3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

The approximately 210-acre Crystal Lake property is located in Nevada County in the Sierra Nevada. The property is near Interstate 80 approximately 70 miles east of Sacramento and 20 miles west of Truckee at an elevation of approximately 6,000 feet (Figure 3-1). The main UC Davis campus in Davis is approximately 80 miles from Crystal Lake. The Crystal Lake property is in rural, mountainous terrain with strong seasonal weather conditions ranging from mild and dry summer periods to cold and snow covered winter periods.

The UC Davis Cal Aggie Alumni Association proposes to construct and operate an alumni family camp/environmental education center and conference center on the 210-acre Crystal Lake property south of Interstate 80 southwest of the Eagle Lakes freeway exit (Figures 3-2 and 3-3). The camp and education center would serve a population of up to 350 campers with 70 staff (Figure 3-4). The conference center would serve as an event venue for professional social gatherings for up to 50 people for a total population of approximately 470 people during a peak period. The mountainous geography of the property and nearby areas consist of steep mountain peaks, heavily forested vegetation, areas of open granite outcroppings, and streams, rivers, and lakes serving to drain and impound water from snow and rainfall.

UC Davis has grown to include a wide variety world-class research interests and highly-ranked undergraduate, post-graduate, and professional education programs. With on-going growth in enrollment and graduations, an annual increase in UC Davis alumni have created strong collaborative relationships for supporting the University mission. While other opportunities exist for expanding alumni participation, an alumni camp is a focused activity that can uniquely garner alumni participation in a campus related activity. Photos showing general conditions of the property are provided in Figure 3-5.

Site planning for the camp identified a desire to have an alumni camp with specific natural features and proximities to UC Davis. The proposed project will necessitate pre-construction vegetation removal and initial management as well as long-term operational vegetation management to reduce fire hazards, clear areas for building sites, prevent invasive species, maintain existing species, and enhance the user experience.

Construction of the following types of camp facilities (Figure 3-4) would be included in the proposed camp: dining hall (approximately 17,000 square feet); lodge, (approximately 10,000 square feet), sleeping pods (80 sleeping cabins and 7 restroom/shower buildings for campers and staff), swimming pool, craft
Figure 3-1
UC Davis Crystal Lake
Regional Location
Photo 1: Existing lodge with lawn area in foreground. View toward west.

Photo 2: Lawn area in foreground east of existing lodge. View toward east of Crystal Lake.

Figure 3-5: Crystal Lake Photographs
Figure 3-5: Crystal Lake Photographs

Photo 3: Existing Crystal Lake Road north of Crystal Lake. View toward west.

Photo 4: Caretaker residence from east looking up driveway.
Photo 5: Crystal Lake view toward east. Dam visible as white concrete toward left side of photo.

Photo 6: Crystal Lake with shoreline shown at edge of forest. Area proposed for development shown north of shoreline. View toward west/northwest.
Photo 7: Northern shoreline of Crystal Lake. View toward west.

Photo 8: Forest area north of Crystal Lake, east of tennis court (not shown). View toward northeast.

Figure 3-5: Crystal Lake Photographs
Photo 9: Forest area north of Crystal Lake. View toward northeast.

Photo 10: Forest area north of existing caretaker residence. View toward north.
Photo 11: Forest edge along existing tennis court. View toward north..

Photo 12: Open granite area east of Crystal Lake. View toward south.
center, caretaker’s house and equipment building, amphitheater, developed recreation facilities, registration building, utility and infrastructure buildings, informal recreation trails, and a lake recreation beach and dock area.

Existing roads and utilities within the property would be expanded and improved to serve the new camp layout and expanded population. Access to the property is provided by Crystal Lake Road, a public road in existence since the 1800’s. Roads off the property including the two-mile Crystal Lake Road from the property toward the Yuba Gap/Interstate 80 exit may also need minor widening in select narrow locations, vegetation removal to remove select branches and small trees, and improved surfacing with asphalt or gravel. Crystal Lake Road, or portions of Crystal Lake Road, are also called Kelly Lake Road on some maps. This EIR refers to the road as Crystal Lake Road as shown on Figure 3-2.

3.2 PROJECT LOCATION AND SURROUNDING LAND USES

The approximately 210-acre Crystal Lake property is located in Nevada County in the Sierra Nevada at an elevation of approximately 6,000 feet above sea level. The property is approximately 70 miles east of Sacramento and 20 miles west of Truckee and is within 500 feet of the Interstate 80 freeway (Figures 1 and 2). The mountainous geography of the property and nearby areas consist of steep mountain peaks, heavily forested vegetation, areas of open granite outcroppings, and streams, rivers, and lakes serving to drain and impound water from snow and rainfall. The property is on the west slope of the Sierra Nevada approximately 13 miles from the crest of the mountain range. Runoff from the site and surrounding areas is predominantly within the Yuba River watershed with a small portion along the southwest side of the property draining to the American River watershed.

Within the 210-acre property, the topography is highly variable with gently sloping areas near the north side of Crystal Lake and steeper slopes near the granite outcroppings on the southeast side of the property. The property is generally bowl shaped with the approximate 12-acre Crystal Lake near the middle of the property receiving runoff from large portions of the property that drain toward the lake. The peripheral portions of the property generally slope away from the property with surface drainage flowing onto adjacent properties. The outfall of Crystal Lake is located at the northeast corner of the lake with the natural streambed blocked by a concrete dam constructed in the 1920’s.

Although Crystal Lake existed as a smaller, natural lake prior to human intervention, an original dam in the 1800’s elevated the lake surface level above the natural level and the 1920 concrete dam further elevated the surface of the lake. Both dams served to increase the surface area and volume of water contained in the lake. The concrete dam is approximately 6 to 10 feet in height with a lowered box area cut into the top surface to provide a static spillway elevation. During periods of runoff, the lake level
increases until reaching the spillway elevation with water then spilling over the top of the dam and entering the streambed and flowing in a northeasterly direction across the property, through other properties, underneath Interstate 80 and then into the South Fork of the Yuba River which flows westerly into Lake Spaulding, a reservoir approximately three miles downstream of the Crystal Lake property.

Most of the surrounding areas are federally owned national forest land with private ownership consisting of small lots for scattered residential uses, larger parcels for recreation (camping), water impoundment on ponds and lakes for water storage and electricity production, and some privately owned areas for timber production. In addition, transportation and utility corridors along the north edge of the site include the Union Pacific Railroad, a main rail corridor connecting California with destinations to the east and Interstate 80, the main freeway connecting California with eastern destinations and the main year-round highway providing a crossing of the Sierra Nevada. Within the property are two utility corridors for an underground petroleum fuel pipe and a fiber-optic communications line that cross the Sierra Nevada. The fuel pipeline corridor is approximately 20 feet in width and extends east to west across the property approximately 100 feet north of Crystal Lake. The fuel pipeline corridor is carefully managed with extensive signage indicating the presence of an underground pipeline. In addition, the pipeline operator conducts regular inspections and removes vegetation from within the 20 foot corridor. The fiber-optic communications line is a 10-foot wide corridor approximately 50 feet north of the fuel pipeline and is managed similarly to the fuel pipeline.

In addition to the dam and utility corridors, existing development on the project property includes the following:

- **Main House.** The main house was constructed in approximately 1993 as a family vacation home along the northwest shore of Crystal Lake. The house includes approximately 5,500 square feet of interior space, a three car garage, patio area, a small dock extending approximately 35 feet into Crystal Lake, and a lawn and play area of approximately 7,000 square feet.

- **Caretaker House.** The caretaker house, constructed in approximately 1994, is located north of the main house and includes approximately 1,200 square feet of interior space, a garage, and small service yard for equipment repair and storage.

- **Pump House.** The pump house, constructed in approximately 1993, is located between the main house and the caretaker house. The pump house sits next to the underground well and is approximately 180 square feet with interior space for the water well equipment and an emergency generator. The existing well is approximately 950 feet deep and provides approximately 8-12 gallons per minute. Propane tanks adjacent to the pump house provide
approximately 4,000 gallons of storage for propane to serve the main house and the caretaker house and the emergency generator.

- **Roads.** The Crystal Lake property has a primary gravel road that extends from the west side of the property toward the caretaker house and then follows the north shore of Crystal Lake toward the Crystal Lake dam. The road then extends to the east boundary of the property and ends at the right-of-way for the Union Pacific Railroad. Along the north shore of the property and extending further north are additional dirt roads that range in condition from well graded roadways to minimally constructed logging roads that served prior logging efforts on the property.

- **Tennis Court.** In approximately 1994, a concrete tennis court was constructed north of Crystal Lake. This recreational facility is approximately 6,500 square feet with metal fencing surrounding the court.

Prior logging in the northern portions of the property at Crystal Lake last took place in approximately 1994 with selective removal of high value timber and very little effort to remove lower value trees or the waste branches and smaller trees that were felled during the logging operation. Many parts of the property currently have a high amount of dense vegetation growth that resulted from saplings and younger trees being able to survive the prior logging effort. Portions of the property are densely vegetated with no evidence of recent fires that would have reduced understory vegetation density.

**Prior History at Project Site**

The Crystal Lake property was used by Native Americans with petroglyphs and basalt chipping areas indicating repeated and important activities on the property. From approximately 1850, the property was used as a transportation route through the Sierra Nevada as a wagon trail, wagon and stage coach toll road, railroad, telegraph and telephone corridor, and automobile highway. These uses reflected the various stages of population growth and transportation technology that occurred in California. With proximity to the toll road and railroad, Crystal Lake was attractive as a reliable water supply for livestock and for steam engines. In the 1870’s, the Crystal Lake Hotel was constructed along the north shore of Crystal Lake and operated as a lodging stop until it burned down in the 1890’s.

From approximately 1915 through 1930, the property was the primary automobile route from Truckee to Sacramento with the Lincoln Highway and then the Victory Highway running across the Crystal Lake property on the original alignment of the Dutch Flat to Donner Lake Wagon Toll Road. From the 1870’s through 1990’s, various logging efforts took place on the property to support timber production. In
approximately 1985, the property transferred from railroad ownership to a private individual using the property as a vacation residence.

**Surrounding Land Uses**

The land uses surrounding the property include United States Forest Service (USFS) land to the west and north. East of the property is the railroad corridor operated by the Union Pacific Railroad and further east of the rail corridor is privately owned land with no structures and infrequent use between the railroad and Interstate 80. The south boundary of the property includes ownership by the USFS and ownership by a private corporation using the land for recreational camping activities. The surrounding USFS lands (to west, north, and south) are heavily forested and contain no structures. The USFS land south of the property includes a dirt road that leads to Kelly Lake. A privately-owned campground to the south of the property contains access roads to the camping facilities, structures for restrooms, and improved camp site amenities (picnic tables, electricity, and water supply).

Within the general vicinity of the property, the Interstate 80 and the Union Pacific Railroad represent the most intense nearby human activity with Interstate 80 providing a four-lane (two lanes in each direction), high-speed crossing of the Sierra Nevada providing both regional transportation between the Lake Tahoe area and the western portion of California and as an interstate connection between California and destinations to the east. Similarly, the railroad serves as a primary rail line for east-west rail traffic between California and destinations to the east for cargo and passenger trains with approximately 22 trains per day. While the freeway and railroad serve as intensively used transportation corridors in close proximity to the proposed project, these corridors do not include substantial stops, commercial services, or visitor amenities near the project area. From the railroad and the freeway, the elevated gradient and existing vegetation mostly obscure views of the project property. The areas proposed for new facilities within the project property are not visible from the railroad or freeway.

In terms of land uses and activities the land surrounding the project property is predominantly characterized as rural forested areas with large parcels of forest land interspersed by land used for camping, institutional lodge and camp areas, and occasional rural residential areas with single residences on large parcels or small clusters of single dwellings on small parcels. Many residences in these areas are used as vacation homes. Topography in the surrounding area is very rugged with steep mountain peaks, deep canyons, and areas of exposed granite outcroppings.
3.3 PROJECT NEED AND OBJECTIVES

UC Davis is a university campus with enrollment of approximately 35,000 students and 232,000 living alumni and is one of the 10 campuses within the University of California system. The University of California was established by amendment of the State of California constitution in 1868 as an autonomous branch of state government, to provide California with a university system for research and education. UC Davis began in 1908 as the farm school for UC Berkeley and from 1908 through 1959, continued as a component of UC Berkeley. Since 1959, UC Davis has operated as a separate comprehensive campus under governance of the University of California Board of Regents and has grown to include a wide variety world-class research interests and highly-ranked undergraduate, postgraduate, and professional education programs. With growth in enrollment and graduations, an annual increase in UC Davis alumni have created strong collaborative relationships for mentoring new students, advising on professional opportunities, and supporting the University mission. These efforts are typical of an alumni association and represent the unique interest among UC Davis graduates to continue their affiliation and support of UC Davis.

Alumni associations typically support a University by serving as a catalyst for alumni to participate in university-related social, professional, charitable, and philanthropic events and programs. By maintaining strong connections among alumni and between alumni and the university, an extended university experience can mutually benefit the university and the life-long learning, discovery, and public service interests of alumni. Typical events include gatherings at sporting competitions, travel opportunities, lectures, performances, professional networking, and social events.

Many alumni organizations have created alumni camps to further support the interests and collaborations of alumni. Within Northern California, Stanford and UC Berkeley have established alumni camps in the Sierra Nevada that successfully provide a vacation opportunity for alumni seeking to renew or expand their connections with friends, family, colleagues, and their respective universities. UC Davis does not provide an alumni camp opportunity but has identified that the expanding base of enthusiastic alumni along with the projected growth in alumni represent a unique period to plan and operate an alumni camp. While other opportunities exist for expanding alumni participation, an alumni camp is a focused activity that can uniquely garner alumni interest, provide a high-quality annual experience, involve entire families with activities for multiple generations, and generate interest among other alumni in camp participation.
The Board of Directors of the Cal Aggie Alumni Association identified development of an alumni camp as a key element for expanding the success of the alumni association and initiated a planning committee consisting of board members and the executive director of the alumni association to consider the real estate and financial planning aspects for building and operating an alumni camp. The alumni association would pay for and operate the camp independently of UC Davis campus funding. Financial planning for the camp identified the ability to generate camp income from user fees to pay for the costs of land acquisition, construction, and camp operation. Site planning for the camp identified a desire to have an alumni camp with specific natural features and proximities to UC Davis.

The following specific objectives of the alumni camp and environmental learning center detail the site planning, programming, financial and operational objectives of the project:

- Create an alumni family camp on property with a water feature such as a lake, stream, or river that would allow water recreation opportunities.
- Provide seclusion within a separate special place for visitors to appreciate and treasure.
- Minimize driving distance from Davis, Sacramento, and San Francisco. Remain within a 2.5 hour drive from Davis to facilitate management of the property and employment opportunities for students.
- Operate a camp that is free from poison oak and at an elevation that is not subject to the extreme heat of the Central Valley in order to provide the highest quality camp experience.
- Provide a full-service camp experience with an adequate revenue base to support dining, lodging, and activities included in the design and operation of the camp.
- Operate a camp primarily during summer months to match vacation planning goals of alumni but also generate income from other activities during non-summer months.
- Operate an alumni camp for a diverse range of interests including people interested in active, passive, independent, or highly facilitated vacation activities that will appeal to a wide range of ages.
- Operate a camp based on a one-week stay scheduled from Sunday arrival to Saturday departure to allow visitors to maximize the amount of vacationing time with minimal time missed at work.
- Operate a camp with unique opportunities for learning about natural and human history.
- Minimize environmental impacts through site selection, camp design, and camp operation.
- Utilize development and construction methods that respect the natural environment.
- Provide long-term stewardship of natural features and human historical features.

In addition, the following objectives were identified as items that are specifically not desired and would not be included in camp operations. These are identified here in the project description for the environmental review in order exclude certain activities that could result in particular environmental
impacts. Items excluded from camp operation are: pets, equestrian activities, firearms, motorized boats or all-terrain vehicle recreation, and hunting.

In addition to an alumni camp, the size of the Crystal Lake property and the presence of the existing large home represent an opportunity to improve the financial viability of the proposed project and support off-season use of the property. The existing large home could be used for events such as weddings, executive professional conferences, retreats, academic conferences, and other gatherings for groups of 15 to 50 people. Specific project objectives of these uses are the following:

- Hosting conferences and events.
- Provide an event venue that is separate from the alumni camp and environmental learning center.
- Utilize the existing main house to provide additional income for the management and operation of the property.

3.4 PROJECT ELEMENTS

The following project elements are described with each item providing information regarding the facilities and activities that would be needed to construct and operate the proposed project.

Land and Forestry Management

The proposed project will necessitate pre-construction vegetation removal and initial management as well as long-term operational vegetation management to reduce fire hazards, clear areas for building sites, prevent invasive species, maintain existing species, and enhance the user experience. Following are the expected types of vegetation management zones for the property.

- **Priority Area 1:** Within 50 feet of roads, within 150 feet of structures greater than 500 square feet. Within this area, limited vegetation ground cover will remain with ground surfaces primarily left covered by wood chips, pine needles, or dirt. Small clusters of shrubs, small trees, or landscaping will remain. Tree density will be reduced to reduce fire hazards and provide building sites and lower limbs will be removed from most trees. Hazardous trees with indications of decay or potential toppling will also be removed.

- **Priority Area 2:** Within all camping areas and within all developed recreational areas. Tree density will be reduced to provide building sites and to reduce fire hazards and lower limbs will be remove from most trees. Hazardous trees with indications of decay or potential toppling will also be removed.
• **Managed Area 1:** Buffer zone extending 200 feet from edge of camp facilities and recreational areas. Extended road area extending 150 feet from roads. Hazardous trees with indications of decay or potential toppling will also be removed. Tree removal, on a selective basis for fuel reduction or timber production could also occur within this area.

• **Managed Area 2:** Timber production for the property and fuel reduction where feasible will be the operational goals of this area. The area will be managed for long-term sustainability of the timber resource and a desire to achieve a species composition to benefit forest health and habitat variety.

• **Exclusion Areas:** Sensitive areas with plant or water resources that will be managed for limited or no entry by camp visitors. Hazardous trees with indications of decay or potential toppling may be removed or felled and left in place in these areas.

• **Unmanaged Areas:** All remaining areas will be left generally unmanaged. Hazardous trees with signs of decay or potential toppling may be removed or felled and left in place in these areas.

Within the proposed camp area, the proposed project would necessitate clearing approximately 3.5 acres for buildings, roads, and site amenities along with tree thinning of approximately 9.5 acres of interstitial areas (areas along trails and between camp clusters) within the development area (Ivy 2015). Where feasible, existing alignments of prior logging roads will be used as the proposed new roads for the camp uses. The thinning activities on approximately 9.5 acres would allow trees to continue growing and these trees could eventually be harvested to allow for replacement trees to grow.

In terms of tree density, for tree removal that would be needed on the 3.5 acres and 9.5 acres described above, the following numbers of trees would need to be removed:

• Approximate number of trees larger than above 30 inches diameter: 20 – 25 trees;
• Approximate number of trees 15 to 30 inches: 90 – 100 trees; and,
• Approximate number of trees 8 to 15 inches: 130 – 150 trees.

The University will comply will all applicable State of California forestry regulations. Certain vegetation management activities may require review, permitting, and approval by the State of California. Specific items such as a timber harvest plan, timber conversion plan will be filed by a registered professional forester in accordance with the requirements of CalFire.
Proposed Camp Facilities

Construction of camp facilities would be needed to support the proposed camp. The following facilities are described in terms of the expected construction effort and operational details. The camp facilities are planned for the area north of Crystal Lake as shown in Figure 3-4.

**Dining Hall.** The dining hall would provide approximately 17,000 square feet of interior space and would consist of a commercial kitchen, a large dining room, restrooms, foyer, an exterior deck area, and a service yard on the exterior of the building for recycling, trash, deliveries, and equipment. The dining hall would be designed to provide interior seating for all campers simultaneously and would operate primarily during the summer months. Between each meal, the dining hall would be closed for cleaning and preparation of subsequent meals. Campers would be expected to vacate the dining hall after each meal and transition to other camp locations for activities and entertainment.

**Lodge.** The lodge building would be approximately 10,000 square feet and would provide the camp with a headquarters building for administration, first aid, a library, game room, office space, activity information, lecture space, a small camp store, a small kitchen for off-season use, and other support uses. The lodge is expected to be a gathering space and destination for campers embarking and returning from activities. The lodge would be operated year-round.

**Sleeping Cabins.** The sleeping areas for campers would consist of six clusters of 10 small cabins of approximately 500 square feet each providing accommodation for 4 to 8 people with a camp total designed for 350 people. For employees, an additional 20 sleeping cabins would be provided for a total of 80 cabins. Each sleeping cabin would include bed space and electricity for heating and lighting and approximately 30 percent of the cabins would include plumbing for sinks, toilets, and showers. Each cluster would be served by a restroom building of approximately 1,500 square feet that would provide sinks, toilets, and showers for the campers. Within the sleeping clusters, additional minor facilities such as picnic tables, a single fire pit, trash and recycling, walkways, and drinking fountains would also be provided.

**Craft Center.** The craft center building would include electrical and plumbing connections. The building would provide a central camp facility for organized craft activities with interior and exterior spaces for groups.

**Caretaker’s House and Maintenance Building.** A caretaker’s house and equipment building and service yard for equipment storage and maintenance would be included in the camp design. The existing caretaker’s house may be reused for this or demolished and a new building constructed. The house is
expected to be approximately 1,500 square feet and the equipment building is expected to be approximately 5,000 square feet with a tall garage door for large equipment.

**Utility Building.** A central building within the camp area would provide laundry facilities, ice, vending, and a central area for minor custodial services and grounds maintenance. This building would be approximately 1,500 square feet.

**Amphitheatre.** The amphitheater would be an outdoor space for gatherings and performances. The facility would include a stage, seating, walkways, and outdoor lighting and electricity would be provided for microphones, speakers, and stage lighting. A small building adjacent to the amphitheater would provide storage space for stage equipment. Amphitheater events would take place in the early evening hours and would consist of camp-related history or entertainment programs such as lectures, children’s skits, and music programs. Amplification for the events is intended to provide sufficient volume for the adjacent audience without creating excess noise. Rock bands or other performances requiring loud levels of amplification would not be allowed.

**Developed Recreation.** The camp would include a variety of recreational facilities such as a tennis court, swimming pool of approximately 100,000 gallons, a volleyball court, bocce court, basketball court, restrooms and changing room for the pool area, and a covered area for table tennis, billiards, shuffleboard, tables for board games, and other activities. The existing tennis court is in a deteriorated condition and is expected to be removed or repurposed as part of the camp design. A pool house of approximately 2,000 square feet would provide space for pool heating and treatment equipment, lifeguard equipment, restrooms, and changing areas.

**Outdoor Play Area.** The camp would include an outdoor playground area consisting of playground equipment for children and a grass area of approximately 6,000 square feet for activities such as wiffle ball, tag, and other similar activities.

**Informal Recreation.** The camp would include hiking trails for accessing areas within the developed portion of the camp (connecting sleeping clusters with the lodge and dining hall) and for access to undeveloped areas of the property such as around the lake and further destinations. Trails within the camp area would be surfaced with gravel or wood chips. Trails outside of the camp would primarily consist of marked routes designed to follow existing contours along exposed areas of granite or relatively flat dirt. Some specialized recreation facilities such as a zip line course may also be provided.

**Registration Building.** The camp registration building would provide check-in and key services for arriving and departing guests. The building would be approximately 200 square feet and would be located within the camp area.
Lake Recreation. The camp is anticipated to include lake recreation opportunities with swimming, human powered boats, and fishing. Access to the lake is expected to occur from the open granite ledges, from the existing dam, from the existing dock and beach area, or from a new dock and beach area to be constructed. Two areas are contemplated for the new dock and beach area. The first is along the north shore of Crystal Lake near the north side of the dam. The second is the existing beach and dock area near the existing lake house. If selected, second area would be expanded in size. Only one of these two areas would be selected. A small boat house or shed building of approximately 500 square feet located approximately 30 feet from the edge of the water would provide storage for boats and other lake equipment.

Infrastructure Building. A new pumphouse and water storage area would be constructed to support the new camp activities. The pumphouse would be approximately 150 square feet. In addition to water storage, propane storage in underground tanks would provide the camp with fuel for heating and cooking.

Additional Small Structures. Additional small structures of up to 3,000 square feet could be needed for support uses such as property management, utilities, electric vehicle charging, and new undefined recreational programs. These structures would be constructed within 50 feet of an existing road or within the proposed development area. These structures would not be constructed within 100 feet of water features.

The intent of the camp is to have minimal lighting of roads (low street poles just at road intersections for example, not for the entire road length), minimal pathway lights (most paths unlit except for one or two major paths within the camp area), and minimal exterior building lighting.

Event Center Facilities

The existing house at Crystal Lake would serve as the event center. No additional facilities would be needed to support the event center. Modifications to the event center would include conversion of the existing garage space to a meeting room, exterior improvements with new pathways and outdoor deck areas including a covered gazebo area that would replace the existing children’s play structure. Amplification is not expected to occur at the event center.
Roadways and Parking

On-Site Roads. The Crystal Lake property has an extensive road system from the southwest corner of the property where Crystal Lake Road enters the site, along the north shore of the lake, and extending as a single road toward the east side of the property at the railroad tracks. The Lincoln Highway was the transcontinental automobile route and beginning in approximately 1913, from Truckee to Sacramento and was routed across the project property on the route of Crystal Lake Road shown Figure 2. Within the property are an extensive network of old logging roads, and where feasible, these routes would be utilized to serve the camp development to provide access to the sleeping clusters. In certain areas, new roads would be constructed to provide vehicular access to the camp areas.

All roads would be surfaced with asphalt, gravel, or packed dirt, and engineered with adequate crown or cross-slope to provide drainage away from the road bed. Where necessary, cut slope areas would be graded into the adjoining slope and a drainage ditch with adequate cross culverts engineered to allow water drainage. The roads are expected to be approximately 11 feet wide for one-way traffic and approximately 20 feet wide for two-way traffic. In some locations, two-way traffic may take place on roads narrower than 20 feet where adequate visibility exists for on-coming cars to wait in a wide spot for a clear opportunity to proceed through the narrow section.

Off-Site Roads. In addition, land for roadway access and improvements to serve the project could include one or a combination of the following off-site road improvements:

1) Improvement of the existing access road near the southwest corner of the property to utilize the existing Crystal Lake Road further westward to the Yuba Gap freeway intersection with Interstate 80. This road is currently a gravel road from the project property for approximately one mile and is then a paved road for approximately ¾ of a mile until connecting with Lake Valley Road a few hundred yards from the Yuba Gap exit at Interstate 80. Potential improvements to the road include vegetation removal to achieve horizontal and vertical clearance, widening to accommodate increased traffic, and increased gravel surfacing or asphalt surfacing. The road width currently varies from approximately 15 to 25 feet. The proposed project includes widening the road to meet CalFire road standards of 22 feet. Guests to the proposed alumni camp and event center will be provided with pre-arrival information showing the route to the property and showing the required slow speeds near the Raccoon RV camp.

2) Emergency access and egress across the Union Pacific Railroad toward Eagle Lakes Road. Emergency use of Crystal Lake Road across the railroad tracks and toward Eagle Lakes Road is expected to continue.
Off-Site Property

To address concerns raised by the adjacent camp area (Snowflower Raccoon camp), UC Davis has considered optional access routes to avoid impacts to the adjacent camp area. None of the optional routes are feasible. These efforts are described in Section 5.4. In an effort to avoid impacting the campers, the UC Davis Cal Aggie Alumni Association is considering additional options.

With approval of the landowner, UC Davis or the Cal Aggie Alumni Association would purchase the approximately 10-acre Snowflower Inc. Raccoon Camp. The Snowflower Inc. organization could then move from the site to use existing sites at other camp areas or could develop new camp sites. None of the potential relocation sites would be within 300 feet of the Crystal Lake Road. UC Davis or the Cal Aggie Alumni Association would disconnect the utilities at the existing Raccoon camp and continue basic maintenance of the facility for two- to four-year period. Potential future uses of the 10 acres could include habitat restoration, fuel break for fire hazard reduction, employee housing, camping or recreational vehicle camping, or other recreational uses. After considering potential future uses, any proposed land use change would require future compliance with the California Environmental Quality Act. This EIR evaluates the proposed impacts of holding the property under basic maintenance efforts with no additional impact analysis for future uses.

Utilities and Infrastructure

As discussed briefly below and detailed in Section 7.19, the proposed Project would need the following utilities to operate:

**Domestic Water:** Domestic water for the property is currently provided by a single well that is approximately 1,000 feet deep and provides approximately 8-10 gallons per minute. To serve the proposed camp, an additional well is expected to be needed. A preliminary investigation has identified the eastern portion of the north side of the property as a likely location to drill a second well. To serve the camp and conference center uses, a total demand of approximately 15,000 to 20,000 gallons per day is expected. Water storage on the site is would take place in underground tanks. Domestic water supply lines would be routed underground.

**Septic System Capacity:** Sanitary sewer service for the existing property is provided by a single septic tank and leach field uphill of the existing main house. The property is not served by a wastewater treatment plant. To serve the proposed camp and the conference center, additional septic system capacity would be needed. In portions of the area proposed for development, a preliminary soil investigation found adequate soil and slope conditions to allow new leach fields that would support a septic system. Through the process of engineering new systems and health and safety permitting by Nevada County,
the design for expanded septic service would identify the necessary capacities, treatment details, inspection needs, and backup land area to provide a new system that would operate correctly. Septic system lines would be routed underground.

**Storm Drainage and Runoff:** The project would include detailed engineering and construction measures to reduce erosion and adequately control runoff.

**Electricity:** Electricity for the project site is provided by an overhead electrical line that supplies power from a Pacific Gas and Electric point of connection at the east side of the property along the Union Pacific Railroad tracks. Electricity of the expanded operations would be provided by the existing supply line or from an expanded service line that would be routed on the existing power poles. Electrical lines within the camp area would be placed underground. The existing backup generator would continue in use to provide limited emergency power during storms or other outages.

**Propane:** Propane for heating of large buildings and for cooking would be provided to the project by delivery trucks. Propane storage tanks would be designed into the layout and placed near buildings.

**Telecommunications:** Most telecommunications would take place wirelessly through the use of nearby cellular towers operated by commercial carriers. Some additional telecommunications capacity would be provided by a new telephone service line that would be extended from the east side of the property and then routed underground to facilities within the camp.

**Population and Traffic**

The study area includes the project site, Crystal Lake Road from the project site to Lake Valley Road, Lake Valley Road from Crystal Lake Road to the I-80/Yuba Gap overpass, and Interstate 80 in Nevada County. The proposed project is a unique land use with travel attributes that are very dissimilar from other land uses. The proposed alumni camp and environmental education center and event center would operate at peak capacity only during the summer months with an approximate season of 10 weeks from approximately early June to late August. In fall, winter, and spring, the center would operate with reduced guests and possibly with school groups arriving by bus.

The proposed project would include 350 campers and approximately 70 staff. Full camp operation is expected to occur from mid-June through August each year. In the spring, early summer, and fall, a limited camp operation would serve approximately 250 campers with a corresponding staff of approximately 40. During winter months, a camp population ranging from zero to 75 is expected.
During the summer, campers are expected to arrive on Sunday’s and depart the following Saturday. At the event center, events with 10 to 50 people could take place during any season and could take place on any day of the week. For this environmental review the environmental impacts related to the conference center population are assumed to take place on busy Saturday’s or Sunday’s during the summer and overlap with the arrival or departure of the camp guests. The busiest type of event for the conference center would be a single-day event such as a wedding with guests, catering employees, and other event staff arriving and departing on the on same day that the alumni camp are arriving or departing.

Traffic associated with the camp would consist of private vehicles (mostly arriving on Sunday and departing on Saturday), employee vehicles (rarely departing), and service vehicles (deliveries such as trash, food, propane, etc.) For the busiest period of the camp Saturday/Sunday traffic is expected to consist of approximately 125 vehicles arriving or departing between 10am and 4pm.

For a Saturday or Sunday conference center event, traffic for an afternoon wedding would arrive between 10am and 2pm and would be expected to depart from 4pm to 8pm. This total is expected to include 40 vehicles. The 10am to 2pm arrival period would overlap with arriving campers and could total 165 vehicles in this time period. With these vehicle projections, the busiest summer Saturday/Sunday traffic volumes are expected to occur from 10am to 8pm and could include a total of approximately 200 vehicles.

During the peak summer season, guests would be allowed to arrive during a specified afternoon period on Sunday afternoons and expected to leave by midday on Saturday’s. From Sunday to Saturday, most guests would remain on the property to participate in formal and informal recreation activities and enjoy site amenities. Guests would typically arrive as a family or group and the remote location of the camp is expected to result in high vehicle occupancy (3 to 4 people per vehicle). The anticipated traffic volumes during a peak afternoon arrival or departure period are expected to consist of approximately 125 vehicles arriving (on a Sunday) or departing (on a Saturday) between 10am and 4pm. Although exact travel times will not be prescribed, the guests are anticipated to arrive evenly distributed throughout the arrival window period of 10am to 4pm. Based on these characteristics and applying a peak hour factor to ensure that impacts are not underestimated, the peak arrival period from 1pm to 2pm on a Sunday afternoon is expected to result in approximately 50 vehicles in the peak hour period for the proposed camp.

For a Saturday or Sunday conference center event, traffic for an afternoon wedding would arrive between 10am and 2pm and would be expected to depart from 4pm to 8pm. This total is expected to include 40 vehicles. The 10am to 2pm arrival period would overlap with arriving campers. Assuming that 20 of the wedding vehicles could arrive between 1pm and 2pm would result a total of 145 vehicles for the proposed project (alumni camp and event center) in this one-hour time period. A peak-hour with 145
vehicles would equate to approximately 2.5 vehicles per minute exiting from Interstate 80 and using Crystal Lake Road to access the project site.

**Figure 3-2 in Section 3.0** shows the project area. Crystal Lake Road is shown as the black line extending from the project property. During the scoping period, one commenter noted that Crystal Lake Road and Kelly Lake Road are sometimes labeled differently on different maps. A review was conducted of printed maps and on-line electronic maps. The review indicates an inconsistency in certain mapping efforts. Most maps identify the road that extends from Crystal Lake as Crystal Lake Road and those maps match the route shown on **Figure 3-2**. Some maps differ and show a portion of the same road as Kelly Lake Road, effectively interchanged with the Crystal Lake Road shown on **Figure 3-2**. Throughout this EIR, Crystal Lake Road is considered to be the road alignment shown in a black line and labeled as Crystal Lake Road. This EIR makes no further effort to reconcile the conflicting map labeling of Crystal Lake Road.

**Construction Schedule and Staging**

The project could begin vegetation removal and facility construction in 2016. It is expected that the camp could be constructed in phases beginning in 2016 with the goal of beginning operation in 2017 or 2018. The sequence of development activities is expected to consist of vegetation removal, grading for roads and building sites, trenching and underground utility installation, building construction, recreation amenity construction, final surfacing of roads and parking areas, and finally, installation of trail markers and visitor signage. **Table 3-1** provides approximate dates for the construction schedule. On-going vegetation management is expected to occur throughout the construction period and continue as a land management effort during long-term operation of the camp and conference center.

During construction, certain sensitive areas would be closed to prohibit disturbance by construction equipment or construction personnel. At a minimum, areas from the south side of the dam and from the south side of the existing lake house would be closed to construction equipment and personnel during construction.
### Table 3-1
2016-2017 Construction Phase Details

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
<th>Estimate Work Days</th>
<th>Notes</th>
</tr>
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<td>Vegetation</td>
<td>Management</td>
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<td>5/2/2016</td>
<td>22</td>
<td>Vegetation management, tree removal, chipping.</td>
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<tr>
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<td>5/28/2016</td>
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</tr>
<tr>
<td>Rough Grading</td>
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<td>5/3/2016</td>
<td>5/16/2016</td>
<td>10</td>
<td>Rough grading site and internal roads</td>
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<tr>
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<td>5/18/2016</td>
<td>5/30/2016</td>
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</tr>
<tr>
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<td>Architectural Coating</td>
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<td>11/10/2016</td>
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<td>Interior and exterior of site built structures</td>
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<tr>
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<td>Paving</td>
<td>6/1/2017</td>
<td>6/8/2017</td>
<td>6</td>
<td>Paving internal camp roads.</td>
</tr>
</tbody>
</table>

Note: During each period, model projections included 5 working days per week.