

**INITIAL STUDY**

**For**

**Clear Ridge Mutual Water Association, Inc.  
Water Right Application A030946**

**Prepared for:**

**Division of Water Rights  
State Water Resources Control Board**

**Prepared by:**

**John Gilchrist & Associates**

**June 2010**

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## **1 INTRODUCTION**

This section describes the purposes of an Initial Study, the decision process to prepare a Negative Declaration (ND) or a Mitigated ND, and provides a short discussion on other public agencies whose approval is required through the permitting process.

### **1.1 Purpose of the Initial Study**

The State Water Resources Control Board (State Water Board) Division of Water Rights (Division) has prepared this Initial Study pursuant to the California Environmental Quality Act (CEQA) for the Clear Ridge Mutual Water Association (Association) Water Right Application A030946. CEQA lists seven purposes of an Initial Study (CEQA Guidelines section 15063[c]):

1. Provide the lead agency (i.e., the Division) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a ND;
2. Enable a lead agency (i.e., the Division) to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND;
3. Assist in the preparation of an EIR, if one is required;
4. Facilitate environmental assessment early in the design of a project;
5. Provide documentation of the factual basis for the finding in a ND that a project will not have a significant effect on the environment;
6. Eliminate unnecessary EIRs;
7. Determine whether a previously prepared EIR could be used with the project.

### **1.2 Decision to Prepare a Negative Declaration or Mitigated Negative Declaration**

According to CEQA Guidelines section 15070, a public agency shall prepare a proposed ND or a Mitigated ND when:

1. The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
2. The Initial Study identifies potentially significant effects, but:
  - a. Revisions in the project plans made before a proposed Mitigated ND and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and,
  - b. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

### 1.3 Project Information

1. Project Title:  
Clear Ridge Mutual Water Association Water Right Application A030946
2. Lead Agency Name and Address:  
State Water Resources Control Board, Division of Water Rights  
1001 I Street, 14th Floor  
Sacramento, CA 95812-2000
3. Contact Persons and Phone Numbers:  
Mitchell S. Moody (916) 341-5383  
Kathy Mrowka (916) 341-5363
4. Project Location:  
Big Sur, Monterey County, California
5. Project Applicant's/Sponsor's Name and Address:  
Ms. Carolyn Shearer  
Clear Ridge Mutual Water Association, Inc.  
PO Box 63  
Big Sur, CA 93920-0063
6. General Plan Designation:  
(Well Site): Rural Community Center
7. Zoning:  
(Well Site): VSC-CZ – Visitor Servicing Commercial (Coastal Zone)  
(Residential Service Area): WSC/40-CZ – Watershed and Scenic Conservation,  
40 acre minimum parcel sizes (Coastal Zone)
8. Other Public Agencies Whose Approval is Required:  
None

### 1.4 Organization of the Initial Study and Mitigated Negative Declaration

The Draft Mitigated ND is located at the beginning of the document after the Table of Contents. Section 2.0 describes the features of the project, the environmental setting, and location. Section 3.0 is the Environmental Checklist. Section 4.0 addresses the potential impacts of project construction. Section 5.0 lists additional personnel who contributed to this document and references used in its preparation. Appendices A – D follow.

## **2 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING**

### **2.1 Project Description**

The Clear Ridge Mutual Water Association, Inc. (Association) serves 42 properties located on Pfeiffer Ridge and Clear Ridge in the Big Sur area of Monterey County. The Association's source of water is a 36-foot deep well situated approximately 45 feet from the southwest bank of the Big Sur River in Monterey County. From the time the well was originally developed in 1972, the Association's right to divert water was based on the theory that the water appropriated was percolating groundwater such that, under California law, a water right permit was not required. On March 9, 1999, the State Water Resources Control Board, Division of Water Rights (Division) determined that the Association's well was extracting underflow of the Big Sur River and that a water right permit was in fact required.

As a consequence, on July 5, 1999, the Association filed water right Application 30946 with the State Board. The application, as amended, requests the right to appropriate up to a total of 42 acre feet per annum (afa) of water at a rate not to exceed 0.058 cubic feet per second (cfs), during the season from January 1 through December 31, from Big Sur Underflow, tributary to the Pacific Ocean. Prior to amendment, the application had requested a total of 140 afa. The proposed purposes of use are domestic and fire protection.

The Association service area is both within and outside the watershed area of the Big Sur River. Residences west of Pfeiffer Ridge and along Clear Ridge are in drainage basins that empty into Sycamore Canyon or drain directly to the Pacific Ocean. Seven Association properties east of Pfeiffer Ridge are within the Big Sur River watershed. No new water facility construction is proposed as part of this project. The application seeks to recognize a water appropriation system in operation since 1972 which now serves 38 residences. Four additional parcels within the service area are vacant although three of these have existing water meters (See Figure 3, below). Up to 4 new residences could be added, and the system could serve property upgrades (caretaker units, vacation homes converted to full time residences). However given the current trend in Big Sur toward absentee ownership and vacation use of properties (J. Saar, pers. com 2008), it is unlikely development on 4 vacant properties, or upgrades on developed properties, will increase water use or other services significantly.

### **2.2 Project Location**

The Association serves 42 properties just south of Molera State Park. The project site is located on the Big Sur Coast in Monterey County, approximately 26 miles south of Carmel near State Highway 1. The properties are located in Big Sur west of Highway 1, and are accessed from a private loop road (Clear Ridge Road) that begins/ends just north of Big Sur on Highway 1, and off Sycamore Canyon Road to the south. The well site is located close to the Big Sur access road entrance on the west side of the Big Sur River. The well is southwest of the access road bridge.

### **2.3 Background Information**

In 1971, Jan Brewer granted an easement on his property near the Big Sur River to drill and maintain a well, pump station and conveyance system to properties in Sections 23, 24, 25, 26, 35 and 36 in T19S, R1E, MDB&M. This area is the present service area of the Association.



The well was drilled in 1972 and water was conveyed via a one-inch pipe to a 16,000-gallon water tank located on Pfeiffer Ridge. The system initially served five properties. By 1980 the system had 13 active and inactive connections permitted by the Monterey County Health Department, although 42 properties were recognized by Monterey County within the system. The water line between the well and tank was upgraded to a 2-inch line in the late 1980's, with a one-inch line continuing from the storage tank to serve individual residences. In 1991 a new 40,000-gallon tank was installed next to the older 16,000-gallon tank. Presently the larger tank provides domestic water to the 42 residences, while the 16,000-gallon tank is used for back up fire storage. Most homeowners within the service area also have one or two 5,000-gallon tanks next to their residences for individual water storage. Water is currently metered, and residents are charged per gallon of use. Properties within the service area encompass approximately 835 acres. Parcels within the service area, including vacant properties, are shown on Figure 3.

In 1977, Robert Lockwood's parents bought the Brewer property with its connection to the Association's well. The Lockwood's experienced pumping and water shortage problems from that well and in 1979 drilled their own well under a riparian right. The Association well was upgraded in its present location in the late 1970's to correct pumping problems. Additional improvements to the water line and storage tanks were made in the early 1990's (Beck, personal communication, 2007).



Photograph 1. Clear Ridge Mutual Water Association Well, with Big Sur River in Background

The Association's well is located on the Lockwood property (APN 419-201-021) (NW $\frac{1}{4}$  of NW $\frac{1}{4}$  of Section 24, T19S, R1E, MDB&M) approximately 70 feet from the southwest Big Sur River bank. The well was drilled to a depth of 36 feet and presently cased with perforations from 20 to 32 feet below the surface. The nominal pumping rate is 0.05 cfs, or approximately 22.5 gallons

per minute (gpm), and the Association is requesting an annual water allocation of 42 af or one acre-foot per residential property per year. The withdrawal would be conducted throughout the year. The well is presently operated up to 16 hours per day. Water use during the years of 2003 through 2005 varied from 12.32 af/year (2003) to 16.11 af/year in 2004 (Fall Creek Engineering, 2009). However, use at 21.65 af was recorded in the 4 quarters ending October 2008 (Beck, pers. com. 2008) with no corresponding increase in development or landscaping. It has been speculated that earlier water metering was defective. The Association is in the process of upgrading all its water meters (S. Beck, pers. comm. 2008).



Photograph 2. Clear Ridge Mutual Water Association Water Tanks on Pfeiffer Ridge, with Clear Ridge in Background

In May 1998, the Division received a complaint. The Division reviewed the complaint and determined that the Association well was withdrawing water from a subterranean stream within the alluvium under the Big Sur River. Consequently the water diversion required a water right permit.

On June 9, 2000, the Division published a notice of Application A030946. Between June 30 and July 27, the Division received nine protests. The basis for each protest follows:

1. Jeanette W. and John D. Otter: County Coastal Development Permit required for inter-basin water transfer; pumping will impact steelhead and riparian vegetation.
2. California Sportfishing Protection Alliance: Pumping will adversely affect threatened steelhead and California red-legged frog.

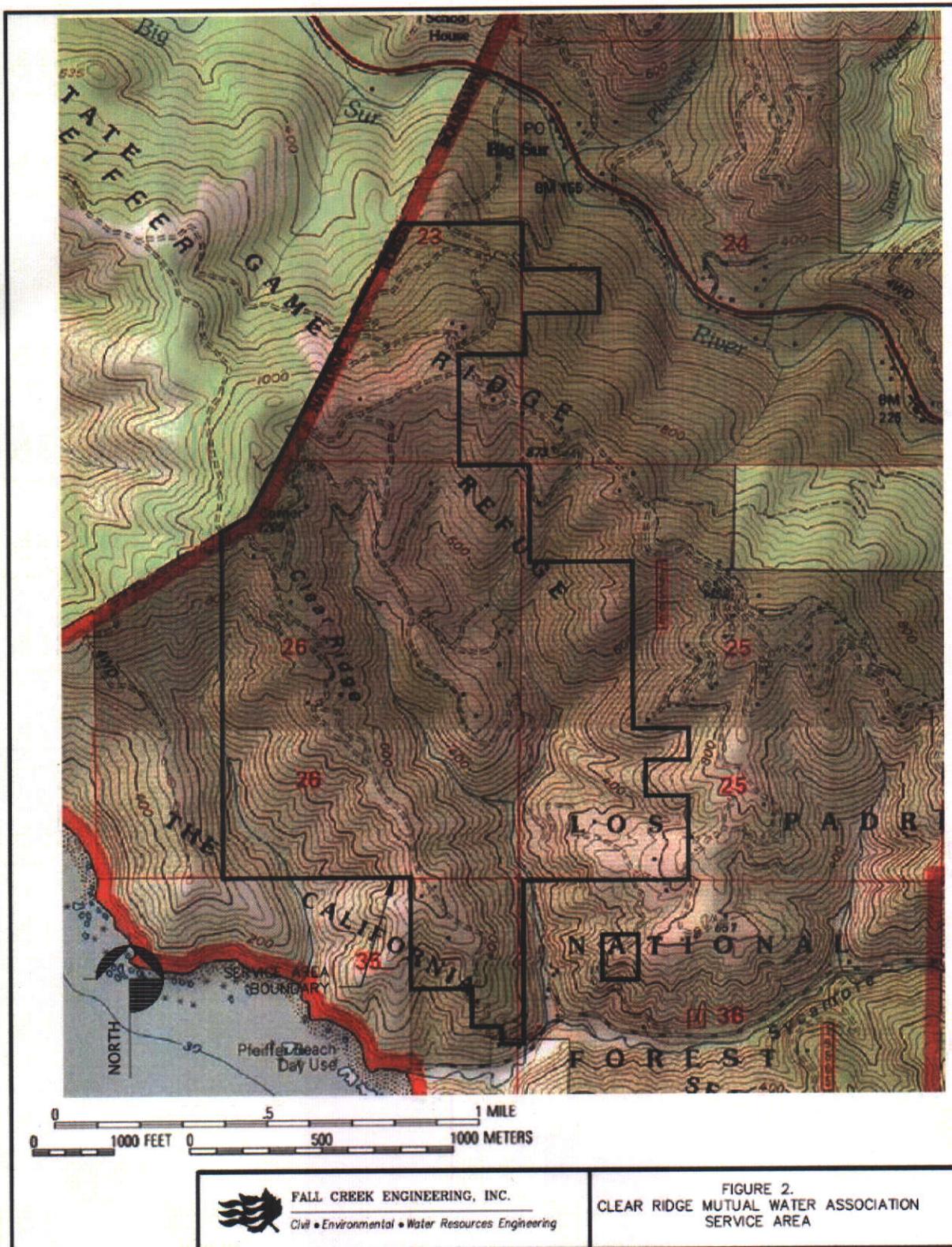


Figure 2. Clear Ridge Mutual Water Association Service Area

3. Sierra Club: Dry season fisheries impacts will occur.
4. California Coastal Commission: Export of water from watershed contrary to the Big Sur Local Coastal Plan (LCP) and would require a Coastal Development Permit. Withdrawal would affect lower River and Lagoon hydrology and Environmentally Sensitive Habitat Area, including steelhead habitat, riparian forest, and sensitive wildlife species habitat.
5. California Department of Fish and Game: Diversion could affect sensitive public trust fish and wildlife including steelhead, red-legged frog and tidewater goby.
6. Carolyn Motzel: Pumping 140 afa will adversely affect threatened steelhead and Big Sur River critical habitat for steelhead. Pumping will also affect sensitive riparian habitat including redwoods in the vicinity of the well.
7. Monterey Peninsula League of Women Voters: Project is inconsistent with the Big Sur LCP, and could affect steelhead during low water drought conditions.
8. Carmel River Steelhead Association: All life stages of threatened steelhead would be affected by the illegal water diversion.
9. Lorri Lockwood: There is a cumulative impact from recreational and residential appropriations in this watershed. River levels have dropped exposing tree roots and adversely affecting riparian vegetation. Steelhead has been harmed downstream.

In 2002 the Association amended Application A030946 to reduce the requested yearly amount from 140 afa to 42 afa, consistent with the Monterey County Health Department and the Monterey Peninsula Water Management District documented water use rates of one af/year for rural residences. Maximum pumping rate would be 26 gpm (0.058 cfs) from one of two 15 horsepower (hp) piston pumps.

### *2.3.1 Department of Fish and Game Comments on Application*

The California Department of Fish and Game (DFG), Central Region was consulted during the preparation of this Initial Study in order to identify potential concerns and to develop appropriate mitigation measures. Two site meetings were held with representatives from the DFG and NOAA Fisheries. DFG had concerns regarding the Association's withdrawal from the offset well during drought or low flow periods. After further discussions with DFG, NOAA Fisheries and Division staff, DFG agreed to dismiss its protest on the condition that specific mitigation measures to protect biological resources were included in any permit issued. The Association agreed to the DFG Terms, which are listed in Appendix A and discussed below.



### 2.3.2 Cumulative Impacts of Diversion

In order to assess the potential cumulative impact of the existing project and all other water diversions within the watershed, the Association prepared a Water Availability Analysis/Cumulative Flow Impairment Index (WAA/CFII). The analysis was prepared with reference to the draft *Guidelines for Maintaining Instream Flows to Protect Resources Downstream of Water Diversion in Mid-California Coastal Streams (NMFS/DFG, 2002)* (Guidelines), although the project itself is located outside their geographic scope. The WAA/CFII report for the project was accepted by the Division on June 10, 2009 and is included in Appendix B. The results of the report, which takes into account the proposed diversion as well as all other permitted senior and junior water rights within the Big Sur watershed, are summarized below in Tables 1, 2 and 3.

The CFII is an index used as a screening tool to evaluate the cumulative flow impairment demand of all existing and pending projects in a watershed of interest. It is a percentage obtained by dividing the demand (in units of af) by the supply (in units of af) at a specified Point of Interest (POI) in the stream system and for a specified time period, where:

1. Demand is the "face" value of entitlements of all existing and pending water rights, under all bases of right above a POI. Information about existing and pending water rights is obtained through use of the State Water Board's Water Rights Information Management System (WRIMS) database and Division files. Demand includes existing and pending water rights applications for "post-1914" appropriators, Statements of Water Diversion and Use for "riparian" and "pre-1914" appropriators, small domestic use registrations, stockpond use registrations, and any other known authorized diversions<sup>1</sup>; The guidelines specify basing demand calculations on seasonal data from October 1 through March 31. For this project, demand is also considered on a monthly basis during the low flow months of April through September; and,
2. Supply is the seasonal average unimpaired flow above a particular POI. For coastal watersheds, the season of December 15 through March 31 is normally used to compute supply. For this project, supply is also considered on a monthly basis during the months of April through September.

Since the diversion season for the Association's project is year-round, CFII calculations were additionally performed on a monthly basis for the months of April through October, in order to assess the potential cumulative impact of the project in low flow months of April through September at various POIs.

The cumulative impacts to the natural hydrology were evaluated at three (3) POIs within the watershed, designated by DFG by memorandum dated February 16, 2006. POI 1 is on the Big Sur River immediately below the Association's well. POI 2 is on the Big Sur River immediately below Statement of Water Diversion and Use S015408 held by the California Department of Parks and Recreation (Andrew Molera State Park). POI 3, approximately 3 miles downstream of POI 1, is the point on the Big Sur River immediately above tidal influence or the point of transition from fresh water to brackish water and below the "old well" of water right Application A030166. The POI locations are marked in Figure 1.

<sup>1</sup> Determined from WRIMs database search performed on May 25, 2005.

The results of this analysis, which takes into account the project's diversion, as well as all other permitted senior and junior water rights within the Big Sur River watershed, show that during the October through March period the project's diversion is insignificant compared to the supply during December 15 through March 31 (see Table 1, below).

**Table 1. CFII Results for December 15 through March 31**

Position	Demand acre-feet	Supply	CFII %
Calculated on the basis of existing water diversions			
POI 1	129.54	52,605	0.25
POI 2	138.34	55,162	0.25
POI 3	163.34	55,399	0.29
Calculated on the basis of existing and pending water diversions			
POI 3	523.34	55,399	0.94

In addition to the seasonal analysis required under the Guidelines, additional CFII's were calculated for the months of April to October, based on historical stream gage records for Big Sur River. As shown in Table 2, below, during these months, the cumulative impact of all diversions at or upstream of POI 1 and POI 2 varies from 0.33 to 3.33 percent.

**Table 2. CFII Results During the Low Flow Months (%)**

	April	May	June	July	August	September	October
<b>POI 1</b>	0.36	0.76	1.38	2.14	2.91	3.32	2.91
<b>POI 2</b>	0.36	0.76	1.38	2.15	2.91	3.33	2.91
<b>POI 3</b>	0.41	0.84	1.57	2.37	3.21	3.79	3.21

Approximately 3 miles downstream of the project, however, there is a senior pending water right Application 030166 in the amount of 1615 afa, located immediately upstream of POI 3 (point of tidal influence). This application, as currently amended, specifies a monthly irrigation requirement with a maximum diversion of 230 af in any month. If Application 30166 is approved by the Division, the CFII during low flow months would be as follows:

**Table 3. CFII Results if A030166 is Granted**

	April	May	June	July	August	September	October
<b>POI 1</b>	0.36	0.76	1.38	2.14	2.91	3.32	2.91
<b>POI 2</b>	0.36	0.76	1.38	2.15	2.91	3.33	2.91
<b>POI 3</b>	1.60	3.87	8.91	13.67	16.45	19.07	12.72

These results suggest that, although the potential impacts at POI 1 and 2 are insignificant year-round under Guidelines criteria (CFII less than 5%), a potentially significant cumulative impact could occur at POI 3 during the months of June through October if Application 30166 is granted. However, the Association's implementation of the mitigating permit terms agreed upon with the Department of Fish and Game should limit potential harm to a less than significant level at this POI. These terms, described below, include conformance to a restrictive schedule of diversions tied to the actual level of supply so that the amount diverted in any period does not exceed a low percentage of the supply during the period. There is also an inherent mitigating factor in the Association's method of diversion. Instead of diverting directly from the surface flow, the Association diverts from an offset well at a depth of 36 feet and a distance of approximately 45 feet from the riverbank, thus having an attenuating effect on any potential impacts.

A proposed diversion could be considered to have adverse impacts to the environment if it:

1. resulted in habitat modifications that adversely affected any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the DFG or the United States Fish and Wildlife Service (USFWS);
2. had an adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the DFG or the USFWS; or,
3. would 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.

Through implementation of the proposed mitigation measures, impacts are reduced to less than significant. Specific permit terms implementing these and other measures to be included in any permit issued are detailed in Section 3.0.

### 2.3.3 *Bypass Flow*

The bypass flow is the minimum flow rate to be maintained past a project's point of diversion, in units of cubic feet per second (cfs). The appropriate bypass is developed on a case-by-case basis. For this project the rate of diversion (0.058 cfs) is less than the measurement error inherent in the stream flow data, which is assumed to be on the order of a few tenths of a cfs at the lowest flows measured and much more at higher flows.

Water has been diverted by this project for thirty-five years. Recent reports from the DFG describe the steelhead fishery as healthy, that over-summering survival and growth of steelhead were among the highest in California coastal streams, that there is sufficient flow available during low-flow years, that temperatures remained suitable for steelhead and stream continuity was never disrupted (Titus et al, 1994).

The diversion rate is less than the uncertainty in the measurement of the unimpeded flow past the project's point of diversion. The fish habitat near the point of diversion has remained in satisfactory condition while coexisting with the diversion for thirty-five years. In addition, the Association's adherence to the restrictive diversion schedule, as explained in Section 2.3.4, will

ensure that any fisheries impacts incurred by Application A030946 at points of interest downstream are mitigated to insignificant levels.

#### *2.3.4 Mitigation*

In accordance with mitigation developed in cooperation with the DFG, the diversion rate in the Association's well will be restricted during low Big Sur River flows to less than 1% of the gauged flow measured by United States Geological Survey (USGS) stream gauge 11143000 located in Pfeiffer-Big Sur State Park. This is a conservative approach because the Big Sur River underflows diverted by the Applicant, are not measured in the stream gage and could be considerably more than gauged flows. When the gauged flow is equal to or below 3 cfs, the entire flow of the Big Sur River will be bypassed and no water diverted from the Association well. Gauged flows greater than 3 cfs and less than or equal to 4 cfs will have a maximum 24 hour average well diversion rate of 0.03 cfs. Gauged flows greater than 4 cfs and less than or equal to 5 cfs will have a maximum 24 hour average well diversion rate of 0.04 cfs. Gauged flows greater than 5 cfs and less than or equal to 6 cfs will have a maximum 24 hour average well diversion rate of 0.05 cfs. A gauged flow rate of 6 cfs and greater would result in a maximum average diversion rate of .058 cfs, or the maximum output of the existing pump.

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed a maximum instantaneous rate of 0.058 cfs from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 42 af/year.

This mitigation will assure that the diversion that is the subject of Application A030946 will not have an adverse impact on the stream flows. This mitigation may also serve as a model for a corresponding mitigation for pending diversions near POI 3.

#### *2.3.5 Monitoring Compliance*

A monitoring compliance plan has been established to assure that the bypass flows would be maintained and rates of diversion would not be exceeded by the project. The plan includes the following provisions:

1. The project would provide DFG personnel access to the point of diversion and place of use for the purpose of conducting routine and/or random monitoring and compliance inspections.
2. The project would record information to an automated data logger. Collected information on flows and rates of diversions would be submitted to the State Water Board for compliance monitoring upon request.

A summary of mitigating permit terms and conditions are contained in Appendix A. A copy of the monitoring compliance plan is included in Appendix D.

## **2.4 Environmental Setting**

### *2.4.1 Physical Setting*

The Big Sur coast and mountains, including the project site vicinity, are part of the Santa Lucia mountain range that continues eastward to the Salinas Valley. The Sur Thrust Fault follows the

general alignment of the Big Sur River in the project area. Geology in the site vicinity consists of sedimentary and metamorphic rocks of the Franciscan Formation, and east of the Sur fault, granitic and metamorphic rocks of the Salinian Block. On the Big Sur River Valley bottom, including the area of the well site, the Franciscan and Salinian Formations are overlain by sedimentary deposits from the Big Sur River. These deposits range from 40 to 60 feet deep. Topography varies from flat or gently sloping in the valley bottoms, coastal terraces and along ridges, to steep on slopes and canyons.

Vegetation in the immediate vicinity of the well site is dense redwood forest. To the east along both banks of the Big Sur River typical native riparian trees such as big leaf maple, black cottonwood, red alder, yellow and arroyo willow and bay are present. Plant communities in the vicinity of the 42 properties served by the Association include coastal scrub, annual grassland and coast live oak-mixed hardwood forest. Redwood forest and coast live oak forest are found on the east-facing Pfeiffer Ridge slope, along the Clear Ridge access road above the well site. Non-native eucalyptus forest is present along lower portions of the southerly Clear Ridge Road near Sycamore Canyon.

#### *2.4.2 Land Use*

Land uses in the vicinity of the existing well include several single-family residences and the River Inn shopping area. The Big Sur River Inn complex has small shops, a gas station, restaurant, motel and general store southeast of the well site. Captain Cooper School is east of Highway 1, north of the River Inn. To the north and west of both the well and water association service area is Andrew Molera State Park. A large cattle ranch (El Sur Ranch) lies northeast of Molera State Park. Existing single-family residences on relatively large parcels are present in the Association's service area.

**3 ENVIRONMENTAL CHECKLIST FORM**

**3.1 Environmental Factors Potentially Affected**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

	Aesthetics		Agricultural Resources		Air Quality
X	Biological Resources	X	Cultural Resources		Geology/ Soils
	Hazards & Hazardous Materials	X	Hydrology/ Water Quality		Land Use/ Planning
	Mineral Resources	X	Noise		Population/ Housing
	Public Services		Recreation		Transportation/ Traffic
	Utilities/ Service Systems		Mandatory Findings of Significance		

**3.2 Environmental Impacts**

**3.2.1 Aesthetics**

<b>AESTHETICS. Would the project:</b>				
Issues (and Supporting Information Sources):	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?			X	
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area				X

Discussion

The viewshed in the greater Big Sur project vicinity is significant, with scenic vistas of the ocean, rugged coastline and mountains. The Big Sur coast is a major tourist destination due to scenic vistas. However, the project will have little effect on any public viewshed. The well and pump housing are contained within a redwood storage shed. These structures are largely camouflaged by riparian vegetation on both sides of the river and are not visible by travelers on Highway 1 or visitors to the River Inn commercial complex east of the Big Sur River. Several other pump sheds are present in the same area, and no new infrastructure is proposed as part of the project. The 42 existing properties are located on a private access road and cannot be seen from Highway 1 or from public access locations in Andrew Molera State Park. No new residences, roads or above-ground water infrastructure are proposed that would add light or glare or affect day or night views.

Permit Terms Required

None.

3.2.2 *Agricultural Resources*

<b>AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</b>				
Issues (and Supporting Information Sources):	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 non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				X

Discussion

The project is not located in an agricultural area and would not affect commercial farmland or established agricultural uses. Several properties within the Association's service area have small orchards or vegetable gardens.

**Permit Terms Required**

None.

3.2.3 Air Quality

<b>AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</b>				
Issues (and Supporting Information Sources):	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?				X
b) Violate any air quality standard or contribute to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

Discussion

The North Central Coast Air Basin (NCCAB), in which the project site is located, is under the jurisdiction of the Monterey Bay Air Pollution Control District and includes Santa Cruz, Monterey and San Benito Counties. The NCCAB is classified as a non-attainment area for the state ozone and PM<sub>10</sub> standards. The region is not designated as a non-attainment for any criteria pollutant under federal standards.

The proposed project does not involve construction of new facilities related to the water system, or provide for new construction, and would therefore not require worker vehicle or construction equipment at the project area. The project also does not change visitor access to the Big Sur

coast. Vehicular traffic levels would remain relatively constant although a small number of additional trips would be created from 4 new residences.

The project does not conflict with or obstruct implementation of any air quality plan. It does not violate an air quality standard or contribute to an air quality violation. Because there is no construction and a minimal traffic increase, it would not increase any criteria pollutant for which the region is in state non-attainment.

The existing and proposed project involves pumping from a well contained within an enclosed structure and would not emit substantial pollutant concentrations or subject a substantial number of people to objectionable odors.

**Permit Terms Required**

None.

*3.2.4 Biological Resources*

<b>BIOLOGICAL RESOURCES. Would the project:</b>				
Issues (and Supporting Information Sources):	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 Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or			X	

migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

Discussion

**a) Candidate, Sensitive or Special-status Species:**

Wildlife. Five special status species, tidewater goby (*Eucyclogobius newberryi*), steelhead trout (*Oncorhynchus mykiss*), California red-legged frog (*Rana aurora draytonii*), southwestern pond turtle (*Emy pallida marmorata*) and California tiger salamander (*Ambystoma californiense*) could be present in aquatic habitats at or downstream of the site. Other potential sensitive species are shown in Table 4 but would not be affected by the project.

*Tidewater goby.* The tidewater goby is a federal endangered species and a DFG species of special concern. It is a small fish, rarely exceeding two inches in length, that occupies California coastal lagoons with salinities of about ten parts per thousand (ppt) or less. Food sources include small crustaceans, aquatic insects, and mollusks including some benthos living in lagoon sediments. This species has been extirpated from over fifty percent of formerly occupied localities, with major losses occurring in southern California wetlands. It's short lifespan (one to three years) and absence of a marine phase limits potential for natural recolonization of unoccupied wetlands (USFWS 1994). Tidewater gobies spawn in burrows dug in a sandy substrate, usually in water 25-50 centimeters deep with salinity levels of about ten ppt and temperatures of 18-22°C. However, the species has been documented in a wide range of water quality conditions, including salinity ranges of 0-42 ppt, temperature ranges of 8-25°C and dissolved oxygen levels down to less than one milligram per liter (USFWS 2004). Large salinity fluctuations and lagoons without backwater areas that experience flood flows are detrimental to goby survival. Human factors responsible for tidewater goby declines include upstream diversion of freshwater, agricultural and sewage discharges, siltation, and introduction of non-native fish and frogs.

Tidewater goby could be present in the Big Sur River Lagoon, although during various surveys for other fish and wildlife species, none have been detected (Kittleson, pers. com. 2007; DFG, 1988; DFG, 2007). Dr. Cam Swift surveyed the lower eight miles of the Big Sur River for tidewater gobies in 1990 and found no evidence of the species (DPR, 1993). One geographic distribution gap for tidewater goby has been documented between southern Monterey Bay and northern San Luis Obispo County (Moyle et al, 1995). If goby populations are still absent on the Big Sur coast, recruitment into the Big Sur River Lagoon is unlikely with the absence of nearby

recruitment populations. In the unlikely event tidewater goby is present in the Big Sur River, the project is not expected to cause major changes in water levels, salinity, temperature, flooding or other river conditions that would adversely affect the species.

*Steelhead trout.* The Central Coast Evolutionarily Significant Unit (ESU) steelhead trout were listed as a threatened species in 1997 (NMFS 1997), and then its status was reaffirmed in January 2006. The National Marine Fisheries Service (NMFS) has also listed streams in the Central Coast ESU as critical habitat, subject to the section 4(d) rule in the Endangered Species Act (NMFS 2000). This rule identifies specific activities that could cause a species' take, and protective regulations or prohibitions critical to steelhead recovery. Steelhead are an anadromous form of rainbow trout. Steelhead spend one to two years in the ocean before returning to their natal stream to spawn. Unlike other salmonids, steelhead are capable of spawning more than once before dying (Shapovalov and Taft, 1954; Moyle, 2002). Steelhead spawning in the Big Sur River system typically begins when the river mouth breaches (typically late November or December) and continues into April, with a peak between late December and March (D. Duffy & Assoc., 2003; Titus, 1994). Upstream migration may occur slightly later during dry years. Steelhead are able to spawn and rear in the lower eight miles of river and some tributary streams, with the higher river reaches probably inaccessible due to the falls at Pfeiffer-Big Sur State Park (Titus 1994; DFG 1981). Juvenile steelhead generally spend one to two years in freshwater before migrating to the ocean, although Big Sur River studies have indicated that a large portion of first year juveniles out-migrate (Titus 1994; Collin 1988). Steelhead young often utilize riffle and run habitat during the growing season and move to deeper, slower water habitat during the high flow months. Larger steelhead use the same areas as well as heads of pools for feeding. Lagoons and estuaries at the mouths of creeks are also used for rearing by juvenile steelhead (Smith, 1990; Smith, 1994). Juvenile steelhead are known to use the Big Sur River Lagoon for rearing (Hanson, 2005).

Downstream migration of smolts and adults generally occurs between April and early June. Typically 90 percent of the migration is completed by the end of May; however, the outmigration is dependent on stream flows and is often earlier in dry years. Steelhead have suffered significant population declines in recent years. The Central Coast ESU steelhead population was estimated at 94,000 historically (Busby, 1996), but has declined to less than 9,000. Steelhead runs in the Big Sur River system have seen similar historic declines. However, one researcher has indicated that steelhead populations in the River over the last 25-30 years appear to be relatively stable, based on somewhat limited survey results (R.G. Titus, pers. comm. with G. Kittleson, 2003).

Steelhead could spawn and rear in the Big Sur River at or downstream of the well site. The El Sur Ranch study conducted within Andrew Molera State Park found highest rearing densities of juvenile fish in the River lagoon during July and October 2004 surveys (Hanson, 2005). Out of the 358 (July) and 417 (October) fish counted, 65% and 88% respectively were in the lagoon. Significant water withdrawal rates (higher than historic withdrawals) from the project well during low river flow conditions could reduce surface flows, adversely affect steelhead, particularly summer-rearing steelhead at and downstream of the site by increasing stream temperatures, reducing dissolved oxygen levels, and disconnecting habitats resulting in fish being stranded in isolated pools and backwater areas. This would be a potentially significant impact without mitigation. Mitigation is proposed below.

*California red-legged frog.* The California red-legged frog (*Rana aurora draytonii*) was listed as threatened by the United States Fish and Wildlife Service (Miller et al, 1996). The California red-legged frog is the largest native frog in California (85-138 mm) and was historically widely

distributed in the central and southern portions of the state (Jennings & Hayes, 1994). The species requires still or slow-moving water during the breeding season, where it deposits large egg masses, usually attached to submergent or emergent vegetation. Breeding typically occurs between December and April, depending on annual environmental conditions and locality (USFWS 2002). Radio-telemetry data indicates that adults engage in straight-line breeding season movements irrespective of riparian corridors or topography, and they may move up to two miles between non-breeding and breeding sites (Bulger, 2003). Adults generally inhabit aquatic habitats with riparian vegetation, overhanging banks or plunge pools for cover, especially during the breeding season (Hayes and Jennings, 1988). They may take refuge in small mammal burrows, leaf litter or other moist areas during periods of inactivity or to avoid dessication (Rathbun et al, 1993; Jennings and Hayes 1994). Red-legged frogs may move up to 300 feet from aquatic habitats into surrounding uplands, especially following rains, when individuals may spend days or weeks in upland habitats (Bulger 2003; USFWS 2002). Eggs require 6 to 12 days before hatching and metamorphosis generally occurs 3.5 to 7 months after hatching, although larvae are capable of over-wintering (Stebbins 2003). Following metamorphosis, generally between July and September, juveniles are 25-35 mm in size. Movements and habitat associations of juveniles are poorly understood. Occurrence of this frog is negatively correlated with presence of non-native bullfrogs (*Rana catesbeiana*) (Moyle 2002; Hayes & Jennings 1986, 1988), although where bullfrogs are found in low numbers, both species appear to persist at certain locations, particularly in the coastal zone (M. Allaback, pers. comm. 2003). During the non-breeding season, a wider variety of aquatic habitats are used by California red-legged frogs, including small pools in coastal streams, springs, water traps and other ephemeral water bodies (J. Gilchrist, pers. obs., 2003; M. Allaback, pers. comm., 2003). These areas are considered summer dispersal habitat. It is estimated that the California red-legged frog has disappeared from approximately 75% of its former range, and has nearly been extirpated from the Sierra Nevada, Central Valley and much of southern California (Miller et al, 1996). The species continues to persist and is locally common in some areas of the Coast Zone from Marin County south through Santa Barbara County.

High Big Sur River winter flows and lack of backwater areas probably make the river near the project site and downstream unsuitable for California red-legged frog breeding. However, the river does provide summer dispersal habitat, and California red-legged frogs could be present in the lower river reaches during the non-breeding season. Significant summer flow reduction could affect habitat quality for California red-legged frogs. The project will not result in significant summer flow reduction as indicated in the WAA report (Appendix B).

*Southwestern Pond Turtle.* The southwestern pond turtle is a DFG species of special concern. In California, the pond turtle is distributed mostly along the Pacific slope drainages from Oregon to Mexico (Jennings and Hayes, 1994). Pond turtles primarily occur in permanent freshwater ponds, lakes, marshes and quiet waters of streams (Bury and Holland 1993). Pond turtles favor sites with the largest and deepest pools and with an abundance of basking sites, such as partially submerged logs or rocks, matted emergent vegetation, or exposed shorelines (Bury and Holland 1993). Pond turtles displace one another from basking sites, where such resources are limited (Bury and Wolfheim, 1973). Pond turtles are highly sensitive and will seek cover when approached within 100 meters (Bury and Holland, 1993). Undercut banks, root masses and boulder piles provide underwater escape cover (Bury and Holland, 1993). Although highly aquatic, pond turtles leave the water to reproduce, aestivate and overwinter (Stebbins 2003; Jennings and Hayes 1994). Females dig nests and deposit eggs, during May and June, along the shoreline or in a variety of open upland habitats, usually within 200 meters of water, but as much as 500 meters, and mostly on south-facing slopes with well-drained clay soils (Rathbun et. al. 1992; Jennings and Hayes 1994). Nests must remain dry for proper

incubation and the young hatch and overwinter in the nest (Jennings and Hayes 1994). Hatchlings require shallow water habitat with dense emergent vegetation and abundant zooplankton (Jennings and Hayes 1994). Pond turtles reach sexual maturity between seven and fourteen years of age (Bury and Holland 1993) and live to be over 42 years (Jennings and Hayes 1994). During dispersal, pond turtles can move up to two kilometers in search of suitable habitat and can tolerate a minimum of seven days without water (Jennings and Hayes 1994). Studies on central coast drainages show that turtles use upland habitat within 50 meters of the creek in times of drought or to avoid winter floods (Rathbun et al. 1992). Pond turtles are threatened by habitat alteration and loss due to water development, agricultural practices and non-native predators (Jennings and Hayes 1994).

Although habitat quality for pond turtles is not optimum, they might occasionally breed or be present near or downstream of the project site. One researcher who has conducted a number of field surveys recently in Andrew Molera State Park has indicated he has never seen pond turtles (G. Kittleson, pers. comm.). Even if present, the project should not impact the southwestern pond turtle. No new construction is planned that would impact nesting sites. Significant summer flow reduction could affect habitat quality for the pond turtles. Although significant summer flow reduction will not result from the project, the mitigating permit terms listed below should reduce any aquatic impacts to insignificant levels.

*California tiger salamander.* The California tiger salamander (*Ambystoma californiense*) is a Federal threatened species and State species of special concern (USFWS 2004; CDFG 2007). The California tiger salamander has disappeared from 55% of its historic range (Jennings and Hayes 1994). Presently, this species is distributed in the Central Valley from Yolo County south to Tulare County, and in the Coast Range valleys and lower foothills from Sonoma County south to Santa Barbara County (Shaffer 1991). California tiger salamanders primarily inhabit valley floor and foothill grasslands, open oak woodlands and scrub habitats encompassing vernal pools and seasonal ponds (Trenham 2001; USFWS 2000). Post-metamorphic individuals (i.e., adults and juveniles) live in rodent burrows in uplands for most of their lives (Trenham 2001; Trenham et al 2000; Loredó et al 1996). During the rainy season, typically November through March, adults migrate at night to aquatic breeding sites (Loredó and Van Vuren 1996; Stebbins 2003), which include quiet waters of seasonal ponds, reservoirs and lakes (Stebbins 2003). Tiger salamanders have osmoregulatory adaptations that allow for existence in highly alkaline aquatic environments (Kirschner et al. 1971; Romspert and McClanahan 1981). Based on a recent study, migration distances of adults between upland habitat and breeding pools generally are within 450 m (Trenham and Shaffer *in prep.*), but distances up to 2 km (1.24 miles) have been recorded (USFWS 2000). The adults remain at the breeding pond from one day to several weeks, before returning to upland refugia (Loredó and Van Vuren 1996). Males migrate to breeding sites before females and tend to stay at breeding sites longer (e.g., 6 – 8 weeks for males and 1 – 2 weeks for females) (Trenham et al 2000; Loredó et al 1996; Shaffer 1993). Eggs are laid singly, or in small groups of up to four, on stalks of submerged vegetation or other objects (e.g., rocks woody material, etc.), typically along the shoreline. The eggs hatch in 10 days to approximately three weeks (USFWS 2000; Jennings and Hayes 1994). The number of eggs deposited per female per breeding season ranges from around 400 – 1,300 (USFWS 2000). The diet of larvae consists of aquatic insects and other invertebrates, and mostly tadpoles as the larvae grow larger (USFWS 2000; Petranka 1998). Larvae typically metamorphose in two to three months, from late spring to summer, when ponds begin to dry (USFWS 2000). Metamorphs emerge from ponds and seek shelter mostly in the immediate vicinity in burrows, cracks in the ground or under debris, but sometimes as far as 200m away, even in the absence of rain (Trenham 2001; Trenham and Shaffer *in prep.*; Loredó et al 1996). During the rainy-season, the juveniles continue to disperse farther to seek refuge in upland

areas within 640 m of the breeding pond, but distances up to 1.6 km away from the breeding pond have been recorded (Jennings and Hayes 1994). Adults live up to at least 10 years, but take up to 4 – 5 years to reach sexual maturity (Trenham *et al* 2000).

High Big Sur River winter flows and lack of backwater areas make the river near the project site and downstream unsuitable for California tiger salamander breeding. Although refuge habitat is available on the Hill Ranch north of the River, there have been no documented sightings of tiger salamander on the Big Sur coast (CNDDDB 2009).

*Other Sensitive Species.* Other sensitive species are documented in the California Natural Diversity Data Base (CNDDDB, 2009) and are listed below in Table 4. These species either do not occur within the immediate project vicinity or have little or no potential to be affected by the project. Additional sensitive species were identified from a review of CDNNB records for surrounding quadrangles (See Appendix C). However these would have no potential for impact from the proposed project because these are upland species or ocean aquatic species, and project will have no surface disturbance or potential impacts on upland or ocean habitat

**Table 4. Special-Status Wildlife Potentially Occurring in the Project Vicinity**

Species	Status <sup>1</sup>	Occurrence and Habitat
Dolloff Cave Spider ( <i>Meta dolloff</i> )	FSC	Calcareous caves. None known from project vicinity.
Monarch Butterfly ( <i>Danaus plexippus</i> )	CSC	Fall-winter roost sites known in the project region but roost habitat lacking within the project area. May forage within residential service area but no project impacts expected.
Smith's Blue Butterfly ( <i>Euphilotes enoptes smithi</i> )	FE	Host plant, <i>Eriogonum parvifolium</i> , not in project area
Southern Pacific Pond Turtle ( <i>Emys marmorata pallida</i> )	CSC, FSC	Potential aquatic habitat in Big Sur River. No records of sightings.
California Red-legged Frog ( <i>Rana aurora draytonii</i> )	CSC, FT	Potential summer forage habitat in the Big Sur River. No breeding habitat within project area.
California Tiger Salamander ( <i>Ambystoma californiense</i> )	CSC, FT	Absence of ponds or slow-moving water for winter breeding; not known from Big Sur coast
Yellow Warbler ( <i>Dendroica petechia</i> )	CSC (Nesting)	Nests within willow riparian, and may occur along Big Sur River. Would not be affected by project.
California Brown Pelican ( <i>Pelicanus occidentalis californicus</i> )	SE, FE	Present along the coast mostly from summer and fall as a non-breeder. Project site is outside of nesting distributional range.
Double-crested Cormorant ( <i>Phalacrocorax auritus</i> )	CSC (Nesting)	May nest near Big Sur River mouth. Not within project area and would not be affected by project.
Prairie Falcon ( <i>Falco mexicanus</i> )	CSC	May forage in grasslands on Hill Ranch; no cliff nesting sites on or near project area.
Northern Harrier ( <i>Circus cyaneus</i> )	CSC (Nesting)	Aerial transient. No nesting habitat on-site.
Osprey ( <i>Pandion haliaetus</i> )	CSC (Nesting)	Aerial transient. Occasional along coast. No nesting habitat in project area.
Black Swift ( <i>Cypseloides niger</i> )	CSC (Nesting)	Occurs along the coast but not likely in project area.
Merlin ( <i>Falco columbarius</i> )	CSC (Nesting)	Aerial transient. May forage near site during migration and winter. Project site is outside of nesting distributional range.
Steelhead ( <i>Oncorhynchus mykiss</i> )	FT, CSC	Present in Big Sur River near well site and downstream. Could be affected by excessive water withdrawal during drought or low flows.
Tidewater Goby ( <i>Eucyclogobius newberryi</i> )	FE, CSC	May be present in Big Sur River Lagoon, although not detected in recent surveys. Not affected by proposed project.
Monterey Dusky-footed Woodrat ( <i>Neotoma macrotis luciana</i> )	CSC	May be present in redwood and oak woodland near well site. Not affected by project as no new construction proposed.
Southern Sea Otter ( <i>Enhydra lutris nereis</i> )	FP, FT	Occurs exclusively along the coast offshore.
American Badger ( <i>Taxidea taxus</i> )	CSC	May occur in grassland on Hill Ranch; would not be affected by proposed project.
<sup>1</sup> CSC = California species of special concern; FE = Federal endangered species; FSC = Federal species of concern; FT = Federal threatened species; SE = State endangered species; FP = California fully protected species		

Vegetation. Several sensitive plant species and plant communities (Table 5) have the potential to occur within the project vicinity (CNDDDB, 2009; Hickman 1993). Because there is no construction or upland habitat change associated with the proposed project, there should be no impacts to any of these species.

**Table 5. Sensitive Plant Species and Plan Communities Occurring in the Project Vicinity**

Species	Status <sup>1</sup>	Occurrence and Habitat
Tear Drop Moss ( <i>Dacryophyllum falcifolium</i> )	CNPS-R	New genus discovered 2004; calcareous rock in redwood forests
Adobe Sanicle ( <i>Sanicula maritima</i> )	FSC, SR	Foothill meadows and seeps, valley grassland, chaparral and coastal prairie.
Little Sur Manzanita ( <i>Arctostaphylos edmundsii</i> )	FSC, CNPS-R	Coastal bluff scrub and chaparral.
Arroyo Seco Bush Mallow ( <i>Malacothamnus palmeri</i> var <i>lucianus</i> )	FSC, CNPS-R	Chaparral, meadows, and seeps.
Maple-leaved Checkerbloom ( <i>Sidalcea malachroides</i> )	CNPS-R	Evergreen forest, coastal prairie, coastal scrub and north coast coniferous forest.
Hutchinson's larkspur ( <i>Delphinium hutchinsoniae</i> )	FSC, CNPS-R	Broad-leaved upland forest, chaparral, coastal prairie and coastal scrub.
Dudley's Lousewort ( <i>Pedicularis dudleyi</i> )	FSC, SR, CNPS-R	Chaparral, coast redwood forest, valley and foothill grassland.
Fragrant Fritillary ( <i>Fritilaria liliacea</i> )	FSC, CNPS-R	Coastal scrub, valley and foothill grassland and coastal prairie.
Jolon Clarkia ( <i>Clarkia jolonensis</i> )	CNPS-R	Dry woodland
Bristlecone fir ( <i>Abies bracteata</i> )	CNPS-R	Broad-leaf evergreen forest assoc. with canyon-oak phase
<sup>1</sup> FSC = Federal species of concern; SR = State Rare species, CNPS-R = CNPS rare species in California and elsewhere		

#### b) Riparian Vegetation:

In general, riparian zones provide important ecological functions for terrestrial and aquatic species. Direct benefits to fish and wildlife include nesting and forage opportunities, cover from predators, increased stream bank stability, stream habitat complexity, insect food sources for juvenile salmonids and other native fish, and shade for maintaining suitable water temperatures. Shaded riverine aquatic (SRA) cover is particularly important for native fish.

Riparian vegetation along the Big Sur River in the vicinity of the Association's well consists of native redwood, alder, willow, big leaf maple, bay, scattered sycamore and native understory species. The riparian community is stratified, very diverse and would be expected to provide high value fish and wildlife habitat values. Riparian habitat downstream within Andrew Molera State Park is also largely native and diverse, although SRA cover is more limited as would be expected where the River widens and then enters a lagoon. Andrew Molera State Park also has the DFG rare California Sycamore Alluvial Woodland community, classified as a declining community of high protection priority. Central Coast Redwood and Central Coast Willow Riparian are also plant communities of concern to DFG. Both exist in proximity to the well site.

There is no physical evidence at the well site or downstream that would indicate a decline in riparian vegetation or riparian habitat. A riparian plant community field survey and sampling

study for the El Sur Ranch found no decline in riparian habitat within Andrew Molera State Park (ESA, 2002). California Department of Parks and Recreation has planted approximately 5,500 new riparian trees in the Creamery Meadow floodplain to restore the meadow to a riparian forest that existed before agricultural practices and grazing began in the 1880's. There should be no substantial adverse impacts from the project to riparian vegetation or other natural communities.

**c) Federally Protected Wetlands:**

Section 404 of the Clean Water Act requires authorization from the Secretary of the Army, acting through the United States Army Corps of Engineers (USACE), for the discharge of dredged or fill material into all waters of the United States, including wetlands, both adjacent and isolated. Wetlands are defined as areas that "are inundated by surface or groundwater with a frequency sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Envir. Lab. 1987).

There are no jurisdictional wetlands at the well site or known wetlands in the residential service area. Some of the streamside riparian habitat as well as jurisdictional "other waters of the US" (unvegetated open waters) are present within the Big Sur River adjacent to and downstream of the project site. These waters and wetlands are regulated by the USACE and DFG. However, the project would have negligible effects on wetlands or open waters, consistent with the conclusion above for riparian habitat. The existing small withdrawal of subsurface flows from the well would not result in a hydrological interruption of surface flows in the river.

**d) Movement of Species:**

The project could affect juvenile steelhead movement and adult out migration in summer months during extreme low flow (drought) events, as discussed above in Section 4.4(a). The mitigating permit terms below should reduce impacts to less than significant levels. The project does not affect migratory wildlife species or wildlife corridors, or impede use of fish or wildlife nursery sites.

**e) Local Policies and Ordinances Conservation Plans:**

The project does not involve cutting of trees, and therefore would not conflict with any tree preservation policy. The Big Sur River Protected Waterway Management Plan (1986) does mention the Dani-Pfeiffer Ridge Mutual Water Company as one of the water systems that exports water out of the Big Sur River basin but indicates such entities should be provided with a state water right recognizing existing use for the existing properties. However the plan has a policy recommendation that restricts additional water withdrawal or new parcels that would increase water transferred out of the drainage basin. The existing well withdrawal and 42 property service area (in effect prior to 1981) would be consistent with this policy.

**f) Conservation Plans:**

The proposed project would not conflict with local, state or regional policies or provisions of tree preservation policies, habitat conservation plans, natural community conservation plans or other biological resource policies or ordinances.

**Permit Terms Required**

To prevent any threat of impacts to fisheries, wildlife, and plant species, any permit issued by the State Water Board pursuant to Application A030946 shall include the following mitigating terms, substantially as written:

- **Quantity, Direct Diversion.** *The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed a maximum instantaneous rate of 0.058 cubic foot per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 42 acre-feet per year.*
- **Fish and Wildlife Bypass.** *The rate of diversion shall be restricted during low Big Sur River flows to less than 1% of the gauged flow measured by the United States Geological Survey stream gauge 11143000 located in Pfeiffer-Big Sur State Park, in accordance with the Application A030946 flow bypass compliance plan dated June 10, 2008 on file with the Division. When the gauged flow is equal to or below 3 cfs, the entire flow of the Big Sur River will be bypassed and no water diverted under this permit. Permittee shall also limit diversions as follows:*
  - *When the gauged flow is greater than 3 cfs and less than or equal to 4 cfs, the diversion shall not exceed a maximum 24 hour average rate of 0.03 cfs.*
  - *When the gauged flow is greater than 4 cfs and less than or equal to 5 cfs, the diversion shall not exceed a maximum 24 average hour rate of 0.04 cfs.*
  - *When the gauged flow is greater than 5 cfs and less than or equal to 6 cfs, the diversion shall not exceed a maximum 24 hour average rate of 0.05 cfs.*
  - *When the gauged flow is 6 cfs and greater, the well diversion rate will be the pump's maximum capacity of 0.058 cfs.*
- **Measuring Devices-Direct Diversion.** *Permittee shall install and maintain devices satisfactory to the Division to measure the instantaneous rate of diversion and cumulative quantity of water diverted under this permit. A record of such measurements shall be maintained by the Permittee, and made available to interested parties upon reasonable request. This flow and diversion data shall be maintained for the life of the project and submitted to the Division with the Progress Report by Permittee and to the California Department of Fish and Game upon reasonable request.*
- **Reserved Jurisdiction.** *The State Water Board reserves jurisdiction over this permit to modify, delete, or add minimum flow requirements or related criteria for the protection of fish and wildlife and the maintenance of recreation in the Big Sur River should (1) additional fishery studies be conducted in the Big Sur River, or (2) unforeseen adverse impacts occur to the fishery or recreation in the Big Sur River. Action by the Board will be taken only after notice to interested parties and opportunity for hearing.*
- **Protection of Instream Resources.** *To protect instream resources, any and all diversion shall occur from the existing subterranean well. There shall be no direct diversion from*

surface water flow of the Big Sur River under the exercise of any basis of right. Any device or contrivance which prevents, impedes, or tends to prevent or impede the passage of aquatic resources upstream or downstream shall be prohibited as a means to divert or store water.

- **Access to Project.** Permittee shall allow representatives of the Division and other parties, as may be authorized from time to time by the Division, reasonable access to project works to determine compliance with the terms of this permit.
- **Measuring Device for Bypass.** Permittee shall document Big Sur River flows to meet bypass requirements by monitoring USGS Stream Gage #1114300 in Pfeiffer-Big Sur State Park. If this gage is rendered inoperable, permittee shall be responsible for repair and maintenance of said gage unless/until another agency or party accepts responsibility. Permittee shall implement all provisions of the Application A030946 flow bypass compliance plan dated June 10, 2008 on file with the Division.
- **Endangered Species Protection.** This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, the Permittee shall obtain authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit.

3.2.5 Cultural Resources

CULTURAL RESOURCES. Would the project:				
Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion

No project-specific cultural, archaeological or historical review has been conducted. However, the well, pump, storage system and water conveyance pipes are already in place, and no new water facility construction is proposed that would result in ground disturbance and potential impacts to cultural resources.

**Permit Terms Required**

There is the possibility that subsurface archeological deposits could be present and accidental discovery could occur. There is also the possibility that an unanticipated discovery of human remains could occur. The following permit terms, substantially as written, shall be included in any water right permit or license issued pursuant to Application 30946:

- Cultural Resources.** *Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators include: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails. The Deputy Director for Water Rights shall be notified of the discovery and a professional archeologist shall be retained by the Permittee to evaluate the find and recommend appropriate mitigation measures. Proposed mitigation measures shall be submitted to the Deputy Director for Water Rights for approval. Project-related activities shall not resume within 100 feet of the find until all approved mitigation measures have been completed to the satisfaction of the Deputy Director for Water Rights.*
- Human Remains.** *If human remains are encountered, then the Applicant shall comply with Section 15064.5 (e) (1) of the CEQA Guidelines and the Health and Safety Code Section 7050.5. All project-related ground disturbance within 100 feet of the find shall be halted until the county coroner has been notified. If the coroner determines that the remains are Native American, the coroner will notify the Native American Heritage Commission to identify the most-likely descendants of the deceased Native Americans. Project-related ground disturbance, in the vicinity of the find, shall not resume until the process detailed under Section 15064.5 (e) has been completed and evidence of completion has been submitted to the Deputy Director for Water Rights.*

3.2.6 Geology and Soils

<b>GEOLOGY AND SOILS. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</b>				
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State				X

Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
b) Strong seismic ground shaking?				X
c) Seismic-related ground failure, including liquefaction?				X
d) Landslides?				X
e) Would the project result in substantial soil erosion or the loss of topsoil?				X
f) Would the project 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?				X
g) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
h) 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 waste water.				X

### Discussion

#### **a-d) Earthquake Potential and/or Unstable Geologic Unit or Soil:**

There are no known active earthquake faults in the project area. The project will not result in constructing new facilities or new structures and therefore will not expose people or property to increased risk from seismic shaking, liquefaction or landslides.

#### **e) Soil Erosion-Loss of Topsoil:**

The project does not involve new construction of facilities that would result in substantial erosion or loss of topsoil. New construction of residences would be subject to County grading ordinance and erosion control protections.

#### **f,g) Unstable or Expansive Soils:**

There are no known geologic units or unstable soils at the site. The project is located on flat slopes above the banks of a river channel. Liquefaction or lateral spreading are potential problems in loosely consolidated (sandy) soils that front on an open slope (like a streambank),

but there is no evidence that the well structure is located on these soils. The well pipe, extending approximately 36 feet into the ground would tend to prevent movement of the structure in the event of earthquake-induced liquefaction or lateral spreading. There is no evidence of subsidence or expansive soils in the project vicinity.

**h) Soils Incapable of Adequately Supporting Septic or Alternate Wastewater Disposal:**

The project does not involve use of septic systems or construction of new wastewater disposal systems.

**Permit Terms Required**

None.

*3.2.7 Hazards and Hazardous Materials*

<b>HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>				
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
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?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

e) For 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, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Discussion

**a-d) Transportation Routes-Public or Environmental Hazards-Schools-Listed Governmental Hazardous Waste Site:**

The project would not transport or expose persons to risk associated with hazardous materials. Small quantities of chlorine from a small container (1 gallon sodium hypochloride) is diluted with water and then added to well water through an automatic metering system. This is done in the pump house and is mandated by Monterey County Health requirements. The potential for an accidental spill is remote, and if it occurred would be limited to the immediate area of the pump house and be contained within that structure. There are no other hazardous materials associated with the well, conveyance system or storage system. The site is not included on a California Government Code section 65962.5 hazardous materials site list. No impacts from hazardous materials are expected from this project.

**e,f) Airports:**

The project well site and homes served by the water association are more than 20 miles from the Monterey Airport, and are not within the flight path of any private airstrip.

**g) Emergency Response or Evacuation Plan:**

The major emergency vehicle access and evacuation route is State Highway 1. The project will have not effect on this highway. The project will not affect emergency response to adjacent land use facilities or to residences served by the water association.

**h) Wildlands-Fire:**

The well site is located in a redwood forest and riparian community that has some dry season wildland fire risk, although not as high as other undeveloped Big Sur areas due to relatively high moisture content of tree species, and presence of some fire protection resources in the nearby Big Sur River Inn complex. Residences served by the well are located in more remote grassland and woodland areas where wildland fire risk is higher. Dry summer conditions with high winds can result in dangerous wildfires that can result in loss of property, injury or death. One project benefit is that it will provide water for firefighting purposes, meeting the Monterey County standard of one acre-foot per year for existing residences, thereby reducing the hazard of wildfires. The Association has one water storage tank devoted to fire storage, and individual residences have one to two 5000 gallon tanks that provide onsite storage in case of fire. The project itself (water right for an existing water system) is unlikely to cause fire hazards.

**Permit Terms Required**

None.

*3.2.8 Hydrology and Water Quality*

<b>HYDROLOGY AND WATER QUALITY. Would the project:</b>				
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?		X		
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or				X

	off-site.				
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.				X
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				X
f)	Otherwise substantially degrade water quality?				X
g)	Place housing within a 100-year flood-hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h)	Place within a 100-year flood-hazard area structures which would impede or redirect flood flows?			X	
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j)	Inundation by seiche, tsunami, or mudflow?				X

### Discussion

#### **a-f) Water Quality Standards or Waste Discharge Requirements – Otherwise Degrade Water Quality:**

The project does not require any waste discharge or increase in number of septic systems that may affect water bodies including the Big Sur River. Four additional septic systems on 4 vacant parcels will not affect water quality due to relatively large parcel sizes, remote locations away from water bodies, and County standards regulating septic location and construction. Substantial water flow reductions could affect the saltwater/freshwater boundary in the lower river lagoon near the river mouth. Groundwater pumping, if excessive, may have an adverse affect on water quality by increasing natural salinity conditions in the lagoon and shifting the seawater wedge upstream (Jones and Stokes 1999); EIP Associates 2006). However, as indicated below, the Association's well has a relatively minor effect on Big Sur River flows in all but lowest flow periods.

**b) Groundwater Supplies:**

Water transmissive alluvial deposits are present in the 350-400 foot wide Big Sur River Valley (Mussetter Eng. 1998), including the location of the Association's well. It is estimated that the alluvial deposits are 50 to 60 feet deep in the vicinity of the well. Evidence from the near synchronous response of surface flows in the river and groundwater levels below after precipitation events imply a hydrologic connection between the river and groundwater within the alluvial deposits<sup>2</sup>. A WAA/CFII report (Fall Creek Engineering, 2009) was prepared for the Association's water appropriation application. Based on available records from the USGS stream gauge at Pfeiffer-Big Sur State Park, the report indicated average flows in the river at the well site are about 82,731 af/year. The one percentile flow rate (lowest flows) at the gauge during the lowest flow month (August) is 3.4 cfs, with flows at the downstream well site presumed to be slightly higher due to a larger watershed area and inflows from several tributary creeks. The mean flows in the river adjacent to the well during August are projected at 16.7 cfs compared with a 15 cfs flow rate at the gauge. The subsurface aquifer (which the subject well withdraws from) has additional flows which cannot be measured at the USGS gauge. Based on this analysis, the project does not substantially deplete groundwater or surface water supplies. The WAA report indicates the proposed 0.058 cfs well pumping rate is within the measurement and calculation error for the flow analysis during low flow periods, and is about 1.4% of the total streamflow during the lowest flow periods. Further reduction in water pumping rates during low flow periods is proposed in the mitigating permit terms in the Section 3.2.4. This would reduce water withdrawal to less than 1% during drought periods.

The well does not affect groundwater recharge rates.

**c-e) Alternation of Existing Drainage Patterns-Erosion/Siltation, Surface runoff causing flooding or excess runoff:**

The proposed project will not alter surface drainage, cause flooding or surface water increases or affect storm drainage capacity. If water withdrawal from the well was significant enough to cause measurable reduction in flows downstream, river bank erosion and siltation could result from loss of streamside vegetation in downstream reaches. As indicated above, the well pumping rate is not a significant portion of surface or subsurface stream flow.

**g,h) Houses or structures in 100-year floodplain, Structures within a 100-year flood hazard area:**

The project does not involve housing or placement of other land uses within a floodplain. The well structure is probably located within the Big Sur River floodplain; however, the pump house structure is elevated above probable flood height and its relatively small on-ground footprint would not impede flood flows.

**i,j) Inundation by Seiche, Tsunami, or Mudflow:**


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<sup>2</sup> This is the basis of the SWRCB finding that a water right is needed for the Association's well

The project site is not located in an area that would expose people to mudflow or tsunami hazards, and the project will not affect or alter any existing hazard due to failure of an upstream dam or upstream seiche.

**Permit Terms Required**

To prevent any threat of impacts to hydrology and water quality, any permit issued by the Division pursuant to Application A030946 shall include the following mitigating terms, substantially as written:

- See recommended diversion quantity and rate terms (Section 3.2.4 – Biological Resources).
- **Other Agency Permits.** Permittee shall obtain all necessary federal (including United States Army Corps of Engineers Section 404), state and local agency permits required by other agencies prior to construction and diversion of water. Copies of such permits and approvals shall be forwarded to the Deputy Director for Water Rights.

3.2.9 Land Use and Planning

<b>LAND USE AND PLANNING. Would the project:</b>				
Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?				X

Discussion

**a) Physically Divide an Established Community:**

The well is contained within an elevated pump house with a relatively small footprint. It is visible from Clear Ridge Road and the Lockwood access road but not the developed areas at Big Sur River Inn. It's relatively small size and continued existence for over 35 years would not lead to a future division of an established community. Other wells and pump structures are also present in the project vicinity.

The service area consists of 42 properties that also have been in existence for a relatively long time. The project will not increase the number of parcels in the service zone.

**b,c) Conflict With Existing Land Use Plans, Conflict With Conservation Plans:**

The project (well and pump house) is consistent with the rural community center designation in the Monterey County General Plan (Monterey Co. 1982) and the Visitor Serving Commercial-Coastal Zone (VSC-CZ) zoning designation. The VSC-CZ zone district allows "water system facilities including wells and storage tanks serving 14 or fewer service connections... and replacement of water tanks and wells where no increase in service connections is created" with a Coastal Administrative Permit. The ordinance also allows new "water system facilities including wells and storage tanks service 15 or more service connections" with a Coastal Development Permit. The General Plan and zoning ordinance designations were not in effect in 1971-72 when the well and pump house was installed. The Monterey County General Plan was adopted in 1982. The Big Sur Coast Land Use Plan (LUP) was adopted by the County in 1985 (Monterey Co. 1985) and approved by the California Coastal Commission in 1986. The zoning ordinance designations for Big Sur followed adoption/approval of the Big Sur Coast LUP (Monterey Co. 1988).

The Big Sur Coast LUP has a provision that excludes "interbasin transfers of water" for new water systems or expansion of existing water systems. Existing systems are defined as installed prior to January 1, 1977. Because the existing Association's well and service area were established in 1971, the system predates this requirement.

The current zone district for the residential service area is Watershed and Scenic Conservation with a 40-acre minimum parcel size (WSC/40-CZ). This zone district "allows [residential] development in the more remote or mountainous areas in the Coastal Zone protecting the significant and substantial resources of those areas." Development in the zone district must meet development standards relating to density, setbacks and height. Again, some of the property creation and development pre-dates this zoning, as evidenced by the existence of older homes and parcels less than 40 acres. Recently constructed residences and any future development must meet requirements of this ordinance. The project is consistent with this zoning ordinance.

There are no known Habitat Conservation Plans or Natural Community Conservation Plans, or other approved local state or federal habitat conservation plans for this area. Therefore the project would not conflict with this type of plan.

**Permit Terms Required**

Where new development is proposed within the service area, Coastal Development permit and applicable building permits shall be obtained from Monterey County Planning and Building Inspection. To prevent any threat of impacts to hydrology and water quality, any permit issued by the Division pursuant to Application 30946 should include the following mitigating term, substantially as written:

- *See Other Agency Permits term (Section 3.2.8 – Hydrology and Water Quality).*

3.2.10 Mineral Resources

<b>MINERAL RESOURCES. Would the project:</b>				
Issues (and Supporting Information Sources):	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?				X
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?				X
c) Exceed energy demands significantly more than the current use or conflict with energy conservation plans?			X	

Discussion

**a,b) Existing Mineral Resources:**

The project site is not located in an area having mineral resources or with a mineral resource recovery designation.

**c) Exceed Energy Demands/Conflict with Energy Conservation Plans:**

The project's use of electrical energy varies depending on demand. Energy is expended at the pump to get water from the well to the storage tanks at Pfeiffer Ridge. If demand for water remains the same, the overall annual energy use should remain about the same. If there is an increase in pumping beyond the existing rate to reach 0.058 cfs limit, then energy use will increase accordingly. This is not considered a significant impact.

**Permit Terms Required**

None.

3.2.11 Noise

<b>NOISE. Would the project result in:</b>				
Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards				X

established in the local general plan or noise ordinance or applicable standards of other agencies				
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				X
c) Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For 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, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion

**a,b) Exposure of Persons to Severe Noise Levels, Ground Borne Vibration:**

The proposed project does not involve construction of facilities and therefore would not result in construction noise. Similarly, there is no ground borne vibration associated with the pump house or project.

**c,d) Permanent Increase in Ambient noise Levels, Periodic Increase in Ambient Noise Levels:**

The residents living in relatively close proximity to the pump house have complained about noise from the water pump which operates up to 16 hours each day (Gunter, 1998). Noise abatement personnel from Monterey County visited the site and determined that daytime ambient noise levels from Highway 1 traffic exceed those levels generated by the Association's pumps. Although there have been no noise measurements at the site, the ambient nighttime noise levels in this rural area are low. The Monterey County General Plan recognizes low ambient noise levels occur in rural areas and has a policy that noise reduction measures such as soundproofing should be added to noise producing facilities. If the Association's water pumps are operating during nighttime hours when traffic volumes are low, the project could expose persons close by to noise in excess of ambient levels. According to the Association's

representative, this is the reason they have limited pumping to 16 hours per day (C. Shearer, personal communication, 2007). It is conceivable that pumping could occur up to 24 hours per day. The pumps are located within a pump house, but to the extent possible both pumps should be enclosed with noise reduction materials. The pump house should also be fully insulated with noise reduction materials. The mitigation (below) is recommended to reduce noise levels affecting nearby residents to less than significant levels.

Proposed mitigation is possible even though the pumps are located within a pump house, and to the extent possible both pumps should be enclosed with noise reduction materials. The pump house should also be fully insulated with noise reduction materials.

**e,f) Airport Interference:**

The project site is not in proximity to an airport or private airstrip.

**Permit Terms Required**

Both pumps and the pump house should be insulated with noise reduction materials as required by the Monterey County General Plan. To prevent any threat of impacts by noise levels on sensitive receptors, any permit issued by the State Water Board pursuant to Application A030946 shall include the following mitigating term, substantially as written:

- **Noise Reduction.** *In order to reduce noise impacts, the pumps and pump house shall be insulated with noise reduction materials within 120 days of permit issuance.*

3.2.12 Population and Housing

<b>POPULATION AND HOUSING. Would the project:</b>				
Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			x	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion

The project will not result in construction of facilities that will induce population growth. The water rights application is limited to 42 existing residential water connections. New homes could be built on the 4 vacant parcels, but this would not induce "substantial population growth". Because the project does not involve new facility construction or new commercial enterprises it would not add new workers that would require housing in the area.

The project involves an existing well, water infrastructure and existing homes. It would not displace existing housing or displace persons living in housing within the service area. It also would not create new housing other than build-out on existing vacant parcels.

**Permit Terms Required**

None.

*3.2.13 Public Services*

<b>PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical 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:</b>				
Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Fire protection?				X
b) Police protection?				X
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Discussion

The project will not result in construction of facilities that could generate population growth and a need for public services. The project provides water for existing residences and potentially 4 new residences, but would not create growth that could result in new services.

**Permit Terms Required**

None.

*3.2.14 Recreation*

<b>RECREATION. Would the project:</b>				
Issues (and Supporting Information Sources):	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?				X
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion

The project will not create a major increase in local population that would generate an increase in use of neighborhood or regional parks. Similarly the project would not remove any existing recreational facilities or require expansion of existing facilities that would have adverse environmental effects.

**Permit Terms Required**

None.

3.2.15 *Transportation/Traffic*

<b>TRANSPORTATION/TRAFFIC. Would the project:</b>				
Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (for example, result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?				X

d)	Substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment)?				X
e)	Result in inadequate emergency access?				X
f)	Result in inadequate parking capacity?				X
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (for example, bus turnouts, bicycle racks).				X

### Discussion

#### **a,b) Vehicle Congestion, Level of Service Standards:**

The project does not change land uses or result in a significant increase in the number of residences served by the Association. Therefore it would not cause congestion or change traffic patterns. Use of Highway 1, the Clear Ridge Road bridge over the Big Sur River, and the private Clear Ridge Road will increase to a minor extent with development on the 4 vacant parcels. The occasional visits to the pump house and storage tanks to perform maintenance tasks would remain the same.

#### **c) Air Traffic Patterns:**

The project will have no effect on air traffic patterns.

#### **d,e) Traffic Hazards, Emergency Services:**

The project will not require any changes to roadway or intersection design or result in incompatible uses. Emergency access to the well site, pipelines, storage tanks and homes within the service area will remain the same.

#### **f) Parking Capacity:**

Parking facilities and parking requirements will not change with this project. Currently public parking is available along a dirt strip west of Highway 1 northeast of the entrance to the Clear Ridge Road bridge. Public parking is also available near the River Inn and in a turnout near the Valero station. These parking areas will remain unchanged with the project.

#### **g) Alternative Transportation:**

The project will not impact alternative transportation facilities, and does not conflict with existing plans or programs.

### **Permit Terms Required**

None.

3.2.16 Utilities and Service Systems

<b>UTILITIES AND SERVICE SYSTEMS. Would the project:</b>				
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction or which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

Discussion

The project will result in a minor increase in new residential development but would not generate the need for major new utilities or service systems. Power lines may need to be extended to vacant parcels when developed, and new septic systems would be installed. One purpose of the project is to provide sufficient water through a water appropriation permit to serve existing and new residences in the service area. The project will not alter or require new storm drainage, waste water treatment facilities, or affect solid waste capacity.

**Permit Terms Required**

None.

*3.2.17 Mandatory Findings of Significance*

<b>MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:</b>				
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
a) Have the potential to 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, 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?		X		
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 the 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?				X

Discussion

**a) Fish and Wildlife Species:**

As indicated in Section 3.2.4, with mitigation, there will be no substantial impacts on listed fish, animals or plant/animal communities. The project will not affect listed rare plants. The project has been in operation since 1972 without any demonstrable effects on plant or animal communities. The project should have no effect on cultural resources.

**b) Cumulative Impacts:**

Section 15130(a) of the CEQA Guidelines states that "where a lead agency is examining a project with an incremental effect that is not 'cumulatively considerable', a lead agency need not consider that effect significant". Section 15130(a)(3) of the CEQA Guidelines states that "a project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."

As discussed in Section 2.3.2 above, the diversion of water by the existing project does not have the potential to cause a cumulative adverse environmental impact either at the project location or downstream at the second point of interest studied above. It is only three miles downstream, at a point immediately below pending senior water right Application 30166 (Hill) for 1615 afa that the project could contribute to a cumulative impact. This impact could potentially affect fisheries, wildlife, riparian vegetation and water quality at that point during the months of June through October (see Table 3, above). However, with the Association's operation of the existing offset well in accordance with the restrictive diversion schedule developed in consultation with DFG, and other mitigation measures, the proposed project would avoid or minimize such potential impacts and would not result in cumulatively considerable environmental impacts.

**c) Humans:**

The project will not cause significant adverse effects related to aesthetics, agricultural resources, air quality, cultural resources, geology and soils, hazards and hazardous materials, land use, mineral resources, noise, population and housing, public services, recreation, transportation/circulation, and utilities and service systems. A mitigation measure has been incorporated into the project to reduce biologic and hydrologic impacts to insignificant levels. An additional mitigation has been added to reduce noise impacts to nearby residents to insignificant levels. Substantial adverse effects on human, either direct or indirect, will not occur from this project.

Based on the above, the Division has determined that the proposed project will not have any significant adverse environmental effects.

4 ENVIRONMENTAL DETERMINATION

2010 JAN 13 AM 11:55

On the basis of this initial evaluation:

DIV OF WATER RIGHTS SACRAMENTO

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed 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.	X
I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a <input type="checkbox"/> potentially significant impact or potentially significant unless mitigated impact on the environment, but at least one effect (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 proposed 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 proposed project, nothing further is required.	

Prepared By:

*John Gilchrist*

*1/11/10*

John Gilchrist/Project Manager/Gilchrist Associates

Date

Reviewed By:

*Katherine Mrowka*

*1-14-10*

Katherine Mrowka, Chief, Inland Streams Unit

Date

*Steven Herrera*

*6-15-2010*

Steven Herrera, Manager, Water Rights Permitting Section

Date

## 5 REPORT AUTHOR AND REFERENCES

### 5.1 Report Author

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### 5.2 Persons Contacted

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 Recreation (Andrew Molera State Park)  
 Saar, John, John Saar Properties, Carmel  
 Shearer, Carolyn, Clear Ridge Mutual Water Association

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