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes	
B) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?					
C) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X	
D) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			\boxtimes		

A) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The project would change the management of water diversion and increase instream uses of irrigation water. The project would not involve the construction of any structures or result in activities that could impair or interfere with emergency response or evacuation plans. No new or increased traffic would occur due to actions of the project that would interfere with an emergency response or evacuation plan. **No impact** on an adopted emergency response plan or emergency evacuation plan would occur.

B) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Implementation of the project would result in reallocation of water typically diverted for irrigation back into Walker River. The project would not induce growth or movement of people into the project areas i.e., there would be no new occupants of the project area as a consequence of project implementation. Therefore, the project would not exacerbate wildfire risks. Less than significant impacts would occur.

C) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The project changes the management for water diversion. No infrastructure would be installed or maintained as part of the project. The project would have **no impact**.

D) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Implementation of the project would result in reduction of irrigation withdrawal from the Walker River, which could lead to an increase in fallowed farmland. Long term fallowing would result in a transition to drier vegetation communities including scrub communities that could potentially exacerbate wildfire risks. Wildfire could denude the vegetation and associated root structures from a region within the project area. The affected land would consist of former farmland with slopes of less than 5% (Ciotti, Aylward, Merrill, & Young, 2014)), which has a low susceptibility to landslides and slope instability. In addition, policy action 3.E.4.d of the project would require land owners to manage the risk of soil loss or degradation that could occur as a consequence of runoff. Therefore, implementation of the project would have a **less than significant** effect.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
A) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	\boxtimes			

3.5.21 Mandatory Findings of Significance

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
 B) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) 	X			
C) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	\boxtimes			

A) Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The project could result in changes irrigation withdrawal from the Walker River, which would positively affect native riparian communities along the West Walker River and the tributaries by increasing flow in the waterways. This increase in flows could increase the habitat for native fish and wildlife species within the project areas. Water diversion from the Walker River has created riparian and wetland habitat for a variety of plant and animal species, which could be adversely affected by irrigation withdrawal. Therefore, the project could have a **potentially significant impact** to habitat, wildlife, and plants. Mitigation would be designed to reduce these impacts to less than significant. Impacts and mitigation will be addressed in the EIR.

B) Would the project have impacts that are individually limited, but cumulatively considerable?

Several impacts from the implementation of the project have the potential to be significant alone and may combine with other projects to produce a **potentially significant impact**. These cumulative impacts will be addressed in the EIR.

C) Would the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Implementation of the project has the potential to result in hazards that could affect human beings from dust related to the drying of vegetation communities, which could be a **significant effect**. The impacts and mitigation will be addressed in the EIR.

Adams, S. (2018, September). Personal Communication. (I. Fisher, Interviewer)

- Alyward, B., & Fisher, I. (2018). Mono County Water Transaction Scenario California Environmental Quality Act (CEQA) Project Description and Conceptual Program Design.
- CalFlora. (2019). CalFlora Taxon Report Database. Retrieved from https://www.calflora.org/
- California Department of Conservation. (2017). State of California Williamson Act Contract Land. Retrieved from ftp://ftp.consrv.ca.gov/pub/dlrp/wa/2016%20Statewide%20Map/WA_2016_34X44.pdf
- California Department of Transportation (Caltrans). (2011, September 7). California Scenic Highway Mapping System. Retrieved March 29, 2019, from http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/
- California Department of Fish and Wildlife (CDFW). (2018, November). Special Animals List. California Natural Diversity Database (CNDDB). Retrieved from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406
- Ciotti, S. P., Aylward, B., Merrill, A., & Young, G. (2014). Feasibility Assessment of a Water Transaction Program in the Walker River Basin, California. Coleville: Resource Conservation District of Mono County.
- California Native Plant Society (CNPS). (2019). Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Retrieved April 4, 2019, from http://www.rareplants.cnps.org
- Federal Transit Administration (FTA). (2006, May). Transit Noise and Vibration Impact Assessment. Office of Planning and Environment Federal Transit Administration. Retrieved from https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Man ual.pdf
- Herschler, R. a. (2009). A Mactrid Bivalve from Pleistocene Deposits of Lake Russel, Mono Basin. Retrieved April 5, 2019, from https://repository.si.edu/bitstream/handle/10088/8432/iz HershlerJayko2009.pdf?sequen ce=1&isAllowed=y
- Hitaj, C., & Suttles, S. (2016, August). Trends in U.S. Agriculture's Consumption of Energy and Production of Energy: Renewable Power, Shale Energy, and Cellulosic Biomass. U.S.

Department of Agriculture, Economic Research Service. Retrieved March 27, 2019, from https://www.ers.usda.gov/webdocs/publications/74658/60128_eib159.pdf?v=0

- Intergovernmental Panel on Climate Change (IPCC). (2006). 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 4: Agriculture, Forestry, and Other Land Use. Retrieved March 38, 2019, from https://www.ipccnggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_10_Ch10_Livestock.pdf
- Martin, S., Aylward, B., Colby, B., Dicharry, W. B., Grantham, T. E., Kendy, E., . . . Ziemer, L. (2017). *Inidcator Guidebook for Water Transaction Programs*. Contributors: Peter Culp, Lain Leoniak, Ron Nelson, Andrew Purkey, Leon Szeptycki.
- Mono County. (2008, March). *Antelope Valley Community Profile*. Retrieved from https://monocounty.ca.gov/sites/default/files/fileattachments/rpac_-_antelope_valley/page/8532/avprofile.pdf
- Mono County. (2014, August 1). *Mono County Resource Efficiency Plan*. Retrieved from http://monoclimateaction.org/wp-content/uploads/2017/04/Mono-REP-38-MW_Final.pdf
- Mono County. (2015a, April). *Character Inventory & Design Guidelines for Highway 395 Scenic Byway Corridor Communities.* Opticos Design, Inc. Retrieved from https://www.monocounty.ca.gov/sites/default/files/fileattachments/planning_division/p age/6572/mco_ideabook_04.30.2015_web.pdf
- Mono County. (2015b, July 15). County of Mono Regional Transportation Plan & General Plan Update Draft Environmental Impact Report (EIR) State Clearinghouse (SCH) #2014061029. Retrieved from https://monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/80 22/2_draft_eir_with_appendices_7.31.15.pdf
- Mono County. (2015c, January). *Countywide Siting Element of the Mono County Integrated Waste Management Plan*. Mono County Department of Public Works. Retrieved from https://monocounty.ca.gov/sites/default/files/fileattachments/public_works_-____solid_waste/page/8577/january_2015_countywide_siting_element.pdf
- Mono County. (2015d). Mono County General Plan: Conservation/Open Space Element.
- Mono County. (2015e). *Mono County General Plan EIR*. Retrieved from https://monocounty.ca.gov/planning/page/general-plan-eir
- Mono County. (2015f). *Mono County General Plan Land Use Element*. Retrieved from Mono County: https://monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/96 17/2018_land_use_element_final.pdf

- Mono County. (2015g). *Mono County General Plan Update: Noise Element*. Retrieved from https://monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/42 65/7_noise_element_pc_11.12.15.pdf
- Mono County Local Transportation Comission (LTC). (2013). *Mono County Regional Transportation Plan.* Retrieved from https://monocounty.ca.gov/sites/default/files/fileattachments/local_transportation_com mission_ltc/page/4857/2013_rtp_12.9.2013.pdf
- National Fish and Wildlife Foundation (NFWF). (2011). Walker Basin Restoration Program Progress Report 2010-2011.
- Regional Water Quality Control Board (RWQCB) Lahontan Region. (1995). *Water Quality Control Plan for the Lahontan Region North and South Basins.* South Lake Tahoe. Retrieved March 27, 2019, from https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/prin t_version.pdf
- Sierra Nevada Conservancy. (2011, November). *System Indicators: Land Conservation and Wildlife Habitat*. Retrieved from https://sierranevada.ca.gov/wp-content/uploads/sites/236/attachments/land_conservation_and_wildlife_habitat.pdf
- State Water Resources Control Board (SWRCB). (2004, February 27). California's Groundwater Bulletin 118. *Bridgeport Valley Groundwater Basin*. Retrieved from https://www.water.ca.gov/LegacyFiles/pubs/groundwater/bulletin_118/basindescription s/6-8.pdf
- Stillwater Sciences, Inc. (2014). *Potential Environmental Impacts of a Water Transaction Program.* Walker River Basin, CA.
- U.S. Census. (2018). *QuickFacts: Mono County, California*. Retrieved from https://www.census.gov/quickfacts/fact/table/monocountycalifornia/PST045218
- United States v. U.S. Board of Water Commissioners, No. 15-16316 ((9th Cir. 2018) May 2018).
- West, T. O., Bandaru, V., Brandt, A. E., Schuh, A. E., & Ogle, S. M. (2011). Regional uptake and release of crop carbon in the United States. *Biogeosciences*(8), 2037-2046. doi:10.5194/bg-8-2037-2011
- Wolf, J., Asrar, G. R., & West, T. O. (2017). Revised methane emissions factors and spatially distributed annual carbon fuxes for global livestock. *Carbon Balance and Management*, 12:16. doi:10.1186/s13021-017-0084-y

This page is intentionally left blank.

APPENDIX A WATER TRANSACTIONS CONSISTENCY WITH GENERAL PLAN POLICES

Water Transactions General Consistency with General Plan Polices