air emissions from vehicular traffic have been addressed in Sections 5.7, *Noise*, and Section 5.6, *Air Quality*, respectively. Analysis of noise and air quality impacts is based upon the traffic study, which assigns a daily trip generation rate for residential uses, as described above. Third, the loss of space on the lake due to the marina facility is addressed under Impact Statement 5.2-2 of the EIR. The EIR concludes that since the project site is private property, public access is not assured. However, public access to the lakeshore would be maintained at the eastern and western boundaries of the site. Public access to the lakeshore would also continue to be maintained at other locations along the perimeter of the lake. Refer also to Response to Comment No. 13-26.

13-25 The Big Bear Metropolitan Water District (MWD) Management Plan indicates that the average annual weekend use factor for docks on the lake is nine (9) percent. The Commentor states that the weekend use factor during the summer is 60 percent and 90 percent on holiday weekends. According to the Management Plan, the lake has a carrying capacity of 1,000 boats. The Management Plan states that during the summer peak season, from 1996 to 1999, the highest average daily use of boats was 262 during the 1996 season. Since these statistics were developed 2000, it is assumed that the current summer peak season average boat usage has incrementally increased over the past several years to closer to 300 boats per day. However, even if assuming all 100 boats are used during the summer peak season, the carrying capacity of the lake would not be surpassed. Additionally, it is acknowledged that during peak holiday periods, the boating usage numbers increases beyond the summer peak season. However, according to Management Plan, current lake use statistics show that it is unlikely that in the foreseeable future, the District would need to consider any restriction on the number of boats on the Lake. In fact, as long as the parking facilities remain at the current level, use of the Lake is somewhat self-restricting.

13-26 In consideration of the proposed residences along the lakefront and their proximity to existing residences to the east and proposed residential uses to the west, the EIR text has been updated to accurately reflect the nature of public access to the lakeshore.

Page 5.2-5, Paragraph 2 of the Draft EIR, has been revised in the Final EIR as follows:

> The County of San Bernardino General Plan Goal C-54 states the intention to "provide public access to all water bodies and water courses." Furthermore, Policy/Action OR-48 states that, "Because the County seeks to improve the ability of the public to enjoy water-related recreation, the County shall seek to improve public access to rivers, lakes, creeks, lakes and other bodies of water." Additionally, Policy/Action OR-49 states that "Because public access to water for recreational uses is important to the County, easements and dedications allowed in the Subdivision Map Act to acquire access to lakes, streams, public lands and other locally and regionally significant natural features shall be required for all new development." ~~However, since the Project site is private property, public access is not assured~~. As the project abuts existing homes to the east and the proposed Marina Point Development to the west, ~~P~~public access to the lakeshore would be

maintained below the high water line of the lake.~~maintained at the eastern and western boundaries of the site~~. Public access to the lakeshore also continues to be maintained at other locations along the perimeter of the lake. However, since the Project site is private property, public access is not assured.

13-27 As stated in Response to Comment Nos. 4-1 and 4-4, the Final EIR text will reflect that the project area is located within a Fire Safety Area 1 (FS1), as designated by the County of San Bernardino General Plan Hazard Maps. Thus, the project would be subject to all project design requirements for projects located within a FS1 area. The San Bernardino County Fire Department has indicated that due to the size and scale of the proposed project, specific fire flow requirements would need to be met. Instead of 1,500 gpm at 2 hours (which is based on a maximum square foot house of 3,600 square feet), the fire flow requirement would be 1,750 gpm at 2 hours, based on homes in the range of 3,600 to 4,800 square feet, and 2,000 gpm at 2 hours, based on homes greater than 4,800 square feet. Homes above 5,000 square feet would have a larger sprinkler requirement. Additionally, a fuel modification area and plan would be required for the proposed project under the provisions of the FS1 Fire Safety Overlay District. The project would include a 100-foot fuel modification zone located along the northern and eastern perimeter to provide a fuel break between the project area and the adjacent forestland. The fire flow requirements and Fuel Management Plan, along with the identified mitigation measures, would reduce impacts to fire protection services to less than significant levels.

Also, refer to Response to Comment Nos. 4-1 and 4-4.

13-28 In Section 5.3, *Public Services and Utilities*, the analysis of fire protection services is not intended to analyze availability of groundwater resources, but rather is intended to identify the necessary fire protection resources that are required to meet the fire protection needs of the project. Water resources are analyzed in Section 5.11, *Hydrology and Drainage*. As stated in the Section 5.11, it has been concluded that impacts to groundwater resources is a significant adverse effect and until additional technical review is conducted to verify conditions, the project would result in an unavoidable impact to groundwater resources. The Project Applicant will have the responsibility to prove that water resources are available to serve the project. The County will consider the Commentor's opinion and comments during their deliberation on the project.

13-29 The Commentor is correct in that the additional fire flow alone would not mitigate for additional manpower. The EIR text has been revised to reflect that fire flow requirements are only one component to be provided for adequate fire protection services to the project area. The project will be subject to all FS1 fire safety overlay district standards and requirements and would also include a fire modification zone adjacent to National Forest Lands, as discussed in Response to Comment Nos. 4-1, 4-4 and 13-27.

13-30 Commentor refers to fuel modification zones and associated permit requirements. Please refer to Response to Comment No. 4-1, which addresses this concern.

13-31 Please refer to Response to Comment No. 4-4. The recommended mitigation measures regarding fire protection services have been updated to reflect the FS1 standards and requirements, as well as to identify plans for implementation and enforcement.

13-32 According to the CEQA Guidelines, impacts regarding "hazards and hazardous materials" must analyze whether the project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project would have access from State Route 38, which is the primary roadway serving all of the Big Bear Lake area. The traffic analysis has recommended mitigation measures to reduce all traffic-related impacts, including safety hazards and emergency access, to less than significant levels. Refer to Mitigation Measure Nos. 5.5-4a to 5.5-4g.

Additionally, should a fire occur to the east or west of the project, emergency access and/or evacuation routes would be provided from two directions to/from the site via State Route 38. Since State Route 38 provides two ways of reaching any point within the site, emergency access is determined to be adequate. Similarly, State Route 38 would provide two directions to evacuate the site. Local, State and/or Federal authorities would be responsible for conducting evacuation planning and timing in the event of a fire. It is the responsibility of residences to comply with evacuation timing and directions from local, State and/or Federal authorities should a fire occur in the project area. The development of the project site with the proposed residential uses would not result in changes to evacuation routes in the project area. Thus, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

13-33 As the project proposes 92 residences and a marina facility, medical aide calls to the Fire Department would increase beyond existing conditions. However, the increase in medical aide calls would not result require modifications to existing fire facilities, including Station 49. Thus, the project would not result in substantial adverse physical impacts associated with the provision of new or altered governmental facilities in regards to an increase in medical aide calls to the Fire Department.

13-34 Commentor refers to the urban/forest interface and the increased fire risk associated with the Project. Please refer to Response to Comment Nos. 4-1, 4-4, and 13-27, which addresses these concerns.

13-35 Future on-site uses, including fuel use and storage at the proposed marina, would be required to comply with all requirements of the San Bernardino County Fire Department Hazardous Materials Division for the storage and use of any hazardous materials utilized at a specific facility. Therefore, compliance with all permitting requirements and regulations set forth by local, State and Federal regulatory agencies would ensure that the project would not create a significant hazard to the public or the environment from associated fire risks.

13-36 The Commentor has stated that the EIR lacks analysis of whether fire insurance would be available with implementation of the proposed project. It is beyond the scope of the EIR to assess fire insurance coverage provided by private companies to

residences in the project vicinity. The County will consider the Commentor's opinion and comments during their deliberation on the project.

13-37 The County will consider the Commentor's opinion and comments during their deliberation on the project.

13-38 The Community of Fawnskin is located within the jurisdiction of the Big Bear Sheriff's Station. According to the Big Bear Sheriff's Station, the average response time to emergency type calls is 6.97 minutes within their jurisdiction, which includes the Community of Fawnskin. The average response time for all unincorporated areas is 28.59 minutes. Response times would be similar year around as police staffing would increase to correspond with increased visitors during peak weekend and holiday periods.

Page 5.3-2 of the Draft EIR, Paragraph 3 has been revised in the Final EIR as follows:

> The Big Bear Sheriff's Station provides police protection services to a population of approximately 15,800 persons in the unincorporated San Bernardino County areas of Big Bear Valley. The Community of Fawnskin is located within the jurisdiction of the Big Bear Sheriff's Station. The average response time for emergency calls ~~to the unincorporated county area~~ within the jurisdiction of the Big Bear Sheriff's Station is 6.97 minutes. The response times may vary, plus or minus, depending on the number of service calls received. According to the Sheriff's Crimes Analysis Unit, between January 1, 2000 and January 1, 2001, the Sheriff's Department handled 9,028 calls for service in the unincorporated area of Big Bear Valley.[1]

13-39 The project area would be served by the Big Bear Sheriff's Station, which serves an unincorporated population of approximately 16,000. The project would increase the population of Fawnskin by approximately 212 persons, which is an approximately 0.01 percent increase over the unincorporated population. Although police protection services would need to be nominally increased as a result of the project, it is anticipated that project implementation would not require any new police facilities or the alteration of existing facilities to maintain acceptable performance objectives. The project's increase in demand for police services would be offset through project related fees and taxes.

13-40 As stated in Response to Comment No. 13-39, the project would result in a nominal increase in service calls (emergency or non-emergency) to the project area. Similar to the increase in emergency type calls, any impact created by non-emergency calls would be offset through project related fees and taxes.

13-41 The County will consider the Commentor's opinion and comments during their deliberation on the project.

13-42 The EIR is correct to conclude that the project is not subject to SB221 reporting requirements. Additional text has been added to the Final EIR to clarify that based

upon the definition of a public water system being at least 3,000 connections; project implementation would not trigger the SB221 reporting requirements.

Page 5.3-8 of the Draft EIR, the second bullet point has been revised in the Final EIR as follows:

- Any proposed development that increases connections by 10 percent or more, if the PWS has fewer than 5,000 connections. Water Code 10912(7)(C) states that a "public water system" is defined as a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections.

Page 5.3-18 of the Draft EIR, the second bullet point and proceeding text have been revised and text has been added in the Final EIR as follows:

- Any proposed development that increases connections by 10 percent or more, if the PWS has fewer than 5,000 connections. Water Code 10912(7)(C) states that a "public water system" is defined as a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections.

Based on the "Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001" the following excerpt shows that 300 dwelling units are necessary to qualify as a "subdivision," and therefore be subject to SB 221.

> *"Code 66473.7(a) provides that a "subdivision" for a public water system with fewer than 5,000 service connections is a proposed development that would increase the number of service connection for a public water system by 10% or more, a "subdivision" could be as few as 300 dwelling units. For example, a water utility that has 3,000 service connections would experience an increase in the number of service connections by 10% if it were required to serve a proposed residential development with 300 units, thus making the 300-unit development a "subdivision" under 221."*

As stated above, Water Code 10912(7)(C) states that a "public water system" is defined as a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections. Therefore, if Fawnskin has only 673 connections it does not qualify as a "public water system," but rather a piece of a larger "overall system." Whether the project is under the jurisdiction of the DWP or the County Special Districts Department, each of these agencies "overall system" has more than 3,000 connections qualifying them as public water systems. Thus, the proposed 92 dwelling units would not exceed 10 percent of the 3,000 connections or 300 dwelling unit minimum dwelling unit threshold to be subject to SB 221 reporting requirements.

~~The proposed meets neither of the above scenarios.~~

13-43 The EIR concludes that based on the data available at the time of preparation of the Draft EIR, impacts to groundwater resources are significant and unavoidable. Further analysis and testing is required to prove that groundwater resources are available to serve the project. The County will consider the Commentor's opinion and comments during their deliberation on the project.

13-44 The GSS 2000 Report concluded that groundwater quality in the Moon Camp area is generally of superior water quality. All concentrations were below maximum contaminant levels (MCLs), with the exception of iron with a concentration of 0.69 mg/L. All potential water resources, including any wells utilized as a water resource for the proposed project, would be subject to all applicable local, State and/or Federal groundwater quality standards, which include potential for mineral contamination. Thus, analysis of any potential water resources would be required to verify compliance with all applicable water quality standards. Additionally, Mitigation Measures 5.3-6a and 5.3-6b have been modified to ensure groundwater water quality from existing wells meet all applicable groundwater standards.

The following paragraph, to be added below Paragraph 3 on Page 5.11-23 of the Draft EIR, will be included in the Final EIR:

GROUNDWATER QUALITY

As stated in the Existing Conditions section above, groundwater samples collected from Well FP-2 located on the southern portion of the Moon Camp site in 1987 were submitted for a full Title 22 analysis. The chemical analysis indicated that the groundwater quality in the Moon Camp area is generally of superior water quality, with the exception of iron concentration. Thus, if existing on-site wells are utilized for obtaining water resources for the proposed project, mitigation measures have been recommended to ensure that the wells are in acceptable operating condition and that groundwater does not exceed the maximum contaminant level (MCL) for iron concentrations (refer to Mitigation Measures 5.3-6a and 5.3-6b). However, it also acknowledged that all potential water resources, including the above referenced wells, for the proposed project would be subject to all applicable local, State and/or Federal groundwater quality standards.

Page 5.3-23 of the Draft EIR, Mitigation Measures 5.3-6b and 5.3-6c have been revised and text has been added in the Final EIR as follows:

5.3-6b If either or both of the two existing on-site wells are utilized as a water source for the project, ~~T~~the Project Applicant shall equip the~~two existing on-site~~ wells to meet DWP and/or County Special Districts Department standards and dedicate these facilities and water rights to the appropriate water purveyor~~County of San Bernardino~~. Within the proposed tract, no individual private irrigation wells shall be permitted.

5.3-6c ~~If served by CSA 53-C through a contract with the City of Big Bear Lake Department of Water and Power, t~~ After a determination has been

made regarding the water purveyor, the Project Applicant shall advance fair-share funds ~~or enter into a reimbursement agreement with the~~ to the appropriate water agency (CSA and/or DWP)~~(if required)~~ towards constructing a new reservoir and pipeline improvement at Cline-Miller Reservoir (with an estimated project cost at $481,100). These facilities would be dedicated to the appropriate water agency.

13-45 The County will consider the Commentor's opinion and comments during their deliberation on the project.

13-46 Water utilized for construction activities is considered a short-term impact and would cease upon project completion. However, since no water resources are currently available to the project site, water utilized during construction activities would need to be provided by the Project Applicant and/or Contractor. Proof of availability of water resources for construction activities would be provided by the Project Applicant and/or Contractor prior to grading activities associated with the project.

13-47 A Homeowners Association would enforce Mitigation Measure 5.3-6d. The water conservation measures in Mitigation Measure 5.3-6d were developed in consultation with the County of San Bernardino during the preparation of the Draft EIR. The water conservation measures are the minimum measures that shall be complied with in conjunction with domestic water supply to the project. Additional water conservation measures may be imposed as a result of a contract for water supply between CSA 53-C and/or the City of Big Bear Lake DWP. The County will consider the Commentor's opinion and comments during their deliberation on the project.

Also, refer to Response to Comment No. 4-2.

13-48 As shown in Response to Comment No. 1-3, the Final EIR text will include a discussion of water withdrawn from private wells for both the North Shore and Grout Creek Hydrologic Subunits. Pumping data for the 20 private wells in the North Shore Hydrologic Subunit was not available. However, assuming that they are domestic sources and that an average single family home uses approximately 200 gallons per day per year (gpd/yr), it is estimated that production from these wells is approximately 4.5 acre-ft/yr. Similarly, pumping data for the 29 private wells in the Grout Creek Hydrologic Subunit was not available. However, based upon the consumption factor, stated above, it is estimated that production from these wells is approximately 6.5 acre-feet per year. Although water withdrawn from private wells only comprises approximately 11 acre-feet per year in both of the subunits combined, it has been concluded that the North Shore Hydrologic Subunit is likely in a state of overdraft and further analysis and testing is required to prove that water resources are available to serve the project.

Also, refer to Response to Comment No. 1-3.

13-49 An increased demand for electrical service would occur at the project site as a result of the proposed development. According to Bear Valley Electric Service (BVES), it is anticipated that there would be a substantial loading increase upon build-out of the proposed project. However, BVES has indicated that electric service could be

provided with construction of new facilities. BVES would consider several alternatives to provide electricity to the site. One alternative would be to connect to existing power lines. Another alternative would be to investigate a distributed generation option. Distributed generation involves placing a power source (i.e., reciprocating engine that uses natural gas to power generator) on the site that would generate power on an as needed basis, such as during peak load times (i.e., winter, holiday weekends, etc.). As it is unknown whether a distributed generation will be considered as a feasible option by the BVES, the environmental impacts for the distributed generation option are appropriately not considered in this analysis. However, if the distributed generation option were considered by the BVES, future environmental documentation in accordance with the CEQA would be required, as necessary. In any case, the Project Applicant would be required to pay all costs/fees for the expansion of existing facilities and/or construction of new facilities to maintain the existing level of service to existing BVEC customers, while adding new load to the system.

13-50 Commentor refers to the potential impacts as a result of constructing an alternative electrical power source on the project site. Please refer to Response to Comment No. 13-49, which addresses these concerns.

13-51 The County will consider the Commentor's opinion during their deliberation on the project.

13-52 Section 5.4, *Aesthetics*, states that the proposed project would be required to comply with the glare and outdoor lighting provisions of the County of San Bernardino Development Code (i.e., Section 87.0921 et. seq.). The County of San Bernardino would assure compliance with the Development Code during the plan review process.

13-53 The County will consider the Commentor's opinion during their deliberation on the project.

13-54 The view simulations present an anticipated development scenario, thus, they are not representative of architectural design and final development plans for the placement of new residences. Although the architectural style may not be precisely representative of the final development plans, the visual simulations do illustrate the density of the proposed residential uses. The visual simulations are intended to illustrate the change in visual character of the site and the effects to scenic corridors/vistas. Utilizing the visual simulations, it has been concluded that due to the siting and density of the proposed residential uses, significant and unavoidable impacts related to "aesthetics/light and glare" would occur as a result of viewshed alterations involving existing residents to the north, east and west of the project site. Additionally, significant and unavoidable impacts have been identified for views from State Route 38, a scenic highway, to the south and from the south shore of Big Bear Lake.

13-55 The visual simulations include existing vegetation as well as anticipated ornamental landscaping. Comparing the existing versus the simulated views, the largest trees are the existing Jeffrey pine trees. The simulated views do not add large, mature Jeffrey pine trees to the views. Although ornamental landscaping would vary

between each proposed residence, it is likely that the ornamental landscaping would be fast growing vegetation and/or planted in a mature stage of growth. As stated in Response to Comment No. 13-54, the view simulations were utilized as an analytical tool to assess impacts associated with the change in visual character of the site and effects to scenic corridors/vistas. Although the ornamental landscaping may vary from the view simulations upon the initial completion of the project, the conclusion of significance of impacts will not change as a result of modifying the maturity of the ornamental vegetation in the simulated views.

13-56 Visual impacts to the lake associated with the marina facility are discussed in Impact Statement 5.4-2, *Long-Term Aesthetic Impacts*. "Views from west" of the project site acknowledges that the proposed marina facility would alter the visual character of the Lake by introducing a man-made structure on the lakefront and removal of several trees for parking facilities. Views from the west have been concluded as significant and unavoidable. The marina facility would also be visible from south of the project site. "Views from the south" of the project site have also been identified as significant and unavoidable. The EIR text has been revised to reflect that the marina facility would contribute to the significant and unavoidable long-term aesthetic impact for views from south of the project site.

Page 5.4-24, Paragraph 1 of the Draft EIR, has been revised in the Final EIR as follows:

> Views from the South. Views across the Lake from the south shore and the Lake itself to the north shore consist primarily of mountainsides covered in dense forest vegetation, with small areas of sporadic developed areas, such as the Community of Fawnskin. As shown in Exhibit 5.4-3, *Plan View*, the majority of the existing Jeffrey pine trees located between the high-water line of the Lake and immediately adjacent to or on the southern boundary of the project would remain. The lakefront residences, and residences to the north, would be partially screened by the existing trees when viewed from the south. The potential size and massing of residential buildings and change in visual character of the lake from the proposed marina facility (marina facility discussed in "views from west") would constitute a significant and unavoidable impact for views across the lake, from the south shore, and the lake itself to the north.

13-57 Boat storage would be the responsibility of the individual boat owner. It is unknown whether boats would be stored at an individual residence or a designated boat storage facility. Should boats be stored at an individual residence(s), the conclusion of significant and unavoidable impacts associated with the change in visual character of the site would not change.

13-58 Growth is very closely related to the economic cycle. As such, in times of a "good" economy, growth accelerates; and in a "poor" economy, growth contracts. Therefore, as the economy undergoes fluctuations that can be described as "good" and "poor" economies over time, it has been concluded that a 10-year time period is a reasonable approach to establish an annual growth rate. Also, refer to Response to Comment No. 13-2.

13-59 The weekday A.M. and P.M. peak hours in the mountains can be expected to occur between 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., respectively.

13-60 Although the mountains are subject to wet weather conditions, the standard practice for preparing a traffic impact analysis is to use dry weather conditions.

13-61 Legally, there needs to be a nexus between fees paid and a traffic-related impact. A developer cannot be required to solve existing problems, particularly when a project has an insignificant traffic impact as with the proposed project. Thus, a developer is required to pay only a pro-rata share of future traffic growth toward an improvement. Also, refer to Response to Comment No. 26-13.

13-62 The County will consider the Commentor's opinion during their deliberation on the project.

13-63 There is no justification that the proposed straightening of State Route 38 within the project vicinity will materially affect existing traffic patterns. The entire stretch of State Route 38 along the north shore of Big Bear Lake consists of many curves and it is anticipated that the proposed straightening will make little difference in choice of route. The County will consider the Commentor's opinion during their deliberation on the project.

13-64 The traffic analysis was prepared in accordance with prescribed San Bernardino County Congestion Management Program procedures. This methodology is typical for an EIR level analysis of traffic-related impacts.

13-65 The proposed improvements (i.e., straightening) to State Route 38 would be designed in accordance with all applicable design standards regarding traffic flow and safety. This would include appropriate signage to identify maximum speed limits and any potential roadway hazards. Compliance with all applicable Caltrans design standards and regulations would that potential hazards due to a design feature are reduced to less than significant levels.

13-66 The County will consider the Commentor's opinion during their deliberation on the project.

13-67 Commentor refers to the modeling process used to analyze air quality impacts associated with the Project. Please refer to Response to Comment No. 19-3, which addresses this concern.

13-68 Commentor refers to the lack of analysis of SO_x, lead and toxic air contaminates in the Draft EIR. Please refer to Response to Comment No. 19-4, which addresses this concern.

13-69 Commentor refers to potential air quality impacts associated with wood smoke emissions from wood stoves and fireplaces. Please refer to Response to Comment No. 19-6, which addresses this concern.

13-70 Commentor refers to potential impacts associated with visibility reducing particles. Please refer to Response to Comment No. 19-7, which addresses this concern.

13-71 Commentor refers to potential air quality impacts to health as a result of implementing the Project. Please refer to Response to Comment No. 19-8, which addresses this concern.

13-72 Commentor refers to air quality impacts to the mortality rate as a result of project implementation. Please refer to Response to Comment No. 19-9, which addresses this concern.

13-73 Commentor refers to air quality impacts associated with toxic air contaminates. Please refer to Response to Comment No. 19-10, which addresses this concern.

13-74 Commentor refers to practicality of enforcing mitigation requiring EPA certified fireplaces. Please refer to Response to Comment No. 19-13, which addresses this concern.

13-75 Commentor refers to hydrocarbon emissions from watercraft and affects to air quality. Please refer to Response to Comment No. 19-14, which addresses this concern.

13-76 The EIR discusses the possible use of distributed generation to support peak electrical demand for the project. Distributed generation involves placing a power source (i.e., reciprocating engine that uses natural gas to power generator) on the site that would generate power on an as needed basis, such as during peak load times (i.e., winter, holiday weekends, etc.). The distributed generator would be owned by the Project Applicant and/or BVES, depending on future agreements between the Applicant and BVES. Distributed generation is discussed as an alternative only, and will be investigated further by the BVES. Should this alternative become necessary, the Applicant will have to seek out permits from the SCAQMD for siting a stationary source. Should any adverse environmental effects arise during the permitting stage, mitigation measures would be adopted as a condition of approval for any such stationary sources. Also, refer to Response to Comment No. 13-49.

13-77 The County will consider the Commentor's opinion during their deliberation on the project.

13-78 Information within Section 5.7, *Noise*, was based on the most current and up-to-date information available. The Noise section was based on the *Traffic Analysis Report*, prepared by Kunzman Associates in September 2003. Trip generation rates utilized within the Traffic Report were from the *Institute of Transportation Engineers 6th Edition Trip Generation Rates, 1997.* Traffic volumes were obtained from the weekday peak hour intersection turning movement counts conducted by Kunzman Associates in March 2001. In addition, the noise analysis was conducted in accordance with the *Noise Guidelines* provided by the United States Department of Housing and Urban Development, prepared by the Environmental Planning Division of the Office of Environment and Energy. Traffic noise modeling was performed using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108), which is the current recommended model by the California department of Transportation, Federal Highways Administration and Federal Transit Administration.

13-79 In general, in an ambient outdoor noise environment, a 3-dBA change in sound pressure levels is considered a "just detectable" difference in most situations. In a laboratory-controlled environment, a 1-dBA change in sound pressure level is detectable. Per standard acoustical practices, a 10-dBA change is considered a doubling (or halving) of the subject loudness. In terms of human response to noise, a sound must be 10 dBA or higher to have a doubling effect.[1]

13-80 Sound from a small localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates or drops-off at a rate of 6 dBA for each doubling of the distance (6 dBA/DD). This decrease, due to the geometric spreading of the energy over an ever-increasing area, is referred to as the *inverse square law*. However, highway traffic noise is not a single, stationary point source of sound and would not produce a funneling effect of noise. The movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. This would result in a cylindrical spreading rather than the spherical spreading of a stationary point source. The change in surface area of a cylinder only increases by two times for each doubling of the radius compared to four times which is associated with spheres. The change in sound level is 3 dBA per doubling of distance (3 dBA/DD). The FHWA RD-77-108 program utilized in the analysis determined that noise from the highway would increase less than 1 dBA at a distance of 100 feet from the roadway centerline with future (Year 2006) project implementation. Additionally, refer to Response to Comment 13-82.

13-81 On page 5.7-4 of the Draft EIR, the discussion provided information regarding noise sensitive receptors within the project area and not sensors measuring sound pressure levels (SPL). According to the *General Plan Guidelines,* provided by the Office of Planning and Research, sensitive receptors include schools, hospitals, rest homes, long-term medical and mental care facilities and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours. Section 5.7, *Noise*, indicated sensitive receptors located within a one-mile radius of the project site.

13-82 Table 5.7-2, *Land Use Compatibility for Community Noise Environments*, does not take into account noise resulting from construction. Under the County of San Bernardino Development Code, construction activities are exempt from adhering to County noise/vibration standards as long as construction is limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday and prohibited on Sundays and Federal Holidays.

13-83 The noise model predicted vehicular noise in a perpendicular pattern from the roadway. Receptors located above roadways would potentially experience levels at or below the predicted noise values since a drop off effect would occur through atmospheric attenuation. In addition, the modeling for future scenarios predicted a less than 1 dBA increase in ambient noise levels for project related traffic noise. Additionally, refer to Response to Comment No. 13-80.

13-84 Please refer to Response to Comment Nos. 13-2 and 13-58 to 65. The County will consider the Commentor's opinion during their deliberation on the project.

[1] Cyril M. Harris, *Handbook of Noise Control,* 1979.

13-85 The Commentor's general comments are noted and will be considered by the County of San Bernardino. The statements used in the Draft EIR for gauging the significance of noise are based on widely accepted methodology and County Standards. These standards are considered appropriate, and even conservative.

13-86 The impact analysis within Section 5.8, *Biological Resources*, assumes removal of all vegetation types within the project site boundary. Table 5.8-4, *Vegetation Types Impacted*, states that 54.91 acres of Jeffrey pine forest would be impacted by project implementation. This acreage includes areas impacted by highway, road, residential unit construction, and fuel modification zones. Analysis of the impact of removing vegetation types, including Jeffrey pine forest, is also included in the second paragraph on page 5.8-53 of the Draft EIR. The impact to Jeffrey pine forest on the project was considered less than significant given that approximately 58,526 acres of Jeffrey pine forest presently exists in the San Bernardino National Forest and removal of 54.91 acres would not substantially reduce its range. However, impacts to individual trees used by bald eagles as perch or roosting trees were determined to be significant and unavoidable.

13-87 Comment noted. The analysis has been updated to acknowledge the osprey.

The following paragraph, to be added below Paragraph 3 on Page 5.8-39 Draft EIR, will be included in the Final EIR:

> Osprey (*Pandion haliaetus*). The osprey is a California Species of Special Concern. It is an uncommon winter visitor in southern California, but nesting has been documented at Lake Casitas near Ventura and Lake San Antonio in Monterey County (Garrett and Dunn 1981) and may occur elsewhere. The osprey would be expected to occur on the project site during spring migration or post-breeding wandering. The Project site provides roosting and foraging habitat for the osprey, but no potentially suitable nesting habitat. Therefore, its potential to occur on the Project site is considered to be low for foraging only.

Page 5.8-51 of the Draft EIR, Paragraph 4 has been revised and text has been added in the Final EIR as follows:

> Cooper's Hawk, Northern Goshawk, Sharp-shinned Hawk, Golden Eagle, Long-eared Owl, Ferruginous Hawk, Northern Harrier, White-tailed Kite, Merlin, American Peregrine Falcon, Osprey, Prairie Falcon, and California Spotted Owl. Project implementation would reduce the amount of foraging habitat for these species. This impact would contribute to the cumulative loss of foraging habitat for these raptor species. However, the loss of potential foraging habitat for these species would be considered adverse, but less than significant due to the limited amount of habitat loss relative to the availability of foraging habitat for these species in the San Bernardino Mountains and National Forest.

13-88 The EIR provides mitigation to reduce impacts to the bald eagle; however, it also maintains that impacts to the bald eagle cannot be reduced to a level considered less than significant with project implementation. No available mitigation measures could be identified that would reduce impacts to a level considered less than significant. The Draft EIR text has been revised to reflect that cumulative impacts to the wintering bald eagle population are concluded to be significant and unavoidable.

Page 5.8-62 of the Draft EIR, the Cumulative impact discussion has been revised and text has been added in the Final EIR as follows:

CUMULATIVE

5.8-6 *Cumulative development in the Project area may impact the area's biological resources. Analysis has concluded that ~~with implementation of the specified mitigation and compliance with all applicable County, State and Federal regulations concerning biological resources, a loss than significant impact would occur in this regard.~~project implementation incrementally adding to impacts on bald eagle habitat in the Big Bear Valley would result in a significant and unavoidable cumulative impact to the wintering bald eagle population on Big Bear Lake.*

The proposed project contains some of the most utilized bald eagle roosting and perching habitat in the Big Bear Valley. Construction of the proposed project would diminish the habitat value of the project site for the species. When viewed in conjunction with other past, present, and reasonably foreseeable developments planned for the Fawnskin/Big Bear Lake area, the loss of bald eagle perch and roosting trees on the project site would significantly impact bald eagle habitat on the north shore of Big Bear Lake. Thus, cumulative impacts to the bald eagle are considered significant. Mitigation measures reflective of recommendations developed by scientific studies in the Big Bear Valley, including Kimball Garrett's study on the effects of human activity on wintering bald eagles (1981), are provided as part of the proposed project. However, implementation of these mitigation measures would not reduce direct or cumulative impacts to bald eagle habitat to a level considered less than significant.

~~t~~The loss of Jeffrey pine forest, pebble plain habitat and other native vegetation, as well as the loss of wildlife habitat could be considered a negative cumulative effect. However, with implementation of the recommended mitigation measures cumulative impacts to the Jeffrey pine trees would be mitigated to a less than significant level. ~~The proposed project would impact 0.69 acres of pepple plain habitat, however, implementation of the recommended mitigation measures would ensure that impacts would be reduced to less than significant levels.~~Additionally, implementation of the recommended mitigation measures would reduce impacts to 0.69 acre of pebble plain habitat to a less than significant level.

Potential impacts would be site specific and an evaluation of potential impacts would be conducted on a project-by-project basis. This would be especially true of those developments located in areas that contain sensitive species and habitat.

Each incremental development would be required to comply with all applicable County, State and Federal regulations concerning the preservation of biological resources. ~~In consideration of these regulations,~~ However, potential cumulative impacts upon ~~biological resources~~ wintering bald eagle populations would ~~not~~ be considered significant and unavoidable.

13-89 Commentor refers to removal of trees in the fuel modification zone and affects to biological resources. Please refer to Response to Comment No. 13-86, which addresses this concern.

13-90 The EIR indicates on page 5.8-49 that botanical surveys were conducted during a very low rainfall year and were inconclusive as to the presence or absence of most special status species plants with potential to occur. Additionally, the EIR states that surveys during a normal rainfall year would be required to make a determination as to the presence or absence of the species listed on page 5.8-49. Mitigation Measure 5.8-1a has been provided to ensure that a proper accounting of onsite botanical resources is completed and potential impacts are appropriately mitigated. Please also refer to Response to Comment No. 3-5.

13-91 The EIR addressed impacts to wildlife movement on page 5.8-60 and determined that impacts would be considered less than significant given that the site is not a regionally important wildlife movement corridor.

13-92 The proposed project may not proceed until implementation of Mitigation Measure 5.8-1a. The conservation easement must be purchased, the management entity approved by the California Department of Fish and Game (CDFG), and a non-wasting endowment established for the monitoring and management of the preservation site by the management entity in perpetuity prior to the initiation of clearing or grading activities on the project site. Refer to Response to Comment Nos. 3-5 and 13-86.

13-93 Commentor refers to the acreage assessment of pebble plain habitat. Please refer to Response to Comment No. 6-1, which addresses this concern.

13-94 Commentor refers to the recommended mitigation measures for impacts to pebble plain habitat. Please refer to Response to Comment Nos. 3-5, 13-86 and 13-92, which address this concern.

13-95 Mitigation Measures 5.8-1b and 5.8-1c apply to "any development that may occur within the project site," which includes road cutting and other structural changes required for the proposed project, including fuel modification. However, project-related and cumulative impacts to the bald eagle are identified as significant and unavoidable, even with implementation of the proposed mitigation. This conclusion takes into account the loss of trees for roosting and perching.

13-96 Commentor refers to impacts associated with tree removal and to the bald eagle. Please refer to Response to Comment No. 13-95, which addresses these concerns.

13-97 The Commentor is correct that Mr. Magorien has highlighted several deficiencies in the available data to indicate the presence of available water resources to serve the project. Since the available data regarding water resources at time of preparation of the EIR did not adequately prove that a reliable water resource exists to serve the project, impacts to groundwater resources have been identified as significant and unavoidable. The deficiencies highlighted by Mr. Magorien will need to be further analyzed and resolved; and a proven water resource will need to be identified to conclude that impacts to groundwater resources are reduced to a less than significant level.

13-98 The Commentor states that the EIR fails to acknowledge the conclusion in the 2003 GSS report that drought conditions will have a significant impact on groundwater levels in the North Shore and Grout Creek Hydrologic Subunits. This statement and the associated discussion in the 2003 GSS report are discussed on Page 5.11-22, Paragraph 1, of the Draft EIR. Based on the analyses presented in the 2003 GSS report, the following have been concluded regarding the maximum perennial yield of the North Shore Hydrologic Subunit:

- The North Shore Hydrologic Subunit can be conveniently subdivided into six tributary subareas (A through F) based on surface water drainage divides.
- The revised range of average annual ground water recharge for the North Shore hydrologic Subunit as a whole is approximately 150 to 430 acre-ft/yr with a midpoint of approximately 290 acre-ft/yr.
- The midpoint of the estimated range of average annual ground water recharge (290 acre-ft/yr) is considered a good estimate of maximum perennial yield for the North Shore Hydrologic Subunit, given the available data. The midpoint of the range is approximately 4.5 percent of precipitation for the subunit which is within the range of accepted recharge estimates for other ground water basins in southern California (three to seven percent; Metropolitan Water District of Southern California (MWD), 1999; Daniel B. Stevens, 1996).
- The revised perennial yield of 290 acre-ft/yr is slightly higher than the previous perennial yield value of 260 acre-ft/yr from the GEOSCIENCE, 2001 report, primarily as a result of the use of an updated EPA input parameter list for the watershed model and the consideration of the bedrock aquifer as a viable source of ground water supply.
- The maximum perennial yield for individual tributary subareas within the North Shore Subunit range from 27 acre-ft/yr (Subarea E) to 73 acre-ft/yr (Subarea B).
- Additional ground water monitoring and geohydrologic data collection are required in each individual subarea to manage the ground water resources in the area as it is developed in the future.

The results of the ground water recharge analysis for the Grout Creek Subunit are as follows:

Summary of Ground Water Recharge Results
Grout Creek Tributary Subareas

Tributary Subarea	Area (acres)	Annual Precipitation (inches)	Average annual Ground Water Recharge - Low Estimate (acre-ft/yr)	Average Annual Ground Water Recharge – High Estimate (acre-ft/yr)	Average of Ground Water Recharge Estimate Range (acre-ft/yr)
A	1,074	33.44	74	249	161
B	850	29.01	50	160	105
C	1,668	29.93	104	331	217
D	592	26.74	32	99	66

For the Grout Creek Hydrologic Subunit, the following is concluded:

- The Grout Creek Hydrologic Subunit can be conveniently subdivided into four tributary subareas (A through D) based on surface water drainage divides.
- The revised range of average annual recharge for the Grout Creek Hydrologic Subunit as a whole (Tributary Subareas A through D) is approximately 260 to 840 acre-ft/yr with a midpoint of approximately 550 acre-ft/yr. However, ground water resources in Subareas A and B of the Grout Creek Subunit are not currently practical to develop because they are remote and are located on land under the jurisdiction of the USFS.
- Due to the cost and political limitations associated with ground water development in Subareas A and B, it is currently recommended to use the sum of the midpoint recharge estimates for tributary Subareas C and D as the maximum perennial yield for the Grout Creek Subunit. This results in a maximum perennial yield for the Grout Creek Subunit of 283 acre-ft/yr.
- The revised perennial yield is higher than the previous perennial yield value of 200 acre-ft/yr from the GEOSCIENCE, 2001 report, primarily as a result of the use of an updated EPA input parameter list for the water shed model and the consideration of the bedrock aquifer as a viable source of ground water supply.
- The maximum perennial yield for individual tributary subareas within the Grout Creek Subunit range from 66 acre-ft/yr (Subarea D) to 217 acre-ft/yr (Subarea C).

Mitigation Measure 5.11-2 on Page 5.11-27 of the Draft EIR has been revised in the Final EIR as follows:

~~5.11-2 Based upon the technical analysis presented, a potential groundwater overdraft condition would occur and no additional mitigation measures have been identified.~~

5.11-2a Within three months of project approval, the Project Applicant shall submit a plan for a detailed geohydrologic investigation. The plan must present the possible sources of groundwater selected for the project and the methodology proposed to investigate those sources. If the on-site wells are to be utilized to serve this project, it must be determined if either could draw water from Big Bear Lake. The plan must be prepared by a California Registered Geologist.

5.11-2b Within six months of plan approval, the Project Applicant shall submit the results of the geohydrologic investigation. The report must be prepared by a California Registered Geologist.

5.11-2c Concurrently or within three months of approval by the geohydrologic report, the Project Applicant shall submit a groundwater monitoring plan in accordance with San Bernardino County's "Guidelines for Preparation of a Groundwater Monitoring Plan." The plan must be prepared by a California Registered Geologist.

13-99 Section 5.11, *Hydrology and Drainage*, discusses impacts associated with short- and long-term water quality. Overall, the project has the potential to violate water quality standards of the lake due to an increase in the level of activity on the project site. Without mitigation, the project would be expected to increase pollutant loadings, including hydrocarbons, fertilizers, and pesticides in the lake. However, the recommended mitigation that includes a comprehensive Water Quality Management Plan (WQMP) for Urban Runoff, including both Structural and Non-Structural BMPs, to comply with the requirements made by the Santa Ana Regional Water Quality Control Board, would reduce potential water quality impacts to the lake to a less than significant level.

13-100 The Commentor is correct that the Initial Study prepared for the project indicated that no impact to groundwater resources would occur as a result of project implementation. This conclusion was based upon available data (which was limited) at the time of preparation of the Initial Study (2001). Since that time, wells in the project vicinity have been considered as an option to supply the project with water. Thus, the EIR appropriately analyzes the potential impacts to groundwater resources in the North Shore and Grout Creek Hydrologic Subunits. The analysis concludes that significant and unavoidable impacts would occur to groundwater resources in the North Shore and Grout Creek Hydrologic Subunits, since no proven source of water supply has been provided in the technical analysis provided by the Project Applicant.

13-101 The EIR text has been revised to clarify that according to data from the 2000 GSS report, groundwater quality from Well FP-2 is "generally" of superior water quality. All concentrations were below maximum contaminant levels (MCLs), with the exception of iron with a concentration of 0.69 mg/L.

The following paragraph, to be added below Table 5.11-3 on Page 5.11-8 of the Draft EIR, will be included in the Final EIR:

GROUNDWATER QUALITY

According to the GSS 2000 Report, groundwater samples collected from Well FP-2 located on the southern portion of the Moon Camp site in 1987 was submitted for a full Title 22 analysis. The chemical analysis indicated that the groundwater quality in the Moon Camp area is calcium bicarbonate and is generally of superior water quality as all concentrations were below maximum contaminant levels (MCLs), with the exception of iron with a concentration of 0.69 mg/L. The MCL for iron is 0.3 mg/L. However, the iron concentration of Well-FP-3 (located approximately 800 feet to the northeast of Well FP-2) was only 0.06 mg/L, which suggest that iron concentrations are possibly lower elsewhere.

13-102 The County will consider the Commentor's opinion during their deliberation on the project.

13-103 The County will consider the Commentor's opinion during their deliberation on the project.

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BIG BEAR GROUP

May 16, 2004

Matthew W. Slowik
Land Use Services Department
Planning Division
385 N. Arrowhead Ave., First Floor
San Bernardino, CA 92415-0182

RE: DRAFT EIR FOR THE MOON CAMP DEVELOPMENT PROJECT/RCK PROPERTIESS INC. GENERAL PLAN AMENDMENT/OFFICIAL LAND USE DISTRICT CHANGE FROM BV/RL-40 TO BVRS-7200 AND AMENDMENT TO COUNTY CIRCULATION ELEMENT FOR REALIGNMENT OF NORTH SHORE DRIVE; TENTATIVE TRACT MAP #1636, AND CONDITIONAL USE PERMIT FOR A BOAT DOCK.

Dear Mr. Slowick,

The Sierra Club , Big Bear Group, appreciates the opportunity to comment on the DEIR referred to above. The following are a just a few of the objections we have to the proposed project.

First and foremost, under "Land Use Element", section LU-2, (a), this project does not ensure compatibility with adjacent land uses and community character. The community of Fawnskin has no projects resembling anything of this size. The adjacent land is Forest Service single family lots and homes. The changing of zoning from R40 would alter the atmosphere of the whole community adversely. 14-1

Section 5.3-9 lists the alternative of a distributed generation option. This would require additional construction, and does not address the fact that such an option would create noise pollution as well as air pollution and be disruptive to neighbors and wildlife. 14-2

Section 5.3-10 states "The inability of water providers to confirm service on a project level would also result in significant and unavoidable cumulative impacts." This is a 14-3

problem that can't be solved or mitigated and should be reason enough for rejection of the project as proposed. 14-3

The conclusion in Section 5.4-2 is correct and good reason why the project should not be approved as proposed. 14-4

Section 5.8 has too many omissions to document here, but my biggest concern is that it did not properly address the Bald Eagle population and its impacts and completely omitted the Osprey, which in recent years has been returning to the area. 14-5

In conclusion, we feel the EIR is inaccurate and incomplete. Thank you for allowing us to express my concerns.

Sincerely,

Ervin Nichols, Chairman,

Big Bear Sierra Club Group

Response to Commentor No. 14
Ervin Nichols, The Sierra Club
May 14, 2004

14-1 Commentor refers to the Project's consistency with the County General Plan. Please refer to Response to Comment No. 13-20, which addresses this concern.

14-2 Commentor refers to the potential impacts as a result of constructing an alternative electrical power source on the project site. Please refer to Response to Comment No. 13-49, which addresses these concerns.

14-3 The County will consider the Commentor's opinion during their deliberation on the project.

14-4 The County will consider the Commentor's opinion during their deliberation on the project.

14-5 Commentor refers to impacts to the bald eagle and osprey. Please refer to Response to Comment Nos. 3-7, 13-87 (osprey), 13-88, 13-95 and 41-14, which address these concerns. The County will consider the Commentor's opinion during their deliberation on the project.

BBSO
Big Bear Solar Observatory

New Jersey Institute
of Technology
A Public Research University

Big Bear Solar Observatory
40386 North Shore Lane
Big Bear City, CA 92314
FAX: 909-866-4240

May 17, 2004

County of San Bernardino
Land Use Services Department
Planning Division
385 N. Arrowhead Ave. First Floor
San Bernardino, California 92415-0182
Attn: Matthew Slowik, Sr. Associate Planner

Dear Mr. Slowik:

RE: DRAFT EIR FOR THE MOON CAMP DEVELOPMENT PROJECT/RCK PROPERTIES INC.: GENERAL PLAN AMENDMENT/OFFICIAL LAND USE DISTRICT CHANGE FROM BV/RL-40 TO BV/RS-7200 AND AMENDMENT TO COUNTY CIRCULATION ELEMENT FOR RE-ALIGNMENT OF NORTH SHORE DRIVE; TENTATIVE TRACT MAP #16136, AND CONDITIONAL USE PERMIT FOR A BOAT DOCK.

Thank you for the opportunity to review and comment on the draft EIR for the proposed Moon Camp project. The Big Bear Solar Observatory, operated by the New Jersey Institute of Technology, a public research university of the state of New Jersey, is one of the leading solar observatories in the world. We have serious concerns that a number of aspects of the proposed Moon Camp project may adversely affect our research programs. We are somewhat surprised that during the preparation of the DEIR we were not contacted for input. Specifically, our concerns include the following: 15-1

- Dust generated during construction. We are primarily concerned with generation of PM_{10} and $PM_{2.5}$. Although these particles do remain in the air for long distances from a source, they are most prevalent near the source. PM_{10} particles will increase scattered light in our telescopes by settling on exposed lenses and mirrors, while $PM_{2.5}$ particles contribute to scattering ("haze") in the atmosphere. We are concerned that the mitigation measures listed in section 5.6-1 of the DEIR may not be adequate. 15-2
- Dust generated by traffic after project completion. Our concerns are basically the same as during construction. 15-3

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- Smoke from wood stoves and fireplaces. Again, our concerns are mainly due to the increased levels of PM_{10} and $PM_{2.5}$ in the vicinity of the project. It should be noted that the winter inversion layers already tend to trap smoke from the city of Big Bear Lake, across the lake from the proposed project, in the mornings. Mornings are particularly important for our observations since the air is less turbulent at that time. 15-4

- Thermal convection from house roofs. This is not addressed by the DEIR. The major limitation to the resolution of ground-based telescopes is distortion caused by air turbulence. In the daytime, the largest contribution to this is the heating of the ground and other surfaces by the sun. The reduction of this turbulence by large bodies of water is the main reason why the Observatory is located in Big Bear Lake. In general, building roofs and asphalt and concrete paved areas are the worst sources of ground heating. Replacement of a large forested area near the Observatory by homes is likely to have detrimental effects on our ability to see detail on the sun. 15-5

- Light pollution and trespass. The Observatory also operates a long term program monitoring the earth's climate by measuring the earth's reflectance by observing the earthshine, that is, the light reflected from the earth to the moon and back. This project is primarily concerned with measuring the overall reflectivity of clouds in the earth's atmosphere. Cloud reflectivity is an important factor in determining the nature and extent of global warming.
  Light pollution and trespass from the proposed Moon Camp project may adversely affect our ability to continue this project. The mitigation measures in section 5.4-4 may not be sufficient to prevent interference with our observations. We would recommend that in addition to the measures in 5.4-4, the following measures should be added: All outdoor light fixtures should be cutoff luminaires, and should only use high-pressure or low-pressure sodium lamps. 15-6

We would like to point out that Big Bear Solar Observatory represents an important non-tourist related contribution to the economy of the Big Bear Valley. Degradation of observing conditions here could have long-term effects on the economy of this area.

Thank you again for allowing us to comment on this proposed project.

Sincerely,

Philip R. Goode
Director
Big Bear Solar Observatory

William H. Marquette
Site Director
Big Bear Solar Observatory

John R. Varsik
Assistant Research Professor
Big Bear Solar Observatory
New Jersey Institute of Technology

Response to Commentor No. 15
Phillip R. Goode, William H. Marquette, and John R. Varsik, Big Bear Solar Observatory (BBSO)
May 17, 2004

15-1 The County will consider the Commentor's opinion during their deliberation on the project.

15-2 Per Impact Statement 5.6-1 – *Short Term Air Quality Impacts*, the analysis states that the project shall comply with the South Coast Air Quality Management District Rule 403, *Fugitive Dust.* Article (d)(1) states that:

> *No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:*
>
> *(A) the dust remains visible in the atmosphere beyond the property line of the emission source; or*
> *(B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.*

Additionally, as the project site is in excess of 50 acres and construction would occur after January 2005, it must also comply with the Best Available Control Technology (BACT) measures outlined in Section 5 of Rule 403. Implementation of the above referenced measures during construction and operation would ensure that there would not be an abundance of particulate matter emitted beyond the property line. Therefore, particulate settlement beyond normal ambient conditions on the Big Bear Solar Observatory (BBSO) telescope lens is not anticipated.

15-3 Commentor refers to dust generated by traffic and affects to air quality. Please refer to Response to Comment No. 15-2, which addresses this concern.

15-4 Please refer to Response to Comment No. 15-2.

15-5 The enhanced greenhouse hypothesis indicates that thermal convection within a high altitude climate will manifest itself at higher minimum nocturnal and winter temperatures (effect on maxima is small to non-existent because pushing more energy into a warm air mass increases vibrational excitation, reduces air density to the point that overcomes earth's natural inversion layer and cooler, more-dense air above displaces less-dense warm air, convection takes over and, via a chaotic exchange, thermal energy is vented to space - i.e., hot air rises). However, to further reduce any adverse effects that may arise from thermal convection from roofs to homes, an additional mitigation measure has been proposed.

Page 5.4-29 of the Draft EIR, the following mitigation measure has been added in the Final EIR as follows:

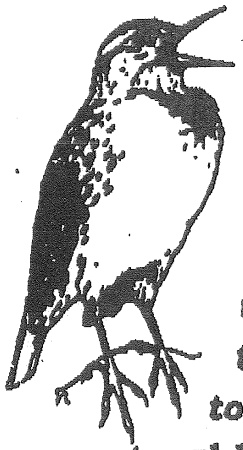
5.4-4g	The Project Applicant/Developer shall install light colored, reflective roof products. Such roofs shall utilize light colored, reflective materials that meet the performance standards developed by the Energy Star Labeled Roof Program, as well as the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Standards 90.1 and 90.2 on energy efficient buildings. This condition shall be verified by the County of San Bernardino Building and Safety Division prior to issuance of building permits.

15-6 The BBSO has recommended that all outdoor light fixtures should be cutoff luminaries and should only use high-pressure or low-pressure sodium lamps. The EIR has been modified to include this suggestion as a recommended mitigation measure to further reduce potential light and glare impacts associated with the proposed project. Also, refer to Response to Comment No. 13-52.

Page 5.4-29 of the Draft EIR, the following mitigation measure has been added in the Final EIR as follows:

5.4-4f	All outdoor light fixtures shall be cutoff luminaries and shall only use high- or low-pressure sodium lamps.

COMMENT NO. 16



to enjoy
to study
to protect
our natural heritage

San Bernardino Valley AUDUBON SOCIETY

P.O. Box 19973 San Bernardino, CA 92423

May 17, 2004

Matt Slowik, Senior Associate Planner
COUNTY OF SAN BERNARDINO
Land Use Services Department, Planning Division
385 N. Arrowhead Ave., First Floor
San Bernardino, CA 92415-0182

RE: Draft Environmental Impact Report for the MOON CAMP Development Project / RCK Properties Inc.; General Plan Amendment -Official Land Use District Change from BV/RL-40 to BV/RS-7200 and Amendment to County Circulation Element for Realignment of North Shore Drive; Tentative Tract Map #16136; and Conditional Use Permit for a Marina.

Dear Mr. Slowik,

The *San Bernardino Valley Audubon Society* appreciates the opportunity to comment on the Draft Environmental Impact Report referenced above for the Moon Camp Development Project and marina in Fawnskin plus the accompanying General Plan Amendment for increased density in land use designation and the proposed highway realignment.

The San Bernardino Valley Audubon Society represents approximately 2000 citizens living in the Inland Empire. Together with our members who actually reside in the mountains, all of us look to the San Bernardino National Forest as a monumental public asset, a one-of-a-kind forest sanctuary that offers refuge, recreation and spiritual renewal to anyone who wishes to enjoy its rare and valuable alpine qualities. When actions are proposed that threaten to sacrifice these advantages unnecessarily and unjustifiably, we feel an obligation to speak up on behalf of the general populace and against potential giveaways that primarily favor private gain at public expense.

We believe that the severity of adverse impacts resulting from the combined proposals of this project would be extremely detrimental to the community of Fawnskin, the Big Bear Valley, the San Bernardino National Forest and the general public. Given the present emergency crisis of severe fire hazard in the mountain region, overdraft of water resources, insupportable infrastructure, public safety risk from limited evacuation capability and excessive fragmentation of wildlife and National Forest resources, this project deserves to be denied so that a clear message is registered that important public values will not be compromised in the County of San Bernardino. 16-1

1

Major Adverse Impacts

Without going into extensive detail, there are several elements of this proposal that by themselves are sufficient to warrant denial due to overall inappropriateness, conflict with County General Plan guidelines and incompatibility with primary public values.

In this context we would like to address the proposed General Plan Amendment for a land use designation change, the proposed highway realignment, impacts to the bald eagle, cumulative effects and the unprecedented fire danger. 16-1

We acknowledge our gratitude to the Friends of Fawnskin, a local community organization, for sharing their research and a copy of their extensive comments with us. The County is indeed privileged when local citizens care enough to participate to such an earnest extent in the planning process. We find that their comments are thoroughly researched, valid and compelling. We concur wholeheartedly with their conclusion that the project is unsound and detrimental.

General Plan Amendment

As acknowledged in the Draft Environmental Impact Report, the proposed Moon Camp Project is in conflict with the County of San Bernardino's land use plan, policies and regulations set forth in the General Plan and requires a General Plan Amendment to offset the existing conflict and actively confer special advantages to the applicant. These special advantages can only be granted at significant expense and detriment to the public. For this reason the proposed General Plan Amendment should be denied. We strongly disagree with the analysis in the Draft EIR that changing the existing land use designation to accommodate a major development would result in a less than significant impacts to the surrounding community, the San Bernardino National Forest, environmental quality, public resources, public values and public rights. 16-2

The proposed General Plan Amendment to change the land use designation from BV/RL-40 to BV/RS-7200 is insupportable in view of the extreme fire danger in the San Bernardino Mountains. Right now there is a declared state of emergency in the mountain region due to the excessive fire hazard. The California Department of Forestry and Fire Protection indicate that these mountains face the most severe fire conditions in the world. The recent Old Fire vividly demonstrated that present firefighting capabilities are insufficient to defend existing structures on the mountains much less any additional structures, especially ones unauthorized by existing General Plan guidelines. 16-3

Fire danger cannot be expected to decrease in the foreseeable future. These facts ought to preclude any further mountain development that is not already prescribed in the General Plan. Each additional structure added to the hazardous mountain environment worsens the already out of balance ratio of urban-to-wildland intermix. Defending a disproportionate urban-to-wildland intermix is the most costly and difficult firefighting condition of all. Given such circumstances, a 16-4

hypothetical General Plan Amendment designed to enable only five additional structures where current provisions allow only 1.5 would be irresponsible and a tragic disservice to the public. The prospect of relaxing zoning restrictions to allow 60 or 90 units and the accompanying increase in population would be unconsciencable. 16-4

The owners acquired this land in full knowledge of its zoning restrictions. They have no right to expect a change when such a change would not be in the public interest. Depriving the public of their open space rights, General Plan protections, fire safety, aesthetics and other general rights conferred by existing planning would be unfair and unwarranted under the circumstances. Ceding to a private request solely for the purpose of private gain accomplished entirely at the public expense and loss should not be considered. 16-5

Moreover a change in the land use designation cannot be justified on the grounds that adjacent property is approved for higher residential densities. In actual fact the majority of the adjacent land is National Forest and shoreline within the scenic corridor of the scenic highway. Compatibility with such valuable open space values strongly argues for the maintenance of the existing zoning at one unit per 40 acres.

Proposed Highway Realignment

The scenic highway and lake view on the predominantly woodland north shore of Big Bear Lake in conjunction with the curving contour of the roadway conform to the rural character of the Fawnskin community's alpine setting. Straightening and realigning the highway to enable shoreline houses would nullify and defeat the purpose of the scenic highway and the protections of this public benefit upheld in the County General Plan. This would constitute an extreme adverse impact and should clearly be disallowed.

Furthermore, straightening the highway would likely create an unnecessary speed strip in an otherwise meandering alignment that encourages slow travel along the scenic shoreline. Public meetings held in the Big Bear Valley to gather community input for a new County General Plan Revision indicate an overwhelming preference for maintaining the open space and rural character of the mountain region by avoiding discretionary actions that compromise these qualities. Realigning the highway is counterproductive for maintaining these values. 16-6

By proposing the zoning change and the highway realignment, the applicant is essentially asking the County to conspire against the public interest by taking away long established public rights and bestowing upon the applicant vastly extended new rights and a major magnification of property values, which the applicant has no claim to unless the County dishonors its existing commitment to the public as upheld in the General Plan and the established land use designation.

By paying property taxes based on the existing land use designation of one unit per 40 acres with a scenic highway (protected by the County General Plan) traversing the land and no building sites obstructing the public's view of the lake, the applicant has duly acknowledged the

special public rights that adhere to this land. It would be inappropriate for the County to cancel these rights when the public has clearly demonstrated its interest in preserving them. The scenic open space land owned by the applicant is linked to the National Forest, which provides the main public value and major attraction of the north shore, and is also important bald eagle habitat. The larger value of the overall public forest, for which the County General Plan mandates compatible uses on adjacent private land, clearly ought not to be diminished so extensively and simply for the purpose of facilitating private gain as this proposal seeks. The applicant has no basis to expect the County to accede to such demands. That would be a major "taking" of significant public rights in the form of an unjustified giveaway, unduly bestowing extravagant favoritism and unfair advantages to a private party. It would be highly inappropriate for the County to allow the applicant to capitalize at public expense. The most reasonable response is for the County to deny this project. 16-6

Bald Eagles

Recent increased development in the Big Bear Valley has corresponded with a simultaneous decline in the population of wintering bald eagles that inhabit the area. In addition to being the national bird, the bald eagle has also come to symbolize the unique wildlife values of the Big Bear Lake area in the San Bernardino National Forest. Beyond its importance as a threatened species, the presence of the bald eagle in Big Bear is a popular attraction for the visiting public, widely featured in media publications. Such attention is a considerable benefit to the tourist economy that thrives on a major destination like the National Forest. The Forest Service Discovery Center on the north shore is the main visitor center for the local mountains. Eagle tours are the primary attraction in winter. The health and sustainability of the bald eagle is a critical indicator of the overall natural resource values of the National Forest in the Big Bear Lake area. 16-7

The Moon Camp site is important roosting habitat for the remaining bald eagle population in the Big Bear area. It is clear that the proposed project, dependent upon approval by the County of a radical zoning change and relocation of the scenic highway would have a significant adverse effect on this species. The quantity of trees that would need to be removed for the extensive building and road construction proposals would severely compromise the viability of the existing habitat and likely compound the factors causing the population of the bald eagle to decline. We strongly recommend that the project be denied as being incompatible to the established values of the site, among which we count the extraordinary presence of the magnificent bald eagle as one of the most exceptional and irreplaceable. It would be a tragic loss if the largest population of wintering bald eagles in Southern California were allowed dissipate due to unwarranted projects like this.

Cumulative Impacts

The mountain area of the San Bernardino National Forest and the general public has suffered enormously in prior years by the County failing to adequately take into consideration the 16-8

cumulative impacts of persistent development. This has led to overdraft of water supplies in the Big Bear Basin and water shortages in the Lake Arrowhead area. Waste water treatment facilities are routinely located on pubic lands of the National Forest. Infrastructure in general is pushed to insupportable levels so that taxpayers are eventually forced to underwrite the cost of improvements necessitated by poorly planned developments, which steadily downgrade the basic quality of life of the rural setting within the National Forest. The proposed project is no exception. 16-8

The Draft EIR for the Moon Camp Project raises many red flags, which are extensively referenced in comments from the Friends of Fawnskin. As is abundantly clear in the DEIR and the additional analysis of FOF, the project will generate serious adverse impacts to aesthetics, air quality, biological resources, hydrology, public services, traffic and fire hazard. It is surprising that the DEIR has failed to recognize the "No Project/Existing Designation" Alternative as the environmentally superior alternative, insofar as it clearly meets this criteria and the applicant clearly has no inherent right to develop the land to the extent that is proposed. 16-9

The cumulative impacts assessment in the DEIR, despite its deficiencies, particularly strikes a strong cautionary note in recognizing that the proposed project could result in increased demand for public services, which typically means higher taxes for existing residents. It also acknowledges that the inability of water providers to confirm services has a significant adverse effect. This fact in conjunction with the severe overdraft in the Big Bear Basin is ample reason to deny the project. This is especially true insofar as the County has never properly analyzed the potential for the increased conversion of second homes into full-time occupancy and the resulting impacts to existing infrastructure, which have hitherto been largely predicated on the basis of a second home resort community. Proposals such as the Moon Camp Project likely will have a significant impact in accelerating the overall conversion of the community to a primary resident population. This creates significant conflicts with prior planning assumptions, density projections and land use designations. None of this has been addressed by the County in relationship to growth inducing trends, impacts to the National Forest, carrying capacity of the mountain infrastructure, projected build-out and the previously unforeseen fire hazard crisis. In view of so many unpredictable variables and existing excessive demands on infrastructure, it is wise not to amend the General Plan in a way that would only make conditions worse. 16-10

Fire Hazard

To further elaborate on the existing fire hazard in the San Bernardino Mountains and the continuing emergency crisis of drought, excessive fuels and savage winds, it is one of the glaring deficiencies of land use planning for the mountain region that realistic precautions against a major fire catastrophe, which presents a much greater threat to public safety than the County recognizes, has been overly neglected. This is especially alarming in view of the fact that the County appears to accept no liability or accountability for decisions that compromise public safety on such a large scale. 16-11

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