The Monitoring Program and Trigger Levels established to prevent significant impacts to Cartago wells, the riparian and wetland habitat on site, and Spring Fault Line Habitat are defined in Section 6.0.

[3] Baseline values were determined based on focused survey by San Marino Environmental Associates on July 29, 2013.

4.0 HYDROGEOLOGIC AND ENVIRONMENTAL SETTING

4.1 Site Setting and Description

The site, locally known as the Cabin Bar Ranch, is an irregularly-shaped property that consists of approximately 420 acres. The site is located along U.S. Highway 395 approximately 2 miles north of the town of Olancha (Figure 1). Adjacent to site on the north is the community of Cartago. Adjacent to the site on the south is CGR's current bottling facility.

CGR purchased the ranch site from Anheuser Busch Company in 2010. Prior to the purchase, the site was used for cattle ranching and currently has numerous existing ranching facilities, including ranch houses, corals, irrigation ditches, and a reservoir. The main ranch house is located on the northern portion of the property (Figure 2). The current caretaker's house, along with several old houses and barns, is located in the southern portion of the site. Livestock was generally grazed in the meadow areas located in the eastern portion of the site. The meadow area was flood irrigated by a system of irrigation ditches, including a manmade main collection ditch that is approximately 2,000 feet long and approximately 3 to 6 feet deep (James M. Montgomery [JMM], 1993). The general location of the collection ditch is shown on Figure 2. Currently, the main collection ditch collects water from overflow from an irrigation well and groundwater discharging directly into the ditch from the bottom and sidewalls of the ditch (i.e., groundwater seeping into the ditch) and the lineament of springs and seeps located immediately west of the ditch. Flow from the main collection ditch into the system of smaller ditches located in the meadow area was controlled in the past by a series of gates (JMM, 1993). A large irrigation reservoir was also used for water supply on the ranch (Figure 2).

4.2 Environmental Setting

The Cabin Bar Ranch site supports several natural plant communities as well as developed areas covered by pavement, gravel or ornamental landscaping. These natural plant communities include dry uplands dominated by rubber rabbitbrush scrub (Ericameria nauseosa) and three wetland and riparian habitat types including red willow thicket, baltic rush marsh and salt grass flat. Several isolated stands of Fremont cottonwood are present near the main ranch entrance and ruderal habitat dominated by Russian thistle (Salsola tragus), red-stem filaree (Erodium cicutarium) and red brome (Bromus madritensis ssp. rubens) is present along Highway 395 and other disturbed areas on the ranch.

Red willow thicket, a riparian habitat is present along Cartago Creek which flows eastward towards Owens Lake. Red willow thicket is also present along the spring fault line in the southern portion of the ranch. Surrounding this riparian habitat is baltic rush marsh which then transitions to salt grass flat. Salt grass flats occur as a transitional community bordering the wet baltic rush marsh east of the spring fault and the dry rubber rabbitbrush scrub on the west.

4.3 Regional and Site Hydrogeology

Hydrogeological information for the Cabin Bar Ranch project is presented in recent reports including Geosyntec Consultants' report dated February 7, 2011 entitled Test Well Installation and Hydrogeology Report, Cabin Bar Ranch, U.S. Highway 395, Olancha, California and in Richard Slade and Associates' report dated June 2012, Hydrogeological Evaluation For Crystal Geyser Roxane Cabin Bar Ranch, Water Bottling Facility Project, Inyo County, California.

Regionally, the site is located in the southern portion of the Owens Valley. Owens Lake (dry lake bed) is located east of the site, and the base of the Sierra Nevada Mountains is located 1 mile west of the site (Figure 1). Highway 395, which runs north-south, crosses the western portion of the site. The Los Angeles Aqueduct is located approximately ½ mile west of the site and Cartago Creek, which is an ephemeral stream that runs east-west across the site.

Owens Valley is a graben bounded by the Sierra Nevada Frontal Fault and the Inyo Mountain Frontal fault. These faults are considered active and the offset on these faults is the cause of the dramatic relief in the Owens Valley area. The site is located on the valley floor at an elevation of approximately 3,640 feet, while Olancha peak, to the west of the site in the Sierra Nevada Mountains, stands at an elevation of over 12,000 feet.

The Inyo Mountains east of the site have an elevation greater than 8,000 feet. The Sierra Nevada Mountains to the west are generally composed of Cenozoic age igneous rocks of granodiorite-granite composition, whereas the White/Inyo Mountains, to the east, consist of Pre-Cambrian to Triassic sedimentary rock locally intruded with Cenozoic granitic rocks. The valley (Owens Valley) between the two mountain ranges, also referred to as the Owens Valley Groundwater Basin (DWR, 2003), is filled with alluvium and lacustrine deposits which are generally interfingered.

The interfingered relationship of the alluvium, generally consisting of sands and gravels, and the lacustrine deposits, generally consisting of finer grained silts and clays

the site is the result of deposition associated with ancient fluctuations of water levels in Owens Lake. Alluvial materials derived from the Sierra Nevada Mountains were deposited along the shoreline while fine-grained lacustrine materials were deposited in the shallow lake waters. As the elevation of the lake varied, the shoreline moved laterally, causing interfingering of the coarse alluvial materials and the fine-grained lake deposits. The lacustrine deposits generally consist of silts, clays and very fine sands, and have a relatively high organic content. A fine-grained layer encountered at a depth of approximately 80 feet across the southern portion of the site during investigative drilling by Geosyntec (2011) is interpreted to be a lacustrine deposit. The sequence of alluvium and lacustrine deposits beneath the site is at least 750 feet thick and, based on site drilling logs, the percentage of fine-grained material (lacustrine deposits) increases to the east (JMM, 1993). The sandy and gravelly alluvium is the major groundwater bearing unit in the basin and beneath the site. Site geologic cross-sections that show the general interfingering of alluvium and lacustrine deposits beneath the site and the fine-grained lacustrine layer at 80 feet below ground surface are presented in Appendix A-Figure A1 through A3.

A general hydrogeologic site conceptual model (SCM) was developed by Geosyntec (Geosyntec, 2011). This SCM was used to develop the groundwater flow model presented in Section 5.0. The SCM is as follows:

Groundwater beneath the site is mostly derived from precipitation (rainfall) and snowmelt in the Sierra Nevada Mountains to the west of the Cabin Bar Ranch. The precipitation and snowmelt that runs off the mountain infiltrates the alluvium near the mountain base. Much of the groundwater recharge for the site is thought to occur along Cartago Creek and Braley Creek where surface water runs off the mountains onto the alluvial fans that border the mountain's eastern face. Surface water or runoff quickly percolates into the sandy and gravelly alluvium and moves downward to the groundwater table. Some groundwater recharge also may occur from underflow through bedrock fractures and from direct precipitation on the valley floor.

Groundwater in the alluvium flows eastward, away from the Sierra Nevada Mountains and towards the central portion of the basin. Shallow groundwater beneath the site occurs under unconfined conditions; although where fine-grained layers are present, local semi-confined conditions may occur. The upper The aquifer material beneath the site is referred to as the Shallow Zone. Shallow Zone is defined herein as the saturated sand and gravel aquifer that overlies the fine-grained lacustrine layer that occurs at a depth of approximately

80 feet (Appendix A – Figures A2 and A3). The 80-foot fine-grained layer is considered to be an aquitard that separates the Shallow Zone from deeper sandy and gravely alluvium (i.e., deeper portion of aquifer). Based on aquifer tests performed by previous investigators, there is some hydraulic connection between the Shallow Zone and the deeper portions of the alluvial aquifer beneath the Shallow Zone. Groundwater in the deeper portions of the alluvial aquifer (i.e., below the 80-foot fine-grained layer) occurs under confined conditions.

The depth to the shallow groundwater table beneath the site gradually decreases towards the east. In the south central portion of the site shallow groundwater intersects the ground surface along an approximate line where numerous springs and seeps are observed. This line is interpreted to be associated with the presence of a fault called the Spring-line fault. The location of the fault and lineament of springs is shown on a map and cross-sections presented in Appendix A - Figure A1. The rise of groundwater may also be associated with the increase of fine-grained lacustrine deposits towards the east, although the linear nature of the spring locations suggests a fault. Both the Spring-line fault and/or the increase of fine-grained deposits are interpreted to impede groundwater flow which subsequently produces a rise of the groundwater table, and the observed springs and meadowlands in the central and eastern portions of the site. The source of spring water surfacing on the site is the Shallow Zone.