

EXHIBIT B

Conditions of Approval

CONDITIONS OF APPROVAL:

GENERAL REQUIREMENTS

Conditions of Operation and Procedures

Land Use Services – Planning (909) 387-8311

1. Project Approval Description. This Tentative Tract Map 16136 is approved to be recorded and constructed in compliance with the San Bernardino County Code (SBCC), the conditions of approval stated herein and the approved stamped tentative tract maps. This approval includes the requirements of any approved reports (e.g. traffic study, noise study). Tentative Tract Map No. 16136 is approved to create 50 numbered lots and 7 lettered lots on 62.46 acres. APN: 0304-082-04 & 0304-091-12, 21, 22, Project No: PH11076.
2. Concurrent Filings. The project includes a General Plan Amendment to change the Official Land Use Zoning District from BV/RL-40 to BV/RS on 62.46 acres.
3. Code Compliance. The project shall be constructed and operated in compliance with the San Bernardino County Code (SBCC), California Building Codes (CBC) San Bernardino County Fire Code, , and the following conditions of approval, the approved tentative tract map and all other required and approved reports and/or displays (e.g. elevations). The developer shall provide a copy of the approved conditions and approved tentative tract map to every current and future developer to facilitate compliance with these conditions of approval and continuous use requirements for the project site.
4. Project Location. The project is located north and south of North Shore Drive (State Highway 38), 180 feet east of Canyon road in the Community of Bear Valley (3rd^d supervisorial District).
5. Revisions. Any proposed change to the approved Tentative Tract Map and/or the conditions of approval shall require that an additional land use application (e.g. Revision to an Approved Action) be submitted to County Planning for review and approval.
6. “Developer” Defined. The term “developer” as used in these conditions of approval for this project and for any development of this project site, includes all of the following: the applicant, the property owner and any lessee, tenant or sub-tenant, operator and/or any other agent or other interested party of the subject project and/or project site and/or any heir or any other successor in interest in the project site or project land use by sale or by lease of all or of a portion of the project site or project land uses and/or any other right given to conduct any land use in any or all of the project structures or any area on the project site.
7. Indemnification. In compliance with SBCC §81.01.070, the developer shall agree, to defend, indemnify, and hold harmless the County or its “indemnitees” (herein collectively the County’s elected officials, appointed officials (including Planning Commissioners), Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body) from any claim, action, or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning a map or permit or any other action relating to or arising out of County approval, including the acts, errors or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except

where such indemnification is prohibited by law. In the alternative, the developer may agree to relinquish such approval.

Any condition of approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the developer of any claim, action, or proceeding and that the County cooperates fully in the defense. The developer shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney fees, which the County or its indemnitees may be required by a court to pay as a result of such action.

The County may, at its sole discretion, participate at its own expense in the defense of any such action, but such participation shall not relieve the developer of their obligations under this condition to reimburse the County or its indemnitees for all such expenses.

This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The developer's indemnification obligation applies to the indemnitees' "passive" negligence but does not apply to the indemnitees' "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

8. Expiration. This conditional approval shall become null and void unless all conditions have been completed and the Tentative Map has been deemed complete by the County Surveyor for purposes of recordation within thirty-six (36) months following the effective approval date, unless an extension of time is granted.

PLEASE NOTE: This will be the ONLY notice given of the approval expiration date. The "developer" is responsible for initiation of any extension request.

9. Continuous Effect/Revocation. All of the conditions of this project approval are continuously in effect throughout the operative life of the project for all approved structures and approved land uses/activities. Failure of the property owner or developer to comply with any or all of the conditions at any time may result in a public hearing and possible revocation of the approved land use, provided adequate notice, time and opportunity is provided to the property owner, developer or other interested party to correct the non-complying situation.
10. Extension of Time. Where circumstances cause delays, which do not permit compliance with the required recordation time limit, the developer may submit for review and approval an application requesting an extension of time. County Planning may grant such requests for extensions of time in compliance with the State Map Act Section 66452.6. An Extension of Time may be granted upon a successful review of an Extension of Time application, which includes a justification of the delay in recordation, a plan of action for completion and submittal of the appropriate fee, not less than 30 days prior to the expiration date. The granting of an extension request is a discretionary action that may be subject to additional or revised conditions of approval.
11. Project Account. The Job Costing System (JCS) account number is PH11076. This is an actual cost project with a deposit account to which hourly charges are assessed by various

county agency staff (e.g. Land Use Services, Public Works and County Counsel). Upon notice, the “developer” shall deposit additional funds to maintain or return the account to a positive balance. The “developer” is responsible for all expenses charged to this account. Processing of the project shall cease, if it is determined that the account has a negative balance and that an additional deposit has not been made in a timely manner. A minimum balance of \$3,000.00 shall be in the project account at the time of project approval and the initiation of the Condition Compliance Review. Sufficient funds shall remain in the account to cover all estimated charges that may be made during each compliance review. All fees required for processing shall be paid in full prior to final inspection, occupancy and/or operation of each approved use in each approved structure or land use activity area. There shall be sufficient funds (\$1000.00) remaining in the account to properly fund file closure and any other required post-occupancy compliance review and inspection requirements (e.g. landscape performance).

12. Condition Compliance. Condition compliance confirmation for purposes of the Final Map recordation will be coordinated by the County Surveyor.
13. Condition Compliance. In order to obtain construction permits for grading, building, final inspection and tenant occupancy for each approved building, the developer shall process a Condition Compliance Release Form (CCRF) for each respective building and/or phase of the development through County Planning in accordance with the directions stated in the Approval letter. County Planning shall release its holds on each phase of development by providing to County Building and Safety the following:
 - a) Grading Permits - a copy of the signed CCRF for grading/land disturbance and two “red” stamped and signed approved copies of the grading plans.
 - b) Building Permits - a copy of the signed CCRF for building permits and three “red” stamped and signed approved copies of the final approved site plan.
 - c) Final Inspection - a copy of the signed CCRF for final inspection of each respective building, after an on-site compliance inspection by County Planning.
14. Development Impact Fees. Additional fees may be required prior to issuance of development permits. Fees shall be paid as specified in adopted fee ordinances.
15. Additional Permits. The property owner, developer, and land use operator are all responsible to ascertain and comply with all laws, ordinances, regulations and any other requirements of Federal, State, County and Local agencies as are applicable to the development and operation of the approved land use and project site. These include:
 - a) FEDERAL: United States Fish and Wildlife Service, Army Corp of Engineers
 - b) STATE: California Department of Fish and Wildlife, Regional Water Quality Control Board (RWQCB) –Santa Ana Region, South Coast Air Quality Management District (SCAQMD).
 - c) COUNTY: Land Use Services Department; Public Health-Environmental Health Services (DEHS), Department of Public Works, AND
 - d) LOCAL: San Bernardino County Fire Department, Local Agency Formation Commission (LAFCO)

16. Performance Standards. The approved land uses shall operate in compliance with the general performance standards listed in the County Development Code Chapter 83.01, regarding air quality, electrical disturbance, fire hazards (storage of flammable or other hazardous materials), heat, noise, vibration, and the disposal of liquid waste, including during construction.
17. GHG – Operational Standards. The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:
 - a. Waste Stream Reduction. The developer shall provide to all tenants and homeowners County-approved informational materials about methods and need to reduce the solid waste stream and available recycling services.
 - b. Vehicle Trip Reduction. The developer shall provide to all tenants and homeowners County-approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, and/or providing a web site or message board for coordinating rides.
 - c. Provide Educational Materials. The developer shall provide to all tenants and homeowners education materials and about reducing waste and available recycling services. The education materials shall be submitted to County Planning for review and approval.
 - d. Landscape Equipment. The developer shall require in the landscape maintenance contract and/or in onsite procedures that a minimum of 20% of the landscape maintenance equipment shall be electric-powered.
18. Construction Hours. Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday in accordance with the County of San Bernardino Development Code standards.
19. Improvements. All improvements, including but not limited to, landscaping, fencing, walls, ditches, sewer/wastewater treatment, open space, detention basins and related pumping systems, parkways, walkways, medians, trails and streetlights, shall be maintained in good condition by the subdivider until such improvements are conveyed to individual property owners, or until an association or public agency accepts the maintenance responsibility.
20. MMRP. Implementation of the mitigation measures required for the project shall be verified according to the methods specified in the Mitigation Monitoring and Reporting Program (MMRP) of the certified EIR.

Land Use Services – Code Enforcement Division (909) 387-8311

21. Enforcement. If any County enforcement activities are required to enforce compliance with the conditions of approval, the property owner shall be charged for such enforcement activities in accordance with the County Code Schedule of Fees.

22. Weed Abatement. The applicant shall comply with San Bernardino County weed abatement regulations [SBCC§ 23.031-23.043] and periodically clear the site of all non-complying vegetation. This includes removal of all Russian thistle (tumbleweeds).

County Fire Department – Community Safety Division (909) 386-8465

23. Fire Jurisdiction. The above referenced Project is under the jurisdiction of the San Bernardino County Fire Department, herein "Fire Department". Prior to any construction occurring on any parcel, the developer shall contact the Fire Department for verification of current fire protection requirements. All new construction shall comply with the current California Fire Code requirements and all applicable statutes, codes, ordinances, and standards of the Fire Department.
24. Expiration. Construction permits, including Fire Condition Letters, shall automatically expire and become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Suspension or abandonment shall mean that no inspection by the Department has occurred within 180 days of any previous inspection. After a construction permit or Fire Condition Letter becomes invalid and before such previously approved work recommences, a new permit shall be first obtained and the fee to recommence work shall be one half the fee for the new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. A request to extend the Fire Condition Letter or Permit may be made in writing PRIOR TO the expiration date justifying the reason that the Fire Condition Letter should be extended.
25. Additional Requirements. In addition to the Fire requirements stated herein, other on-site and off-site improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.
26. Fire Fee. The required fire fees shall be paid to the San Bernardino County Fire Department/Community Safety Division (909) 386-8400.

Land Use Services – Land Development – Drainage (909) 387-8311

27. Tributary Drainage. Adequate provisions should be made to intercept and conduct the tributary off site - on site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties at the time the site is developed.
28. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed.
29. Additional Drainage Requirements. In addition to drainage requirements stated herein, other "on-site" and/or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.

30. Continuous BMP Maintenance. The property owner/“developer” is required to provide periodic and continuous maintenance of all Best Management Practices (BMP) devices/facilities listed in the County approved Water Quality Management Plan (WQMP) for the project. This includes but is not limited to, filter material replacement and sediment removal, as required to ensure peak performance of all BMPs. Furthermore, such maintenance activity will require compliance with all Local, State, or Federal laws and regulations, including those pertaining to confined space and waste disposal methods in effect at the time such maintenance occurs.
31. BMP Enforcement. In the event the property owner/“developer” (including any successors or assigns) fails to accomplish the necessary BMP maintenance within five (5) days of being given written notice by County Public Works, then the County shall cause any required maintenance to be done. The entire cost and expense of the required maintenance shall be charged to the property owner and/or “developer”, including administrative costs, attorney’s fees and interest thereon at the rate authorized by the County Code from the date of the original notice to the date the expense is paid in full.

Public Works – Traffic Division (909) 387-8186

32. Traffic. The project vehicles shall not back out into the highway.

Public Works - Solid Waste Management (909) 387-8701

33. Recycling Storage Capacity – The developer shall provide adequate space and storage bins for both refuse and recycling materials. This requirement is to assist the County in compliance with the recycling requirements of Assembly Bill (AB) 2176.

PRIOR TO ISSUANCE OF GRADING PERMITS

The following shall be completed:

Land Use Services - Building and Safety (909) 387- 8311

34. Retaining Wall Plans. Submit plans and obtain separate building permits for any required walls or retaining walls.
35. Geology Report. A geology report shall be submitted to the Building and Safety Division for review and approval by the County Geologist and fees paid for the review prior to grading permits.
36. Geotechnical (Soil) Report. When earthwork quantities exceed 5,000 cubic yards, a geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval prior to issuance of grading permits.
37. Grading Plans. One copy of the proposed engineered grading plans shall be submitted for plan review with appropriate fees and approval of these obtained, when earthwork quantities exceed fifty (50) cubic yards.
38. Erosion Control Plan. One copy of the proposed engineered erosion and sediment control plans shall be submitted for plan review with appropriate fees and approval of these obtained.
39. Erosion Control Devices. Prior to land disturbance, erosion control devices must be installed at all perimeter openings and slopes. No sediment is to leave the job site.
40. NPDES -NOI. Submit a copy of the Notice of Intent (NOI) obtained from the Regional Water Quality Control Board in compliance with the National Pollutant Discharge Elimination System (NPDES), when proposed grading is one acre or more. Contact local Regional Water Quality Control Board for information.
41. WDID. Submit a copy of the Regional Water Quality Control Board (RWQCB) permit letter with the Waste Discharge Identification (WDID) number assigned by the RWQCB when proposed grading is one acre or more. The letter must include the total land disturbance area including all clearing, grading, and/or excavation areas. Contact the local RWQCB for more information.

Land Use Services - Planning (909) 387- 8311

42. AQ-Dust Control Plan. The “developer” shall prepare, submit for review and obtain approval from County Planning of both a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/ subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following requirements:

- a) Exposed soil shall be kept continually moist to reduce fugitive dust during all grading and construction activities, through application of water sprayed a minimum of two times each day.
 - b) Any portion of the site to be graded shall be pre-watered to a depth of three feet prior to the onset of grading activities.
 - c) During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 25 mph.
 - d) Any area that will remain undeveloped for a period of more than 30 days shall be stabilized using either chemical stabilizers and/or a desert wildflower mix hydroseed on the affected portion of the site.
 - e) Storage piles that are to be left in place for more than three working days shall be sprayed with a non-toxic soil binder, covered with plastic or revegetated.
 - f) Imported fill and exported excess cut shall be adequately watered prior to transport, covered during transport, and watered prior to unloading on the project site.
 - g) Storm water control systems shall be installed to prevent off-site mud deposition.
 - h) All trucks hauling dirt away from the site shall be covered.
 - i) Construction vehicle tires shall be washed, prior to leaving the project site.
 - j) Rumble plates shall be installed at construction exits from dirt driveways.
 - k) Paved access driveways and streets shall be washed and swept daily when there are visible signs of dirt track-out.
 - l) Street sweeping shall be conducted daily when visible soil accumulations occur along site access roadways to remove dirt dropped or tracked-out by construction vehicles. Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday and after street sweeping.
43. AQ - Construction Mitigation. The “developer” shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:
- a) Provide documentation prior to beginning construction demonstrating that the project will comply with all SCAQMD regulations including 402, 403, 431.1, 431.2, 1113 and 1403.
 - b) Each contractor shall certify to the developer prior to construction-use that all equipment engines are properly maintained and have been tuned-up within last 6 months.
 - c) Each contractor shall minimize the use of diesel-powered vehicles and equipment through the use of electric, gasoline or CNG-powered equipment. All diesel engines shall have aqueous diesel filters and diesel particulate filters.
 - d) All gasoline-powered equipment shall have catalytic converters.
 - e) Provide onsite electrical power to encourage use of electric tools.
 - f) Minimize concurrent use of equipment through equipment phasing.
 - g) Provide traffic control during construction to reduce wait times.
 - h) Provide on-site food service for construction workers to reduce offsite trips.
 - i) Implement the County approved Dust Control Plan (DCP)

- j) Suspend use of all construction equipment operations during second stage smog alerts. NOTE: For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).
44. Noise Mitigation. The developer will submit for review and obtain approval of an agreement letter that stipulates that all construction contracts/subcontracts contain as a requirement that the following noise attenuation measures be implemented:
- a) Noise levels of any project use or activity will be maintained at or below adopted County noise standards (SBCC 83.01.080). The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.
 - b) Exterior construction activities will be limited between 7 a.m. and 7 p.m. There will be no exterior construction activities on Sundays or National Holidays.
 - c) Construction equipment will be muffled per manufacturer's specifications. Electrically powered equipment will be used instead of pneumatic or internal combustion powered equipment, where feasible.
- All stationary construction equipment will be placed in a manner so that emitted noise is directed away from sensitive receptors nearest the project site.
45. AQ- Air Quality Mitigation. *Contractor shall ensure use of ultra low-sulfur diesel fuel in construction equipment as required by the County per County Development Code § 83.01.040 (c)(2)(I) (diesel fuel with sulfur content of 15 ppm by weight or less). Prior to the issuance of grading permits, the applicant shall provide documentation to the County that verifies that certain equipment are exempt; that an ultra low-sulfur diesel supply has been secured; and that the construction contractor is aware that the use of ultra low-sulfur diesel is required. As a conservative measure, no reduction was taken in this analysis for the use of low-sulfur diesel fuel. [AQ-3]*
46. AQ- Air Quality Mitigation. *Contractor shall ensure that all off- road heavy-duty construction equipment utilized during construction activity would be CARB Tier II Certified or better (to the maximum extent feasible). Prior to the issuance of grading permits, the applicant shall provide documentation to the County that verifies that certain equipment is not available as CARB Tier II certified; that applicable CARB Tier II certified equipment has been secured; and that the construction contractor is aware that the use of CARB Tier II Certified equipment is required. Implementation of this measure is estimated to reduce emissions of VOCs, NOX, PM10, and PM2.5 by approximately 78.31 percent, 54.57 percent, 54.82 percent, and 50.43 percent, respectively.*
47. BIO – Biological Resources Mitigation. *A biologist/monitor shall be present at the site during all land disturbance activities. 2*
48. BIO – Biological Resources Mitigation. *To avoid an illegal take of active bird nests, any grubbing, brushing, or tree removal will be conducted outside the State identified nesting season (February 15 through September 1). Alternatively, the site will be evaluated by a qualified biologist prior to any ground disturbance activities to determine the presence or absence of nesting birds. If an active nest is located in the project construction area, it will be flagged and a 300 foot buffer will be placed around it. No activity will occur within the 300 foot-buffer until the birds have fledged the nest. 5*

49. CUL – Cultural Resources Mitigation. In accordance with the paleontological resource impact mitigation program (PRIMP) prepared for this proposed project, a trained paleontological monitor, working under the supervision of a qualified paleontologist, shall be present during ground-disturbing activities within the proposed project area in sediments determined likely to contain paleontological resources. The monitoring for paleontological resources shall be conducted on a half-time basis. If after a reasonable amount of excavation is done, and it is determined, by the qualified paleontologist, that the sediments in question are not fossiliferous, or have low potential to contain fossils the monitoring can be reduced. If paleontological resources are located within the proposed project, the monitoring program will increase to full-time. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor shall be equipped to rapidly remove any large fossil specimens encountered during excavation. During monitoring, if fossiliferous sediments are found samples shall be collected and processed to recover microvertebrate fossils. Processing shall include wet screen washing and microscopic examination of the residual materials to identify small vertebrate remains. [CU -1]
50. CUL – Cultural Resources Mitigation. Upon encountering a large deposit of bone, salvage of all bone in the area shall be conducted with additional field staff and in accordance with modern paleontological techniques. [CUL-2]
51. CUL – Cultural Resources Mitigation. All fossils collected during the proposed project shall be prepared to a reasonable point of identification by a qualified paleontologist. Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of all material collected and identified shall be provided to the San Bernardino County museum repository along with the specimens. [CUL-3]
52. GEO – Geologic Hazard Prior to issuance of grading permits, a Design Level Geotechnical Analysis of the project site shall be performed. This analysis will provide additional analysis and refine the following preliminary recommendations:
- A) Foundations for small outlying structures, such as property line walls or trash enclosures, which will not be tied-in to the proposed structures, will be supported on foundations (deemed appropriate by a geotechnical engineer) bearing in properly compacted fill, competent native soils, or bedrock. Proper drainage must be maintained adjacent to foundations to minimize settlements in the soils and any foundations supported therein.
 - B) Where engineered fill is to be placed, grading will begin with the removal of all existing vegetation and existing improvements from the area to be graded. Deleterious debris such as wood, tree stumps, and thick roots shall be exported from the site and shall not be mixed with the fill soils. Asphalt and concrete will not be mixed with the fill soils without approval by the Geotechnical Engineer. All existing underground improvements planned for removal will be completely excavated and the resulting depressions properly backfilled.
53. GEO – Geologic Hazards. All manufactured slopes shall be planted, drained and maintained to reduce erosion. Due to the very granular nature of the majority of the site

soils, consideration shall be given to landscaping to reduce the potential for surficial erosion per landscape standards of County Ordinance 83.10.070 and 83.10.080. [GEO-2]

54. *GEO – Geologic Hazards.* *Drainage control structures will be installed to intercept water flow emanating from the canyon drainages and directed to proper drain improvements. [GEO-3]*
55. *HAZ – Hazards Mitigation.* *Abandon and/or remove all existing wells (water, dry well, etc.) in accordance with applicable laws and regulations. [HAZ-1]*
56. *HAZ – Hazards Mitigation.* *Trash and debris shall be removed from the project site and disposed in accordance with applicable laws and regulations. [HAZ-4]*
57. *HYD – Hydrology Mitigation.* *Prior to issuance of grading permits, applicants shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and obtain a Notice of Intent (NOI) to comply with obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit from the State Water Resources Control Board. Evidence that this has been obtained (i.e., a copy of the Waste Discharger's Identification Number) shall be submitted to the County for coverage under the NPDES General Construction Permit. [HYD – 4]*
58. *NOI -Noise Mitigation.* *During all project site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*
 - A) *The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.*
 - B) *The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours to be determined by County staff consistent with normal weekday working hours (e.g. 7a.m. to 7p.m. Monday thru Friday).*
 - C) *The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. Haul trucks shall access the site using the route furthest from sensitive land uses or residential dwellings.*
59. *NOI -Noise Mitigation.* *Prior to the issuance of building permits, a noise analysis shall be required when grading plans are available. The grading plan shall include the location of stationary noise sources, such as loading docks, air conditioning units, trash compactors, and drive-thru lanes. The noise analysis shall evaluate the potential noise impacts to the existing and proposed noise sensitive homes near the retail areas of the project. The noise analysis will require design features and practices to ensure that noise levels will be reduced to acceptable levels.*

60. PSU - Public Services Mitigation. Prior to the development of any combustible construction, the development of each phase shall have two (2) points of paved access, or as otherwise approved by the Fire District, for fire and other emergency equipment, and routes of escape which will safely handle evacuations. Each of these access points shall provide an independent route into the area in which the development is located. [PSU-1]
61. PSU - Public Services Mitigation. Unless otherwise approved by the Fire Chief, on-site fire protection water systems shall be designed to be looped and fed from two (2) remote points. [PSU-2]

County Fire Department – Community Safety Division (909) 386-8465

62. Water System. Prior to any land disturbance, the water systems shall be designed to meet the required fire flow for this development and shall be approved by the Fire Department. The required fire flow shall be determined by using Appendix IIIA of the Uniform Fire Code. [F05]
63. Additional Requirements. In addition to the Fire requirements stated herein, other on-site and offsite improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office. [F01A]
64. Street Signs. This project is required to have an approved street sign (temporary or permanent). The street sign shall be installed on the nearest street corner to the project. Installation of the temporary sign shall be prior any combustible material being placed on the construction site. Prior to final inspection and occupancy of the first structure, the permanent street sign shall be installed. Standard 901.4.4 [F72]
65. Fire Flow Test. Your submittal did not include a flow test report to establish whether the public water supply is capable of meeting your project fire flow demand. You will be required to either produce a current flow test report from your water purveyor demonstrating that the fire flow demand is satisfied or you must install an approved fire sprinkler system. This requirement shall be completed prior to combination inspection by Building and Safety. [F05B]

Public Works – Solid Waste Management Division (909) 386-8701

66. Construction and Demolition Waste Management Plan (CDWMP) – Part 1. The developer shall prepare, submit, and obtain approval from Solid Waste Management Division (SWMD) of a “Construction Waste Management Recycling Plan (CDWMP), Part I. The CDWMP shall list the types and volumes of solid waste materials expected to be generated from grading and construction. The Plan shall include options to divert from landfill disposal materials for reuse or recycling by a minimum of 50 percent of total volume.

Upon completion of construction, the developer shall complete SWMD’s CDWMP Part 2. This summary shall provide documentation of diversion of materials including but not limited to receipts or letters from diversion facilities or certification regarding reuse of materials on site.

Public Health – Environmental Health Services (DEHS) (800) 442-2283

67. Vector Clearance. The project area has a high probability of containing vectors. DEHS Vector Control Section will determine the need for vector survey and any required control programs. A vector clearance letter shall be submitted to DEHS/Land Use. For information, contact Vector Control at (800) 442-2283.

Public Works – Surveyor (909) 387-8149

68. Monumentation. If any activity on this project will disturb any land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying prior to commencement of any activity with the potential to disturb said monumentation, and appropriate documents shall be filed with the County Surveyor pursuant to Section 8771(b) Business and Professions Code.

Land Use Services - Land Development - Drainage (909) 387-8311

69. Grading Plans. Grading plans shall be submitted to Land Development Division for review and approval obtained, prior to construction. All Drainage and WQMP improvements shall be shown on the Grading plans according to the approved Drainage study and WQMP reports.
70. Drainage Improvements. A Registered Civil Engineer (RCE) shall investigate and design adequate drainage improvements to intercept and conduct the off-site and on-site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties. Submit drainage study for review and obtain approval. A \$550 deposit for drainage study review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule.
71. Storm Drain Plans. Permanent drainage improvements will be required to intercept and conduct larger drainage flows through or around the site in an approved manner. Submit Storm Drain Plans for review and approval.
72. Drainage Easements. Adequate San Bernardino County Drainage Easements (minimum fifteen [15] feet wide) shall be provided over the natural drainage courses, drainage facilities/or concentration of runoff from the site. Proof of recordation shall be provided to the Land Development Division
73. On-site Flows. On-site flows need to be directed to the drainage facilities unless a drainage acceptance letter is secured from the adjacent property owners and provided to Land Development.
74. FEMA Flood Zone. The project is located within Flood Zone D according to FEMA Panel Number 7295H dated 08/28/2008. Flood Hazards are undetermined in this area but possible. The requirements may change based on the most current Flood Map prior to issuance of grading permit.

75. Topo Map. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.
76. WQMP. A completed Water Quality Management Plan (WQMP) shall be submitted for review and approval obtained. A \$2,650 deposit for WQMP review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule. The report shall adhere to the current requirements established by the Santa Ana Watershed Region. Copies of the WQMP guidance and template can be found at: (<http://cms.sbcounty.gov/dpw/Land/WQMPTemplatesandForms.aspx>)
77. WQMP Inspection Fee. The developer shall provide a \$3,600 deposit to Land Development Division for inspection of the approved WQMP. Deposit amounts are subject to change in accordance with the latest approved fee schedule.
78. Streambed Alteration Agreement. California Department of Fish and Wildlife (CDFW) must be notified per Fish and Game Code (FGC) §1602. A streambed alteration agreement shall be provided prior to Grading permit issuance. Link to CDFW website at <https://www.wildlife.ca.gov/Conservation/LSA>

PRIOR TO RECORDATION OF THE FINAL MAP

The Following Conditions Shall Be Completed

Land Use Services – Planning (909) 387-8311

79. HOA required. The Developer shall establish a Homeowners' Association (HOA) for the purpose of monitoring and maintaining common area amenities and, where applicable, private lot areas with HOA maintenance easements. The HOA shall be formed to the satisfaction of County Planning. The Developer shall submit the following to County Planning for review and approval:
 - a) Cover Letter. Reference the project case number P201500428 and identify the contact individual (with contact information) for any questions concerning the submitted documents.
 - b) By-Laws/CC&R. The proposed HOA By-Laws, Declaration of Covenants, Conditions and Restrictions (CC&R's), and HOA Rules and Regulations shall be submitted for review and approval obtained from County Planning. The By-laws and the CC&R's, as approved by the County, shall not be modified or rescinded without County approval. The CC&R's shall:
 - Provide for a minimum term of 60 years.
 - Provide for the establishment of an HOA comprised of the owners of each individual lot or unit as tenants in common.
 - Provide for common area ownership to be by either the HOA or the owners of each individual lot or unit as tenants in common.
 - Contain the following note verbatim: "Notwithstanding any provision in this Declaration to the contrary, the following provisions shall apply: The property owners' association established herein shall manage and continuously maintain

the 'common area', more particularly described on Exhibit 'A', attached hereto, and shall not sell or transfer the 'common area' or any part thereof, absent the prior written consent of the County of San Bernardino or the County's successor-in-interest. The property owners' association shall have the right to assess the owners of each individual lot or unit for the reasonable cost of maintaining such 'common area', and shall have the right to lien the property of any such owner who defaults in the payment of a maintenance assessment. An assessment lien, once created, shall be paid in full prior to all other liens recorded subsequent to the notice of assessment or other document creating the assessment lien. This Declaration shall not be terminated, 'substantially' amended, or property deannexed there from absent the prior written consent of the County of San Bernardino or the County's successor-in-interest. A proposed amendment shall be considered 'substantial' if it affects the extent, usage, or maintenance of the 'common area' established pursuant to the Declaration. In the event of any conflict between this Declaration and the Articles of Incorporation, the Bylaws, or the property owners' association Rules and Regulations, if any, this Declaration shall control."

- c) Sample Title. A sample document conveying title to the purchaser of an individual lot or unit, which provides that the declaration of covenants, conditions, and restrictions is incorporated therein by reference.
- d) Recordation. After approval by the County, the HOA By-Laws, the Declaration of Covenants, Conditions and Restrictions (CC&R's) shall be recorded and a copy of the recorded documents shall be provided to County Planning. The submitted documents shall include: One (1) copy and one (1) original, wet signed, notarized and ready for recordation declaration of covenants, conditions, and restrictions; attached to these documents there shall be included a legal description of the property included within the covenants, conditions and restrictions and a scaled map or diagram of such boundaries, both signed and stamped by a California registered civil engineer or licensed land surveyor.
- e) HOA Responsibilities. The HOA documents (CC&R's) shall indicate that the HOA is required to maintain the private streets (including snow removal where appropriate) street landscaping, common area landscaping, fuel modification measures, slopes, fencing, retaining walls, drainage facilities, and water quality facilities. The HOA shall enforce architectural controls to insure compatibility of colors, materials, landscaping and overall aesthetic appearance, including prompt removal of graffiti. The HOA shall require that roof mounted mechanical equipment shall be screened from view, on all sides to minimize any visual and aesthetic adverse impacts. Homeowners shall be required to incorporate drought-resistant, fire retardant, and water conserving plants and irrigation systems in their landscaping designs. Homeowners will be required to maintain any required fuel modification and sound attenuation measures.
- f) Landscaped Area Maintenance. The maintenance of landscaped areas shall be the sole responsibility of the developer until the transfer to individual ownership of the lots or until the maintenance is officially assumed by the required Homeowners' Association (HOA). A separate water meter shall be installed in any common easement landscaped area, in conformance with an approved landscaping plan.

Land Use Services - Building & Safety Division (909) 387-8311

80. Geology Report. A geology report shall be submitted to the Building and Safety Division for review and approval by the County Geologist and fees paid for the review prior to recordation of the final map.
81. Geotechnical (Soil) Report. When earthwork quantities exceed 5,000 cubic yards, a geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval prior to recordation of the final map.
82. CDP/B&S. A Composite Development Plan (CDP) is required and the following shall be delineated or noted on the CDP with confirmation and approval obtained from the B&S, prior to recordation of the Parcel Map (Statements in quotations shall be verbatim):

“Land Use Services Department / Building and Safety Division (909) 387-8311”

- **“Retaining Wall Plans:** Submit plans and obtain separate permits for any required walls, retaining walls or trash enclosures.”
- **“Geology Report:** A geology report shall be submitted to the Building and Safety Division for review and approval by the County Geologist and fees paid for the review prior to final project approval.”
- **“Geotechnical (Soil) Report:** When earthwork quantities exceed 5,000 cubic yards, a geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval prior to issuance of grading permits.”
- **“Grading Plans:** Grading plans shall be submitted to Building and Safety for review and approval prior to grading/land disturbance of more than 50 Cu Yards.”
- **“Erosion & Sediment Control Plan:** An erosion and sediment control plan shall be submitted to and approved by the Building Official.”
- **“Erosion Control Installation:** Erosion control devices must be installed at all perimeter openings and slopes prior to any land disturbance or grading. No sediment is to leave the job site.”
- **“Construction Plans:** Any building, sign, or structure to be constructed or located on site, will require professionally prepared plans based on the most current County and California Building Codes, submitted for review and approval by the Building and Safety Division.”
- **“Temporary Use Permit:** A Temporary Use Permit (T.U.P.) for the office trailer will be required or it must be placed on a permanent foundation per State H.C.D. guidelines. A T.U.P. is only valid for a maximum of five (5) years.”

Public Health - Environmental Health Services (DEHS) (800) 442-2283

83. Water Purveyor. The water purveyor shall be **the City of Big Bear Lake Department of Water and Power**.
84. Water Verification. Applicant shall procure a verification letter from the water agency with jurisdiction. This letter shall state whether or not water connection and service shall be made available to the project by the water agency. This letter shall reference the File Index Number and Assessor's Parcel Number.
85. Sewage Disposal. Method of sewage disposal shall be a **County Service Area 53B**
86. Sewer Verification. Applicant shall procure a verification letter from the sewerage agency with jurisdiction. This letter shall state whether or not sewer connection and service shall be made available to the project by the sewerage agency. The letter shall reference the Assessor's Parcel Number.
87. LAFCO. Submit verification of annexation to DEHS for any project that require water or sewer connection outside a purveyor's jurisdiction. For information, contact LAFCO at (909) 387-5866.
88. Preliminary Acoustic Information. Submit preliminary acoustical information demonstrating that the proposed project maintains noise levels at or below San Bernardino County Noise Standard(s), San Bernardino Development Code Section 87.0905(b). The purpose is to evaluate potential future on-site and/or adjacent off-site noise sources. If the preliminary information cannot demonstrate compliance to noise standards, a project specific acoustical analysis shall be required. Submit information/analysis to the DEHS for review and approval. For information and acoustical checklist, contact DEHS at (800) 422-2283.
89. Existing Wells. Any existing wells on the lot shall (1) be properly destroyed under permit OR (2) have been constructed to "California Well Standards" and be used as a source of water (industrial and/or domestic) for the project. Contact DEHS/Water Section for more information at (800) 442-2283.

Land Use Services - Land Development - Drainage (909) 387-8311

90. Drainage Improvements. A Registered Civil Engineer (RCE) shall investigate and design adequate drainage improvements to intercept and conduct the off-site and on-site drainage flows around and through the site in a safety manner, which will not adversely affect adjacent or downstream properties. Submit drainage study for review and obtain approval. A \$550 deposit for drainage study review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule.
91. Drainage Easements. Adequate San Bernardino County Drainage Easements (minimum fifteen [15] feet wide) shall be provided over the natural drainage courses, drainage facilities/or

concentration of runoff from the site. Proof of recordation shall be provided to the Land Development Division.

92. Topo Map. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.
93. On-site Flows. On-site flows need to be directed to the drainage facilities unless a drainage acceptance letter is secured from the adjacent property owners and provided to Land Development.
94. WQMP. A completed Water Quality Management Plan (WQMP) shall be submitted for review and approval obtained. A \$2,650 deposit for WQMP review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule. The report shall adhere to the current requirements established by the Santa Ana Watershed Region. Copies of the WQMP guidance and template can be found at: (<http://cms.sbcounty.gov/dpw/Land/WQMPTemplatesandForms.aspx>)
95. Grading Plans. Grading plans shall be submitted for review and approval obtained IF grading occurs prior to Final Map recordation. All Drainage and WQMP improvements shall be shown on the Grading plans according to the approved Drainage study and WQMP reports.
96. CDP/LDD - Drainage. A Composite Development Plan (CDP) is required and the following shall be delineated or noted on the CDP with confirmation and approval obtained from the LDD, prior to recordation of the Final Map (statements in quotations shall be verbatim):
"Land Use Services Department – Land Development Division – Drainage Section (909) 387-8311"
 - "Grading Plans. Grading plans shall be submitted to Land Development Division for review and approval obtained prior to issuance of grading permits for each parcel to reflect the proposed WQMP BMP features per the approved WQMP dated _____. Submit necessary fees per the latest fee schedule for review, WQMP inspection and approval."
 - "Revisions to WQMP. If the Owner wishes to deviate from the approved WQMP dated _____, the Owner(s) shall submit a revised WQMP along with grading plans for the lot. Submit necessary fees per the latest fee schedule for review, Inspection and approval."
 - "Natural Drainage. Natural Drainage Course(s) and/or Easement(s) shall not be occupied or obstructed, unless specific approval is given by County Land Use Services Department - Land Development Division/Drainage Section for each lot/parcel."
 - "FEMA Flood Zone. The project is located within Flood Zone D according to FEMA Panel Number 7295H dated 08/28/2008. Flood Hazards are undetermined in this area but possible. The requirements may change based on the most current Flood Map prior to issuance of grading permit."
 - "Grading Plans. Grading plans shall be submitted to Land Use Services/Land Development Division for review and approval obtained prior to issuance of grading permits. Submit necessary fees per the latest fee schedule for review, inspection and approval."

- "Additional Drainage Improvements. At the time each lot/parcel is developed, a California Registered Civil Engineer (RCE) shall prepare/design complete drainage improvement plans and profiles. After these are submitted for review and approval additional "on-site" and/or "off-site" improvements may be required which cannot be determined from tentative plans at this time."
- "Drainage Improvements. All required drainage improvements shall be completed by the applicant. The private registered engineer shall inspect improvements outside the County right-of-way and certify that these improvements have been completed according to the approved plans. Certification letter shall be submitted to Land Development."
- "WQMP Improvements. All required WQMP improvements shall be completed by the applicant, inspected and approved by County Public Works. An electronic file of the final and approved WQMP shall be submitted to Land Development Division, Drainage Section."
- "WQMP Operations and Maintenance. Operation and maintenance requirements for all Source Control, Site Design, and Treatment Control BMPs shall be identified within the Water Quality Management Plan (WQMP). All maintenance or replacement of BMPs proposed as part of the WQMP is the sole responsibility of the Owner in accordance with the terms of the WQMP Agreement."
- "Streambed Alteration Agreement. California Department of Fish and Wildlife (CDFW) must be notified per Fish and Game Code (FGC) §1602. A streambed alteration agreement shall be provided prior to Grading permit issuance. Link to CDFW website at <https://www.wildlife.ca.gov/Conservation/LSA>."

Land Use Services - Land Development - Roads (909) 387-8311

97. Road Dedication/Improvements. The developer shall submit for review and obtain approval from the Land Use Services Department the following dedications and plans for the listed required improvements, designed by a Registered Civil Engineer (RCE), licensed in the State of California.

SH-38 (Mountain Major Highway – 80')

- Road Dedication. An 80 foot grant of easement is required to accommodate SH-38 will be required per Caltrans standards.

Street "A" (Mountain Local – 40')

- Road Dedication. A 40 foot grant of easement is required to provide a full-width right-of-way of 40'.
- Curb Return Dedication. A 20 foot radius return grant of easement is required at all curb returns
- Street Improvements. Design a minimum of 26-feet paved road, constructed to County Standards 114b.

- Driveway Approach. Design driveway approach per San Bernardino County Standard 128A, and located per Standard 130.
- Curb Returns. Curb Returns shall be designed per Caltrans Standard A88A
- Cul-de-sac Design. The proposed cul-de-sac shall be designed and constructed full width to County Standards 120.
- Paved Access Road. This project is required to have a minimum of 26-foot wide paved access road within 40' of right-of-way that ties into a maintained paved public road.

Street "B" (Mountain Local – 40')

- Road Dedication. A 40 foot grant of easement is required to provide a full-width right-of-way of 40'.
 - Curb Return Dedication. A 20 foot radius return grant of easement is required at all curb returns
 - Street Improvements. Design a minimum of 26-feet paved road within a 40' right-of-way that ties into a maintained public road.
 - Driveway Approach. Design driveway approach per San Bernardino County Standard 128A, and located per Standard 130.
 - Curb Returns. Curb Returns shall be designed per Caltrans Standard A88A
 - Paved Access Road. This project is required to have a minimum of 26-foot wide paved access road within 40' of right-of-way that ties into a maintained paved public road.
98. Road Standards and Design. All required street improvements shall comply with latest San Bernardino County Road Planning and Design Standards and the San Bernardino County Standard Plans. Road sections shall be designed to Mountain Road Standards of San Bernardino County, and to the policies and requirements of the County Department of Public Works and in accordance with the General Plan, Circulation Element.
99. Street Improvement Plans. The developer shall submit for review and obtain approval of street improvement plans prior to construction. Final plans and profiles shall indicate the location of any existing utility facility or utility pole which would affect construction. Any utility affecting construction shall be relocated as necessary without cost to the County. Street improvement plans shall not be approved until all necessary right-of-way is acquired.
100. CMRS Exclusion. Road improvements required for this development will **not** be entered into the County Maintained Road System (CMRS).

101. Improvement Securities. Any required public road, drainage, and/or utility improvements for subdivisions shall be bonded in accordance with County Development code unless constructed and approved prior to recordation. All necessary fees shall be provided in accordance with the latest fee schedule.
102. Maintenance Bond. Once all required public road, drainage, and/or utility improvements have been constructed and approved, a maintenance bond for a period of one year shall be required to insure satisfactory condition of all improvements. Submit necessary fees, per the latest fee schedule, for new securities.
103. Access Rights. Vehicular access rights shall be restricted on SH-38 along the rear of double frontage lots.
104. Turnarounds. Turnarounds at dead end streets *and entrances to the marina* shall be in accordance with the requirements of the County Department of Public Works and Fire Department.
105. Two Access Points. A minimum two points of ingress/egress are required or alternative approved by County Fire Department.
106. Street Type Entrance. Street type entrance(s) with curb returns shall be constructed at the entrance(s) to the development.
107. Transitional Improvements. Right-of-way and improvements (including off-site) to transition traffic and drainage flows from proposed to existing, shall be required as necessary.
108. Street Gradients. Road profile grades shall not be less than 0.5% unless the engineer at the time of submittal of the improvement plans provides justification to the satisfaction of County Public Works confirming the adequacy of the grade.
109. Caltrans Approval. Obtain comments and approvals from Caltrans for access requirements and working within their right-of-way.
110. Physical Access. Physical access shall be required to all newly created parcels. Physical access is defined as a route which is traversable in a standard (two-wheel drive) sedan. The Developer's Engineer or Surveyor shall submit a signed and sealed letter, to Land Development Division certifying that physical access has been completed.
 - A) Pedestrian safety: Homeowner information provided by the HOA shall discourage pedestrian crossing of SR 38, and signage warning of cross traffic shall be placed at the entry/exit gate, to discourage unsafe crossing of the state highway.
111. CDP/LDD - Roads. A Composite Development Plan (CDP) is required and the following shall be delineated or noted on the CDP with confirmation and approval obtained from the LDD prior to recordation of the Parcel Map (Statements in quotations shall be verbatim):

"Land Use Services Department / Land Development – Roads (909) 387-8311"

- Structural Section Testing. A thorough evaluation of the structural road section, to include parkway improvements, from a qualified materials engineer, for the private roads shall be submitted to Land Development.
- "Private Roads/Improvements Prior to occupancy, construction of private roads and private road related drainage improvements shall be inspected and certified by the engineer. Certification shall be submitted to Land Development by the engineer identifying all supporting engineering criteria."
- "CMRS Exclusion. Roads within this development will **not** be entered into the County Maintained Road System (CMRS)."

Public Works – Surveyor (909) 387-8149

112. Final Map. A Tentative and Final Map is required in compliance with the Subdivision Map Act and the San Bernardino County Development Code.
113. Lot Line Adjustment. The Lot Line Adjustment noted on the tentative map will need to be filed concurrently with the Final Map application.
114. Non-interference Letter. Subdivider shall present evidence to the County Surveyor's Office that he has tried to obtain a non-interference letter from any utility company that may have rights of easement within the property boundaries.
115. Easements of Record. Easements of record not shown on the tentative map shall be relinquished or relocated. Lots affected by proposed easements or easement of record, which cannot be relinquished or relocated, shall be redesigned.
116. Payment of Actual Cost Fees. Review of the Final Map by our office is based on actual cost, and requires an initial \$8,000.00 deposit. Prior to recordation of the map all fees due to our office for the project shall be paid in full.
117. Title Report. A current Title Report prepared for subdivision purposes is required at the time the map is submitted to our office for review.
118. Final Monumentation. Final Monumentation, not set prior to recordation, shall be bonded for with a cash deposit to the County Surveyor's Office as established per the current County Fee Ordinance on file with the Clerk of the Board.

County Fire Department – Community Safety Division (909) 386-8465

119. Fire Fees. The required fees shall be paid.
120. CDP/Fire. The project applicant shall submit for review and approval a "Composite Development Plan" (CDP). The following statements shall be placed verbatim on the CDP.

- This project is protected by the County Fire Department. Prior to building permits being issued on any parcel, the applicant shall comply with the adopted California Fire Code requirements and all other applicable codes, ordinances, and standards of San Bernardino County Department standards.
- Individual lot owners shall be required to provide their own fire protection measures as determined and approved by the Fire Department prior to any building permit issuance. Fire protection measures may include Fire Department approval of:
 - Automatic fire sprinklers for all structures.
 - Surfacing of access roads and driveways.
- All construction shall adhere to the applicable standards and requirements of the Fire Safety Review Area One (FS1) overlay district, as adopted in the San Bernardino County Development Code. In Fire Hazard Areas, the applicant shall contact the San Bernardino County Building & Safety Division for variances concerning modified one-hour fire resistive construction for exterior walls.
- The street addresses shall be posted with a minimum of four-inch (4") numbers, visible from the street, and during the hours of darkness the numbers shall be internally electrically illuminated with a low voltage power source. Posted numbers shall contrast with their background and be legible from the street in accordance with the Uniform Fire Code. Where building setbacks exceed fifty feet (50') from the roadway, additional contrasting four-inch (4") numbers shall be displayed at the property access entrances.
- Prior to combustibles being placed on the project site, an approved paved road shall be installed. The topcoat of asphalt does not need to be installed until final inspection.
- Not less than two (2) complete sets of Building Plans shall be submitted to the Fire Department for review and approval.

PRIOR TO ISSUANCE OF BUILDING PERMITS

The Following Shall Be Completed

Public Works – Surveyor (909) 387-8149

121. Monumentation. If any activity on this project will disturb any land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying prior to commencement of any activity with the potential to disturb said monumentation, and appropriate documents shall be filed with the County Surveyor pursuant to Section 8771(b) Business and Professions Code.

County Fire Department – Community Safety Division (909) 386-8465

122. Paved Road. Prior to combustibles being placed on the project site, an approved paved road shall be installed. The topcoat of asphalt does not need to be installed until final inspection.
123. Fire Flow Operational. The applicant shall provide the Fire Department with a letter from the serving water company, certifying that the required water improvements have been made or that the existing fire hydrants and water system will meet distance and fire flow requirements. Fire flow water supply shall be in place prior to placing combustible materials on the job-site.
124. Street Sign. This project is required to have an approved street sign (temporary or permanent). The street sign shall be installed on the nearest street corner to the project. Installation of the temporary sign shall be prior any combustible material being placed on the construction site. Prior to final inspection and occupancy of the first structure, the permanent street sign shall be installed.
125. Hydrant Marker Blue reflective pavement markers indicating fire hydrant locations shall be installed as specified by the Fire Department. In areas where snow removal occurs, the blue reflective hydrant marker shall be posted on an approved post along the side of the road, no more than three feet (3') from the hydrant and at least six feet (6') high above the adjacent road.
126. Fire Hydrants. Additional Fire Hydrants shall be required on cul-de-sac roads greater than 350 feet long. No cul-de-sacs over 600 feet long will be allowed.

Public Works - Traffic Division (909) 387-8186

127. Improvements: The applicant shall design as part of the street improvement plans, one eastbound left-turn lane and additional eastbound through lane on North Shore Drive (SR-38) at each of the two project access roadways. The corner sight distance should be evaluated and meet Caltrans Highway Design Manual (latest edition) guidelines.

128. Fair Share Contribution: A fair share contribution for this project is required and will be based on the fair share percentages calculated in the Urban Crossroads traffic study (revised dated June 29, 2007). The Study concluded that additional traffic generated by this project will have an impact at the following intersections: Big Bear Boulevard (SR-18) at Stanfield Cutoff, North Shore Drive (SR-38) at Stanfield Cutoff, and North Shore Drive(SR-38) at Big Bear Boulevard (SR-18)

The total fair share contribution shall be paid to the Department of Public Works-Traffic Division. At the time of the traffic study, the total estimated fair share contribution is \$48,921. When an application for a building permit is filed, this amount will be adjusted to reflect actual construction cost incurred, if available, or will be adjusted to account for future construction cost incurred, if available, or will be adjusted to account for future construction cost using the Caltrans Construction Cost Index.

PRIOR TO FINAL INSPECTION OR OCCUPANCY

The Following Shall Be Completed

Public Works – Surveyor (909) 387-8149

129. Monumentation. If any activity on this project will disturb any land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying prior to commencement of any activity with the potential to disturb said monumentation, and appropriate documents shall be filed with the County Surveyor pursuant to Section 8771(b) Business and Professions Code.

Land Use Services Department – Planning Division (909) 387-8311

130. CCRF/Occupancy. Prior to occupancy/use, all Condition Compliance Release Forms (CCRF) shall be completed to the satisfaction of County Planning with appropriate authorizing signatures from each affected agency.

Public Works - Solid Waste Management (909) 387-8701

131. Construction and Demolition Waste Management Plan (CDWMP) Part 2 – The developer shall complete SWMD's CDWMP Part 2 for construction and demolition. This summary shall provide documentation of actual diversion of materials including but not limited to receipts, invoices or letters from diversion facilities or certification of reuse of materials on site. The CDWMP Part 2 shall provide evidence to the satisfaction of SWMD that demonstrates that the project has diverted from landfill disposal, material for reuse or recycling by a minimum of 50% of total weight or volume of all construction waste.

County Fire Department – Community Safety Division (909) 386-8465

132. Key Box. An approved Fire Department key box is required. The key box shall be provided with a tamper switch and shall be monitored by a Fire Department approved central monitoring service.
133. Radio Control. Where an automatic electric security gate is used, an approved Fire Department radio operated controller is required.

Land Use Services Department / Land Development Division – Drainage Section (909) 387-8311

134. Drainage Improvements. All required drainage improvements shall be completed by the applicant. The private Registered Civil Engineer (RCE) shall inspect improvements outside the County right-of-way and certify that these improvements have been completed according to the approved plans. Certification letter shall be submitted to Land Development.

135. WQMP Improvements. All required WQMP improvements shall be completed by the applicant, inspected and approved by County Public Works. An electronic file of the final and approved WQMP shall be submitted to Land Development Division, Drainage Section.

Land Use Services Department / Land Development Division – Road Section (909) 387-8311

136. Private Roads/Improvements Prior to occupancy, construction of private roads and private road related drainage improvements shall be inspected and certified by the engineer. Certification shall be submitted to Land Development by the engineer identifying all supporting engineering criteria.
137. Structural Section Testing. Prior to occupancy, a thorough evaluation of the structural road section, to include parkway improvements, from a qualified materials engineer, shall be submitted to Land Development.
138. Condition of Road Improvements. At the time of occupancy for all structures, the condition of all required on-site and off-site improvements shall be acceptable to County Public Works.
139. CMRS Exclusion. Roads within this development will not be entered into the County Maintained Road System (CMRS).
140. Landscape Maintenance. Trees, irrigation systems, and landscaping required to be installed on public right-of-way shall be approved by the County Public Works/Current Planning, maintained by the adjacent property owner or other County-approved entity.

END OF CONDITIONS

EXHIBIT C

Final Environmental Impact Report & Appendices
Please follow link
(documents listed under 'Moon Camp 2018'):
<https://cms.sbcounty.gov/lus/Planning/Environmental/Mountain.aspx>)

EXHIBIT D

Mitigation Monitoring Reporting Program

Mitigation Monitoring and Reporting Program for the Moon Camp Project San Bernardino County, California

Prepared for:

County of San Bernardino

~~Advance~~ Planning Division

Land Use Services Department

385 North Arrowhead Avenue

San Bernardino, CA 92415-0182

909.387.5036

Contact: Tom Nieves, Contract Planner

Prepared by:

FirstCarbon Solutions

650 E. Hospitality Lane, Suite 125

San Bernardino, CA 92408

Contact: Frank Coyle, Project Director
Charles Holcombe, Senior Project Manager

Report Date: September 13, 2018

Table 1: Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.1—Aesthetics					
A-1a: Construction equipment staging areas shall be located away from existing residential uses. Appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Project Grading Plans. (MM 5.4-1a)	On-site inspection to confirm implementation of mitigation measures.	During project construction	County of San Bernardino		
A-1b: All construction-related lighting associated with the construction of new roadways, improvements to SR-38 and the installation of utilities shall be located and aimed away from adjacent residential areas. Lighting shall use the minimum wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the County for review along with Grading Permit applications for the subdivision of the lots. (MM 5.4-1b)	Review and implement proposed plans.	Prior to construction of the project	County of San Bernardino		
A-2a: All homes shall provide a two-car garage with automatic garage doors. (MM 5.4-2a)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
A-2b: New development shall be subordinate to the natural setting and minimize reflective surfaces. Building materials including siding and roof materials shall be selected to blend in hue and brightness with the surroundings. Colors shall be earth tones: shades of grays, tans, browns, greens, and pale yellows; and shall be consistent with the mountain character of the area. (MM 5.4-2b)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
A-2c: Outside parking/storage areas associated with the boat dock activities shall be screened from view by the placement of landscaping and plantings which are compatible with the local environment and, where practicable, are capable of surviving with a minimum of maintenance and supplemental water. (MM 5.4-2c)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
A-2d: Construction plans for each individual lot shall include the identification and placement of vegetation with the mature height of trees listed. Landscaping and plantings should not obstruct significant views, within or outside of the project, either when installed or when they reach maturity. The removal of existing vegetation shall not be required to create views. (MM 5.4-2d)	Review and implement proposed plans.	Prior to construction of the project	County of San Bernardino		
A-2e: A Note shall be placed on the Composite Development Plan stating that during construction plans review and prior to issuance of building permits for each lot, the building inspector shall refer to the Mitigation Monitoring and Compliance Program regarding these aesthetic impact mitigation measures. The building inspector shall coordinate with the Advance Planning Division the review and approval of building plans in relation to these aesthetic impact mitigation measures, prior to approval and issuance of building permits. (MM 5.4-2e)	Review and implement proposed plans. Confirm coordination with Advance Planning Division.	Prior to approval and issuance of building permits	County of San Bernardino		
A-3a: Any entry sign for the development shall be a monument style sign compatible with the mountain character, preferably, rock or rock appearance. (MM 5.4-3a)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
A-3b: Prior to recordation of the tract map (and/or any ground disturbance, whichever occurs first), landscaping or revegetation plans for lettered lots (A through D) shall be submitted to and approved by the San Bernardino County Land Use Services Department. (MM 5.4-3b)	Review and implement proposed plans.	Prior to recordation of the tract map or before ground-disturbing (preparation and construction activities)	County of San Bernardino		
A-4a: All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary to prevent spill lighting on adjacent off-site uses. (MM 5.4 4a)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
A-4b: Lighting used for various components of the development plan shall be reviewed for light intensity levels, fixture height, fixture location and design by an independent engineer, and reviewed and approved by the County Building and Safety Division to ensure that light emitted from the proposed project does not intrude onto adjacent residential properties. (MM 5.4-4b)	On-site inspection to confirm implementation of mitigation measures. Confirm approval by the County Building and Safety Division.	Prior to final project approvals	County of San Bernardino		
A-4c: The project shall use minimally reflective glass. All other materials used on exterior buildings and structures shall be selected with attention to minimizing reflective glare. (MM 5.4-4c)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
A-4d: Vegetated buffers shall be used along State Route 38 to reduce light intrusion on residential development and on forested areas located adjacent to the project site. The vegetation buffers shall be reflected on the master landscape plan submitted to and approved by the County Land Use Services Department prior to the issuance of the first grading permit. (MM 5.4-4d)	Review and implement proposed plans.	Prior to construction of the project	County of San Bernardino		
A-4e: All outdoor light fixtures shall be cutoff luminaries and only high- or lowpressure sodium lamps shall be used. (MM 5.4-4f)	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
A-4f: Mitigation Measures A-4a through A4e shall be included in the Conditions, Covenants and Restrictions (CC&Rs) of the Home Owner's Association (HOA). (MM5.4-4e)	Confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.2 Air Quality/Greenhouse Gas					

<p>AQ-1: Prior to construction of the project, the project proponent will provide a Fugitive Dust Control Plan that will describe the application of standard best management practices to control dust during construction. The Fugitive Dust Control Plan shall be submitted to the County and SCAQMD for approval and approved prior to construction. Best management practices will include, but not be limited to:</p> <ul style="list-style-type: none"> • For any earth moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction. • For all disturbed surface areas (except completed grading areas), apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area. • For all inactive disturbed surface areas, apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind-driven fugitive dust, excluding any areas that are inaccessible due to excessive slope or other safety conditions. • For all unpaved roads, water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph. • For all open storage piles, apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind-driven fugitive dust. • Mass grading activities shall be limited to a maximum of 5 acres per day. 	<p>On-site inspection to confirm implementation of mitigation measures.</p>	<p>Prior to construction of the project</p>	<p>County of San Bernardino</p>		
<p>AQ-2: To reduce emissions from the construction equipment within the project site, the construction contractor will:</p>	<p>On-site inspection to confirm</p>	<p>During project construction</p>	<p>County of San Bernardino</p>		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<ul style="list-style-type: none"> Use catalyst and filtration technologies to the extent that equipment and technology is available and cost-effective. Use ultra-low sulfur diesel fuel containing no more than 15-ppm sulfur, or a suitable alternative fuel in all diesel-fueled engines used in construction of the Project. Ensure that all construction diesel engines with a rating of 50 horsepower (hp) or more, shall meet the Tier II California Emission Standards for off-road compression ignition engines. Maintain heavy-duty diesel equipment in optimum running condition. 	implementation of mitigation measures.				
<p>AQ-3: To reduce the emissions from wood burning apparatus; the following requirement will be placed on all new residences constructed on the proposed project's lots:</p> <ul style="list-style-type: none"> No open-hearth fireplace will be allowed in new construction, only EPA Phase II Certified fireplaces and wood stoves, pellet stoves, and natural gas fireplaces shall be allowed. 	On-site inspection to confirm implementation of mitigation measures.	During project construction	County of San Bernardino		
<p>AQ-4: To establish a "Good Neighbor Policy for Burning" that will further help reduce the potential for localized nuisance complaints related to wood burning; the proponent shall distribute an informational flyer to each purchaser of lots. At a minimum, the flyer will say:</p> <p>KNOW WHEN TO BURN</p> <ul style="list-style-type: none"> Monitor all fires; never leave a fire unattended. Upgrade an older woodstove to one with a catalytic combustor that burns off excess pollutants. Be courteous when visitors come to your home. Wood smoke can cause problems for people with 	Confirm distribution of flyer.	At the time of lot purchases.	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>developing or sensitive lungs (i.e. children, the elderly) and people with lung disease.</p> <p>KNOW WHAT TO BURN</p> <ul style="list-style-type: none"> Split large pieces of wood into smaller pieces and make sure it has been seasoned (allowed to dry for a year). Burning fresh cut logs = smoky fires. When buying wood from a dealer, do not assume it has been seasoned. Small hot fires are more efficient and less wasteful than large fires. Never burn chemically treated wood or non-wood materials. Manufactured fire logs provide a nice ambience, have the least impact to air quality, and are a good choice for homeowners who use a fireplace infrequently. <p>KNOW HOW TO BURN</p> <ul style="list-style-type: none"> Proper combustion is key. Make sure your wood fire is not starved; if excess smoke is coming from the chimney or stack, the fire isn't getting enough air. Visually check your chimney or stack 10 to 15 minutes after you light a fire to ensure it is not emitting excess amounts of smoke. Homeowners should have woodstoves and fireplaces serviced and cleaned yearly to ensure they are working properly. 					
Section 4.3 Biological Resources					
BR-1a Prior to the initiation of clearing or grading activities on the Project site, a conservation easement shall be placed upon the 10-acre Dixie Lee Lane property. The conservation easement shall be in favor of a California Department of Fish	Confirm easement is in place.	Prior to the initiation of clearing or grading activities on the Project site	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
and Wildlife approved conservation entity and shall be recorded in the San Bernardino County Recorder's Office. The easement shall provide for the continued protection and preservation of the property through development of a Long-Term Management Plan (LTMP). The LTMP shall provide for the preservation, restoration, and enforcement of the Conservation Areas so that each area is maintained, and restored where needed, to its natural condition. The LTMP will also include documentation of baseline conditions, any needed site preparation, anticipated restoration/enhancement activities, a biological monitoring program, the creation of a set of success criteria for managing the site, anticipated maintenance activities, an annual reporting process, and a set of contingency or adaptive management measures to be implemented in case success criteria are not being met; to ensure that the implementation of the LTMP is fully funded, a Property Action Report (PAR) will be prepared that will document costs for site security, maintenance activities, site preparation, restoration/enhancements activities, biological monitoring, contingency measure and annual reporting. The costs identified in the PAR will be used to develop a non-wasting endowment that will ensure all costs will be available to establish the site, conduct any needed restoration and enhancements, and to fund reoccurring annual cost needed to manage the site in perpetuity. The easement shall, at a minimum, restrict all use of the property that has the potential to impact the quality of pebble plain soils and other valuable biological habitat, including the occurrences of the Federally Threatened Ashy-Gray Indian Paintbrush. The property shall be fenced and signs shall be placed on the fencing indicating the sensitive nature of the property habitat					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
and warning that any entry would be prosecuted as a trespass.					
MM BR-1b. Prior to the initiation of clearing or grading activities on the Project site, the 5.38-acre on-site conservation easements (including Lot-A and Lot-H) shall be established. The conservation easement shall be in favor of a California Department of Fish and Wildlife approved qualified conservation entity and shall be recorded in the San Bernardino County Recorder's Office. The easement shall provide for the continued protection and preservation of the property through development of a Long-Term Management Plan (LTMP). The LTMP shall provide for the preservation, restoration, and enforcement of the Conservation Areas so that each area is maintained, and restored where needed, to is natural condition. The LTMP will also include documentation of baseline conditions, any needed site preparation, anticipated restoration/enhancement activities, a biological monitoring program, the creation of a set of success criteria for managing the site, anticipated maintenance activities, an annual reporting process, and a set of contingency or adaptive management measures to be implemented in case success criteria are not being met; to ensure that the implementation of the LTMP is fully funded, a Property Action Report (PAR) will be prepared that will document costs for site security, maintenance activities, site preparation, restoration/enhancements activities, biological monitoring, contingency measure and annual reporting. The costs identified in the PAR will be used to develop a non-wasting endowment that will ensure all costs will be available to establish the site, conduct any needed restoration and enhancements, and to fund reoccurring annual cost needed to manage the site in perpetuity. The easement shall, at a	Confirm recordation of easement.	Prior to the initiation of clearing or grading activities on the Project site	California Department of Fish and Game (CDFG)		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
minimum, restrict all use of the property that has the potential to impact the quality of pebble plain soils and other valuable biological habitat, including the occurrences of the Federally Threatened ashy-grey Indian paintbrush. The property shall be fenced and signs shall be placed on the fencing indicating the sensitive nature of the property habitat and warning that any entry would be prosecuted as a trespass.					
<p>MM BR-1c. Project Applicant shall take the following actions to further ensure the permanent preservation of the Conservation Areas (Lot A and Lot H):</p> <ul style="list-style-type: none"> • Restrict access by pedestrians and motor vehicles to the Conservation Areas. The Conservation Areas shall be secured through installation of fencing or other barriers to prevent access to Conservation Areas. Barriers shall be installed prior to commencement of any construction activities on site. Applicant shall also include provisions in the CC&Rs for the Project instituting penalties to residents who violate the restrictions and cause any damage to the protected plant habitat. • Include enforcement provisions in the CCR's requiring the Homeowners Association, individual resident within the project, and/or County of San Bernardino to enforce any violation of the provisions intended for the protection of sensitive plant species located within Lot A and Lot H. • Install appropriate signage identifying Conservation Areas and the sensitive nature of such areas on the project site and that access is prohibited. The Conservation Areas shall be monitored on a regular basis by the Conservation Entity. 	Confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<ul style="list-style-type: none"> Prohibit use of invasive plant species in landscaping. Each lot owner shall be given a list of prohibited invasive plant species upon purchase of lot with the parcel. Landscape plans for individual parcels shall be approved by the County prior to development to ensure no inappropriate plant material is incorporated into the design of any individual lot or common area which may compromise the quality of the Conservation Areas. Development may not change the natural hydrologic conditions of the Conservation Areas. All grading plans shall be reviewed by the County to ensure hydrologic conditions of the conservation lands are not adversely changed by development Applicant or appointed conservation entity shall monitor Conservation Areas on a periodic basis to ensure invasive, non-native species are not present. All non-native invasive plant species shall be removed from Conservation Areas. Fuel modification zones and programs shall not be implemented in Lots A and H. The Conservation Entity shall prepare an annual biological monitoring report identifying the current status of the rare plant species and any necessary actions to further enhance and protect the habitat. The Conservation Entity shall conduct routine monitoring of rare plant resources on Lot A and H. The occurrence of non-native species outbreaks, or other examples of ecological disturbance as a result of indirect impacts of development in and around Lots A and H shall be reported in the annual biological monitoring reports and remedial action 					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>shall be recommended and implemented by the Conservation Entity.</p> <ul style="list-style-type: none"> The occurrence of non-native species outbreaks, or other examples of ecological disturbance as a result of indirect impacts of development in and around Lots A and H shall be reported in the annual biological monitoring reports and remedial action shall be recommended and implemented by the Conservation Entity. 					
<p>MM BR-1d. Construction to the rear portions of Lots 47, 48, 49, and 50 shall be restricted by means of building envelopes or building setback lines to prevent construction in the occupied Ashy-Gray Paintbrush habitat, wherever feasible.</p>	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
<p>MM BR-3. Given the negative results of on-site surveys in and the available technical and peer reviewed literature, negative effects to the San Bernardino flying squirrel are not expected. However, because marginal foraging habitat was found on-site, the following mitigation measures will be implemented in the lots with densely forested areas and snags. These mitigation measures are to be implemented to avoid and minimize impacts to San Bernardino flying squirrels:</p> <ul style="list-style-type: none"> Restrict Project shall have a qualified biologist as a monitor just prior to and during all tree removal on-site. Minimize the removal of large coarse woody debris (>10cm diameter), which provide microhabitat for the growth of hypogeous fungi. 	Confirm presence of a qualified biologist.	During project construction	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<ul style="list-style-type: none"> Limit removal of standing snags (>25cm DBH) and large trees (>25cm DBH), which provide both structural complexity and potential nesting habitat. Prioritize the retention of large trees and snags with visible potential cavity nesting structures, which are associated with higher densities of northern flying squirrels. Minimize the loss of continuous canopy closure, especially in the drainages, which provides protection from predators while foraging and may play an important role in maintaining habitat connectivity. Project must compensate for the removal of suitable habitat through construction and erection of two nest boxes and one aggregate box per snag removed. Project is required to provide homeowners with information on the biology of the flying squirrel and suggest steps that homeowners can take to reduce their urban-edge effects. All subsequent home developers must comply with these provisions which shall be enforced by the County of San Bernardino through implementation of the Mitigation Monitor Reporting Program as mandated by CEQA. <p>If the monitoring biologist observes a flying squirrel during pre-construction and/or construction monitoring, the biologist will immediately halt work until the occupied tree can be vacated prior to felling the tree; however, if the work is during the nesting season (generally March through May), when baby squirrels could be present, the nest will not be</p>					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
vacated until after the nesting season ends (June 1 st), as cleared by the monitoring biologist.					
MM BR-4. Eagle perch trees identified in the 2002 Bonterra Consulting Bald Eagle Survey for Tentative Tract 16136, Moon Camp, Fawnskin, San Bernardino County, California, (see Appendix A of this Revised and Recirculated Draft EIR No. 2) shall be preserved in place upon project completion. If any of the designated perch trees should become hazardous and need to be taken down, replacement will be at a 5:1 ratio with the creation of artificial perch trees along shoreline designated open space. Prior to commencement of construction activity, applicant shall have a qualified consultant survey all trees on-site to determine the location of all perch trees to be preserved. Any development that may occur within the Project site and in the individual lots must avoid impacts to trees larger than 24 inches dbh and their root structures to the maximum extent feasible. If any additional non-perch trees on-site larger than 24 inches dbh are removed, then a replacement ratio of 2:1 shall be required and replacement trees shall be 24-inch box trees or larger. Whenever an eagle perch tree or other non-perch tree larger than 24 inches DBH is removed, the Home Owners Association shall retain a qualified consultant to oversee removal and compliance with the replacement requirement. All construction or landscaping improvements, including irrigation, will be prohibited on or around the exposed root structures or within the dripline of these trees. These restrictions on development of the individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This measure shall be identified as a Note on the Composite Development Plan.	Confirm presence of qualified consultant.	Prior to commencement of construction activity	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM BR-5. Prior to vegetation clearing, grading, or other disturbance, the Project site shall be surveyed to identify all large trees (i.e., greater than 20 inches in diameter at 4.5 feet from the ground) within 600 feet from the high water line. Trees identified on the Project site as having a diameter in excess of 20 inches at 4.5 feet from the ground within 600 feet of the shoreline shall be documented and tagged. Any development that may occur within the Project site and in the individual lots shall avoid impacts to tagged trees and their root structures. If such trees cannot be avoided, their removal shall be coordinated with the County of San Bernardino to minimize impacts to the extent feasible. All construction or landscaping improvements, including irrigation, will be prohibited on or around the exposed root structures or within the dripline of these trees. These restrictions on development of individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This measure shall be identified as a Note on the Composite Development Plan.	Confirm completion of survey for project site.	Prior to vegetation clearing, grading, or other disturbance	County of San Bernardino		
MM BR-6. Seven days prior to the onset of construction activities, a qualified biologist shall survey within the limits of project disturbance for the presence of any active raptor nests. Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFG. If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for raptors in the region of the Project site normally occurs from February 1 to July 30.	Confirm completion of survey for project site by a qualified biologist.	Seven days prior to the onset of construction activities	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
To protect any nest site, the following restrictions on construction are required between February 1 and July 30 (or until nests are no longer active as determined by a qualified biologist): (1) clearing limits shall be established a minimum of 300 feet in any direction from any occupied nest and (2) access and surveying shall not be allowed within 200 feet of any occupied nest. Any encroachment into the 300/200-foot buffer area around the known nest shall only be allowed if it is determined by a qualified biologist that the proposed activity shall not disturb the nest occupants. Construction during the nesting season can occur only at the sites if a qualified biologist has determined that fledglings have left the nest.					
MM BR-7. Vegetation removal, clearing, and grading on the Project site should be performed outside of the breeding and nesting season (between February 1 and June 30), when feasible, to minimize the effects of these activities on breeding activities of migratory birds and other species. If clearing occurs during breeding season, a 30-day clearance survey for nesting birds shall be conducted. Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFG. If nesting activity is present at any nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code.	Confirm vegetation removal, clearing, and grading does not occur during nesting season. If so, confirm 30-day clearance survey was completed.	Prior to project construction	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM BR-8. The use of the boat dock for motorized boating shall be prohibited between the dates of December 1 and April 1. No motorized boats shall be allowed to launch or moor in the vicinity of the boat dock at any time during this period. This restriction shall be clearly displayed on signage at the entrance to the parking lot and on the boat dock visible from both land and water. This requirement shall also be published in the Homeowner's Association Conditions, Covenants & Restrictions (CC&Rs).	On-site inspection to confirm implementation of mitigation measures.	After construction of project	County of San Bernardino		
MM BR-9. Street lamps on the Project site shall not exceed 20 feet in height, shall be fully shielded to focus light onto the street surface and shall avoid any lighting spillover onto adjacent open space or properties. Furthermore, street lights shall utilize low color temperature lighting (e.g., red or orange).	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
MM BR-10. Outdoor lighting for proposed homes on the individual tentative tracts shall not exceed 1,000 lumens. Furthermore, residential outdoor lighting shall not exceed 20 feet in height and must be shielded and focused downward to avoid lighting spillover onto adjacent open space or properties. These restrictions on outdoor lighting of the individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This requirement shall also be published in the Homeowner's Association CC&Rs.	On-site inspection to confirm implementation of mitigation measures.	Prior to final project approvals	County of San Bernardino		
MM BR-11. To limit the amount of human disturbance on adjacent natural open space areas, signs shall be posted, to the satisfaction of the Planning Director or appointee, along the northern and eastern perimeter of the Project site where the property boundary abuts USFS open space with the	On-site inspection to confirm implementation	Prior to final project approvals	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>following statement: “Sensitive plant and wildlife habitat. Please use designated trails and keep pets on a leash at all times.”</p> <p>In addition, a requirement stating that residents shall keep out of adjacent open space areas to the north with the exception of designated trails will be published in the Homeowner Association CC&Rs and a map of designated hiking trails will be provided to all residents.</p>	of mitigation measures.				
<p>MM BR-12. Prior to recordation of the final map, a landscaping plan for the entire tract shall be prepared (inclusive of a plant palette) with an emphasis on native trees and plant species, and such plan shall be submitted to the County of San Bernardino for review and approval by a qualified biologist. The review shall determine that invasive, non-native plant species are not to be used in the proposed landscaping. The biologist will suggest appropriate native plant substitutes or non-invasive, nonnative plants. A note shall be placed on the Composite Development Plan indicating that all proposed landscaping (including landscaping on individual lots) shall conform to the overall approved tract map landscaping plan. A requirement shall be included stating that residents shall be restricted to the use of tree and plant species approved per the overall tract map landscaping plan. The Homeowner Association CC&Rs shall also require individual lot owners to use only tree and plant species approved per the overall tract map landscaping plan/plant palette.</p>	Review and implement proposed plans.	Prior to recordation of the final map	County of San Bernardino		
<p>MM BR-13 Prior to issuance of grading permits, the Project applicant shall obtain all required authorization from agencies with jurisdiction over all unavoidable impacts to State and</p>	Confirm receipt of required authorizations.	Prior to issuance of grading permits	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Federal jurisdictional lakes, streams, and associated habitat within the Project site. Impacted features shall be offset through onsite restoration, offsite restoration, or purchase of credits at an agency-approved mitigation bank in the region at no less than a 3:1 for direct impacts and 1:1 for indirect impacts if impacts cannot be avoided.					
Section 4.4—Hydrology					
HYD-1 Prior to issuance of a building permit, a program satisfactory to the County will be formulated to handle storm drain waters adequately.	Review and implement proposed program.	Prior to issuance of a building permit	County of San Bernardino		
HYD-2 All required drainage improvements must be designed and constructed to County standards. Tentative tract map, site plan, and other precise plans for individual lots will be accompanied by adequate plans for drainage improvements prepared by registered professional engineers.	Review and implement proposed plans.	Prior to construction activities	County of San Bernardino		
HYD-3 The proposed cross culverts shall be sized for 100-year burn and bulking flow rates. The burn and bulking method would increase the runoff from the natural areas. The method provided in the Los Angeles County Hydrology Manual is recommended. In addition, the cross culverts shall all be designed with headwalls to prevent CMP crushing, and shall be maintained adequately.	On-site inspection to confirm implementation of mitigation measures.	During construction activities	County of San Bernardino		
HYD-4 To mitigate sediment transport during construction, the developer shall submit a sedimentation control plan with the grading plan for review and approval by the Public Works Department. The Project engineer shall certify compliance.	Review and implement proposed plan.	Prior to construction activities	County of San Bernardino Project Engineer		
HYD-5 Prior to Grading Permit issuance and as part of the Proposed Alternative Project's compliance with the NPDES requirements, a Notice of Intent (NOI) shall be prepared and	Review and implement proposed plan.	Prior to Grading Permit issuance	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
submitted to the Santa Ana Regional Water Quality Control Board providing notification and intent to comply with the State of California general permit. Also, a Storm Water Pollution Prevention Plan (SWPPP) shall be completed for the construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction-site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction-site to the "maximum extent practicable."					
<p>HYD-6 At a minimum, the following shall be implemented from the California Storm Water Best Management Practice Handbook - Construction Activity:</p> <ul style="list-style-type: none"> • Dewatering Operations – This operation requires the use of sediment controls to prevent or reduce the discharge of pollutants to storm water from dewatering operations. • Paving Operations – Prevent or reduce the runoff of pollutants from paving operations by proper storage of materials, protecting storm drain facilities during construction, and training employees. • Structural Construction and Painting – Keep site and area clean and orderly, use erosion control, use proper storage facilities, use safe products and train employees to prevent and reduce pollutant discharge to storm water facilities from construction and painting. • Material Delivery and Storage – Minimize the storage of hazardous materials on-site. If stored on-site, keep in designated areas, install secondary containment, conduct regular inspections and train employees. 	Confirm BMPs are incorporated into design and construction phases.	Before ground-disturbing (preparation and construction activities)	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<ul style="list-style-type: none"> Material Use – Prevent and reduce the discharge of pesticides, herbicides, fertilizers, detergents, plaster, petroleum products and other hazardous materials from entering the storm water. Solid Waste Management – This BMP describes the requirements to properly design and maintain trash storage areas. The primary design feature requires the storage of trash in covered areas. Hazardous Waste Management – This BMP describes the requirements to properly design and maintain waste areas. Concrete Waste Management – Prevent and reduce pollutant discharge to storm water from concrete waste by performing on and off-site washouts in designated areas and training employees and consultants. Sanitary Septic Water Management – Provide convenient, well-maintained facilities, and arrange regular service and disposal of sanitary waste. Vehicle and Equipment Cleaning – Use off-site facilities or wash in designated areas to reduce pollutant discharge into the storm drain facilities. Vehicle and Equipment Fueling – Use off-site facilities or designated areas with enclosures or coverings to reduce pollutant discharge into the storm drain facilities. Vehicle and Equipment Maintenance – Use off-site facilities or designated areas with enclosing or coverings to reduce pollutant discharge into the storm drain facilities. In addition, run a “dry site” to prevent pollution discharge into storm drains. Employee and Subcontractor Training – Have a training session for employees and subcontractors to 					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>understand the need for implementation and usage of BMPs.</p> <ul style="list-style-type: none"> • Preservation of Existing Vegetation – Minimize the removal of existing trees and shrubs since they serve as erosion control. • Seeding and Planting – Provide soil stability by planting and seeding grasses, trees, shrubs, vines, and ground cover. • Mulching – Stabilize cleared or freshly seeded areas with mulch. • Geotextiles and Mats – Natural or synthetics material can be used for soil stability. • Dust Control – Reduce wind erosion and dust generated by construction activities by using dust control measures. • Construction Road Stabilization – All on-site vehicle transport routes shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust. • Stabilized Construction Entrance – Stabilize the entrance pad to the construction area to reduce amount of sediment tracked off-site. • Earth Dikes – Construct earth dikes of compacted soil to divert runoff or channel water to a desired location. Temporary Drains and Swales – Use temporary drains and swales to divert off-site runoff around the construction-site and stabilized areas and to direct it into sediment basins or traps. • Outlet Protection – Use rock or grouted rock at outlet pipes to prevent scouring of soil caused by high velocities. • Check Dams – Use check dams to reduce velocities of concentrated flows, thereby reducing erosion and 					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>promoting sedimentation behind the dams. Check dams are small and placed across swales and drainage ditches.</p> <ul style="list-style-type: none"> • Silt Fence – Composed of filter fabric, these are entrenched, attached to support poles, and sometimes backed by wire fence support. Silt fences promote sedimentation behind the fence of sediment-laden water. • Straw Bale Barrier – Place straw bales end to end in a level contour in a shallow trench and stake them in place. The bales detain runoff and promote sedimentation. • Sand Bag Barriers – By stacking sand bags on a level contour, a barrier is created to detain sediment-laden water. The barrier promotes sedimentation. • Brush or Rock Filter – Made of 0.75 to 3-inch diameter rocks placed on a level contour or composed of brush wrapped in filter cloth and staked to the toe of the slope provides a sediment trap. • Storm Drain Inlet Protection – Devices that remove sediment from sediment laden storm water before entering the storm drain inlet or catch basin. • Sediment Trap – A sediment trap is a small, excavated, or bermed area where runoff for small drainage areas can pass through allowing sediment to settle out. 					
<p>HYD-7 A water quality maintenance program will be implemented to mitigate the impact of Proposed Alternative Project generated runoff on surface water quality over the long term. The program outlined in Water Pollution Aspects of Street Surface Contaminants (prepared by the United States Environmental Protection Agency) provides</p>	Review and implement proposed program.	During grading activities	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>recommendations for street cleaning and prevention of pollution generation.</p> <ul style="list-style-type: none"> • Prior to Grading Permit issuance, a Water Quality Management Plan (WQMP) shall be developed and shall include both Non-Structural and Source Control BMPs. The WQMP shall conform to the San Bernardino County Draft NPDES permit and WQMP standards. The following are the minimum required controls to be implemented as a part of the WQMP for Urban Runoff. • Education for Property Owners, Tenants and Occupations – The Property Owners Association is required to provide awareness educational material, including information provided by San Bernardino County. The materials shall include a description of chemicals that should be limited to the property and proper disposal, including prohibition of hosing waste directly to gutters, catch basins, storm drains or the lake. • Activity Restrictions – The developer shall prepare conditions, • covenants and restriction of the protection of surface water quality. • Common Area Landscape Management – For the common landscape areas on-going maintenance shall occur consistent with County Administrative Design Guidelines or city equivalent, plus fertilizer and pesticide usage consistent with the instructions contained on product labels and with regulation administered by the State Department of Pesticide Regulation or county equivalent. • Common Area Catch Basin Inspection – Property Owners 					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<ul style="list-style-type: none"> Associations shall have privately owned catch basins cleaned and maintained, as needed. These are intended to prevent sediment, garden waste, trash and other pollutants from entering the public streets and storm drain systems. Common Area Litter Control – POAs shall be required to implement trash management and litter control procedures to minimize pollution to drainage waters. Street Sweeping Private Streets and Parking Lots – Streets and Parking lots shall be swept as needed, to prevent sediment, garden waste, trash and other pollutants from entering public streets and storm drain systems. 					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
HYD-8 The following controls from the California Storm Water Best Management Practice Handbook – Municipal shall be employed: <ul style="list-style-type: none"> Housekeeping Practices – This entails practices such as cleaning up spills, proper disposal of certain substances and wise application of chemicals. Used Oil Recycling – May apply to maintenance and security vehicles. Vegetation Controls – Vegetation control typically includes chemical (herbicide) application and mechanical methods. Chemical methods are discussed in SC10. Mechanical methods include leaving existing vegetation, cutting less frequently, hand cutting, planting low maintenance vegetation, collecting and properly disposing of clippings and cuttings, and educating employees and the public. Storm Drain Flushing – Although general storm drain gradients are sufficiently steep for self-cleansing, visual inspection may reveal a buildup of sediment and other pollutants at the inlets or outlets, in which case flushing may be advisable. 	Confirm BMPs are incorporated into design and construction phases.	Prior to construction of project	County of San Bernardino		
HYD-9 The Water Quality Management Plan (WQMP) shall include Structural or Treatment BMPs. The structural BMPs utilized shall focus on meeting potential TMDL requirements for noxious aquatic plants, nutrients, sedimentation and siltation. The structural BMPs shall conform to the San Bernardino County NPDES permit and the San Bernardino WQMP standards.	Confirm BMPs are incorporated.	Ongoing	County of San Bernardino		
HYD-10 Consistent with the WQMP guidelines contained in the Draft National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for San Bernardino County, Structural BMPs shall be required for the	Confirm BMPs are incorporated.	Ongoing	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>Proposed Alternative Project. They shall be sized to comply with one of the following numeric sizing criteria or be considered by the Permittees to provide equivalent or better treatment. Volume-based BMPs shall be designed to infiltrate or treat either:</p> <ul style="list-style-type: none"> • The volume of runoff produced from the 85th percentile 24-hour storm event, as determined from the local historical rainfall record; or • The volume of the annual runoff produced by the 85th percentile 24-hours rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998); or • The volume of annual runoff based on unit basin storage volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practice Handbook – Industrial/Commercial (1993); or • The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. <p>- OR -</p> <ul style="list-style-type: none"> • Flow-based BMPs shall be designed to infiltrate or treat either: • The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or • The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as 					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
determined from the local historical rainfall record, multiplied by a factor of two; or <ul style="list-style-type: none">The maximum flow rate of runoff, as determined from the local historical rainfall record that achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>HYD-11 The following are the minimum required controls to be implemented as a part of the Water Quality Management Plan (WQMP) for Urban Runoff.</p> <ul style="list-style-type: none"> Control of Impervious Runoff – Surface runoff shall be directed to landscaped areas or pervious areas. Common Area Efficient Irrigation – Physical implementation of the landscape plan consistent with County Administrative Design Guidelines or city equivalent, which may include provision of water sensors, programmable irrigation timers, etc. Common Area Runoff – Minimizing Landscape Design – Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Catch Basin Stenciling – “No Dumping – Flows to Lake” or equivalent effective phrase shall be stenciled on catch basins to alert the public as to the destination of pollutant discharging into storm drain. Debris Posts – These shall be installed to prevent large floatable debris from entering the storm drains. They shall be placed upstream of the cross culverts. Inlet Trash Racks – These shall be installed where appropriate to reduce intake and transport through the storm drain system of large floatable debris. Trash racks shall be provided where drainage from open areas enters storm drain or cross culverts. 	On-site inspection to confirm implementation of mitigation measures.	Ongoing	County of San Bernardino		
<p>HYD-12 Storm water treatment under the NPDES Permit and the future TMDL requirements shall include the construction of treatment BMPs.</p>	Verify construction of treatment BMPs are included.	During construction activities	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
HYD-13 Treatment BMPs appropriate for on-site use shall include infiltration trenches and basins, swales, inlet filtration, and/or water quality basins.	Confirm BMPs are incorporated.	Every 5 years	County of San Bernardino		
HYD-14 All storm water runoff shall be treated before leaving the site to reduce pollutants in Big Bear Lake.	On-site inspection to confirm implementation of mitigation measures.	Ongoing			
HYD-15 Infiltration trenches and/or basins shall be used on site to meet potential future TMDLs for noxious aquatic plants and nutrients. Infiltration trenches and basins treat storm water runoff through filtration. A typical infiltration trench is essentially an excavated trench that is lined with filter fabric and backfilled with stones. Depth of the infiltration trench shall range from three to eight feet and shall be located in areas with permeable soils, and water table and bedrock depth situated well below the bottom of the trench. Trenches shall not be used to trap coarse sediments since large sediment would likely clog the trench. Grass buffers may be installed to capture sediment before it enters the trench to minimize clogging. Infiltration basins shall be used for drainage areas between 5 and 50 acres. Infiltration basins shall be either in-line or offline, and may treat different volumes such as the water quality volume or the 2-year or 10-year storm.	Confirm infiltration trenches and/or basins are used.	Ongoing	County of San Bernardino		
HYD-16 The Proposed Alternative Project shall implement either vegetative swales, enhanced vegetated swales utilizing check dams and wide depressions, a	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
series of small detention facilities designed similarly to a dry detention basin, or a combination of these treatment methods into a treatment train (series of Structural BMPs). The Water Quality Management Plan shall address treatment for the Proposed Alternative Project to assure that runoff from the site is treated to the “maximum extent practicable.” The swales shall be treated as water quality features and shall be maintained differently than grass areas. Specifically, pesticides, herbicide, and fertilizers, which may be used on the grass areas, shall not be used in the vegetation swales.					
<p>HYD- 17 Filtration shall be implemented as a treatment method and shall use drop-in infiltration devices or inline devices. Drop-infiltration devices at all curb inlets within the internal parking lots shall be implemented to provide potential pollutant removal. Existing examples of these filtration devices include the Drain Pac Storm Drain Inserts and Fossil Filters. These types of devices are efficient at removing oil and grease, debris, and suspended solids from treated waters. Some of these devices have also exhibited high efficiencies at removing heavy metals and other pollutants.</p> <p>Inline devices suggested for use on-site include the Continuous Deflection Separator (CDS unit). Once the runoff has entered the storm drain, an in-line diversion would direct the treatment flow to a CDS unit. The CDS unit is a nonblocking, non-mechanical screening system, which would provide a second line of defense for solids removal.</p> <p>Adsorption materials can be added within the CDS unit to aid</p>	Confirm filtration is implemented.	Prior to final project approval	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>in the removal of oil and grease. The treated flow would then exit the CDS unit and continue downstream. Monitoring of filtration devices shall be conducted.</p> <p>The use of street sweeps on the parking lots and streets shall aid in reducing the amounts of sediment and debris that flow through the devices. This would extend the effectiveness of the devices during a storm event and would lower the frequency of required maintenance. The devices shall be checked and cleaned, if necessary, once a month during the rainy season, following any precipitation and at the end of the dry season prior to the first precipitation event of the rainy season.</p> <p>Consideration shall be given to using these filtration units in other areas besides the parking lot inlets. Another potential location is at the downstream end of the tributary pipes that feed the discharge point. Siting these units at a downstream point would allow for the treatment of a greater amount of runoff.</p>					
HYD-18 The Developer shall comply with any requirements of the U.S. Army Corps of Engineers (ACOE) and the California Department of Fish and Game (CDFG) regarding water quality and drainage.	Confirm implementation of mitigation measures.	Ongoing	County of San Bernardino		
HYD- 19 A well located on the site of the Proposed Alternative Project, if not used as a water supply well or a monitoring well, shall be capped and taken out of service in accordance with accepted civil engineering standards.	Confirm implementation of mitigation measures.	Ongoing	County of San Bernardino		
Section 4.6—Noise					
NOI-1 Construction contractors shall be required to ensure that construction equipment is well tuned and maintained	Confirm implementation	During construction activities	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
according to the manufacturer's specifications, and that the equipment's standard noise reduction devices are in good working order. (MM5.7-1b, modified.)	of mitigation measures				
NOI-2 Consistent with the County of San Bernardino Development Code Section 87.0901, construction activities shall be limited as follows (MM 5.7-1a modified): For general construction activities, the operation of construction equipment and outdoor construction or repair work shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday.	Confirm implementation of mitigation measures	During construction activities	County of San Bernardino		
NOI-3 Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturers' specifications) and by shrouding or shielding impact tools. All equipment shall have sound-control devices no less effective than those provided by the manufacturer. (MM5.7-1c, modified.)	Confirm implementation of mitigation measures	During construction activities	County of San Bernardino		
NOI-4 Construction activities contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from adjacent residences. Activities within these staging areas shall conform to the time limitations established in Mitigation Measure NOI-2. (MM5.7-1d, modified.)	Confirm implementation of mitigation measures	During construction activities	County of San Bernardino		
Section 4.7—Public Services					
PS-1 The fire flow requirement shall be 1750 gpm @ 2 hours based on homes in the range of 3,600 to 4,800 square feet,	Confirm implementation	Prior to final project approval	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
and 2,000 gpm @ 2 hours for homes greater than 4,800 square feet. (MM 5.3-1a.)	of mitigation measures				
PS-2 All residences less than 5,000 square feet shall be subject to the standard fire sprinkler requirement (NFPA 13D). Homes above 5,000 square feet shall be subject to the NFPA13R sprinkler requirement. (MM 5.3-1b, as modified.)	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		
PS-3 A Fuels Management Plan, with specifications, shall be prepared and subject to approval by the County of San Bernardino Fire Department and San Bernardino National Forest Service. The Fuels Management Plan shall implement the fire safety requirements of the FS1 Fire Safety Overlay District, including a 100-foot minimum setback requirement from the National Forest. The fuel modification zone shall be located entirely within the project boundaries. The minimum fuel modification zone requirements may be greater in steeper areas (up to 300 feet), as determined by the Fire Department. (MM 5.3-1c, as modified.)	Review and implement proposed program.	Prior to construction activities	County of San Bernardino Fire Department and San Bernardino National Forest Service		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
PS-4 A Homeowner's Association shall be established to implement the Fuels Management Plan. The Fuels Management Plan shall specify any professional assistance, if necessary, to implement the action portion of the plan. The Plan shall determine if a Registered Professional Forester is necessary for professional guidance to implement the Plan. The HOA is to be responsible for fuel modification in common areas. (MM 5.3-1e, as modified.)	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		
Section 4.8—Traffic					
T-1 Project Design Features recommended in the TIA shall be incorporated into the project design. These include: <ul style="list-style-type: none"> • Construction of North Shore Drive at its ultimate half-section width as a Mountain Major highway from Canyon Drive to the Easterly project boundary. • Installation of a stop sign control at Driveway #1 and Driveway #2. • Construction of an Eastbound Left Turn Lane at Driveway 1/North Shore Drive and Driveway 2/North Shore Drive for 2030 Buildout Conditions. • Construction of a 2nd Eastbound Through Lane at Driveway /North Shore Drive and Driveway 2/North Shore Drive for 2030 Buildout Conditions. 	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		
T-2 The eastbound left turn lanes at both project access points will be constructed at opening year at 100% cost to the Applicant. The Applicant shall pay fair share costs of the construction of the eastbound through lanes at both project access points for the horizon year conditions. The developer shall pay the fair share cost of \$99,320 toward the off-site traffic improvements recommended in Appendix G of the San Bernardino Congestion Management Program, 2003 Update.	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>T-3 The following Project Design Features\recommended in the Revised 2018 Focused Traffic Impact Assessment (FEIR Appendix M) shall be incorporated into the Proposed Alternative Project design:</p> <ul style="list-style-type: none"> • Construction of left-turn pockets on driveways along North Shore Drive (SR-38) on Driveway 1 and Driveway 2. • Construction of a Class II Bicycle Lane on North Shore Drive (SR-38) in the eastbound direction. 	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.9—Utilities					

<p>U-1a The Moon Camp Home Owners Association shall create a “conservation guidelines” booklet that outlines the following measures:</p> <ul style="list-style-type: none"> • All indoor water fixtures shall be low flow / low flush. • Landscape shall not be irrigated between the hours of 9:00 a.m. and 6:00 p.m. • Residences, buildings, and premises shall be limited to watering landscaping every other day. • Water from landscape irrigation shall not be allowed to run off into streets or other paved areas. • Water leaks are not permitted and must be repaired as soon as practicable. • Sidewalks, paved driveways, and parkways shall not be washed off with hoses, except as required for sanitary purposes. • Washing non-commercial vehicles (cars, boats RVs) is permitted; however, it shall only be permitted with an automatic shut-off nozzle on a hose, or with a bucket. • Turf landscaping shall be limited to 500 square feet on a parcel or lot unless the water purveyor’s regulations allow additional turf area. • Turf irrigation shall include an automatic controller that incorporates evapotranspiration and rain shutoff features. • Sprinklers are only allowed on turf. All other landscape plantings must be irrigated with efficient, low water use devices, such as, drip systems or bubblers. • All outdoor irrigation systems shall be shut off and winterized between November 1st and April 1st of each year. • A model landscaping and irrigation guide shall be prepared for the tract and required by homeowner association rules. The guide shall identify the following conservation measures: Landscaping shall 	<p>Confirm implementation of mitigation measures.</p>	<p>Prior to final project approval</p>	<p>County of San Bernardino</p>		
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Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
<p>include a plant palette that emphasizes Xeriscape, native plants and cultivars that are suitable for the mountain climate. Plant materials shall be low water consuming and fire resistant. Irrigation shall limit aerial spray methods and shall emphasize drip and bubbler type emitters. The landscaping guidelines shall be reviewed and approved by the Land Use Services Department.</p> <ul style="list-style-type: none"> The Project shall comply with the local water agency's "Model Landscape and Irrigation" ordinance. 					
U-1b Pumping and extraction of groundwater shall be limited to 9 acre-feet per year for Well FP-2, 0 acre-feet per year for Well FP-3, and 5 acre-feet per year for Well FP-4. If DWP desires to extract groundwater from Well FP-2 in excess of 9 acre-feet per year, the purveyor shall conduct an independent environmental analysis and consider potential impacts at that time.	Confirm implementation of mitigation measures.	Ongoing	County of San Bernardino		
U-1c The grant deeds transferring ownership of Wells FP-2, FP-3 and FP-4 shall include the pumping and extraction limitations included in Mitigation Measure U-1b. The grant deeds shall also state that DWP, on January 1st of each year, shall report the amount of the prior year's annual groundwater production from Wells FP-2, FP-3 and FP-4 to the County Planning Department and the County Health Department.	Confirm implementation of mitigation measures.	Ongoing	County of San Bernardino		
U-2 Prior to issuance of building permits, the Applicant shall fund all on-site and off-site sewer improvements required to support development of the Project site. Such improvements shall be to the satisfaction of the County Service Area (CSA) 53B.	Confirm implementation of mitigation measures.	Prior to issuance of building permits	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
U-3 Prior to issuance of building permits, the Applicant shall provide evidence to the County of San Bernardino that the BBARWA has sufficient transmission and treatment plant capacity to accept sewage flows from the Project site.	Confirm implementation of mitigation measures.	Prior to issuance of building permits	County of San Bernardino		
Cultural Resources					
5.9-1 Project-related grading, grubbing, trenching, excavations, and/or other earth-moving activities in the project area shall be monitored by a qualified archaeologist. In the event that a material of potential cultural significance is uncovered during such activities on the project site, all earth-moving activities in the project area shall cease and the archeologist shall evaluate the quality and significance of the material. Earth-moving activities shall not continue in the area where a material of potential cultural significance is uncovered until resources have been completely removed by the archaeologist and recorded as appropriate.	Confirm presence of a qualified archaeologist.	Prior to grading, grubbing, trenching, excavations, and/or other earth-moving activities	County of San Bernardino		
5.9-2a Grading shall be monitored during excavation in areas identified as likely to contain paleontologic resources by a qualified paleontological monitor. Monitoring shall be accomplished for any undisturbed subsurface older alluvium, which might be present in the subsurface. The monitor shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.	Confirm presence of a paleontological monitor, as necessary.	During grading and excavation	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
5.9-2b Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates.	Confirm implementation of mitigation measures.	During construction activities	County of San Bernardino		
5.9-2c Identification and curation of specimens into a museum repository with permanent retrievable storage shall occur for paleontological resources.	Confirm implementation of mitigation measures.	During construction activities	County of San Bernardino		
5.9-2d A report of findings shall be prepared with an appended itemized inventory of specimens. The report shall include pertinent discussion of the significance of all recovered resources where appropriate. The report and inventory when submitted to the appropriate Lead Agency, shall signify completion of the program to mitigate impacts to paleontologic resources.	Confirm inventory is itemized in a report.	At the completion of construction	County of San Bernardino		
5.9-3 In the event human remains are discovered during grading/ construction activities, work shall cease in the immediate area of the discovery and the Project Applicant shall comply with the requirements and procedures set forth in Section 5097.98 of the Public Resources Code, including notification of the County Coroner, notification of the Native American Heritage Commission, and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendent.”	Cease construction when there is a discovery of human remains and contact County Coroner and NAHC.	During construction activities	County of San Bernardino		
Geology and Soils					

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
GS-1 The stability of south facing cut slopes shall be analyzed as part of the design-level geotechnical investigation. Utilizing 2:1 buttressed slopes using onsite native soil materials, or constructing geotextile-reinforced soil buttresses for planned unstable cut slopes are typical engineering designs for stabilizing slopes. Either of these methods, or other methods, must be approved by the San Bernardino County Department of Building and Safety. (MM 5.10-1 of the 2005 Final EIR was modified in response to comments on the 2005 Draft EIR.)	Confirm implementation of mitigation measures.	During geotechnical investigation	County of San Bernardino		
GS-2a Due to the potential for erosion associated with younger alluvial deposits within the two major on-site stream channels, increased surface drainage quantities associated with development on-site shall be directed away from the stream channels. (MM5.10-2a of the 2005 Final EIR.)	Confirm implementation of mitigation measures.	During construction activities	County of San Bernardino		
GS2b Prior to the issuance of Grading Permits, the Project Applicant shall prepare a Soil Erosion and Sedimentation Plan for submittal and approval by the County Building and Safety Department. (MM 5.10-2b of the 2005 Final EIR.)	Review and implement proposed plans.	Prior to the issuance of Grading Permits	County of San Bernardino		
GS-3 Engineering design for all structures and roadways shall be based on the current California Uniform Building Code at the time of project development. Construction plans shall be in accordance with seismic design standards set forth by the County's Development Code and Uniform Building Code. (MM 5.10-3 of the 2005 Final EIR.)	Review of construction plans.	Prior to construction activities	County of San Bernardino		
GS-4 Residential structures shall be located in areas which provide a minimum of five feet of freeboard above the high water line for any structures. (MM 5.10-4 of the 2005 Final EIR.)	Confirm implementation of mitigation measures.	Prior to construction activities	County of San Bernardino		

Table 1 (cont.): Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
GS-5 Prior to grading permit issuance, a quantitative geotechnical analysis and design-level geotechnical engineering report shall be required and submitted to the County of San Bernardino Department of Building and Safety for their approval. (MM 5.10-5 of the 2005 Final EIR has been modified in response to comments on the 2005 Final EIR.)	Confirm implementation of mitigation measures.	Prior to grading permit issuance	County of San Bernardino		
Recreation					
R-1 The proposed project shall be conditioned to provide the right of way to allow future construction of a pedal path along the south side of North Shore Drive, prior to map recordation. The right-of-way is included in the 66-foot offer of dedication included on the Site Plan. (MM 5.2-2 of the 2005 Final EIR has been modified in response to public comments to provide access.)	Confirm implementation of mitigation measures.	Prior to final project approval	County of San Bernardino		

EXHIBIT E

CEQA Findings and Statement of Overriding Considerations

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
FINDINGS OF FACT AND STATEMENT OF OVERRIDING
CONSIDERATIONS**

**Findings Related to the Environmental Impact Report
(2005), Revised and Recirculated Environmental Impact
Report No. 1 (2010), and Revised and Recirculated
Environmental Impact Report No. 2 (2011) for
Moon Camp 50-lot Residential Subdivision, TT No. 16136
Big Bear Lake, San Bernardino County, CA
SCH # 2002021105**

INTRODUCTION

The County of San Bernardino (the “County”), in approving the Moon Camp 50-lot Residential Subdivision (the “Project¹”), which requires a number of discretionary approvals as discussed within the Project Summary, makes the Findings described below and adopts the Statement of Overriding Considerations presented at the end of the Findings.

The Environmental Impact Report was prepared by the County acting as lead agency pursuant to the California Environmental Quality Act (“CEQA”). Hereafter, the Notices of Preparation, Notices of Availability, Notices of Completion, the Draft EIR (2004), the Draft Revised and Recirculated EIR No. 1 (2010), the Draft Revised and Recirculated EIR No. 2 (2011), the Final Revised and Recirculated EIR No. 2 (2014), Technical Studies attached as Appendices to the Draft EIRs, the Final EIR, containing Responses to Comments and textual revisions to the Draft EIRs, and the Mitigation Monitoring and Reporting Program will be referred to collectively herein as the “Environmental Document”. The 2004 Draft EIR for the Project is referred to as the “2004 DEIR [FN]²”. The 2010 Revised and Recirculated Draft EIR is referred to as the “2010 RRDEIR”. The 2011 Revised and Recirculated Draft EIR is referred to as the “2011 RRDEIR”. The 2018 Final EIR is referred to as the “2018 FEIR”.

These Findings are based on the entire record before the County, including the Environmental Document. The County adopts the facts and analyses in the Environmental Document, which are summarized below for convenience. The omission of some detail or aspect of the Environmental Document does not mean that it has been rejected by the County.

PROJECT SUMMARY

1. Site Location and Existing Conditions

The proposed 62.43-acre Moon Camp project site is located on the north shore of Big Bear Lake, in the unincorporated community of Fawnskin, County of San Bernardino. The Big Bear Lake area is primarily a resort community where a major portion (approximately two-thirds) of the residences are second homes. The south shore contains commercial and recreational facilities, including ski areas, hotels, and restaurants, within the incorporated City of Big Bear Lake. By comparison, the north shore area in the vicinity of the Project is less populated and primarily residential, with a small commercial component westerly of the Project site.

State Route 38 (SR-38), also known as North Shore Drive, provides access to the Project site; the road actually transects the property. The Project site is roughly bounded to the north by Flicker Road, to the south by Big Bear Lake, to the east by Polique Canyon Road,

¹ For a complete description of the “Project,” see Section 1 of the 2011 Revised and Recirculated Draft EIR titled “Project Description.” The 2011 Revised and Recirculated Draft EIR refers to the Project as the “2011 Alternative Project.”

² The County issued a Notice of Completion for a Final Environmental Impact Report for this Project on January 27, 2006. However, this EIR was never certified. Subsequent to the Notice of Completion, the Applicant revised the project to substantially reduce, and in some cases completely avoid, significant environmental impacts that were identified in the Final EIR.

and to the west by Canyon Road. In the Public land survey nomenclature, the Project site is described as being located in the northern half of Section 13, Township 2 North, Range 1 West, San Bernardino Baseline and Meridian (SBBM). San Bernardino County parcel numbers for the site include Assessor's Parcel Numbers (APN) 0304-082-04, 0304-091-12, 0304-091-22, and 0304-091-21.

In addition to State Route 38 (SR-38), several dirt trails (generally associated with unauthorized off-road vehicle use) traverse the Project site, which is located approximately 1 mile south of the Pacific Crest Trail; a trail that stretches between the US/Mexican border and the US/Canadian border. Site elevations range from approximately 6,744 feet above mean sea level (msl) at the lakeshore to 6,960 feet above msl at the northeast corner of the site. Individual slopes on-site range from 5 percent to 40 percent. Slope orientation is generally from north to south toward the lake, except for three natural ravines on the Project site that contain eastern and western slopes. Vegetation and habitat types in the Project area include open Jeffery Pine forest (with an average density of 44.4 trees per acre) and pebble plain like soil conditions in the western portion of the Project.

2. Project Description

The Project consists of the subdivision of the site into 58 lots—50 numbered lots (single family residential lots) to be sold individually and developed into custom homes; a 55-slip marina; and eight lettered lots described as follows:

- Three designated as Open Space/Conservation easements and Neighborhood Lake Access;
- Three designated as well sites;
- One designated as a potential reservoir site; and
- One designated for marina parking lot development.

The Project consists of approximately 9.0 acres of open space/conservation/Neighborhood Lake Access within the Project site.

3. Actions Covered by the Environmental Document

The EIR supports the following discretionary approvals:

- Approval of a General Plan Amendment to change the Land Use District and zoning designation from the larger minimum lot size of BV/RL-40 zone change (minimum lot size 40 acres) to BV/RS-20M (minimum lots size 20,000 square feet)
- A Tentative Tract Map (TTM #16136) for 50 single-family residential lots and 8 lettered lots.

ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The County conducted an extensive review of this Project which included an environmental impact report, a revised and recirculated environmental impact report, and

a second revised and recirculated environmental impact report, including technical reports, along with several public review and comment periods.

In 2004, the County circulated a draft EIR evaluating the Original Project—a 92-lot residential subdivision on 62.43 acres with a minimum lot size of 7,200 square feet. Significant adverse and unavoidable impacts resulting from development of the Original Project included Aesthetics (loss of views of the lake and surrounding mountains due to the development of the 31 lakefront lots), Air Quality (short-term during construction and long-term), Biological Resources (noise and perch tree impacts on the bald eagle), and Water Supply (inconclusive groundwater supply).

Partially in response to comments received on the 2004 Draft EIR, the Applicant proposed an alternative to the Original Project—2004 that substantially reduced, and in some cases completely, avoided the significant environmental impacts that were identified in the 2004 EIR. The revised project design/description (2010 Alternative Project) reduced the number of residential lots from 92 to 50 and also proposed seven lettered lots. The residential lots would have a minimum lot size of 20,000 square feet and be sold individually and developed with single-family custom homes.

In response to the development of the 2010 Alternative Project, the County prepared revisions to the 2004 EIR.

The Revised and Recirculated Draft EIR No. 1 concluded that the 2010 Alternative Project would have significant and unavoidable impacts related to Biological Resources. The unavoidable impacts were to the bald eagle. No additional significant impacts related to the 2010 Alternative Project were identified following implementation of mitigation measures and/or compliance with applicable standards, requirements and/or policies by the County of San Bernardino.

Based on concerns raised in comments received on the Revised and Recirculated Draft EIR No. 1, a Supplemental Focused Special Status Plant Species Survey, dated August 2010, was conducted to confirm the conclusion in the Revised and Recirculated Draft EIR No. 1 that impacts to the Ashy-Gray Indian Paintbrush (a Federally-Listed Threatened Species) are less than significant. The survey analyzed the density of Ashy-Gray Indian Paintbrush within the Project site and whether Project implementation would result in potential off-site impacts on the U.S. Forest Service pebble plain habitat near the northeast portion of the Project site. The Supplemental Focused Special Status Plant Species Survey (August 29, 2010) showed the presence of high densities of Ashy-Gray Indian Paintbrush plants on the western most Lots (Lots 1, 2 and 3) in the area west of “Street A”—the public roadway through the Project site.

In addition, the Supplemental Focused Special Status Plant Species Survey (August 29, 2010) determined that the area thought to be pebble plain habitat located within Lot A (as identified within the Supplemental Special Status Plant Species Survey, 2008), is not a true pebble plain habitat due to the lack of two key indicator species (*Arenaria ursina* and *Eriogonum kennedyi austromontanum*). The Supplemental Focused Special Status Plant Species Survey (August 29, 2010 and June 27, 2016) findings augment the Supplemental

Focused Special Status Plant Species Survey conducted by Dr. Krantz, dated June 29, 2008, providing an above-average precipitation year for observation.

Based on the new finding regarding the presence of high densities of Ashy-Gray Indian Paintbrush in areas occupied by significant Ashy-Gray Indian Paintbrush occurrences, the applicant redesigned the subdivision layout to minimize impacts to this species. The redesigned subdivision creates a new Lot “H” Open Space Conservation Easement over the area with the highest concentration of plants (Lots 1-3), with three replacement residential lots proposed to be created along the south side of Street “A”, an area with significantly lower concentrations of Ashy-Gray Indian Paintbrush.

The County determined that the redesign of the subdivision and the conclusions of the Supplemental Focused Special Status Plant Species Survey (August 29, 2010) revealing the presence of high densities of Ashy-Gray Indian Paintbrush on Lots 1-3 of the Project site constitutes “significant new information” as defined by Section 15088.5 of the CEQA Guidelines, and therefore required a partial recirculation of the Revised and Recirculated Draft EIR No. 1 to fully disclose and analyze the potential impacts of the redesigned subdivision.

The 2004 DEIR was circulated for public review from March 29, 2004 through May 17, 2004. The 2010 RRDEIR was circulated for public review from April 6, 2010 through May 21, 2010. The 2011 RRDEIR was circulated for public review from December 9, 2011 through January 23, 2012.

The 2004 DEIR, the 2010 RRDEIR, and the 2011 RRDEIR were made available online at www.sbcounty.gov/landuseservices and made available for public review during normal business hours at the County of San Bernardino’s offices located at 385 North Arrowhead Avenue in the City of San Bernardino, the County of San Bernardino’s offices located at 15900 Smoke Tree Street in the City of Hesperia, the County of San Bernardino’s offices located at 477 Summit Boulevard in the City of Big Bear Lake, and at the County of San Bernardino Public Library located at 41930 Garstin Drive in the City of Big Bear Lake.

Responses to comments letters were provided in writing and incorporated within the FEIR.

The EIR was considered by the San Bernardino County Planning Commission on October 4, 2018.

ENVIRONMENTAL IMPACTS AND FINDINGS

County staff reports, the Environmental Document, written and oral testimony at public meetings or hearings, these facts, findings and statement of overriding considerations, and other information in the administrative record, serve as the basis for the County’s environmental determination.

The detailed analysis of potentially significant environmental impacts and proposed mitigation measures for the Project is presented in the Environmental Document, as well as the responses to comments from the public and from other government agencies.

The Environmental Document evaluated twelve major environmental categories for potential impacts including: Aesthetics/Light and Glare; Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Hydrology and Drainage; Land Use and Planning; Noise; Public Services; Traffic and Circulation; Recreation; and Utilities; Both Project-specific and cumulative impacts were evaluated. Of these twelve major environmental categories, the County concurs with the conclusions in the EIR that the issues and sub-issues discussed in subsections A and B below are either less than significant without mitigation or can be mitigated below a level of significance.

For the remaining potential environmental impact, Biological Resources, the County concurs with the conclusions in the EIR that impacts to the Bald Eagle cannot feasibly be mitigated below a level of significance as discussed in subsection C, and therefore the County must evaluate the overriding considerations and Project benefits and balance them against the significant impacts of the Project.

A. IMPACTS IDENTIFIED AS LESS THAN SIGNIFICANT REQUIRING NO MITIGATION

The following issues have no potential to cause significant impacts and therefore require no Project-specific mitigation. (See 2004 DEIR, Section 10.0, “Effects Found not to be Significant”).

1. Agriculture Resources

The project site is not known to contain soils that have been designated as prime or unique agricultural soils and agricultural activities have not historically occurred at the project site. The project would not adversely impact prime or locally important agriculture as none occur within the project area. The entire site is zoned residential and is not under a Williamson Act contract.

2. Hazards and Hazardous Materials

The project is a residential subdivision that includes the development of a boat dock for use by the residents of the development project. The storage and use of boat and fuel would be typical of any residential land use. The boat dock would not be an improved marina or include the storage of any fuels on-site. No other hazardous materials would be stored on-site nor transported through the property as a result of the subdivision.

3. Mineral Resources

The site is not within an area designated by the State for locally important mineral resources and it does not lie within the County of San Bernardino’s Mineral Resource Zone. The San Bernardino Mountains however are rich in mineral resources; known occurrences include gold, silver, lead, zinc, iron, manganese, and tungsten. Claims have been operated extensively but most have been non productive for at least 15 years. Just north of the project site is Holcomb Valley where William F. Holcomb discovered placer gold in May 1860. The mapped gold placer area begins approximately 1.5 miles north of the project site’s northeastern boundary and the nearest placer gold claim (Wayne Placers) is located in

section 8, approximately one mile to the northeast. One-half mile to the northeast is a site (Polique Canyon) identified as metal prospect or nonmetallic deposit, which has not been operated. All other mapped claims, mines, and quarries are further to the north of the project site. No impacts to mineral resources would occur as a result of the project's implementation.

4. Population and Housing

The project is a 50-lot residential development on currently vacant land. There would be no displacement of existing housing or people.

B. POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED BELOW A LEVEL OF SIGNIFICANCE WITH MITIGATION MEASURES

Public Resources Code section 21081 states that no public agency shall approve or carry out a Project for which an EIR has been completed which identifies one or more significant effects unless the public agency makes one or more of the following findings:

1. Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment.
2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR, and overriding economic, legal, social, technological, or other benefits of the Project outweigh the significant effects on the environment.

The following impacts from eleven of the environmental categories, including Aesthetics, Air Quality, Cultural Resources, Geology and Soils, Hydrology/Water Quality, Land Use and Planning, Noise, Public Services, Recreation, Traffic, and Utilities, were found to be potentially significant, but can be mitigated to a less than significant level with the imposition of mitigation measures. The County hereby finds pursuant to *Public Resources Code* section 21081 that all potentially significant impacts listed below can and will be mitigated to below a level of significance by imposition of the mitigation measures. Specific findings of the County for each category of such impacts are set forth in detail below.

1. Aesthetics

Potential Impact: Whether the project may cause a substantial adverse effect on scenic vistas; whether the project may cause substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; Whether the project may cause a substantial degradation of the existing visual

character or quality of the site and its surroundings; or Whether the project may cause create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Finding: Potential impacts of the Project on Aesthetics are discussed in detail in Section 4.1 of the 2010 RRDEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measures A-1–A-4. Mitigation Measures A-1–A-4 read in full as follows:

Short-Term Aesthetic/Light and Glare Impact Mitigation

A-1a—Construction equipment staging areas shall be located away from existing residential uses. Appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Project Grading Plans.

A-1b—All construction-related lighting associated with the construction of new roadways, improvements to SR-38 and the installation of utilities shall be located and aimed away from adjacent residential areas. Lighting shall use the minimum wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the County for review along with Grading Permit applications for the subdivision of the lots.

Long-Term Aesthetic Impact Mitigation

A-2a—All homes shall provide a two-car garage with automatic garage doors.

A-2b—New development shall be subordinate to the natural setting and minimize reflective surfaces. Building materials including siding and roof materials shall be selected to blend in hue and brightness with the surroundings. Colors shall be earth tones: shades of grays, tans, browns, greens, and pale yellows; and shall be consistent with the mountain character of the area.

A-2c—Outside parking/storage areas associated with the boat dock activities shall be screened from view by the placement of landscaping and plantings which are compatible with the local environment and, where practicable, are capable of surviving with a minimum of maintenance and supplemental water.

A-2d—Construction plans for each individual lot shall include the identification and placement of vegetation with the mature height of trees listed. Landscaping and plantings should not obstruct significant views, within or outside of the project, either when installed or when they reach maturity. The removal of existing vegetation shall not be required to create views.

A-2e—A Note shall be placed on the Composite Development Plan stating that during construction plans review and prior to issuance of building permits for each lot, the building inspector shall refer to the Mitigation Monitoring and Compliance Program

regarding these aesthetic impact mitigation measures. The building inspector shall coordinate with the Advance Planning Division the review and approval of building plans in relation to these aesthetic impact mitigation measures, prior to approval and issuance of building permits.

Long-Term Scenic Highway Impact Mitigation

A-3a—*Any entry sign for the development shall be a monument style sign compatible with the mountain character, preferably, rock or rock appearance.*

A-3b—*Prior to recordation of the tract map (and/or any ground disturbance, whichever occurs first), landscaping or revegetation plans for lettered lots (A through D) shall be submitted to and approved by the San Bernardino County Land Use Services Department.*

Long-Term Light and Glare Impacts

A-4a—*All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary to prevent spill lighting on adjacent off-site uses.*

A-4b—*Lighting used for various components of the development plan shall be reviewed for light intensity levels, fixture height, fixture location and design by an independent engineer, and reviewed and approved by the County Building and Safety Division to ensure that light emitted from the proposed project does not intrude onto adjacent residential properties.*

A-4c—*The project shall use minimally reflective glass. All other materials used on exterior buildings and structures shall be selected with attention to minimizing reflective glare.*

A-4d—*Vegetated buffers shall be used along SR-38 to reduce light intrusion on residential development and on forested areas located adjacent to the project site. The vegetation buffers shall be reflected on the master landscape plan submitted to and approved by the County Land Use Services Department prior to the issuance of the first grading permit.*

A-4e—*All outdoor light fixtures shall be cutoff luminaries and only high- or low-pressure sodium lamps shall be used.*

A-4f—*Mitigation Measures A-4a thru 4e shall be included within the Conditions, Covenants, and Restrictions (CC&Rs) of the Home Owner's Association (HOA).*

Facts in Support of the Finding:

Views

A project impact analysis was performed measuring existing conditions against simulated project conditions.

View Looking West along Highway 38

An analysis of illustrations of the view along SR-38 without a landscape buffer was performed comparing existing conditions versus simulated project conditions. Lots 37, 38, and 39 are partially visible from this viewpoint. As indicated in the simulations, the lakeshore remains undisturbed. From the eastern approach, partial views of only 3 houses are visible in the illustration of the simulated project condition. The winding configuration of SR-38 results in no more than 3 or 4 houses visible in one glance. Only 9 lots actually touch the SR-38 right-of-way and one third of the route through the site has no development on either side. With the eye drawn to the lake, the actual visual impression of added residential development will be relatively insignificant.

Views of the Marina

An analysis of illustrations of the view of the marina site was performed comparing existing conditions versus simulated project conditions. The marina will consist of roofless, floating docks that will be seasonally located at the site. During winter months, these floating docks will be stored off-site. As indicated in the simulations, the marina is a moveable floating facility with a low profile. The addition of boats in season will add dimension and height, but will also introduce color and interest to the shoreline. To the average recreationist, boats and activity are positive visual experiences.

Views from Flicker Road

An analysis of illustrations of the view from Flicker Road was performed comparing existing conditions versus simulated project conditions. As indicated in the simulations, there would be very few houses visible from the water, as the shoreline set-back would give to homes within cover of the trees. Comparing the original planned density to the proposed project with revised/reduced density, the proposed project will result in better visibility of views of the lake and SR-38. The simulations also demonstrate the absence of significant impact to views when comparing existing conditions to the Project with revised/reduced density.

Views from Big Bear Lake

An analysis of illustrations of the views from Big Bear Lake was performed comparing existing conditions versus simulated project conditions. As indicated in the simulations, a large portion of the scenic vista has been preserved. The entire foreground south of SR-38 is relatively unaltered. Seen from a distance, development is very unobtrusive. With the addition of a landscape buffer, development will be minimally obtrusive even in the closer views. The landscape buffer, coupled with the reduction of the overall density of the lots helps blend the sparse development into the trees and natural landscape.

Lighting

The Project would result in additional light sources during nighttime operation hours in an area where there are currently no sources of light. This project has the potential to affect both wildlife and the rural residential quality of the area. In order to diminish this effect, mitigation measures were introduced which include stricter control of light sources than provided by County ordinances. To minimize light pollution, lighting in the project area will be directed downward, be fully shielded and will be the minimum amount necessary

for safe operations. With the implementation of mitigation measures, light pollution will be reduced to a level that is less than significant.

Temporary Impacts

Temporary impacts are generally associated with construction activities. The visual appearance of the site would be temporarily altered by grading and construction activity. The primary impact will be from construction of the access roads and improvement of SR-38. Since the residential lots will be sold for custom residences, construction activity on houses will be intermittent and individual. With custom housing lots, there is less likelihood of concurrent construction of multiple structures. Standard conditions and uniform codes help to preclude construction activities from causing excessive impacts, as they limit construction hours and impose dust and noise control measures.

Cumulative Impacts Related to Aesthetics

Build-out of the Moon Camp development, together with cumulative projects may alter the nature and appearance of the area and contribute to the loss of undeveloped areas. No significant impacts beyond the analysis contained in the County of San Bernardino General Plan and General Plan EIR are anticipated and, thus, no mitigation measures are recommended.

2. Air Quality

Potential Impact: Whether the project may conflict with or obstruct implementation of the applicable air quality plan; whether the project may violate any air quality standard or contribute substantially to an existing or protected air quality violation; whether the project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); Whether the project may contribute to a significant global climate change impact by conflicting with GHG emission reduction strategies; whether the project may expose sensitive receptors to substantial pollutant concentrations; whether the project may create objectionable odors affecting a substantial number of people; or whether the project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone).

Finding: Potential impacts of the Project on Air Quality are discussed in detail in Section 4.2 of the 2010 RRDEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measures AQ-1–AQ-4. Measure Mitigations A-1–A-4 reads in full as follows:

Construction Mitigation

AQ-1 Prior to construction of the project, the project proponent will provide a Fugitive Dust Control Plan that will describe the application of standard best management practices (BMP) to control dust during construction. The Fugitive Dust Control Plan shall

be submitted to the County and SCAQMD for approval and approved prior to construction. Best management practices will include, but not be limited to:

- *For any earth moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.*
- *For all disturbed surface areas (except completed grading areas), apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area.*
- *For all inactive disturbed surface areas, apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of winddriven fugitive dust, excluding any areas that are inaccessible due to excessive slope or other safety conditions.*
- *For all unpaved roads, water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph.*
- *For all open storage piles, apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind-driven fugitive dust.*
- *Mass grading activities shall be limited to a maximum of 5 acres per day.*

AQ-2 *To reduce emissions from the construction equipment within the project site, the construction contractor will:*

- *To the extent that equipment and technology is available and cost effective, the contractor shall use catalyst and filtration technologies.*
- *All diesel-fueled engines used in construction of the project shall use ultra-low sulfur diesel fuel containing no more than 15-ppm sulfur, or a suitable alternative fuel.*
- *All construction diesel engines, which have a rating of 50 hp or more, shall meet the Tier II California Emission Standards for off-road compression ignition engines.*
- *Heavy-duty diesel equipment will be maintained in optimum running condition.*

Residential Woodburning Mitigations

AQ-3 *To reduce the emissions from woodburning apparatus; the following requirement will be placed on all new residences constructed on the proposed project's lots:*

- *No open-hearth fireplace will be allowed in new construction, only EPA Phase II Certified fireplaces and wood stoves, pellet stoves, and natural gas fireplaces shall be allowed.*

AQ-4 *To establish a “Good Neighbor Policy for Burning” that will further help reduce the potential for localized nuisance complaints related to woodburning; the proponent shall distribute an informational flyer to each purchaser of lots. At a minimum, the flyer will say:*

KNOW WHEN TO BURN

- *Monitor all fires; never leave a fire unattended.*
- *Upgrade an older woodstove to one with a catalytic combustor that burns off excess pollutants.*
- *Be courteous when visitors come to your home. Wood smoke can cause problems for people with developing or sensitive lungs (i.e. children, the elderly) and people with lung disease.*

KNOW WHAT TO BURN

- *Split large pieces of wood into smaller pieces and make sure it has been seasoned (allowed to dry for a year). Burning fresh cut logs = smoky fires.*
- *When buying wood from a dealer, do not assume it has been seasoned.*
- *Small hot fires are more efficient and less wasteful than large fires.*
- *Never burn chemically treated wood or non-wood materials.*
- *Manufactured fire logs provide a nice ambience, have the least impact to air quality, and are a good choice for homeowners who use a fireplace infrequently.*

KNOW HOW TO BURN

- *Proper combustion is key. Make sure your wood fire is not starved; if excess smoke is coming from the chimney or stack, the fire isn’t getting enough air.*
- *Visually check your chimney or stack 10 to 15 minutes after you light a fire to ensure it is not emitting excess amounts of smoke.*
- *Homeowners should have woodstoves and fireplaces serviced and cleaned yearly to ensure they are working properly.*

Facts in Support of the Finding:

Short Term Impacts

Short-term impacts will include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities and operation of grading equipment during site preparation. Construction emissions are caused by on-site or off-site activities. On-site emissions principally consist of exhaust emissions (NO_x, CO, VOC, PM₁₀, and

PM_{2.5}) from heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, as well as worker traffic, but also include road dust (PM₁₀). Major construction-related activities include the following:

- Grading/clearing, including the excavation;
- Excavation and earth moving for infrastructure construction of the utilities, both on and off-site, and dwelling unit foundations and footings;
- Building construction;
- Asphalt paving of access roads throughout the development; and application of architectural coatings for things such as dwelling stucco and interior painting.

Construction equipment such as scrapers, bulldozers, forklifts, backhoes, water trucks, and industrial saws are expected to be used on the project site and will result in exhaust emissions consisting of CO, NO_x, VOC, PM₁₀, and PM_{2.5}. During the finishing phase, paving operations and application of architectural coatings will release VOC emissions. Construction emission can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. An analysis was performed to analyze construction-related emissions without mitigation which illustrated that the SCAQMD regional emission thresholds will not be exceeded by any pollutant, but that the locally significant thresholds will be potentially exceeded due to PM₁₀ and PM_{2.5} emissions. However, the short-term localized construction emissions are expected to be less than significant after application of mitigation measures.

Long-Term Impacts

Long-term emissions for the project site were considered for project build-out. Emission sources consist of mobile emissions and stationary emissions. Mobile emissions estimates are derived from motor vehicle traffic. Stationary emissions estimates are derived from the consumption of natural gas, electricity and consumer products, as well as emissions resulting from landscape maintenance. Upon analysis of modeled projected emissions, when emissions projections were compared with the SCAQMD suggested regional thresholds for significance, all long-term emissions are below the applicable thresholds and therefore less than significant.

CO Hotspots

CO is a localized problem requiring additional analysis beyond total project emissions quantification. A CO hot spot is a localized concentration of CO that is above the State or Federal 1-hour or 8-hour ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The Project has the potential to negatively impact the LOS on adjacent roadways and, therefore, requires a CO hotspot analysis. Such an analysis was performed. The estimated 1-hour and 8-hour concentrations, in combination with background concentration, were below the State and Federal ambient air quality standards. Accordingly, no CO hotspots are anticipated as a result of traffic-generated emissions by the Project in combination with existing traffic.

Therefore, the mobile related emissions are not anticipated to contribute substantially to an existing or projected air quality violation and therefore any impact is less than significant.

Residential Woodburning

Wood stoves and fireplaces are reasonably common in the area surrounding Big Bear Lake. Some people use wood as a primary source of heat, and others have wood stoves as a backup in case of emergencies, such as power failures. Wood heating is also popular for cultural reasons when one considers that it can be beneficial because wood is a renewable fuel. However, the smoke from wood stoves and fireplaces pollutes the air outdoors. Smoke from outside can seep into buildings, including nearby homes, also affecting indoor air quality. Smoke from neighborhood stoves and fireplaces, a common source of both odor and reduced visibility, greatly contributes to the air pollution problems people complain about most.

Complete combustion gives off light, heat, and the gases carbon dioxide and water vapor. Because complete combustion does not occur when wood burns, wood smoke is produced which contains CO, NO_x, and ROG. The ROG from woodburning includes toxic and/or cancer-causing substances, such as benzene, formaldehyde and benzo-a-pyrene, a polycyclic aromatic hydrocarbon (PAH).

Most wood heaters, such as woodstoves and fireplaces, release far more air pollution, indoors and out, than heaters using other fuels. In winter, when we heat our homes the most, cold nights with little wind cause smoke and air pollutants to remain stagnate at ground level for long periods. Even though there is no shorter averaging time for particulate matter air quality standards, there is still a potential for nuisance violations in the area. However, the level of significance after mitigation is less than significant.

Conformance with Air Quality Management Plan

An analysis was performed to analyze whether the Project would conflict with or obstruct implementation of the applicable air quality plan. The assessment used four criteria for determining consistency of the Project with the current Air Quality Management Plan (“AQMP”):

1. whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP;
2. whether the project will exceed the assumptions in the AQMP based on the year of project build out and phase (SCAQMD 2006b);
3. whether the project will comply with the control measures in the AQMP; and
4. whether the project will comply with the SCAQMD regional thresholds.

Based on the flowing criteria, the assessment illustrates that Project is consistent with the current Air Quality Management and therefore the impact is less than significant.

Potential for Air Quality Standard Violation

An analysis was performed to analyze whether the project would violate any air quality standard or contribute substantially to an existing or projected air quality violation. The South Coast Air Basin, the geographical area in which the project is located, is in nonattainment for CO, PM₁₀, PM_{2.5}, and ozone. Levels of PM₁₀ and PM_{2.5} are locally high enough that contributions from new sources may add to the concentrations of those pollutants and contribute to a projected air quality violation. Although background levels of ozone are high in the basin, the project alone (without other cumulative sources) would not contribute substantially to a projected air quality violation of ozone. Although CO is still listed as a nonattainment pollutant, the basin has not exceeded the CO standard for the past several years. Additionally, the Project's source receptor area has not violated the CO standard for the past several years. The analysis performed illustrates that the project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation and therefore any impact is determined to be less than significant.

Contribution to Climate Change

An analysis was performed to analyze whether the project would result in an increase in GHGs that would significantly hinder or delay the State's ability to meet the reduction targets contained in AB 32. The potential of the Project to create an impact on GCC is based on whether the Project would conflict with the attainment of the state's goals of reducing GHG emissions as dictated by AB 32. The Project will not interfere with the state's goals of reducing GHG emissions to 1990 levels by the year 2020 and an 80-percent reduction in GHG emissions below 1990 levels to 2050. The Project will generate a limited amount of GHG generation during construction, and it will lead to a low amount of on-going operational emissions from the use of the residential units. The Project will emit less than 25 percent of the SCAQMD's draft numerical GHG threshold of significance. Moreover, the Project will utilize high-efficiency design features that will even further reduce consumption of electricity, natural gas, and will result in a corresponding reduction in GHG emissions. Therefore, the Project will not significantly hinder or delay California's ability to meet the reduction targets contained in AB 32 and therefore this impact is less than significant.

On December 6, 2011, subsequent to the preparation of the 2010 RRDEIR, the San Bernardino County Board of Supervisors approved a countywide Greenhouse Gas Emissions Reduction Plan ("GHG Plan"). In connection with this approval, the San Bernardino County Board of Supervisors adopted a General Plan Amendment detailing a policy designed to reduce GHG emissions within the County boundaries which included adoption of the GHG Plan. With the application of the GHG performance standards, under the GHG Plan, any project that does not exceed 3,000 metric tons of carbon dioxide equivalents ("MTCO_{2e}") per year is considered to be consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. The adoption of the GHG Plan has no bearing on, nor does it affect the less than significant finding of the 2010 RRDEIR as it relates to GHG emissions. As detailed in the Air Quality Analysis Report (Appendix A to the 2010 RRDEIR), the proposed project's estimated combined construction and operational greenhouse gas emissions are 1955.59 MTCO_{2e}, which is far less than the 3,000 MTCO_{2e} benchmark under the GHG Plan. Accordingly, even if the Project was analyzed under the GHG Plan, it would only

confirm the less than significant finding contained in the RRDEIR as it relates to GHG emissions.

Odors

The Project would not create objectionable odors affecting a substantial number of people. The Project does not contain land uses typically associated with emitting objectionable odors, with the possible exception of wood smoke. Wood smoke is pleasant to some and may be a nuisance to others. Implementation and compliance with SCAQMD Rule 402 would ensure that wood smoke would not be offensive to a substantial number of people. Diesel exhaust and VOCs will be emitted during construction of the Project, which are objectionable to some; however, emissions will disperse rapidly from the project site and therefore should not be at a level which will induce any negative response and therefore is less than significant.

Cumulative Impacts Related to Air Quality

The following four-tiered approach was utilized to assess cumulative air quality impacts:

1. Consistency with the SCAQMD project specific thresholds for construction and operation;
2. Project consistency with existing air quality plans;
3. Assessment of the cumulative health effects of the pollutants; and
4. Cumulative impact of global climate change.

After implementation of mitigation measures, during construction, emissions of VOC, NO_x, PM₁₀, and PM_{2.5} are not expected to exceed the SCAQMD regional significance thresholds. In addition, during operation, the Project is not expected to exceed the established regional emission thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5}. The SCAQMD considers construction or operational emissions that do not exceed the project specific thresholds will not result in a cumulative impact. Design features that reduce the emissions generated by motor vehicles, natural gas consumption, and electricity consumption will reduce the main operational sources of GHGs. Although the Project is not of sufficient size to create a significant impact to global warming, incorporation of the above recommended design features will further reduce the Project's cumulative impact in this area.

The Basin, in which the project is located, is in nonattainment for ozone, PM₁₀, PM_{2.5}, and CO. As such, the SCAQMD is required to prepare and maintain an AQMP and a SIP to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SCAQMD does not have direct authority over land use decisions, it was recognized that changes in land use and circulation planning were necessary to maintain clean air. The Project is compliant with the AQMP.

Ambient air quality standards were set to protect the health of sensitive individuals (i.e., elderly, children, and the sick). Therefore, when the concentration of those pollutants exceed the standard, it is likely that some of the sensitive individuals of the population

could experience health effects. The localized significance analysis for the Project demonstrated that during construction activities, no localized significance threshold was expected to be exceeded; therefore, the emissions of particulate matter, primarily in the form of fugitive dust, would not result in a significant cumulative health impact with implementation of the identified mitigation measures.

Long-term operational emissions are not expected to exceed the District's significance thresholds. ROG and NO_x are precursors to ozone. Because ozone is a secondary pollutant (it is not emitted directly but formed by chemical reactions in the air), it can be formed miles downwind of the project site. The Project emissions of VOC and NO_x may still contribute to the background concentration of ozone but such contributions would not be considered cumulatively considerable. Operational emissions of PM₁₀ and PM_{2.5} are not expected to exceed the regional significance threshold. The combination of ozone and PM₁₀ can aggravate health effects. PM_{2.5} is a component of PM₁₀. The ambient air quality standard for both PM₁₀ and PM_{2.5} are exceeded in the Basin. Therefore, the Project's emissions may contribute to the background of those pollutants but such contributions would not be considered cumulatively considerable.

The long-term impacts of wood burning in hearths and fireplaces can potentially emit smoke and toxic air contaminant through the incomplete combustion of the wood products. Such emissions could also impact indoor air quality particularly during winter when adequate ventilation and air exchanges would be at a minimum. These smoke and TAC emissions could contribute to an overall increase in smoke in the area encompassing and surrounding the Project site.

The localized construction analysis demonstrated that without mitigation, the Project would not exceed the localized thresholds for CO, NO₂, PM₁₀, or PM_{2.5}. Therefore, during construction, the Project would not expose sensitive receptors to substantial pollutant concentrations of CO, NO₂, PM₁₀, or PM_{2.5}. The construction equipment would emit diesel particulate matter, which is a carcinogen. However, the diesel particulate matter emissions are short term in nature. Determination of risk from diesel particulate matter is considered over a 70-year exposure time. Therefore, considering the dispersion of the emissions and the short time frame, exposure to diesel particulate matter is anticipated to be less than significant. The main source of air pollutant emissions during operation are from off-site motor vehicles traveling on the roads surrounding the project. An analysis of the study area intersections illustrates that air pollutant emissions during operation Project would result in a less than significant impact.

During operation of the Project, the addition of woodburning devices to the area would potentially expose sensitive receptors to localized concentrations of criteria and toxic pollutants. However, with the implementation of mitigation measures, the Project would not expose sensitive receptors to substantial pollutant concentrations.

Based on the forgoing, with the implementation of mitigation, cumulative impacts to air quality are less than significant.

3. Cultural Resources

(a) Archeological and/or Historical Resources

Potential Impact: Whether the project may cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5 or may cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Finding: Potential impacts of the Project on Cultural Resources are discussed in detail in Section 5.9 of the 2004 DEIR, as confirmed by the 2016 Cultural Resources Investigation prepared by McKenna, et al. (“McKenna Study”). Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measure 5.9.1. Mitigation Measure 5.9.1 reads in full as follows:

Project-related grading, grubbing, trenching, excavations, and/or other earth-moving activities in the project area shall be monitored by a qualified archaeologist. In the event that a material of potential cultural significance is uncovered during such activities on the project site, all earth-moving activities in the project area shall cease and the archeologist shall evaluate the quality and significance of the material. Earth-moving activities shall not continue in the area where a material of potential cultural significance is uncovered until resources have been completely removed by the archaeologist and recorded as appropriate.

Facts in Support of the Finding: Site CA-SBR-10635H, in the southeastern portion of the project area, consists of a historic-period refuse scatter. Since many of the artifacts at the site can be dated to the pre-WWII period, it is possible, and probable, that the items were deposited in connection with the early 20th century resort camps known to be in operation in the vicinity. Due to the limited number and types of the artifacts observed, there is insufficient evidence to establish this association conclusively, or association with any persons or events of recognized historic significance. Furthermore, the site constitutes a minor component of a larger historic-period refuse deposit located outside the project area, and its limited information potential is further diminished by extensive disturbances and the intrusion of modern trash. Based on these considerations, the Historical/Archeological Resources Survey Report concludes that Site CA-SBR-10635H, as recorded during this study, does not appear to meet any of the criteria for listing in the California Register, and thus does not qualify as a “historical resource.”

Although the field survey effort included a detailed reconnaissance of the site, the potential does exist for subsurface resources to occur and that cannot be visibly detected. This potential impact can be considered potentially significant thus requiring field monitoring mitigation by an archaeologist, qualified and approved by the County during grading and other associated clearing activities. Implementation of Mitigation Measure 5.9.1 would reduce the significance of potential impacts to a less than significant level.

(b) Paleontological Resources

Potential Impact: Whether the project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: Potential impacts of the Project on Cultural Resources are discussed in detail in Section 5.9 of the 2004 DEIR and the McKenna Study. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measures 5.9.2a-d. Mitigation Measures 5.9.2a-d reads in full as follows:

Grading shall be monitored during excavation in areas identified as likely to contain paleontologic resources by a qualified paleontological monitor. Monitoring shall be accomplished for any undisturbed subsurface older alluvium, which might be present in the subsurface. The monitor shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments which are likely to contain

the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates.

Identification and curation of specimens into a museum repository with permanent retrievable storage shall occur for paleontological resources.

A report of findings shall be prepared with an appended itemized inventory of specimens. The report shall include pertinent discussion of the significance of all recovered resources where appropriate. The report and inventory when submitted to the appropriate Lead Agency, shall signify completion of the program to mitigate impacts to paleontologic resources.

Facts in Support of the Finding:

The field survey results, supported by literature and subsurface testing, indicate that the project area contains sediments deposited during Holocene time. Vertebrate fossils have been found in these same age sediments approximately five miles east of this location. Geologic studies suggest that these vertebrate fossil remains were found in sediments probably associated with a natural Holocene lake (Baldwin Lake) and not in alluvial sediments associated with alluvial fan deposits.

Previous geologic studies have recorded sands and some gravels at depths greater than five feet in the area north of State Route 38. Based on those findings, and in view of the recent alluvium covering the surface to a depth of five feet and the ground water saturation situation south of the highway, the Paleontological Resources Survey Report concludes that there is a moderate potential for the presence of vertebrate fossils within the project area, north of State Route 38, at depths greater than five feet. Although the field survey effort included a detailed reconnaissance of the site, the potential does exist for subsurface resources to occur that cannot be visibly detected. This potential impact can be considered

significant thus requiring field monitoring mitigation by a geologist/paleontologist, qualified and approved by the County, during grading and other associated clearing activities. Implementation of Mitigation Measures 5.9.2a-d would reduce the significance of potential impacts to a less than significant level.

(c) Burial Sites

Potential Impact: Whether the project may disturb any human remains, including those interred outside of formal cemeteries?

Finding: Potential impacts of the Project on Cultural Resources are discussed in detail in Section 5.9 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measure 5.9-3. Mitigation Measures 5.9-3 reads in full as follows:

In the event human remains are discovered during grading/construction activities, work shall cease in the immediate area of the discovery and the Project Applicant shall comply with the requirements and procedures set forth in Section 5097.98 of the Public Resources Code, including notification of the County Coroner, notification of the Native American Heritage Commission, and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendent.”

Facts in Support of the Finding:

According to the Historical/Archeological Resources Survey Report, records indicate that a Native American burial ground may have been in close proximity to the eastern end of the project area. A diligent field survey effort was conducted to find any surface manifestation of the reported burial ground, however, none was found. Despite the findings of the field survey effort, the potential does exist for human remains to occur that cannot be visibly detected. This potential impact can be considered significant and would require that all proper notification actions be taken in the event that human remains are discovered during construction/earth-moving activities.

(d) Cumulative Impacts Related to Cultural Resources

Potential Impact: Whether cumulative development may adversely affect cultural resources in the north shore area.

Finding: Potential impacts of the Project on Cultural Resources are discussed in detail in Section 5.9 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but is mitigated to a less than significant level because mitigation is incorporated on a project-by-project basis.

Facts in Support of the Finding:

The Moon Camp project is located within the north shore of Big Bear Lake. There is limited potential for future development in the project vicinity, assuming that existing US Forest Service owned lands remain undisturbed and undeveloped. Although there is a limited development potential in the north shore area, potential impacts to cultural resources would

be evaluated on a site specific, project-by-project basis to ensure that impacts are reduced to less than significant levels. This would be especially true of those developments located in areas considered to have a high sensitivity for cultural (archaeological, paleontological and historical) resources. Each incremental development would be required to comply with all applicable State and Federal regulations concerning preservation, salvage, or handling of cultural resources. In consideration of these requirement and limited amounts of developable land, potential cumulative impacts upon cultural resources would not be considered significant.

4. Geology and Soils

(a) Slope Stability

Potential Impact: Whether development of the Project could result in slope failures?

Finding: Potential impacts of the Project on Geology and Soils are discussed in detail in Section 5.10 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with compliance with the County Development Code and Uniform Building Code and the implementation of Mitigation Measure 5.10-1. Mitigation Measures 5.10-1 reads in full as follows:

South facing cut slopes shall utilize 2:1 buttressed slopes using on site native soil materials, or by constructing geotextile-reinforced soil buttresses where cut slopes are planned. Either of these methods, or methods approved by the San Bernardino County Geologist for slope reinforcement may be utilized.

Facts in Support of the Finding:

Given the apparent southerly inclination of bedding planes within the older alluvial deposits, proposal of south-facing, manufactured cut slopes could be grossly unstable. If weak clay layers within the older alluvium were found to be dipping out-of-slope, in what is referred to as “daylighted bedding”, slope failures could occur and encroach into adjacent lots.

The most proven methods to mitigate such conditions would be to construct 2:1 (horizontal to vertical) buttressed slopes using on site native soil materials, or constructing geotextile-reinforced soil buttresses where cut slopes are planned. Either of these methods, as well as a number of other forms of proven slope reinforcement methods would reduce this impact to a less than significant level.

(b) Soil Erosion

Potential Impact: Whether development of the proposed Project could result in accelerated soil erosion?

Finding: Potential impacts of the Project on Geology and Soils are discussed in detail in Section 5.10 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with compliance with the County Development Code and Uniform Building Code and the

implementation of Mitigation Measures 5.10-2a-b. Mitigation Measures 5.10-2a-b reads in full as follows:

Due to the potential for erosion associated with younger alluvial deposits within the two major on-site stream channels, increased surface drainage quantities associated with development on-site shall be directed away from the stream channels.

Prior to the issuance of Grading Permits, the Project Applicant shall prepare a Soil Erosion and Sedimentation Plan for submittal and approval by the County Building and Safety Department.

Facts in Support of the Finding:

The younger alluvial deposits within the two major stream channels are highly erodible. Adverse surface drainage could promote accelerated soil erosion which could undermine proposed structures and lead to increased sedimentation within Big Bear Lake. This impact would be considered significant if not mitigated. Mitigation measures, such providing adequate surface drainage away from these soils or covering them with a roadway, would reduce this impact to a less than significant level.

(c) Ground Shaking

Potential Impact: Whether development of the proposed Project may increase the number of people/structures exposed to effects associated with seismically induced ground shaking?

Finding: Potential impacts of the Project on Geology and Soils are discussed in detail in Section 5.10 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with compliance with the County Development Code and Uniform Building Code and the implementation of Mitigation Measure 5.10-3. Mitigation Measures 5.10-3 reads in full as follows:

Engineering design for all structures and roadways shall be based on the 2013 California Uniform Building Code. Construction plans shall be in accordance with seismic design standards set forth by the County's Development Code and Uniform Building Code.

Facts in Support of the Finding:

Given the highly seismic character of the Southern California Region, moderate to severe ground shaking can be expected within the project area due to moderate to large earthquakes on the nearby North Frontal, Helendale, or San Andreas fault zones. This impact would be considered significant if not mitigated. In order to reduce this impact a less than significant level, all structures for human occupancy should be constructed in accordance with seismic design standards set forth in the latest edition of the Uniform Building Code.

(d) Seiche

Potential Impact: Whether development of the proposed Project may expose people/structures to seiching as a result of significant ground motion related to an earthquake?

Finding: Potential impacts of the Project on Geology and Soils are discussed in detail in Section 5.10 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with implementation of Mitigation Measure 5.10-4. Mitigation Measures 5.10-4 reads in full as follows:

Residential structures shall be located in areas which provide a minimum of five feet of freeboard above the high water line for any structures.

Facts in Support of the Finding:

Seiche-induced run-up along the shoreline properties adjacent to Big Bear Lake could conceivably occur due to significant ground motion from a major earthquake. The amount of potential run-up would be dependent on the inclination of the nearshore environment and the height of the lake level at the time of the seismic event. Assuming the lake would be at its highest level during such an event, mitigation measures involving at least 5 feet of “free-board” above the high-water line for all residential structures would reduce this impact to a less than significant level.

(e) Expansive Soil

Potential Impact: Whether development of the proposed Project may create substantial risks to life or property as a result of expansive soils?

Finding: Potential impacts of the Project on Geology and Soils are discussed in detail in Section 5.10 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measure 5.10-5. Mitigation Measure 5.10-5 reads in full as follows:

Prior to grading permit issuance, geologic analysis/studies shall be required including 1) quantitative geotechnical analysis of liquefaction, 2) a design-level geotechnical engineering report, and 3) a design-level engineering geology report.

Facts in Support of the Finding:

Currently, there is insufficient information concerning the nature of the alluvial soils beneath the project site. This impact will need to be evaluated in additional analysis/studies which include 1) a quantitative geotechnical analysis, 2) a design level geotechnical engineering report, and 3) a design-level engineering geology report. Implementation of the recommended mitigation measure and conclusions rendered in the referenced reports would reduce impacts to less than significant levels.

(f) Cumulative Impacts Related to Geology and Soils

Potential Impact: Whether the Project may result in increased short-term impacts such as erosion and sedimentation, and long-term seismic impacts within the area.

Finding: Potential impacts of the Project on Geology and Soils are discussed in detail in Section 5.10 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but is mitigated to a less than significant level because

mitigation is incorporated on a project-by-project basis in areas deemed suitable for development.

Facts in Support of the Finding:

Soils and geologic conditions in the Project vicinity may vary by location. Short-term cumulative impacts such as erosion and sedimentation would occur. The only cumulative long-term impact related to geology is the exposure of people and the property in the vicinity of the North Frontal Fault System to the potential for seismically induced ground shaking. Implementation of the cumulative projects would incrementally increase the number of people and structures potentially subject to a seismic event. Such exposure can be minimized by adhering to UBC standards and requirements. The cumulative effects of increased seismic risk would be addressed on a project-by-project basis in order to determine the need for project specific mitigation.

5. *Hydrology and Water Quality*

Potential Impact: Whether the Project would violate any water quality standards or waste discharge requirements; whether the Project would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted); whether the Project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; whether the Project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; whether the Project would create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; whether the Project would otherwise substantially degrade water quality; whether the Project would place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; whether the Project would expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and whether the Project would result in inundation by seiche, tsunami, or mudflow.

Finding: Potential impacts of the Project on Hydrology and Water Quality are discussed in detail in Section 4.4 of the 2010 RRDEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with implementation of Mitigation Measures HYD-1–HYD-19

10-2a-b, as implemented through the Preliminary Master Water Quality Management Plan. Mitigation Measures HYD-1–HYD-19 reads in full as follows:

Flood Control/Drainage Channels

HYD-1 *Prior to issuance of a building permit, a program satisfactory to the County will be formulated to handle storm drain waters adequately.*

HYD-2 *All required drainage improvements must be designed and constructed to County standards. Tentative tract map, site plan, and other precise plans for individual lots will be accompanied by adequate plans for drainage improvements prepared by registered professional engineers.*

HYD-3 *The proposed cross culverts shall be sized for 100-year burn and bulking flow rates. The burn and bulking method would increase the runoff from the natural areas. The method provided in the Los Angeles County Hydrology Manual is recommended. In addition, the cross culverts shall all be designed with headwalls to prevent CMP crushing, and shall be maintained adequately.*

Water Quality**Construction Impacts**

HYD-4 *To mitigate sediment transport during construction, the developer shall submit a sedimentation control plan with the grading plan for review and approval by the Public Works Department. The Project engineer shall certify compliance.*

HYD-5 *Prior to Grading Permit issuance and as part of the Proposed Alternative Project's compliance with the NPDES requirements, a Notice of Intent (NOI) shall be prepared and submitted to the SARWQCB providing notification and intent to comply with the State of California general permit. Also, a SWPPP shall be completed for the construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction-site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction-site to the "maximum extent practicable."*

HYD-6 *At a minimum, the following shall be implemented from the California Storm Water Best Management Practice Handbook—Construction Activity:*

- *Dewatering Operations—This operation requires the use of sediment controls to prevent or reduce the discharge of pollutants to storm water from dewatering operations.*
- *Paving Operations—Prevent or reduce the runoff of pollutants from paving operations by proper storage of materials, protecting storm drain facilities during construction, and training employees.*
- *Structural Construction and Painting—Keep site and area clean and orderly, use erosion control, use proper storage facilities, use safe products and train employees to prevent and reduce pollutant discharge to storm water facilities from construction and painting.*

- *Material Delivery and Storage—Minimize the storage of hazardous materials on-site. If stored on-site, keep in designated areas, install secondary containment, conduct regular inspections and train employees.*
- *Material Use—Prevent and reduce the discharge of pesticides, herbicides, fertilizers, detergents, plaster, petroleum products and other hazardous materials from entering the storm water.*
- *Solid Waste Management—This BMP describes the requirements to properly design and maintain trash storage areas. The primary design feature requires the storage of trash in covered areas.*
- *Hazardous Waste Management—This BMP describes the requirements to properly design and maintain waste areas.*
- *Concrete Waste Management—Prevent and reduce pollutant discharge to storm water from concrete waste by performing on and off-site washouts in designated areas and training employees and consultants.*
- *Sanitary Septic Water Management—Provide convenient, well-maintained facilities, and arrange regular service and disposal of sanitary waste.*
- *Vehicle and Equipment Cleaning—Use off-site facilities or wash in designated areas to reduce pollutant discharge into the storm drain facilities.*
- *Vehicle and Equipment Fueling—Use off-site facilities or designated areas with enclosures or coverings to reduce pollutant discharge into the storm drain facilities.*
- *Vehicle and Equipment Maintenance—Use off-site facilities or designated areas with enclosing or coverings to reduce pollutant discharge into the storm drain facilities. In addition, run a “dry site” to prevent pollution discharge into storm drains.*
- *Employee and Subcontractor Training—Have a training session for employees and subcontractors to understand the need for implementation and usage of BMPs.*
- *Preservation of Existing Vegetation—Minimize the removal of existing trees and shrubs since they serve as erosion control.*
- *Seeding and Planting—Provide soil stability by planting and seeding grasses, trees, shrubs, vines, and ground cover.*
- *Mulching—Stabilize cleared or freshly seeded areas with mulch.*
- *Geotextiles and Mats—Natural or synthetics material can be used for soil stability.*
- *Dust Control—Reduce wind erosion and dust generated by construction activities by using dust control measures.*
- *Construction Road Stabilization—All on-site vehicle transport routes shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.*

- *Stabilized Construction Entrance—Stabilize the entrance pad to the construction area to reduce amount of sediment tracked off-site.*
- *Earth Dikes—Construct earth dikes of compacted soil to divert runoff or channel water to a desired location.*
- *Temporary Drains and Swales—Use temporary drains and swales to divert off-site runoff around the construction-site and stabilized areas and to direct it into sediment basins or traps.*
- *Outlet Protection—Use rock or grouted rock at outlet pipes to prevent scouring of soil caused by high velocities.*
- *Check Dams—Use check dams to reduce velocities of concentrated flows, thereby reducing erosion and promoting sedimentation behind the dams. Check dams are small and placed across swales and drainage ditches.*
- *Silt Fence—Composed of filter fabric, these are entrenched, attached to support poles, and sometimes backed by wire fence support. Silt fences promote sedimentation behind the fence of sediment-laden water.*
- *Straw Bale Barrier—Place straw bales end to end in a level contour in a shallow trench and stake them in place. The bales detain runoff and promote sedimentation.*
- *Sand Bag Barriers—By stacking sand bags on a level contour, a barrier is created to detain sediment-laden water. The barrier promotes sedimentation.*
- *Brush or Rock Filter—Made of 0.75 to 3-inch diameter rocks placed on a level contour or composed of brush wrapped in filter cloth and staked to the toe of the slope provides a sediment trap.*
- *Storm Drain Inlet Protection—Devices that remove sediment from sediment laden storm water before entering the storm drain inlet or catch basin.*
- *Sediment Trap—A sediment trap is a small, excavated, or bermed area where runoff for small drainage areas can pass through allowing sediment to settle out.*

Long-Term Operational Impacts

HYD-7 A water quality maintenance program will be implemented to mitigate the impact of Proposed Alternative Project generated runoff on surface water quality over the long term. The program outlined in *Water Pollution Aspects of Street Surface Contaminants* (prepared by the United States Environmental Protection Agency) provides recommendations for street cleaning and prevention of pollution generation.

- *Prior to Grading Permit issuance, a WQMP shall be developed and shall include both Non-Structural and Source Control BMPs. The WQMP shall conform to the San Bernardino County Draft NPDES permit and WQMP standards. The following are the minimum required controls to be implemented as a part of the WQMP for Urban Runoff.*
- *Education for Property Owners, Tenants and Occupations—The Property Owners Association is required to provide awareness educational material, including*

information provided by San Bernardino County. The materials shall include a description of chemicals that should be limited to the property and proper disposal, including prohibition of hosing waste directly to gutters, catch basins, storm drains or the lake.

- *Activity Restrictions—The developer shall prepare conditions, covenants and restriction of the protection of surface water quality.*
- *Common Area Landscape Management—For the common landscape areas ongoing maintenance shall occur consistent with County Administrative Design Guidelines or city equivalent, plus fertilizer and pesticide usage consistent with the instructions contained on product labels and with regulation administered by the State Department of Pesticide Regulation or county equivalent.*
- *Common Area Catch Basin Inspection—Property Owners Associations shall have privately owned catch basins cleaned and maintained, as needed. These are intended to prevent sediment, garden waste, trash and other pollutants from entering the public streets and storm drain systems.*
- *Common Area Litter Control—POAs shall be required to implement trash management and litter control procedures to minimize pollution to drainage waters.*
- *Street Sweeping Private Streets and Parking Lots—Streets and Parking lots shall be swept as needed, to prevent sediment, garden waste, trash and other pollutants from entering public streets and storm drain systems.*

HYD-8 *The following controls from the California StormWater BMP Handbook—Municipal shall be employed:*

- *Housekeeping Practices—This entails practices such as cleaning up spills, proper disposal of certain substances and wise application of chemicals.*
- *Used Oil Recycling—May apply to maintenance and security vehicles.*
- *Vegetation Controls—Vegetation control typically includes chemical (herbicide) application and mechanical methods. Chemical methods are discussed in SC10. Mechanical methods include leaving existing vegetation; cutting less frequently, hand cutting, planting low maintenance vegetation, collecting and properly disposing of clippings and cuttings, and educating employees and the public.*
- *Storm Drain Flushing—Although general storm drain gradients are sufficiently steep for self-cleansing, visual inspection may reveal a buildup of sediment and other pollutants at the inlets or outlets, in which case flushing may be advisable.*

HYD-9 *The WQMP shall include Structural or Treatment BMPs. The structural BMPs utilized shall focus on meeting potential TMDL requirements for noxious aquatic plants, nutrients, sedimentation and siltation. The structural BMPs shall conform to the San Bernardino County NPDES permit and the San Bernardino WQMP standards.*

HYD-10 Consistent with the WQMP guidelines contained in the Draft NPDES Permit and Waste Discharge Requirements for San Bernardino County, Structural BMPs shall be required for the Proposed Alternative Project. They shall be sized to comply with one of the following numeric sizing criteria or be considered by the Permittees to provide equivalent or better treatment. Volume-based BMPs shall be designed to infiltrate or treat either:

- *The volume of runoff produced from the 85th percentile 24-hour storm event, as determined from the local historical rainfall record; or*
- *The volume of the annual runoff produced by the 85th percentile 24-hours rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998); or*
- *The volume of annual runoff based on unit basin storage volume, to achieve 80% or more volume treatment by the method recommended in California Storm water Best Management Practice Handbook—Industrial/Commercial (1993); or*
- *The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as*
- *achieved by mitigation of the 85th percentile 24-hour runoff event.*

—OR—

- *Flow-based BMPs shall be designed to infiltrate or treat either:*
- *The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or*
- *The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or*
- *The maximum flow rate of runoff, as determined from the local historical rainfall record that achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.*

HYD-11 The following are the minimum required controls to be implemented as a part of the WQMP for Urban Runoff.

- *Control of Impervious Runoff—Surface runoff shall be directed to landscaped areas or pervious areas.*
- *Common Area Efficient Irrigation—Physical implementation of the landscape plan consistent with County Administrative Design Guidelines or city equivalent, which may include provision of water sensors, programmable irrigation timers, etc.*

- *Common Area Runoff-Minimizing Landscape Design—Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration.*
- *Catch Basin Stenciling—“No Dumping—Flows to Lake” or equivalent effective phrase shall be stenciled on catch basins to alert the public as to the destination of pollutant discharging into storm drain.*
- *Debris Posts—These shall be installed to prevent large floatable debris from entering the storm drains. They shall be placed upstream of the cross culverts.*
- *Inlet Trash Racks—These shall be installed where appropriate to reduce intake and transport through the storm drain system of large floatable debris. Trash racks shall be provided where drainage from open areas enters storm drain or cross culverts.*

HYD-12 Storm water treatment under the NPDES Permit and the future TMDL requirements shall include the construction of treatment BMPs.

HYD-13 Treatment BMPs appropriate for on-site use shall include infiltration trenches and basins, swales, inlet filtration, and/or water quality basins.

HYD-14 All storm water runoff shall be treated before leaving the site to reduce pollutants in Big Bear Lake.

Infiltration Trenches and Basins

HYD-15 Infiltration trenches and/or basins shall be used on site to meet potential future TMDLs for noxious aquatic plants and nutrients. Infiltration trenches and basins treat storm water runoff through filtration. A typical infiltration trench is essentially an excavated trench that is lined with filter fabric and backfilled with stones. Depth of the infiltration trench shall range from three to eight feet and shall be located in areas with permeable soils, and water table and bedrock depth situated well below the bottom of the trench. Trenches shall not be used to trap coarse sediments since large sediment would likely clog the trench. Grass buffers may be installed to capture sediment before it enters the trench to minimize clogging. Infiltration basins shall be used for drainage areas between 5 and 50 acres. Infiltration basins shall be either inline or offline, and may treat different volumes such as the water quality volume or the 2-year or 10-year storm.

Swales

HYD-16 The Proposed Alternative Project shall implement either vegetative swales, enhanced vegetated swales utilizing check dams and wide depressions, a series of small detention facilities designed similarly to a dry detention basin, or a combination of these treatment methods into a treatment train (series of Structural BMPs). The Water Quality Management Plan shall address treatment for the Proposed Alternative Project to assure that runoff from the site is treated to the “maximum extent practicable.” The swales shall be treated as water quality features and shall be maintained differently than grass areas. Specifically, pesticides, herbicide, and fertilizers, which may be used on the grass areas, shall not be used in the vegetation swales.

Filtration

HYD-17 *Filtration shall be implemented as a treatment method and shall use drop-in infiltration devices or inline devices. Drop-infiltration devices at all curb inlets within the internal parking lots shall be implemented to provide potential pollutant removal. Existing examples of these filtration devices include the Drain Pac Storm Drain Inserts and Fossil Filters. These types of devices are efficient at removing oil and grease, debris, and suspended solids from treated waters. Some of these devices have also exhibited high efficiencies at removing heavy metals and other pollutants. Inline devices suggested for use on-site include the Continuous Deflection Separator (CDS unit). Once the runoff has entered the storm drain, an in-line diversion would direct the treatment flow to a CDS unit. The CDS unit is a non-blocking, nonmechanical screening system, which would provide a second line of defense for solids removal. Adsorption materials can be added within the CDS unit to aid in the removal of oil and grease. The treated flow would then exit the CDS unit and continue downstream. Monitoring of filtration devices shall be conducted. The use of street sweeps on the parking lots and streets shall aid in reducing the amounts of sediment and debris that flow through the devices. This would extend the effectiveness of the devices during a storm event and would lower the frequency of required maintenance. The devices shall be checked and cleaned, if necessary, once a month during the rainy season, following any precipitation and at the end of the dry season prior to the first precipitation event of the rainy season. Consideration shall be given to using these filtration units in other areas besides the parking lot inlets. Another potential location is at the downstream end of the tributary pipes that feed the discharge point. Siting these units at a downstream point would allow for the treatment of a greater amount of runoff.*

Jurisdictional Waters

HYD-18 *The Developer shall comply with any requirements of the U.S. Army Corps of Engineers (ACOE) and the California Department of Fish and Game (CDFG) regarding water quality and drainage.*

HYD-19 *Any well located on the site of the Proposed Alternative Project, if not used as a water supply well or a monitoring well, shall be capped and taken out of service in accordance with accepted civil engineering standards.*

Facts in Support of Finding:

By following established guidelines for the management of runoff water, the Project would reduce runoff from the site to 90 percent of the current undeveloped rate. Therefore, there would be no additional runoff. Runoff that does occur would be filtered through a series of engineered devices designed to remove pollutants. The Project design features are expected to be an improvement to the overall drainage of the site and its ability to handle drainage problems. With implementation of the above-referenced mitigation measures, the project will be consistent with the Preliminary Master Water Quality Control Plan, and all applicable Federal, State and local regulations relating to protection of Water Quality.

Flood Control

The project area is located in Flood Control District Zone 6, which is a low flood potential zone. This is due to the fact that the upstream watershed is relatively small and that runoff is incapable of producing floods with huge amounts of water. Nonetheless, stormwater

culverts would be enlarged and fortified so that runoff would be conveyed under SR-38, thereby eliminating sheet flow.

Water Supply

The Water Feasibility Study calculates the Water Demand for the Project as:

- 250 gallons per day per connection x 50 lots = 12,500 gallons per day;
- 12,500 gallons per day x 365 days/year = 4,562,500 gallons per year; and
- 4,562,500 gallons per year is equal to 14 acre-feet per year.

The water supply for the Project's 14 acre-feet per year demand will come from two groundwater basins. The annual groundwater recharge for Subarea A of the North Shore Subunit is between 14 and 44 acre-feet per year, with an estimated annual Maximum Perennial Yield of 29 acre-feet per year. In order to be as conservative as possible, the "minimum recharge" of 14 acre-feet per year will be utilized for Subarea A. There are also existing private, homeowner wells that withdraw their water supply from Subarea A. "Private Wells Production" within Subarea A is 5 acre-feet per year of groundwater production. Subtracting the 5 acre-feet of groundwater production from the minimum recharge for Subarea A of 14 acre-feet leaves 9 acre-feet available to supply the Project. Existing Project Well FP-2 is capable of pumping the 5.6 gallons per minute that will produce the 9 acre-feet per year of groundwater production from Subarea A and will also produce the Maximum Day Demand of 15.27 gpm.

The remaining 5 acre-feet per year of Project Demand will be supplied from the Grout Creek Groundwater Subunit, Subarea D. Project Well FP-4, which was drilled by the developer in the northwest corner of the project site, will supply the 5 acre-feet per year of groundwater production, which is 3.1 gallons per minute. The only potential impact from FP-4 would be the draw-down influence onto neighboring private wells as indicated from pump test data. The data indicated that FP-4, at a sustained rate of 3.5 gpm, would result in a 2-foot draw-down in groundwater level for the nearest private well, which is located approximately 250 feet from Well FP-4. The available data on private wells suggests that the nearest private well has a saturated thickness that would be able to accommodate the additional 2-foot draw-down and that pumping from Well FP-4 would not significantly impact the private well's routine operations. Based on this data, mitigation shall be incorporated into the Project that will limit the Project's allocation of water supply from Well FP-4 to a maximum of 5 acre-feet per year.

The groundwater annual recharge of Grout Creek Subarea D to be between 32 and 99 acre-feet per year, with an estimated annual Maximum Perennial Yield of 66 acre-feet per year. At present, the only groundwater production in this subarea is from 11 private wells and is calculated to be 3 acre-feet per year. The additional 5 acre-feet per year of annual groundwater production from Well FP-4, combined with the existing 3 acre-feet per year of annual groundwater production, results in 8 acre-feet per year of total annual groundwater production, well below the low end of the annual recharge for Subarea D, which is 32-acre-feet per year, and also well below the estimated Maximum Perennial Yield for Subarea D which is 66 acre-feet per year.

Project Well FP-2 was cleaned, rehabilitated and test pumped in July of 2008. Geoscience's August 2008 Report concluded that:

- Well FP-2 has successfully been rehabilitated and its specific capacity restored to near original levels;
- Well FP-2 can yield up to 35 gpm on a long term basis with less than 10 ft of drawdown;
- At the 35 gpm discharge rate, pumping interference with the nearest private well (910 feet to the east of FP2) is expected to be less than 0.3 ft (less than 3.6 inches);
- Groundwater quality data from Well FP-2 indicates the water from the well is suitable for municipal supply; and
- There is no evidence from the Microscopic Particulate Analysis that the ground water produced by Well FP-2 is under the direct influence of surface water in Big Bear Lake.

The potential impact of pumping Project Well FP-2 on the surface water of Big Bear Lake would be minimal. The top of perforations for Project Well FP-2 (the area of the well where water is withdrawn from the surrounding soil) occur (begin) approximately 60 feet below ground surface, at an elevation of approximately 6,686 feet above mean sea level (msl). The high surface water elevation in the lake is 6,743 feet msl and the average depth of the lake is 30 feet. Thus, the elevation of the bottom of Big Bear Lake is approximately 27 feet above the top of perforations for Project Well FP-2. The geologic log for Project Well FP-2 shows multiple silt and clay layers between the land surface and top of perforations. If the silt and clay layers extend beneath the lake, they would provide some hydraulic separation between the lake water and aquifer system. While it is possible that some vertical leakage could occur from the lake into the aquifer system of FP-2, the majority of groundwater produced by FP-2 would be from the aquifer underlying Subarea A.

The third existing, on-site well, FP-3, located to the east of the FP-2 well, would not be equipped nor pumped, but will be used as a monitoring well to record groundwater levels.

Groundwater Recharge

Impacts from Project Wells FP-2 and FP-4 will be less than significant with the implementation of mitigation measures which ensure that annual groundwater production limits for FP-2 are 9 acre-feet per year; and FP-4 are 5 acre-feet per year.

In summary, the Project demand is 14 acre-feet per year. Well FP-2 is capable of producing the 5.6 gallons per minute, which is 9 acre-feet per year from North Shore Subunit, Subarea A, and Well FP-4 will produce the 3.1 gallons per minute, which is 5 acre-feet per year from Grout Creek Subunit, Subarea D. Therefore, there is sufficient water available to serve the Project, and the impacts in regard to water supply for the Project are considered less than significant.

Surface Water Quality

Post-project runoff flows will generally remain in the existing natural drainage pattern, with culvert crossings occurring at low points along the highway and under interior roads, with ultimate discharge into Big Bear Lake. The Project will have a minor impact on the overall existing hydrology, effecting primarily minor redirection of natural flows, with the outfall into the lake remaining largely unchanged in both location and quantity. Project runoff flows will be carried to the lake via six proposed storm culverts, which drain directly into the lake itself; thus, runoff from the Project becomes a small part of the vast storage volume in Big Bear Lake.

The Project has been designed so that minor grading and minimal increases of impervious surfaces would occur on each lot by utilizing stemwall construction and a reduced overall construction footprint. Each lot will further reduce project runoff with the implementation of bioretention Best Management Practices (BMPs), as reflected in Mitigation Measures HYO-7 through HYO-19, while roads constructed as part of the Project will have runoff directed to bioretention areas. Big Bear Lake has a storage capacity of approximately 73,000 acre-feet. The project site is estimated to produce runoff equivalent to 0.04 percent of lake volume before development and 0.09 percent of lake volume after development. Thus, Project runoff is a miniscule fraction of lake storage.

Big Bear Lake possesses a controlled release point for project runoff flows at Big Bear Dam, which is controlled by Big Bear Municipal Water District (BBMWD). The primary goal of the BBMWD is maintaining the water level of Big Bear Lake at as high a level as possible given the availability of water and finances. The belief is that a constant water level increases recreational use, stabilizes property value, improves water quality and supports a healthier fish and wildlife environment.

BBMWD accomplishes their goal by implementing a water management plan that includes the following:

- Stabilization of Big Bear Lake by managing the amount of water released to the downstream;
- Water rights holder;
- Watershed/water quality management;
- Recreation management; and
- Bear Valley Dam and Reservoir Maintenance.

In many seasons, BBMWD will elect to keep water in the lake and then purchase “in-lieu” water to meet demands of the downstream water rights holder. This “in-lieu” water is purchased from the San Bernardino Valley Municipal Water District and consists of water supplied via the State Water Project.

Releases from Big Bear Dam encounter another controlled release point further downstream at the Seven Oaks Dam, which is controlled by the USACE. The USACE

operates Seven Oaks Dam in tandem with the Prado Dam, located 40.3 miles downstream on the Santa Ana River, by implementing the following strategies:

- Runoff during the early flood season is stored behind Seven Oaks Dam to build a debris pool to protect outlet works;
- Small releases from Seven Oaks Dam are made on continual basis to maintain downstream water supply;
- During a flood, Seven Oaks Dam will store runoff for as long as the reservoir pool at Prado Dam is rising;
- After the flood threat has passed, Seven Oaks Dam will release stored water at a rate which does not exceed the downstream channel capacity; and
- After the flood season, Seven Oaks Dam will be gradually drained and the Santa Ana River will flow through unhindered.

BBMWD and the USACE's regulation of their structures is a function of irrigation demand, availability of water from other sources, and flood control purposes. Because these two organizations and their structures regulate and control discharges to downstream waters, and because runoff from the project site is miniscule compared to the volume stored in Big Bear Lake, Hydrologic Conditions of Concern (HCOC) for the Project development are independently minimal and not expected to directly and significantly impact downstream receiving waters.

The Project includes 55 boat slips. This would require no dredging, just the sinking of posts for support of the boat slip structure. Per The Clean Water Act, before the USACE can issue a permit for the marina/boat ramp/slip dock, the project Applicant must receive an individual Conditional Water Quality Certification from the Regional Water Quality Board–Santa Ana Region. Therefore, compliance with this procedure would reduce the level of impact to less than significant.

Project Receiving Waters

Big Bear Lake is the primary downstream receiving water for the project site. As project runoff flows continue westerly, further downstream receiving waters are reach 1 through 6 of the Santa Ana River, which ultimately drains to the Pacific Ocean.

Project Pollutants and Pollutants of Concern

When a project pollutant is the same as a pollutant causing stress in the receiving waters, the San Bernardino County WQMP Guidance requires that project runoff be treated for said pollutants utilizing BMPs that are medium to high effectiveness. Pollutants of concern for the Moon Camp project are bacteria/virus, heavy metals, nutrients, and sediments.

Nutrients are of particular concern because a total maximum daily load (TMDL) for phosphorus has been adopted for Big Bear Lake. The current TMDL assigned to Big Bear Lake is 475 lbs per year for Urban Waste Load Allocation for phosphorus. For urban areas, compliance with this TMDL requires compliance with the Municipal Separate Storm

Sewer System (MS4) Permit, which, in turn, requires implementation of BMPs, which treat pollutants of concern at a medium to high level of effectiveness.

Permit Regulations

WQMP Requirements

The Santa Ana Regional Water Quality Control Board Order Number R8-2010-0036, NPDES Permit No. CAS618036 (Permit) requires post-construction BMPs to be implemented for new development and significant redevelopment projects, for both private and public agencies. AWQMP is then used to guide the development and implementation of a program to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants loads and changes in hydrology. Under the permit's requirements, the Project will be required to comply with the WQMP guidance document by implementing the following:

- Incorporate and implement site design BMPs;
- Incorporate and implement all applicable source control BMPs;
- Incorporate or implement Treatment Control BMPs; and
- Utilize a combination of site design, source control and/or treatment control that addresses all identified pollutants and hydrologic conditions of concern.

TMDL Requirements

The Santa Ana Regional Water Quality Control Board Resolution No R8-2010-0036, amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate a Nutrient TMDL for Dry Hydrological Conditions for Big Bear Lake, was approved by the Office of Administrative Law (OAL). Under this resolution, the only TMDL implementation provision applicable to the Project is the item referring to the MS4 Stormwater Permit:

Implementation Task 3.1—"Waste Discharge Requirements for the San Bernardino County Flood Control and Transportation District, the County of San Bernardino and the Incorporated Cities of San Bernardino County within the Santa Ana Region, Areawide Urban Runoff, NPDES No. CAS618036 (Regional Board Order No. R8-2010-0036). The current Order has provisions to address TMDL issues. In light of these provisions, revision of the Order may not be necessary to address TMDL requirements."

The County of San Bernardino, in compliance with its MS4 permit, has adopted a program that requires new development projects, such as the Project, to prepare and implement a WQMP that includes a combination of site design, source control, and treatment control BMPs to reduce the discharge of pollutants and hydrologic conditions of concern resulting from the development. The Project applicant has prepared a Preliminary Master Water Quality Management Plan that complies with County standards and outline BMPs to be implemented during initial construction and site development activities.

Site design BMPs, source control BMPs, and treatment control BMPs will be implemented by the Project as documented WQMP. A subsequent lot development WQMP will be prepared once final construction specifications are determined. Through implementation of the WQMP, including the prescribed BMPs, the Project will be compliant with the County's requirements, and by extension, the MS4 permit and TMDL implementation plan.

Project BMPs

In order to address the project POCs and to reduce the chance of pollutants entering Big Bear Lake, the Applicant will implement treatment BMPs identified in the WQMP, including the following:

Site Design

Lots in the Project will be low density with stem wall construction, thereby reducing the area of construction. This criterion in planning reduces the overall footprint of construction and minimizes the imperviousness of each lot. The Project also includes 6.2 acres of dedicated open space. Maximizing open space thereby minimizing impervious development will retain optimum on-site precipitation and supplement natural recharge to the site's two ground water basins. These are important concepts guiding the Project's low impact design goals.

Source Control

Activity restrictions and property owners' education are crucial to the Project's success at preserving water quality. The more informed each property owner is, the more likely they are to participate in compliance with imposed water quality standards. Conditions, Covenants & Restrictions (CC&Rs) will be utilized in this Project to clearly spell out activities that are not beneficial to water quality and shall not be allowed on the project site. The CC&Rs will be implemented and maintained by the Project's Property Owner's Association (POA). Specific and detailed activity restrictions will be included in the Final WQMP.

Activities to be restricted in the Final WQMP include, but are not limited to:

- Conducting any activity, improvement or construction that would in any way tamper with, interfere with, or alter the treatment BMP (bioretention) in a manner that renders them less effective; and
- Any activity that is not consistent with the San Bernardino County ordinances and State/Federal laws relating to land use, zoning, and housing and fire hazard abatement.

Treatment Control

Assuming a generous average house footprint of 3,500 square feet on a 43,560-square-foot lot, with an estimated driveway surface of 3,000 square feet, produces an impervious percentage of 15. Using this average 15 percent yields a water quality volume (V0) of 1.56 acre-feet for all project lots.

Calculating the water quality volume of street runoff at 90 percent yields a V0 of 0.37 acre-feet. Therefore, the individual lot treatment BMPs shall be designed to address 1.56 acre-feet of total water quality volume, approximately 0.03 acre-feet per lot, while the street treatment BMPs shall address the remaining 0.37 acre-feet of the water quality volume.

The combination of a biofilter and filtration will treat the project pollutants of concern at medium to high level of effectiveness. The Caltrans Treatment BMP Technology Report (April 2007) provides results of their full-scale pilot studies performed on various BMPs. The report shows that bioretention will effectively treat nutrients from the project, including nitrogen and phosphorus, at a medium level of effectiveness.

Bioretention is the selected treatment BMP for the Project and operates similar to that of a biofilter and filtration. The individual lot owners will each treat their water quality volume prior to discharging from the site. Property owners will be responsible for their own maintenance. The street runoff will also be treated with bioretention that is located in common areas or on open space lots, with maintenance by the POA.

Cumulative Impacts Related to Water Quality and Hydrology

It is possible that cumulative impacts to Big Bear Lake would occur as a result of this Project combined with other development in the region. According to the Santa Ana Regional Water Quality Control Board (SARWQCB-District 8), construction, land development, snow skiing activities, and unknown point sources are the culprits of pollutants such as sedimentation, siltation, excess nutrients, and exotic/noxious plants. Although Big Bear Lake is listed by the SWRCB as an impaired body of water, with implementation of mitigation, the Project's potential to cumulatively impact lake water quality would be reduced to less than significant.

Furthermore, mitigation outlining protocol procedure for set limits on groundwater well extraction and a defined water supply agreement between the Project Applicant, the DWP, and CSA 53C would reduce the Project's potential cumulative impact to groundwater supply to less than significant.

6. Land Use and Planning

Potential Impact: Whether the Project would physically divide an established community; whether the Project would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project (including, but not limited to the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of mitigating an environmental effect; whether the Project would conflict with adopted environmental plans and goals of the community where it is located; whether the Project would conflict with established recreational, educational, religious, or scientific uses of the area; and/or whether the Project would conflict with any applicable habitat conservation plan or natural community conservation plan.

Finding: Potential impacts of the Project on Land Use and Planning are discussed in detail in Section 4.5 of the 2010 RRDEIR. Based on the entire record before us, the County finds that mitigation measures incorporated as a result of other Project specific impacts will

reduce land use impacts to less than significant levels. The County further finds that no unavoidable significant impacts related to Land Use and Planning have been identified and that the project is consistent with and satisfies the requirements of compliance with the San Bernardino General Plan.

Facts in Support of Finding:

Physically Divide a Community

The Project does not physically divide a community. The Project will be less dense than development in adjacent neighborhoods in the Fawnskin community.

Conflict with Applicable Land Use Plans, Policies or Regulations of an Agency with Jurisdiction over the Proposed Project

US Forest Service

San Bernardino National Forest Land Use Management Plan

The San Bernardino National Forest Land Management Plan 2006 Revision identifies a zoning map system for managing the forest. It identifies a plan for conserving a calculated percentage of the forested land it manages for wildlife habitat. This management plan does not affect private land and there are no requirements to conserve additional habitat on the project site other than unique habitat or habitat where sensitive or endangered species are present. Because the project site does contain unique and sensitive habitat, provisions have been made to conserve this land.

The Forest Land Management Plan 2006 Revision identifies high scenic integrity objectives for the area surrounding the project site; therefore the Project has the potential to negatively impact scenic vistas. The establishment of conservation easements on-site, in addition to mitigation measures identified in Sections 4.1, Aesthetics, and 4.3, Biological Resources, would adequately address the potentially significant impacts to land uses that rely on scenic resources.

Wildfires

Wildfire is the primary safety issue in the mountain area. Any residential or commercial land use could be impacted by a wildfire in the area. Implementation of the San Bernardino National Forest Plan for mechanical thinning of understory trees and provision of a dedicated water reservoir for fireflow would reduce fire danger in the project area, although it may still be a threat. Fire conditions in the San Bernardino National Forest are more dangerous than ever, according to the Forest Service (2006). Decades of fire suppression policy, which led to growth of the understory and bark beetle infestation, is partially to blame for this unprecedented fire hazard. A USFS plan to implement an aggressive thinning operation that would remove excess fuels to pre-fire suppression levels was finalized in 2006. Until it is implemented, the fire danger remains. A 100-foot fuel modification zone is required for any development project that abuts USFS land. Residential lots 14 through 26 are affected by this requirement and must abide by the Fuel Modification Plan required to be prepared for the Project

Related to this issue, a Water Supply Feasibility Study was prepared for the Project that addresses both domestic water supply and water supply for fire flow. As part of the Project's permitting process, the Applicant must provide adequate domestic water supply as well as meeting the fire flow requirements established by the County Fire Marshall. Storage capacity for the development would be sized to meet the operational, emergency and fire flow storage requirements. Operational storage would be used to meet the hourly fluctuations in demand during maximum day conditions and must be established as 30 percent of maximum day. Emergency storage would be used to meet demands during a power outage or other emergency situation when supply sources and boosting pumps may not be available; the Big Bear DWP requirements for emergency storage are equivalent to one day of maximum day demand. Fire flow storage capacity would be equal to the fire flow demand (1,750 gpm) times its duration (two-hours). Fire Flow Storage for 1,750 gpm (based on 120 min) is 210,000 gallons.

Bear Valley Community Plan

General Plan Amendment—Land Use District

The evaluation of the Project and its adherence to the Bear Valley Community Plan focuses on consistency with the predetermined General Plan land use policy for the area, compatibility with the surrounding areas, and consistency with the community character.

General Plan Consistency

The project site is designated by the County of San Bernardino Bear Valley Community Plan (BV) as Rural Living with minimum 40-acre lots (BV/RL-40). Therefore, under current conditions, the Applicant is allowed to develop one single-family dwelling unit per 40 acres. Regarding the BV/RL-40, designation, Section BV1.2.2 of the Bear Valley Community Plan states: "In recognition of several large parcels of undeveloped private property that was suitable for future residential development that occur in the unincorporated portion of the valley, residential land use designations were assigned to these properties, but with very low density of development allowed. Appropriate density of future development was intended to be considered at the time that specific development proposals were submitted. Individual projects would address the availability of adequate water supplies, traffic circulation and other infrastructure to support the individual project's proposed density of development. This concept came to be known as the "Holding Zone" approach. The 2006 Bear Valley Community Plan incorporates this strategy from the 1988 Plan. Current residential land use designations on large parcels with low development densities are reflected in such designations as BV/RL-40 (Rural Living, 40-acre minimum parcel size) and other similar low density designations. Future development proposals will be considered based on a demonstrated ability to provide adequate infrastructure and maintain consistency with the goals and policies of the 2006 Community Plan." As such, this designation can be modified when appropriate measures and development criteria have been fulfilled. Therefore, the County may consider revisions to the land use designation for any specific property to allow more intense development if a proposed project is able to provide adequate water supplies, traffic circulation and other infrastructure to support the individual project's proposed density of development.

The Project is not consistent with the County's current Land Use District designation of BV/RL-40, which is a designation for land in rural areas where public infrastructure is not readily available and/or there are environmental constraints such as steep topography, unstable slopes, proximity to earthquake faults or other constraints. The project site is located within the community of Fawnskin adjacent to single family residential neighborhoods to the northwest and southeast. Infrastructure to support the Project is available adjacent to the site. Therefore, a change in the Land Use District designation for the project site to allow minimum 20,000-square-foot lots is appropriate.

The Tentative Tract Map has been designed as an extension of the existing land use pattern (i.e., neighboring single-family residential uses), but with much less density (minimum 7,200-square-foot for neighboring lots and minimum 20,000-square-foot for the Project). The Project offers a cohesively planned development which would be subject to compliance with the County's administrative design guidelines and development standards specific to the BV/RS-20M District. The minimum lot size of the Project is 20,000 square feet; however, all of the proposed residential lots are at least one half acre in size, with the average lot size being 0.90 acres, and 12 lots are over 1 acre in size.

Surrounding Area and Community Character Consistency

The Bear Valley Community Plan specifies that before a General Plan Amendment can be considered for approval by the County, certain criteria must be met. These criteria are listed in the Goals and Policies section of the plan. The Project proposes a Land Use General Plan Amendment. In order to approve such an amendment, the Applicant must prove that the amendment would not have a substantial adverse impact on surrounding properties. In the Bear Valley Community Plan, BV2.2 Goals and Policies, policy BV/LU1.1 specifically states: "Require strict adherence to the Land Use Policy Map unless proposed changes are clearly demonstrated to be consistent with the community character." The elements of community character that the public have identified as important include the following: providing adequate infrastructure, promoting sustainable and beneficial economy, balance between locals and tourists, self-sufficient and sustainable public services, and promoting both single family residential development and local level businesses. Because of the higher proposed density of residential units and the lack of conservation measures, the Original Proposed Project did not meet this guideline.

The Project better preserves the community character in several important ways:

- The residential density is greatly reduced (gross density is 1 house per 1.25 acres).
- Areas with highly sensitive visual resources, such as the waterfront, are not developed for residential uses and are preserved by conservation and lake access easements.
- Conservation areas are established to protect the most valuable biological resources within the Project area (the Ashy Gray Paintbrush and the bald eagle perches).
- 0.82 acres of the waterfront will become accessible to the public.

The proposed residential unit density will be less dense than the surrounding residential properties and will create a contiguous unit of housing between the eastern and western portions of the Fawnskin community.

Consistency of land uses with the character of a community is also a discretionary, subjective judgment for the County of San Bernardino, as lead agency, to make. The Project would not violate any community policy or standard set forth in the Community Plan or County General Plan. Policy BV/LU 1.2 C. states that “densities should not be increased unless there are existing or assured services and infrastructure, including but not limited to water, wastewater, circulation, police, and fire, to accommodate the increased densities.” The Project has produced a secured water source. With regard to impact on cumulative growth, the Project will not cross the growth cap threshold but will add to the margin inside which growth is acceptable, until the maximum capacity for build-out of the mountain area is reached.

Bear Valley Community Priorities

The Project is consistent with the Community Priorities set forth in the Community Plan Section BV 1.3.3. The public identified four principal planning issues and concerns. The Project addresses these issues as follows:

A community in a forest—the natural environment prevails.

- Although the surrounding, existing designation is RS 7,200, allowing lot sizes of 7,200 square feet, the proposed designation for the Project, allows 20,000-square-foot lots. In fact, all residential lots in the planned subdivision are at least one half acre in size, with the average lot size being 0.90 acre, and 12 lots are over 1 acre in size. This allows the individual lot owners to develop their lots, while minimizing grading and preserving existing trees and other natural features on their lots. In addition, no residential development will occur along the lakefront. The forest and the natural environment will be maintained through the large lot sizes and the preservation of the natural lakefront area.

Ensure no conflict in the interface between the National Forest and adjacent land uses.

- The Applicant has designed the Tentative Tract Map (TTM) so that lots that abut the National Forest have adequate depth between the developable area of the site and the National Forest boundary. In addition, as required by the Forest Plan and the County Fire Marshall, owners of these sites are required to maintain a 100-foot fuel modification zone from the National Forest boundary to the interior of the sites. The 10 lots adjacent to the forest range from 0.56 acre to 2.7 acres, with an average lot size of 1.4 acres. Lot depths for the 10 lots range from 206 feet to 474 feet and average 271 feet deep.
- No direct access between the residential lots and the National Forest is proposed; no trails between the site and the forest are proposed as a part of the Project.

Conservation of natural resources and scenic beauty.

- The Applicant has proposed to set aside approximately 6.2 acres of the site for Open Space, Neighborhood Lake Access and Conservation easements in three lettered lots, plus another lettered lot designated for the marina parking lot, but having Open Space value with existing perch trees that would remain in place, these areas are located adjacent to SR-38 so the Open Space component of the Project would reduce the overall intensity of use by limiting the number of residential lots that abut SR-38 to nine lots—none on the lake side. In addition, a 10-acre off-site pebble plain habitat currently owned by the Moon Camp property owner would be dedicated as a Conservation Easement. With no residential development along the lakeshore, the scenic beauty of the lakeshore is conserved. In addition, the use of the property's shoreline as Open Space/Conservation to preserve willow flycatcher habitat, and to minimize the number of trees that would be removed, would continue to provide habitat for a number of bird and mammal species that currently use the site.
- Under the Project, the Applicant's plan for natural resources retains the existing mountain character of the community by preserving viewsheds of the lake and leaving harmonious open spaces in Open Space/Conservation easements (pebble plain habitat and lakeshore). Additionally, the density of proposed development and an architectural design criteria sympathetic to the mountain area allow the development to blend well into the natural surroundings.

Acknowledge service and infrastructure capacity and limitations of the area, particularly roads and water to serve future development.

- The Applicant has prepared a number of studies to determine the level of service and infrastructure required of the Project, including Water and Sewer Feasibility Studies and a Traffic Impact Analysis (TIA), as well as an updated Focused Traffic Impact Analysis (2016). These studies show that the Project can provide water service for future residential development of the 50 lots via two on-site domestic wells (the third on-site well is a monitoring well) and that there is capacity within the existing sewer and wastewater treatment system to accommodate the 50 new residential lots. Domestic potable water services will be provided by the City of Big Bear DWP. The TIA also shows that with implementation of design improvements and the payment of the Applicant's fair share of road/signal infrastructure, impacts on Traffic and Circulation would be less than significant.

Although the Bear Valley Community Plan expresses a need to establish development standards or conditions of approval which adequately address noise potential, no specific standards are included in the Community Plan. The County has general noise standards which apply to this land use. This Project is located in a community that has expressed great concern about noise pollution. Without specific noise control criteria, the best strategy is to employ design criteria for structures. Typical noise mitigation measures related to land use are described in Section 4.6, Noise. With overall density of the Project

being 1 lot per 1.25 acres, typical noise within the subdivision will be dispersed throughout the trees and the 62.43 acres.

Southern California Association of Governments (SCAG)

SCAG's Regional Housing Needs Assessment (RHNA) has projected the housing needs of each city in the County and attempts to strategize for balanced housing availability. However, due to lack of data for the mountain area, SCAG has not yet determined housing needs in the project vicinity. Most cities in southern California are deficient in affordable housing. Clustered development of attached housing units might better satisfy the County's goals and needs for regional housing, but would require a land use designation which is not compatible with the Fawnskin community. This Project does not conflict with the County's housing goals, and single unit residential housing on large lots better fits the Bear Valley Community's needs than attached housing units. Single-family housing units under the Project are consistent with the existing land use in the general Fawnskin area.

Conflict with Adopted Environmental Plans and Goals of the Community

This threshold is addressed above in the discussion of the Bear Valley Community Plan.

Conflict with Established Recreational, Educational, Religious or Scientific Uses of the Area

The project site is designated as a residential site and does not provide direct access to recreational or educational areas. The site is not used for religious purposes and is not located near a church or other religious facility.

Recreational activities in the area consist of hiking, skiing, boating, biking, and other recreational activities consistent with a mountain community adjacent to a lake. The Project would provide a 55-slip boat dock for residents use along with a boat launch and parking lot to accommodate residents use; no public use of the boating facilities is proposed. However, the shoreline would be accessible to local residents who may arrive on foot or bicycle for fishing, bird watching, or other such passive activities. Scientific activities consisting of the study of local sensitive species such as the bald eagle, willow flycatcher and flying squirrel could continue. Also, the willow flycatcher habitat is being preserved in Open Space/Conservation easements on-site. Therefore, the Project would not be in conflict.

Conflict with Any Applicable Habitat Conservation Plan or Natural Community Conservation Plan

The project site is not overlain by a Habitat Conservation Plan (HCP) nor a Community Conservation Plan. A peer review of the biological studies has been conducted. This review included a site visit in December 2006. During the site visit the biologist observed that willow scrub habitat on the lake shoreline had grown up considerably since the site was studied in 2002. The more extensive willow scrub habitat provides greater support for the sensitive species, willow flycatcher. Additionally, the biologist observed the northern half of the project site supports habitat suitable for San Bernardino flying squirrel. USFS studies conducted in the Fawnskin area in 1991 were positive for the presence of this species on USFS land. These existing land use changes are notable and biological surveys

were conducted and mitigation measures for those species and habitats affected by this Project will be implemented.

7. Noise

Potential Impact: Whether the Project would result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; Whether the Project would result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; whether the Project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; Whether the Project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Finding: Potential impacts of the Project on Noise are discussed in detail in Section 4.6 of the 2010 RRDEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with implementation of Mitigation Measures NOI-1–NOI-4. Mitigation Measures NOI-1–NOI-4 reads in full as follows:

***NOI-1** Construction contractors shall be required to ensure that construction equipment is well tuned and maintained according to the manufacturer's specifications, and that the equipment's standard noise reduction devices are in good working order.*

***NOI-2** Consistent with the County of San Bernardino Development Code Section 87.0901, construction activities shall be limited as follows:*

For general construction activities, the operation of construction equipment and outdoor construction or repair work shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday.

***NOI-3** Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturers' specifications) and by shrouding or shielding impact tools. All equipment shall have sound-control devices no less effective than those provided by the manufacturer.*

***NOI-4** Construction activities contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from adjacent residences. Activities within these staging areas shall conform to the time limitations established in Mitigation Measure NOI-2.*

Facts in Support of Finding: Neither the California Environmental Quality Act (CEQA) Guidelines, the County of San Bernardino General Plan, nor the Development Code provides a definition of what constitutes a substantial noise increase. A common practice has been to assume that minimally perceptible to clearly noticeable increases of 3 to 5 dBA represent a significant increase in ambient noise levels. A sliding scale is commonly used to identify the significance of noise increases, allowing greater increases at lower absolute sound levels than at higher sound levels. This approach is based on research that relates

changes in noise to the percentage of individuals that would be highly annoyed by the change. The significance criteria for changes in noise from project operations are as follows:

- A 3-dBA CNEL increase in noise as a result of project operations, if the existing noise level already exceeds the “Acceptable” range for the land use (55 dBA CNEL or less for daytime residential uses—see Table 4.6-4).
- A 5-dBA CNEL increase in noise as a result of project operations, if the existing noise level is in the “Acceptable” range and the resulting level remains within the “Acceptable” range for the land use.

The County Development Code does not permit any vibration which produces a particle velocity greater than or equal to two-tenths (0.2). Construction is exempt from vibration standards provided construction activity is limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday.

Construction Noise

Impact Analysis

Construction noise represents a short-term increase in ambient noise levels. Noise impacts from construction activities associated with the Project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. Short-term noise impacts could occur during construction activities; either from the noise impacts created from the transport of workers and movement of construction materials to and from the Project site, or from the noise generated on-site during ground clearing, excavation, grading, and construction activities. Construction activities are carried out in discrete steps, each of which has their own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow noise ranges to be categorized by work phase.

The residential land uses to the southeast along SR-38, to the west along Canyon Road and to the north along Flicker Road, are the sensitive receptors of most concern as they relate to the Project construction noise. The edge of the project site is adjacent to the backyards of some of these residences. The noise level at the nearest residences could be greater than 90 dBA during various phases of Project construction. Noise at this level would result in a temporary increase in ambient noise levels. Although construction activities would occur during daytime hours, construction noise could still be considered substantially disruptive to residents. However, periods of intrusive noise exposure would be temporary, and noise generated by Project construction would be partially masked by existing noise from traffic. Construction noise often varies significantly on a day-to-day basis, and the noise levels analyzed represented a worst-case scenario.

In addition to construction noise from the project site, construction activities would also result in traffic noise along access routes to the site due from transport of equipment and workers on the site. The primary heavy equipment construction vehicles are expected to be moved on to the site once during the initial grading and would have a less than significant short-term effect on noise levels. Daily transportation of construction workers is not expected to cause a significant effect since this traffic would not be a substantial percentage of current daily volumes in the area, and would not be anticipated to increase traffic noise levels by more than 1 dBA.

The maximum permitted noise exposure to residential uses from stationary sources is 55 dBA L_{eq} from 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. Locally regulated sources are stationary and not pre-empted from local noise control. Pre-empted sources include vehicles operated on public roadways, railroad line operations and aircraft in flight. The maximum permitted noise exposure to residential uses from mobile noise sources is 60 dB (L_{dn} or CNEL). However, an exterior noise level up to 65 dB (or CNEL) is allowed if exterior noise levels have been substantially mitigated through the implementation of best available noise reduction technology and the interior noise exposure does not exceed 45 dB (or CNEL) with windows and doors closed.

Project construction activities would temporarily increase local noise and vibration levels in the project study area and may temporarily exceed County standards. However, the County of San Bernardino Development Code exempts construction activities from adhering to County noise standards as long as construction is limited to the hours of 7:00 a.m. to 7:00 p.m., Monday to Saturday, and prohibited on Sundays or Federal Holidays. This exemption recognizes the inherent and often unavoidable noise associated with construction activities and the limited duration of such impacts. Accordingly, as long as the construction activities occur during the least noise sensitive time of the day, such activities are not subject to the noise ordinance. With adherence to the County Development Code and the noise-related policies in the County General Plan, and due to the relatively short period of construction, noise impacts are anticipated to be less than significant. Implementation of the recommended mitigation measures would ensure that impacts remain at or below less than significant levels.

Mitigation is proposed that would require the Applicant to implement construction noise control measures into the Project and comply with the County's construction noise requirements. While the closest residences would experience exterior noise levels greater than 60 dBA, construction noise is temporary and exempt from the County's land use compatibility noise standards. Therefore, implementation of the mitigation measures would be sufficient to reduce construction noise impacts to a level of less than significant.

Groundborne Vibration

Construction Vibration

Construction activities can produce vibration that may be felt by adjacent uses. The construction of the Project would not require the use of equipment such as jackhammers and pile drivers, which are known to generate substantial construction vibration levels. The primary sources of vibration during construction would be from bulldozers, backhoes,

crawler tractors, and scrapers used during site preparation. A vibratory roller would produce the greatest amount of vibration on the project site, with a 0.21 peak particle velocity (PPV) at 25 feet. The nearest sensitive receptors have backyards adjacent to the project site.

Vibration impacts from construction activities associated with the Project would be a function of the construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

The residential land uses to the southeast along SR-38, to the west along Canyon Road and to the north along Flicker Road, are the sensitive receptors of most concern as they relate to the Project construction potential for vibration. The edge of the project site is adjacent to the backyards of some of these residences. Vibration levels could reach a peak of 0.21 at 25 feet during certain phases of Project construction. Although construction activities would occur during daytime hours, construction vibration could still be considered disruptive to residents. However, periods of vibration would be temporary, and vibration would be partially masked by existing noise from traffic. With mitigation, this is a less than significant impact.

In addition to construction vibration from the project site, construction activities may also result in vibration from traffic along access routes to the site due from transport of equipment and workers on the site. The primary heavy equipment construction vehicles are expected to be moved on to the site once during the initial grading and would have a less than significant short-term effect on vibration levels. Daily transportation of construction workers is not expected to cause a significant effect since this traffic would not be a substantial percentage of current daily volumes in the area, and would not be anticipated to increase traffic vibration to a perceptible level.

The County of San Bernardino Development Code does not permit any vibration which produces a particle velocity greater than or equal to two-tenths (0.2) inches per second measured at or beyond the lot line. However, temporary construction is exempted from these requirements as long as activities are limited to the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday.

Project construction activities would result in temporary vibration that is 0.01 above the County standards and therefore may temporarily exceed County standards. However, the County of San Bernardino Development Code exempts construction activities from adhering to County noise standards as long as construction is limited to the hours of 7:00 a.m. to 7:00 p.m., Monday to Saturday and prohibited on Sundays or federal holidays. With adherence to the County Development Code, and due to the relatively short period of construction and even shorter periods of vibration, impacts are anticipated to be less than significant. Implementation of the recommended mitigation measure would ensure that impacts remain at or below less than significant levels.

Operational Vibration

Following completion of the Project (assuming full future buildout of the residential lots), no increases in vibration would be expected. The additional residences would not be

expected to attract vehicles that would result in groundborne vibration, with the possible exception of increased recreation vehicle (RV), fifth-wheel trailers, and watercraft trailers. As discussed further below, boating use is only expected to increase by less than nine boats daily, and would not cause perceptible vibration over existing boat traffic. Vibration would not be expected from RVs or trailers as they are generally hauled and parked for several days or more, or permanently parked at a residence. Vibration impacts from the operation of the Project would be less than significant.

Operational Noise—Mobile Sources

Traffic

Project operation would result in increased traffic on roadways in the project area, thereby increasing vehicular generated noise near existing and proposed residential uses. Traffic conditions were analyzed utilizing existing, Year 2006, and Year 2025 traffic volumes. Revisions to the Project include the reduction of residential lots from 92 to 50, and therefore these previous studies represent a worst case scenario are adequate for analysis for this Project.

For purposes of analyzing noise impacts associated with Project-related traffic volumes, an analysis was performed to which compares the following scenarios:

1. Existing Plus Other Development Traffic Conditions (Year 2006) versus Existing Plus Project Plus Other Development Traffic Conditions (Year 2006) and;
2. Existing Plus Other Development Traffic Conditions (Year 2025) versus Existing Plus Project Plus Other Development Traffic Conditions (Year 2025).

Thus, in accordance with the Project TIA, with and without the Project scenarios were modeled for Year 2006 and Year 2025 traffic conditions.

According to the September 2003 TIA, 25 percent of the project traffic distribution would be distributed to the west of the project site. The following roadways segments to the west of the project site would receive traffic from the project site:

- North Shore Drive: North of Big Bear Boulevard and Dam (Existing ADT = 2,300);
- Rim of the World Highway: West of North Shore Drive (Existing ADT = 7,100); and
- Big Bear Boulevard: East of North Shore Drive (Existing ADT = 7,300).

Using a worst-case assumption of 220 trips (25 percent of 880 trips) along North Shore Drive, north of Big Bear Boulevard and Dam, under existing conditions, the vehicular noise level along this roadway segment would increase by 0.42 dBA. Thus, noise impacts along this roadway segment would be less than significant.

Therefore, since the roadway segments along Rim of the World Highway (west of North Shore Drive) and Big Bear Boulevard (East of North Shore Drive), would receive 15 percent and 10 percent of the Project traffic, respectively, coupled with the fact that traffic volumes are greater on these segments than on North Shore Drive, noise level increases along these segments as a result of Project generated traffic would be less than 0.42 dBA and therefore, noise impacts along these roadway segments would be less than significant under existing and future traffic scenarios.

Year 2006 Traffic Conditions

Noise levels near the project area were modeled using with and without Project scenarios for 2006 traffic conditions to determine the location and extent of future vehicular generated noise conditions.

Under the “2006 Without Proposed Alternative Project” scenario, noise levels at a distance of 100 feet from centerline would range from approximately 32 to 63 dBA. The highest noise levels would occur on Big Bear Boulevard, west of Stanfield Cutoff. The lowest noise levels would occur along Stanfield Cutoff (north of North Shore Drive). Under the “2006 With Proposed Alternative Project” scenario, noise levels at a distance of 100 feet from centerline would range from approximately 32 to 63 dBA. Similar to the “2006 Without Proposed Alternative Project” scenario, the highest and lowest noise levels would occur along Big Bear Boulevard (west of Stanfield Cutoff) and Stanfield Cutoff (north of North Shore Drive), respectively. All roadway segments comparatively analyzed would experience a noise increase of less than 1 dBA at 100 feet from the roadway centerline. Thus, noise impacts along all the roadway segments would be less than significant.

Year 2025 Traffic Conditions

Noise levels within the vicinity of the project area were modeled for with and without Project scenarios for 2025 traffic conditions to determine the location and extent of future vehicular generated noise conditions. Under the “2025 Without Proposed Alternative Project” scenario, noise levels at a distance of 100 feet from centerline would range from approximately 33 to 64 dBA. The highest noise levels would occur on Big Bear Boulevard, west of Stanfield Cutoff. The lowest noise levels would occur along Stanfield Cutoff (north of North Shore Drive).

Under the “2025 With Proposed Alternative Project” scenario, noise levels at a distance of 100 feet from centerline would range from approximately 33 to 64 dBA. Similar to the “2025 Without Proposed Alternative Project” scenario, the highest and lowest noise levels would occur along Big Bear Boulevard (west of Stanfield Cutoff) and Stanfield Cutoff (north of North Shore Drive), respectively. All roadway segments comparatively analyzed would experience a noise increase of less than 1 dBA at 100 feet from the roadway centerline. Thus, noise impacts along all the roadway segments would be less than significant.

Watercraft Noise

The Project includes the installation of a removable, floating dock with 55 boat slips on the north shore of Big Bear Lake. Previous analysis determined that 103 boat slips (as originally proposed), if multiplied by the weekend use factor of 9 percent, would add

approximately nine boats per day to the daily average number of boats using the lake. All persons undertaking boating activities would be responsible for complying with rules and regulations established by the Big Bear Municipal Water District. Boating operation requirements that include speed limits, mooring and launching restrictions, and muffler requirements would serve to reduce noise impacts generated by watercraft activities. The Project would add fewer than nine boats to the average daily use of the Lake. Not only is this considered a nominal increase in daily boating numbers, adherence to the Water District's rules and regulations, and the Harbor and Navigational Code 654, would reduce noise impacts from watercrafts to a less than significant level. It is noted that during peak holiday and summer periods, the daily use of watercraft would significantly increase. However, compliance with the Water District's rules and regulations would reduce impacts to less than significant levels.

Operational Noise—Stationary Sources

Project operation would result in stationary noise source impacts on-site. These sources would include the typical residential noise sources and activities at the nearby marina and adjacent parking lot. The potential impacts from these sources were analyzed in terms of their proximity to the nearby off-site sensitive receptors.

Residential

Development of the residential lots adjacent to existing residences located to the north (along Flicker Road), west (along Canyon Road) and east (along SR-38) would result in new sources of stationary noise typical of any residential development. Residential noise sources include children playing, pet noise, amplified music, car repair, pool and spa equipment, woodworking and home repair. Noise typically associated with residential land uses does not exceed 60dBA and usually occurs during daytime hours from 7:00 a.m. to 10:00 p.m. In addition, all residents must comply with the noise standards set forth in the County Development Code, which states that exterior noise levels in residential property shall not exceed the basic noise standard of 55 dBA between the hours of 7:00 a.m. and 10:00 p.m. and shall not exceed 45 dBA between the hours of 10:00 p.m. and 7:00 a.m. Thus, noise impacts from the residential uses are less than significant.

Marina Facilities

The Project includes the development of a marina on Big Bear Lake and an associated parking lot and boat launch. The Project includes a floating removable dock with 55 boat slips. Surface parking lots generate instantaneous noise from tire squeals, door slamming, and engine start-ups. Noise would primarily remain on-site and would be temporary (during peak events). Parking lot noise can also be considered a "stationary" noise source and may occur after 10 p.m. Typical noise levels generated by parking areas are an estimated 70 dBA at 50 feet during peak events (this is an "instantaneous" or peak noise level). Parking lot noise would also be partially masked by background noise from adjacent SR-38 and other roads and typical community noise sources. Based on the distance to the nearest existing residential areas from the proposed marina parking lot, noise levels would not exceed 55 dBA during the daytime or 45 dBA at nighttime. Therefore, typical parking lot noise generated at the Project site would be below both the daytime and nighttime noise

standards at the nearest existing residential uses. Thus, noise impacts from the marina facilities are less than significant.

8. Public Services and Utilities

Potential Impact: Whether the project could result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: fire protection, police protection, schools, parks, other public facilities.

Finding: Potential impacts of the Project on Public Services and Utilities are discussed in detail in Section 4.7 of the 2010 RRDEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with the implementation of Mitigation Measures PS-1–PS-4. Mitigation Measures PS-1–PS-4 reads in full as follows:

Fire Protection

PS-1 *The fire flow requirement shall be 1750 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 for homes greater than 4,800 square feet.*

PS-2 *All residences less than 5,000 square feet shall be subject to the standard fire sprinkler requirement (NFPA 13D). Homes above 5,000 square feet shall be subject to the NFPA13R sprinkler requirement.*

PS-3 *A Fuels Management Plan, with specifications, shall be prepared and subject to approval by the County of San Bernardino Fire Department and San Bernardino National Forest Service. The Fuels Management Plan shall implement the fire safety requirements of the FS1 Fire Safety Overlay District, including a 100-foot minimum setback requirement from the National Forest. The fuel modification zone shall be located entirely within the project boundaries. The minimum fuel modification zone requirements may be greater in steeper areas (up to 300 feet), as determined by the Fire Department.*

PS-4 *A Homeowner's Association shall be established to implement the Fuels Management Plan. The Fuels Management Plan shall specify any professional assistance, if necessary, to implement the action portion of the Plan. The Plan shall determine if a Registered Professional Forester is necessary for professional guidance to implement the Plan. The HOA is to be responsible for fuel modification in common areas.*

Facts in Support of the Finding:

Fire Services

Wildfire is the primary safety issue in mountainous areas. Fire conditions in the San Bernardino National Forest are more dangerous than ever, according to the USFS (2006). The recent Butler II fire (September 2007) required the evacuation of the Fawnskin

community for a short period. Many decades of fire suppression policy, which led to growth of the understory and bark beetle infestation, is partially to blame for this fire hazard. Implementation of the San Bernardino National Forest Plan (2006) for mechanical thinning of under-story trees and provision of fire-flow would reduce fire danger in the project area.

The project site is located adjacent to the National Forest Service on the north and east. The USFS requires a 100-foot firebreak for residential lots that are adjacent to USFS land. The Project is designed to include this 100-foot fuel modification zone adjacent to USFS land.

The project site is in a high fire hazard area and included in the County's Fire Hazard Overlay District (FS1). The FS1 Area "includes areas within the mountains and valley foothills. It includes all the land generally within the San Bernardino National Forest boundary and is characterized by areas with moderate and steep terrain and moderate to heavy fuel loading contributing to high fire hazard conditions."

Since the Project is located within a FS1 designated area, it is subject to compliance with various requirements relative to construction, building separations, project design, and erosion and sediment control. The requirements applicable to each fire safety area are found in the County's Development Code in Section 82.13.050 (General Development Standards), Section 82.13.060 (FS1, FS2, and FS3 Development Standards), and 82.13.070 (FS1 Additional Development Standards). The provisions for the FS1 District include, but are not limited to, fuel modification zones, set backs, emergency access, water supply (for fire flows), and apply to all phases of project development.

A 100-foot fuel modification zone is required for any development project that abuts USFS land. Ten of the residential lots are affected by this requirement and must abide by the Fuel Modification Plan required to be prepared for the Project. In addition, because the residential lots would be sold as custom lots and would be developed as they are sold, fuel modification on individual lots may be required if a lot being developed is adjacent to other lots that have not been sold or remain undeveloped. Under this condition, Development Code Section 82.13.060(6) (B) would apply. This provision states in part that "when a development project is phased, individual phases may be required to provide temporary fuel modification areas, where the development perimeter of a phase is contiguous to a subsequent phase of a project, which in its undeveloped state is a hazardous fire area..."

The fuel modification zone adjacent to the USFS boundary and areas within the site that would be required to maintain temporary fuel modification areas will be maintained by the prospective homeowners of these specific lots. Each homeowner will be required to pay property taxes and development impact fees based on then-current rates. The project's increase in demand for fire protection services would be offset through project-related fees and taxes.

Regular thinning of these buffer zones would lessen the fire hazard. A potential loss of habitat could result from the removal of trees required for fire control. However, the County of San Bernardino requires under Chapter 88.01, Plant Protection and

Management, of the Development Code that development on all private and public lands within the unincorporated areas of San Bernardino County is subject to specific requirements. Removal of any native plant from unincorporated areas of San Bernardino requires the approval of a removal permit. The Project would comply with this Plant Protection and Management Ordinance and the design standards specific for high fire areas.

Related to this issue, a Water Supply Feasibility Study was prepared for the Project that addresses both domestic water supply and water supply for fire flow. As part of the permitting process, the Applicant must provide adequate domestic water supply as well as meet the fire flow requirements established by the County Fire Marshall. Storage capacity for the development would be sized to meet the operational, emergency and fire flow storage requirements. Operational storage would be used to meet the hourly fluctuations in demand during maximum day conditions, and must be established as 30 percent of maximum day. Emergency storage would be used to meet demands during a power outage or other emergency situation when supply sources and boosting pumps may not be available. The requirements for emergency storage are equivalent to one day of maximum day demand. Fire-flow storage capacity would be equal to the fire-flow capacity of 1,750 gallons per minute (gpm) times its duration (2 hours). Fire-flow storage for 1,750 gpm (based on 120 minutes) is 210,000 gallons. According to the Water Supply Feasibility Study, the Project would have sufficient water to meet these requirements. In addition, mitigation measures pertaining to fire protection are included to address the potential fuels- and fire-related impacts of the Project. Implementation of these mitigation measures will ensure that fire protection impacts of the Project are less than significant

Emergency Evacuation

The project site is currently vacant; therefore, implementation of the Project would increase the demand for fire protection in the area and increase the probability of additional calls for service. The average household size in Big Bear Valley has been estimated to be 2.31 persons. Therefore, at full build-out of the 50 residential lots, the Fawnskin population has the potential to increase by approximately 116 persons, assuming that all residences are occupied full time, that would require evacuation, in the event of an emergency (currently, Big Bear Valley experiences one third permanent occupancy and two thirds part time, vacation occupancy).

The project site is located adjacent to State Route 38 (SR-38), which serves as the evacuation route for the Fawnskin Community. At this location on SR-38, Fawnskin residents can evacuate the Community (at the direction of the County Sheriff) to the west by going directly west on SR-38 towards Big Bear Dam and then west on SR-18 to Running Springs and onward to San Bernardino and Interstate 210 (I-210). If the Fawnskin residents are directed to evacuate to the east, they travel on SR-38 to the east. As they pass through Big Bear City on SR-38, they can leave the Valley either to the northeast on State Highway 18 to Lucerne Valley, Victorville and I-15, or to the Southeast on SR-38 to Redlands and I-10. There are three two-lane State Highways providing access into and out of Big Bear Valley.

The County of San Bernardino has proactively worked to provide efficient emergency response and an emergency evacuation plan to protect residents and visitors to the Big Bear

Valley. The efforts of the County include providing regulations for property owners to reduce the potential for wildfires, coordination with other jurisdictions in the Big Bear Valley to provide emergency response, and an emergency evacuation plan that includes notification of local media and a reverse 911 system.

The County has enacted several ordinances and regulations in order to proactively work to reduce emergency situations such as wildfires. These regulations include weed abatement requirements and property maintenance standards. Weed abatement requirements and property maintenance standards reduce the amount of fuel that is located adjacent to houses, reducing the risk to structures and humans from wildfire. In addition, fuel reduction of plants, trees, and shrubs along major roads (such as SR-38 and SR-18) has been an ongoing process in coordination with the USFS. The San Bernardino County Operational Area Coordination Council (SBCOACC) consists of 24 cities and towns that meet on a quarterly basis to discuss emergency preparedness in San Bernardino County. The Council has access to resources from all members, including the County and City of Big Bear Lake. Member jurisdictions of the Council coordinate with one another to provide aid in the event of an emergency.

Other participants in interagency planning and cooperation include the USFS, Natural Resources Conservation Service (NRCS), CALFIRE, California Department of Transportation (Caltrans) California Highway Patrol (CHP), San Bernardino County Fire Department, San Bernardino County Roads, San Bernardino County Sheriff, Big Bear Lake Fire Department, Big Bear City Fire Department, and other local fire departments.

The County has adopted an Emergency Operations Plan for all types of disasters, including snowstorms, earthquakes, and fires. This Plan incorporates policies and procedures to care for fulltime residents and visitors in a time of disaster. Depending upon the situation or disaster, citizens and visitors would be instructed on the appropriate action to take. Instructions can be disseminated by a wide array of options. The San Bernardino County Telephone Emergency Notification System (TENS) provides for recorded messages to be sent to all standard telephones in the Big Bear Valley in a reverse 911 system. KBHR 93.3 FM radio and TV6, in addition to their normal emergency broadcasts, have agreed to participate in sending out messages. In addition, a siren system has been installed in the City of Big Bear Lake and can be utilized in the event of an emergency. Scan USA, which is a web-based emergency notification system, sends out locally generated messages by email, telephone, text messaging, and cell phone for individuals that sign up for the service.

With respect to an evacuation, the Emergency Operations Plan allows for conservative trigger points to be established when calling for voluntary and mandatory evacuations. The County has an approved evacuation plan, and it would be implemented in the event of an emergency.

The Big Bear Valley Mutual Aid Association provides public outreach to educate the public for preparedness in the event of an emergency. The County and City provide additional disaster education to residents of the Big Bear Valley through presentations at elementary and pre-schools for earthquake and fire preparedness, open houses at the fire station, press releases to the media, and active participation in community activities to

provide awareness for residents. In addition, the County, City and Community Services District through Mountain Mutual Aid have conducted disaster drills, which included all local agencies, public service organizations and utilities.

Impacts to emergency evacuation will be less than significant, and no mitigation measures are recommended.

Police Services

As with any new residential development, implementation of the Project would increase police service calls to the vicinity beyond existing conditions. This would be a direct result of the addition of 50 single-family residences and associated population. The average household size has been estimated to be 2.31 persons; therefore, at full build-out of the 50 residential lots, the Fawnskin population has the potential to increase by approximately 116 persons. This increase in population would incrementally increase the number of police service calls.

Anticipated police calls that may occur include increased burglar alarm calls, general criminal investigations, missing or lost persons, emergency medical calls, thefts of boats, and vandalism. Although there would be an incremental need for increased police service, it is not anticipated that Project implementation would require any new police facilities. Each homeowner will be required to pay property taxes and development impact fees based on then-current rates. The Project's increase in demand for police services would be offset through project related fees and taxes. Therefore, impacts to law enforcement services are expected to be less than significant, and no mitigation measures are proposed.

School Services

Development of the Project could generate an increased student population of approximately 11 students (based on 0.21 students per unit times 50 units) within the BVUSD. This is less than one student per grade. Currently, the middle school is over capacity. However, all of the schools have augmented existing facilities with portable classrooms to accommodate overcrowding, and the local electorate recently passed Measure Q to build new classrooms and/or improve facilities at all of the BVUSD schools that could be affected by this Project. In addition, both the elementary and middle schools have experienced a decline in enrollment.

Currently, the BVUSD collects development impact fees from new development projects within the service district boundaries. The fees are determined by a Developer Justification Study commissioned by the District every 2 years. Each homeowner will be required to pay these development impact fees, regardless of whether or not they will have students in the BVUSD. Payment of these fees are considered full mitigation under the CEQA Guidelines. Therefore, the impacts to school services would be less than significant, and no mitigation is proposed.

Libraries

Big Bear Lake Branch Library serves the community from a 9,543-square-foot building located at 41930 Garstin Drive. It is one of 28 branch libraries in the County system and serves approximately 6,000 visitors per month.

The Project would add an additional 116 residents to the Fawnskin community, and these additional residents would place an incremental demand on public libraries primarily the Big Bear Lake Branch Library. The increase in population could necessitate a proportionate increase in staffing, resources, materials and library space. The demand for library services has decreased because of the internet (i.e., online publications). The current state average is 0.35 square feet of library space per capita. However, the Division of Library Development Services of the State of California recommends up to 0.5 square feet of space per capita. The Big Bear Lake Branch Library is currently impacted and in need of expansion. According to the San Bernardino County Library Facility Master Plan, the library needs to expand to 15,443 square feet. However, at present, there are no plans to expand.

The individual homeowners will pay property taxes, of which a portion will go toward funding library services. The revenue from property taxes would offset the incremental cost of providing services to the project residents. Furthermore, modern technology (computers) has reduced the need for library services. The impacts to library services are expected to be less than significant and no mitigation is required.

Parks

The Project would add an additional 116 residents to the Fawnskin community, and these additional residents would place an incremental demand on public parks. With implementation of the Project, the existing unauthorized trails and dirt roads on site would be eliminated. However, these features are on private property and could be blocked from public use at any time. An area for Neighborhood Lake Access (Lot B) will be included in the development plan that will be accessible by foot and bicycle. In addition, the Applicant intends to dedicate a 66-foot-wide road easement for SR-38 that would accommodate an extension of the multipurpose trail that runs along the north shore of the lake. Furthermore, the mountain community has multiple recreational facilities, both public and private, and Big Bear Lake has multiple access points that will remain accessible to the general population. The impacts to parks are expected to be less than significant and no mitigation is required.

9. Recreation

(a) Recreational Facilities

Potential Impact: Whether the project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Finding: Potential impacts of the Project on Recreation are discussed in detail in Section 5.2 of the 2004 DEIR. Based on the entire record before us, the County finds the Project will result in a less than significant impact related to the use of existing neighborhood and regional parks or other recreational facilities and no mitigation is required.

Facts in Support of the Finding: As discussed in detail in the 2004 DEIR, the project is located in the Big Bear Lake area, which is a recreational resort area with several

communities and one incorporated city. The community of Fawnskin, located on the north shore of the lake supports visitors with the provision of lodging, restaurants, boat docks, campgrounds, and picnic areas. The proposed project will include a marina for use by residents of the project. No deterioration of existing recreational facilities such as neighborhood or regional parks would result from the project; many residents may not be permanent. Use of the lake will be the primary recreational activity associated with the project which activity is regulated by the Big Bear Municipal Water District.

(b) Expansion and/or Construction of Recreational Facilities

Potential Impact: Whether the project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Finding: Potential impacts of the Project on Recreation are discussed in detail in Section 5.2 of the 2004 DEIR. Based on the entire record before us, the County finds the Project will result in a less than significant impact related to the expansion and/or construction of recreational facilities and no mitigation is required.

Facts in Support of the Finding: Implementation of the Moon Camp project involves the construction or expansion of recreational facilities which may have an adverse physical effect on the environment. Compliance with the Big Bear MWD standards and permit requirements would reduce impacts to a less than significant level. The 2005 FEIR concludes that the addition of approximately 100 boat docks would result in a less than significant impact. The project proposes only 55 boat slips.

The proposed 55 boat slips would be consistent with the provisions set forth for Yacht Clubs by the Big Bear Municipal Water District. The current carrying capacity of Big Bear Lake is 1,000 boats and the maximum number of dock slips on the Lake would be 5,200. The 55 proposed boat slips would not surpass the total amount of boat slips allowed on the Lake. The 55 dock slips, if multiplied by the weekend use factor of nine percent, would add approximately six boats per day to the daily average number of boats using the lake. This increase in boat usage on the lake would not surpass the 1,000 boat carrying capacity of the Lake. Furthermore, according to the Big Bear Municipal Water District 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.

The Big Bear Municipal Water District has identified three areas of concern with implementation of the proposed marina facilities associated with the Moon Camp project. First, a mooring plan for high and low water conditions must be submitted and reviewed to ensure that dock placement is consistent with District regulations. This would allow for a Dock System and License Agreement to be obtained. Second, any construction activity that may occur below the high water line (i.e., seawall, launch ramp, headwalk, dredging or slope modification, etc.) would require a Shorezone Alteration Permit. Third, the District would need to receive a copy of the Storm Water Pollution Prevention Plan

(SWPPP), approved by the Water Resources Control Board, to ensure that the Lake is adequately protected from pollutants before, during and after project construction.

In consideration of the standards set forth by the Big Bear Municipal Water District, potential impacts to the physical environment created by the construction of recreational facilities are concluded to be less than significant. (2004 DEIR pp. 5.2-3 to 5.2-4.)

(c) Cumulative Impacts Related to Recreation

Potential Impact: Whether cumulative development may result in increased use of existing recreational areas/facilities, thereby creating the potential for physical deterioration and whether cumulative development may include recreational facilities that have the potential to result in physical impacts on the environment.

Finding: Potential impacts of the Project on Recreation are discussed in detail in Section 5.2 of the 2004 DEIR. Based on the entire record before us, the County finds that this impact is potentially significant but is mitigated to a less than significant level because mitigation is incorporated on a project-by-project basis.

Facts in Support of the Finding:

The proposed Project would contribute to the cumulative need for more recreational park space and related facilities. Although, the proposed Project would increase the use of existing facilities, the proposed project would also create a new recreation facility. Cumulative projects would be required to mitigate incremental impacts to Countywide recreational facilities, resulting in a less than significant impact.

10. Traffic and Circulation

Potential Impact: Whether the Project would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); whether the Project would exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways; whether the Project would result in a change in traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; whether the Project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment); Whether the Project would result in inadequate emergency access; Whether the Project would result in inadequate parking capacity; whether the Project would conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Finding: Potential impacts of the Project on Traffic and Circulation are discussed in detail in Section 4.8 of the 2010 RRDEIR and confirmed in 2016 Focused Traffic Impact Assessment. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with implementation of Mitigation Measures T-1–T-3. Mitigation Measures T-1–T-3 reads in full as follows:

T-1 The following Project Design Features recommended in the Traffic Impact Analysis shall be incorporated into the Proposed Alternative Project design:

- *Construction of North Shore Drive at its ultimate half-section width as a Mountain Major highway from Canyon Drive to the Easterly Proposed Alternative Project boundary.*
- *Installation of a stop sign control at Driveway #1 and Driveway #2.*
- *Construction of an Eastbound Left Turn Lane at Driveway 1/North Shore Drive and Driveway 2/North Shore Drive for 2030 Buildout Conditions.*
- *Construction of a 2nd Eastbound Through Lane at Driveway 1/North Shore Drive and Driveway 2/North Shore Drive for 2030 Buildout Conditions.*

T-2 The eastbound left turn lanes at both project access points will be constructed at opening year at 100 percent cost to the Applicant. The Applicant shall pay fair share costs of the construction of the eastbound through lanes at both project access points for the horizon year conditions. The developer shall pay the fair share cost of \$99,320 toward the off-site traffic improvements recommended in Appendix G of the San Bernardino Congestion Management Program, 2003 Update.

T-3 The following Project Design Features recommended in the Revised 2018 Focused Traffic Impact Assessment (FEIR Appendix M) shall be incorporated into the Proposed Alternative Project design:

- *Construction of left-turn pockets on driveways along North Shore Drive (SR-38) on Driveway 1 and Driveway 2.*
- *Construction of a Class II Bicycle Lane on North Shore Drive (SR-38) in the eastbound direction.*

Facts in Support of Finding:

The areawide growth was interpolated from adjusted existing volumes (with 16 percent growth) to General Plan Buildout (2030) volumes. The area-wide growth varies for each movement at each intersection. The interpolated areawide growth rate was added to peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the Project and other development.

Long Range General Plan Buildout (2030) conditions were estimated based on a select zone run of the San Bernardino Mountain Model, in addition to traffic generated by the Project and the known cumulative development.

The 2007 TIA analyzed a total of 17 cumulative projects that could affect the study intersections. These other developments are projected to generate 15,111 trip-ends per day with 1,455 vehicles per hour during the AM peak hour and 1,455 vehicles per hour during the PM peak hour. An updated list of 12 cumulative projects was assumed for the purpose of the 2016 Focused Traffic Impact Analysis.

Short-Term Impacts (Year 2010)

The ADT at key intersections for 2010 Without Project traffic conditions have been determined by adding the 2007 existing traffic volumes (with 16 percent adjustment) plus the two percent background growth volumes per year (6 percent for three years) plus the known cumulative development volumes.

2010 Without Project Conditions

For 2010 Without Project traffic conditions, no new traffic signals are projected to be warranted compared to Existing Conditions. Without improvements, the same intersections continue to operate at an unacceptable level of service. With traffic signals, the level of service would improve to acceptable levels.

2010 With Project Conditions

The ADT for the 2010 With Project was determined by adding the Project-only traffic volumes to the 2010 Without Project traffic volumes. For 2010 With Project traffic conditions, no new traffic signals are projected to be warranted as compared to 2010 Without Project conditions.

The following study area intersections are currently operating at an unacceptable level of service during both Friday PM and Sunday mid-day peak hours:

Big Bear Blvd (SR-18) (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- Big Bear Blvd (SR-18) (EW)

These intersections will continue to operate at unacceptable levels without improvements, but will improve to acceptable levels with the addition of traffic signals with no significant impact due to the Project. Driveway or street intersections within the Project are projected to operate at acceptable levels without traffic signals.

Long-Term Impacts (2030)

Long Range conditions were based on a General Plan Buildout (2030) that was estimated by adding the Project peak traffic and the known cumulative development peak traffic volumes to the San Bernardino Mountain Model. Without improvements, the following study area intersections would operate at an unacceptable level of service during both Friday PM and Sunday mid-day peak hours:

Big Bear Blvd (SR-18) (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- Big Bear Blvd (SR-18) (EW)

Driveway #1 (NS) at:

- North Shore Drive (SR-38) (EW)

Driveway #2 (NS) at:

- North Shore Drive (SR-38) (EW)

With implementation of Mitigation Measure T-2, Traffic Impacts to these intersections will be less than significant. The County prepared an updated Focused Traffic Impact Analysis to confirm the significance determinations and adequacy of mitigation measures. The Focused Study confirmed that the proposed mitigation measures adequately mitigate long-term cumulative traffic impacts.

Parking

Under the Project, each residence would have two parking spaces in the driveway, as required by San Bernardino County Development and building codes. Additionally, there would be a parking lot to service the marina and the open space conservation easement on the lakeshore. The parking lot would have 12 parking spaces for use by the public and the residents of Moon Camp. Only the residents would be allowed access to the marina and the boat launch. Each residence would be assigned a slip to store one boat. Parking impacts are less than significant and no mitigation is required.

Emergency Access

Emergency access would occur through the two driveways, and an additional fire gate would be provided on the east end of the Project. Emergency impacts are less than significant and no mitigation is required.

11. Utilities

Potential Impact: Whether the Project would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB); whether the Project would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; whether the Project would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; whether the Project would have

insufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed; whether the Project would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; whether the Project would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; and whether the Project would not comply with federal, state, and local statutes and regulations related to solid waste.

Finding: Potential impacts of the Project on Utilities are discussed in detail in Section 4.9 of the 2010 RRDEIR. Based on the entire record before us, the County finds that this impact is potentially significant but will be mitigated to a less than significant level with implementation of Mitigation Measures U-1a–U-3. Mitigation Measures U-1a–U-3 reads in full as follows:

Water

U-1a The Moon Camp Home Owners Association shall create a “conservation guidelines” booklet that outlines the following measures:

- *All indoor water fixtures shall be low flow/low flush.*
- *Landscape shall not be irrigated between the hours of 9:00 a.m. and 6:00 p.m.*
- *Residences, buildings, and premises shall be limited to watering landscaping every other day.*
- *Water from landscape irrigation shall not be allowed to run off into streets or other paved areas.*
- *Water leaks are not permitted and must be repaired as soon as practicable.*
- *Sidewalks, paved driveways, and parkways shall not be washed off with hoses, except as required for sanitary purposes.*
- *Washing non-commercial vehicles (cars, boats RVs) is permitted; however, it shall only be permitted with an automatic shut-off nozzle on a hose, or with a bucket.*
- *Turf landscaping shall be limited to 500 square feet on a parcel or lot unless the water purveyor's regulations allow additional turf area.*
- *Turf irrigation shall include an automatic controller that incorporates evapo-transpiration and rain shutoff features.*
- *Sprinklers are only allowed on turf. All other landscape plantings must be irrigated with efficient, low water use devices, such as, drip systems or bubblers.*
- *All outdoor irrigation systems shall be shut off and winterized between November 1st and April 1st of each year.*
- *A model landscaping and irrigation guide shall be prepared for the tract and required by homeowner association rules. The guide shall identify the following*

conservation measures: Landscaping shall include a plant palette that emphasizes Xeriscape, native plants and cultivars that are suitable for the mountain climate. Plant materials shall be low water consuming and fire resistant. Irrigation shall limit aerial spray methods and shall emphasize drip and bubbler type emitters. The landscaping guidelines shall be reviewed and approved by the Land Use Services Department. In addition, the project shall comply with the local water agency's Model Landscape and Irrigation Ordinance'.

- *The Project shall comply with the local water agency's "Model Landscape and*
- *Irrigation" ordinance.*

U-1b Pumping and extraction of groundwater shall be limited to 9 acre-feet per year for Well FP-2, 0 acre-feet per year for Well FP-3, and 5 acre-feet per year for Well FP-4. If DWP desires to extract groundwater from Well FP-2 in excess of 9 acre-feet per year, the purveyor shall conduct an independent environmental analysis to identify and consider potential impacts at that time.

U-1c The grant deeds transferring ownership of Wells FP-2, FP-3 and FP-4 shall include the pumping and extraction limitations included in Mitigation Measure U-1b. The grant deeds shall also state that DWP, on January 1st of each year, shall report the amount of the prior year's annual groundwater production from Wells FP-2, FP-3 and FP-4 to the County Land Use Services Department and the County Health Department.

Wastewater

U-2 Prior to issuance of building permits, the Applicant shall fund all on-site and off-site sewer improvements required to support development of the project site. Such improvements shall be to the satisfaction of the County Service Area (CSA)53B.

U-3 Prior to issuance of building permits, the Applicant shall provide evidence to the County of San Bernardino that the BBARWA has sufficient transmission and treatment plant capacity to accept sewage flows from the project site.

Facts in Support of Finding:

Water Service

The 2010 RRDEIR identified three potential Water Service Alternatives which the Project can utilize to meet water service obligations. (1) Service by City of Big Bear DWP, (2) service by County Service Area 53C, or (3) service from on-site wells with no public agency service.

Although water service is not presently provided to the project site, the site is immediately adjacent to the jurisdiction of the DWP and existing DWP water distribution facilities currently providing potable water service to portions of the Fawnskin community. On November 18, 2015, the San Bernardino County LAFCO approved an exemption from Government Code Section 56133, allowing DWP to provide potable water service to the Project site pursuant to that Outside Service Agreement between DWP and CSA 53C.

Pursuant to this option, water service to the project site will be provided from the DWP's Upper Fawnskin pressure zone. However, significant transmission improvements in the Fawnskin system will be needed to provide fire flow to the project site. The closest DWP pipeline within the Upper Fawnskin system is a single six-inch-diameter pipeline located near the intersection of Flicker Road and Chinook Road, approximately 2,000 feet from the westerly boundary of the project site.

The Water Feasibility Study provides two options (A and B) for expanding the existing Fawnskin Water System infrastructure. Option B has been chosen by DWP and the Applicant as the preferred Water Feasibility Study alternative for Water Service Alternative #1. In either case, the Applicant would install all common infrastructures, including fire hydrants, and would also install the water main lines within the Project site. The water improvements will primarily be constructed within the rights-of-way of existing or proposed paved roads. The water service infrastructure required is as follows:

- 900 feet of 12-inch pipeline along Ridge Road from the intersection of Raccoon Drive south to tie to an existing 8-inch PVC pipeline on a private easement.
- 200 feet of 12-inch pipeline along private easement to connect Fawnskin Drive and Canyon Road.
- 650 feet of 12-inch pipeline along Canyon Road to Chinook Road.
- 600 feet of 12-inch pipeline along Chinook Road to Flicker Road.
- 500 feet of 12-inch pipeline along Flicker Road to Mesquite Drive.
- 400 feet of 12-inch pipeline along Mesquite Road to North Shore Drive.
- 250 feet of 12-inch pipeline along North Shore Drive to development westerly boundary.
- Refurbishing existing Cline Miller pump station to augment pumping capacity to approximately 300 gmp.

50 KW on-site emergency generators at the Cline Miller Reservoir. Projected water demand for the Project is based on the DWP's Water Feasibility Study consumption rate of 250 gallons per day (gpd) per connection. Maximum day demand is estimated based on information provided in the recently completed DWP Water Master Plan and it is equivalent to 1.76 times the average day demand. Therefore, the average and maximum day demands for the Project are estimated as follows:

- Average Day Demand (ADD) = 12,500 gpd or 8.68 gallons per minute (gpm); and
- Maximum Day Demand (MDD) = 15.27 gpm.

Based on an estimated average day demand of 12,500 gallons, the annual water demand for the Project is estimated at 4.56 million gallons or 14 acre-feet per year. Required fire

flow and water storage for the Project are 1,750 gpm with a 2-hour duration, and 238,600 gallons of storage.

Currently there are three groundwater wells on-site, Wells FP2, FP3 and FP4. As a condition of obtaining water service to the Project site, the project proponent will deed title to the wells FP2, FP3, and FP4 being deeded to the DWP at the time the tract map is recorded.

The Applicant would install all common infrastructures, including fire hydrants, and would also install the water main lines within the project site. The water improvements will primarily occur within existing paved roads. Nearby residents are not required to tie into the proposed DWP water system. The impacts related to the installation of the off-site and on-site water improvements would be temporary and are considered less than significant.

Water Demand and Water Supply

The Water Feasibility Study calculates the Water Demand for the Project as:

- 250 gallons per day per connection x 50 lots = 12,500 gallons per day;
- 12,500 gallons per day x 365 days/year = 4,562,500 gallons per year; and
- 4,562,500 gallons per year is equal to 14 acre-feet per year.

The water supply for the Project's 14 acre-feet per year demand will come from two groundwater basins. The annual groundwater recharge for Subarea A of the North Shore Subunit is between 14 and 44 acre-feet per year, with an estimated annual Maximum Perennial Yield of 29 acre-feet per year. In order to be as conservative as possible, the "minimum recharge" of 14 acre-feet per year will be utilized for Subarea A. There are also existing private, homeowner wells that withdraw their water supply from Subarea A. "Private Wells Production" within Subarea A is 5 acre-feet per year of groundwater production. Subtracting the 5 acre-feet of groundwater production from the minimum recharge for Subarea A of 14 acre-feet leaves 9 acre-feet available to supply the Project. Existing Project Well FP-2 is capable of pumping the 5.6 gallons per minute that will produce the 9 acre-feet per year of groundwater production from Subarea A and will also produce the Maximum Day Demand of 15.27 gpm.

The remaining 5 acre-feet per year of Project Demand will be supplied from the Grout Creek Groundwater Subunit, Subarea D. Project Well FP-4, which was drilled by the developer in the northwest corner of the project site, will supply the 5 acre-feet per year of groundwater production, which is 3.1 gallons per minute. The only potential impact from FP-4 would be the draw-down influence onto neighboring private wells as indicated from pump test data. The data indicated that FP-4, at a sustained rate of 3.5 gpm, would result in a 2-foot draw-down in groundwater level for the nearest private well, which is located approximately 250 feet from Well FP-4. The available data on private wells suggests that the nearest private well has a saturated thickness that would be able to accommodate the additional 2-foot draw-down and that pumping from Well FP-4 would not significantly impact the private well's routine operations. Based on this data, mitigation shall be

incorporated into the Project that will limit the Project's allocation of water supply from Well FP-4 to a maximum of 5 acre-feet per year.

The groundwater annual recharge of Grout Creek Subarea D to be between 32 and 99 acre-feet per year, with an estimated annual Maximum Perennial Yield of 66 acre-feet per year. At present, the only groundwater production in this subarea is from 11 private wells and is calculated to be 3 acre-feet per year. The additional 5 acre-feet per year of annual groundwater production from Well FP-4, combined with the existing 3 acre-feet per year of annual groundwater production, results in 8 acre-feet per year of total annual groundwater production, well below the low end of the annual recharge for Subarea D, which is 32-acre-feet per year, and also well below the estimated Maximum Perennial Yield for Subarea D which is 66 acre-feet per year.

Project Well FP-2 was cleaned, rehabilitated and test pumped in July of 2008. Geoscience's August 2008 Report concluded that:

- Well FP-2 has successfully been rehabilitated and its specific capacity restored to near original levels;
- Well FP-2 can yield up to 35 gpm on a long term basis with less than 10 ft of drawdown;
- At the 35 gpm discharge rate, pumping interference with the nearest private well (910 feet to the east of FP2) is expected to be less than 0.3 ft (less than 3.6 inches);
- Groundwater quality data from Well FP-2 indicates the water from the well is suitable for municipal supply; and
- There is no evidence from the Microscopic Particulate Analysis that the ground water produced by Well FP-2 is under the direct influence of surface water in Big Bear Lake.

The potential impact of pumping Project Well FP-2 on the surface water of Big Bear Lake would be minimal. The top of perforations for Project Well FP-2 (the area of the well where water is withdrawn from the surrounding soil) occur (begin) approximately 60 feet below ground surface, at an elevation of approximately 6,686 feet above mean sea level (msl). The high surface water elevation in the lake is 6,743 feet msl and the average depth of the lake is 30 feet. Thus, the elevation of the bottom of Big Bear Lake is approximately 27 feet above the top of perforations for Project Well FP-2. The geologic log for Project Well FP-2 shows multiple silt and clay layers between the land surface and top of perforations. If the silt and clay layers extend beneath the lake, they would provide some hydraulic separation between the lake water and aquifer system. While it is possible that some vertical leakage could occur from the lake into the aquifer system of FP-2, the majority of groundwater produced by FP-2 would be from the aquifer underlying Subarea A.

The third existing, on-site well, FP-3, located to the east of the FP-2 well, would not be equipped nor pumped, but will be used as a monitoring well to record groundwater levels.

Groundwater Recharge

Impacts from Project Wells FP-2 and FP-4 will be less than significant with the implementation of mitigation measures which ensure that annual groundwater production limits for FP-2 are 9 acre-feet per year; and FP-4 are 5 acre-feet per year.

In summary, the Project demand is 14 acre-feet per year. Well FP-2 is capable of producing the 5.6 gallons per minute, which is 9 acre-feet per year from North Shore Subunit, Subarea A, and Well FP-4 will produce the 3.1 gallons per minute, which is 5 acre-feet per year from Grout Creek Subunit, Subarea D. Therefore, there is sufficient water available to serve the Project, and the impacts in regard to water supply for the Project are considered less than significant.

Wastewater

The project would generate approximately 10,750 gallons of effluent per day, with an estimated peak flow of 43,000 gallons per day. According to the study, the existing sewer system has the capacity to service the Project.

Before service can be extended to the site, both on and off-site improvements would be necessary. The improvements include an extension of 1,200 linear feet along North Shore Drive to connect to the existing 8-inch collector sewer southwest of the property. Other requirements include that 1) all gravity facilities must be minimum 8-inch diameter; 2) all on-site facilities must meet CSA 53B standards and specifications and construction plans must be submitted for plan check and approval by the District Engineer; and 3) the Applicant will be required to construct 4,400 lineal feet of on-site collector sewer mainlines as shown in Exhibit 2-7, Proposed Sewer Facilities.

The Project would convey part of the wastewater flow via gravity sewer to the existing Pump Station B, southeast of the property. However, depending upon where houses are built on each lot, some of the lots may require individual, on-site, household pump stations. This will depend on the individual lot design and will be decided at the time each lot is developed. The future homeowner will fund and install the lot-specific sewer improvements.

The Applicant will construct and pay for all common sewer infrastructure required for implementing the Project. The future homeowners will fund the lot-specific improvements. The future homeowners will pay for the associated connection fees to CSA 53B and BBARWA. The County's local fee for connecting to CSA-53B is \$1,358.72 per dwelling unit. This represents \$67,936 in local connection fees for the 50 residential lots in the Project. Regional fees are also imposed by BBARWA for sewage treatment and disposal. These fees are assessed at \$2,704.99 per dwelling unit, which represents \$135,249.50 in regional connection fees for the 50 residential lots in the Project.

The sewer line design and connection details must be submitted to the County's Special Districts Department (SDD) for plan check and approval. The Applicant will pay the sewer line design and inspection fees that are related to the common infrastructure. Individual lot owners/home builders do not pay any of these fees. Individual home builders would pay

an inspection fee to CSA 53B for the inspection of their house lateral connection to the common infrastructure.

The future residents would pay monthly user fees that offset the sewer system maintenance. Therefore, all project related costs would be paid for by the Applicant and/or the future residents, and the utility providers would not be financially impacted by the future residential development.

The existing sewer system has the capacity to service the 50 residential lots in the Project, and the cost of providing service will not impact BBARWA, the County or existing Fawnskin residents. The impacts in regard to sewer service are considered less than significant and no mitigation is required.

Solid Waste

According to the website of the California Integrated Solid Waste Management Board, local residents generate an average of 20.0 pounds of solid waste per household per day. Since the Project would have 50 single-family residences, the Project could generate as much as 1,000 pounds or one-half ton of solid waste per day.

Solid waste collection within the project area would be provided by Big Bear Disposal, Inc. Waste would be transported to the Big Bear Transfer Station, located on Holcomb Valley Road in Big Bear City, approximately 1.5 miles north of Highway 18. The transfer station is owned and operated by the County of San Bernardino Waste Management Division. From the transfer station, solid waste is transferred to the Barstow Landfill; a County of San Bernardino owned and operated facility. The landfill is currently permitted to receive 1,500 tons of waste per day. Closure is scheduled for May 1, 2071.

County landfills do not accept hazardous wastes. The County operates regular programs/operations to routinely collect hazardous wastes from residential sources (i.e., residential round-ups, once a month collection locations, etc.). Each new residence is expected to generate approximately 50 pounds of hazardous waste per year, according to data from the State Integrated Waste Management Board website. All residents, including those within the project site, are expected to take advantage of these programs to a similar degree as existing County residents.

Since the cost is passed down to the residents via monthly service fees and because the landfill has adequate storage capacity, no significant impacts are anticipated with regard to solid waste collection or disposal.

Natural Gas

SGC has indicated that natural gas main pipelines are installed in the right-of-way of SR-38. The Southwest Gas Corporation has concluded that there is sufficient capacity in their facilities to provide natural gas service to the project area without any significant impact on the environment. As such, extensions to existing facilities would be required in order to provide service to the Project. Service would be provided in accordance with SGC's policies and extension rules on file with the California Public Utilities Commission. Future

natural gas service to the project area would require coordination with the company's engineering department for a comprehensive plan as to levels of service required.

Because the larger (92-lot) Original Proposed Project would not cause significant impacts, the Project, with 46 percent fewer residential units, would also not cause significant impacts. Therefore, implementation of the Project would result in a less than significant impact with respect to natural gas service.

There is a natural gas line underneath Big Bear Lake, located to the east of the proposed marina. There has been some public concern regarding this natural gas line and the potential for it to rupture during construction activities in the lake, associated with the construction of the boat launch ramp and placement of the floating docks. The gas line does not pose a threat to public safety, as it is buried, and, therefore, protected from boating activities during low lake levels. Furthermore, no dredging of the lake is proposed for the marina. The only proposed construction that would interfere with the lake is the proposed ramp. However, the ramp would not be located in the area of the natural gas line. Additionally, prior to any excavation, Underground Service Alert must be called and all utilities must respond and mark the location of their underground lines. The impacts in this regard are therefore considered less than significant.

Electricity

The Project would result in an increased demand for electrical service. Based on a daily average of 16.66 kilowatts per unit, at project buildout the Project would utilize 833 kilowatts per day. BVE recently constructed a local power generating station to provide backup power and peak power to supplement the two power lines that feed the valley. According to BVE, service is available and of adequate supplies.

The Applicant will construct and fund all infrastructure related to the Project. In addition, the future residents of the site will pay monthly user fees that offset the cost of service and maintenance. Therefore, the impacts in this regard are considered less than significant and no mitigation is required.

C. IMPACTS ANALYZED IN THE EIR AND DETERMINED TO BE SIGNIFICANT AND UNAVOIDABLE

1. Biological Resources

Potential Impact: Whether the Project would have a substantial adverse effect, through either direct or indirect modification of potentially suitable or occupied habitat, or direct take, to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS; whether the Project would have an adverse effect on existing riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS; whether the Project would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; whether the Project would interfere substantially with the movement of any native

resident or migratory fish or wildlife species or with established native, resident, or migratory wildlife corridors or impedes the use of native wildlife nursery sites; whether the Project would conflict with regional policies or other local policies or ordinances protecting biological resources; and whether the Project would conflict with approved local, regional, or state habitat conservation plans.

Finding: Potential impacts of the Project on Biological Resources are discussed in detail in Section 2 of the 2011 RRDEIR. Based on the entire record before us, the County finds that the Project is likely to result in significant unavoidable impacts to the bald eagle. Based on the County of San Bernardino criteria for determining impacts to bald eagles, any removal of perch trees or human activity resulting in light and noise impacts is considered a significant impact under CEQA. This threshold is so restrictive that there is no reasonable configuration to the Project that could avoid a significant impact to the bald eagle. Therefore, further project modifications would not avoid or substantially reduce the identified impacts to bald eagles. No additional significant impacts related to Biological Resources have been identified following implementation of the following mitigation measures and/or compliance with applicable standards, requirements and/or policies by the County of San Bernardino:

Special Status Biological Resources

Special Status Plants and Plant Communities

MM BR-1a *Prior to the initiation of clearing or grading activities on the Project site, a conservation easement shall be placed upon the 10-acre Dixie Lee Lane property. The conservation easement shall be in favor of a California Department of Fish and Wildlife approved conservation entity and shall be recorded in the San Bernardino County Recorder's Office. The easement shall provide for the continued protection and preservation of the property through development of a Long-Term Management Plan (LTMP). The LTMP shall provide for the preservation, restoration, and enforcement of the Conservation Areas so that each area is maintained, and restored where needed, to its natural condition. The LTMP will also include documentation of baseline conditions, any needed site preparation, anticipated restoration/enhancement activities, a biological monitoring program, the creation of a set of success criteria for managing the site, anticipated maintenance activities, an annual reporting process, and a set of contingency or adaptive management measures to be implemented in case success criteria are not being met; to ensure that the implementation of the LTMP is fully funded, a Property Action Report (PAR) will be prepared that will document costs for site security, maintenance activities, site preparation, restoration/enhancements activities, biological monitoring, contingency measure and annual reporting. The costs identified in the PAR will be used to develop a non-wasting endowment that will ensure all costs will be available to establish the site, conduct any needed restoration and enhancements, and to fund reoccurring annual cost needed to manage the site in perpetuity. The easement shall, at a minimum, restrict all use of the property that has the potential to impact the quality of pebble plain soils and other valuable biological habitat, including the occurrences of the Federally Threatened Ashy-Gray Indian Paintbrush. The property shall be fenced and signs shall be placed on the fencing indicating the sensitive nature of the property habitat and warning that any entry would be prosecuted as a trespass.*

MM BR-1b *Prior to the initiation of clearing or grading activities on the Project site, the 5.38-acre on-site conservation easements (including Lot-A and Lot-H) shall be established. The conservation easement shall be in favor of a California Department of Fish and Wildlife qualified conservation entity and shall be recorded in the San Bernardino County Recorder's Office. The easement shall provide for the continued protection and preservation of the property through development of a Long-Term Management Plan (LTMP). The LTMP shall provide for the preservation, restoration, and enforcement of the Conservation Areas so that each area is maintained, and restored where needed, to its natural condition. The LTMP will also include documentation of baseline conditions, any needed site preparation, anticipated restoration/enhancement activities, a biological monitoring program, the creation of a set of success criteria for managing the site, anticipated maintenance activities, an annual reporting process, and a set of contingency or adaptive management measures to be implemented in case success criteria are not being met; to ensure that the implementation of the LTMP is fully funded, a Property Action Report (PAR) will be prepared that will document costs for site security, maintenance activities, site preparation, restoration/enhancements activities, biological monitoring, contingency measure and annual reporting. The costs identified in the PAR will be used to develop a non-wasting endowment that will ensure all costs will be available to establish the site, conduct any needed restoration and enhancements, and to fund reoccurring annual cost needed to manage the site in perpetuity. The property shall be fenced and signs shall be placed on the fencing indicating the sensitive nature of the property habitat and warning that any entry would be prosecuted as a trespass.*

MM BR-1c *Project Applicant shall take the following actions to further ensure the permanent preservation of the Conservation Areas (Lot A and Lot H):*

- *Restrict access by pedestrians and motor vehicles to the Conservation Areas. The Conservation Areas shall be secured through installation of fencing or other barriers to prevent access to Conservation Areas. Barriers shall be installed prior to commencement of any construction activities on site. Applicant shall also include provisions in the CC&Rs for the Project instituting penalties to residents who violate the restrictions and cause any damage to the protected plant habitat.*
- *Include enforcement provisions in the CCR's allowing the Homeowners Association, individual resident within the project and/or County of San Bernardino to enforce any violation of the provisions intended for the protection of sensitive plant species located within Lot A and Lot H.*
- *Install appropriate signage identifying Conservation Areas and the sensitive nature of such areas on the project site and that access is prohibited. The Conservation Areas shall be monitored on a regular basis by the Conservation Entity.*
- *Prohibit use of invasive plant species in landscaping. Each lot owner shall be given a list of prohibited invasive plant species upon purchase of lot with the parcel. Landscape plans for individual parcels shall be approved by the County prior to development to ensure no inappropriate plant material is incorporated into the design of any individual lot or common area which may compromise the quality of the Conservation Areas.*

- *Development may not change the natural hydrologic conditions of the Conservation Areas. All grading plans shall be reviewed by the County to ensure hydrologic conditions of the conservation lands are not adversely changed by development.*
- *Applicant or appointed conservation entity shall monitor Conservation Areas on a periodic basis to ensure invasive, non-native species are not present. All non-nature invasive plant species shall be removed from Conservation Areas.*
- *Fuel modification zones and programs shall not be implemented in Lots A and H.*
- *The Conservation Entity shall prepare an annual biological monitoring report identifying the current status of the rare plant species and any necessary actions to further enhance and protect the habitat.*
- *The Conservation Entity shall conduct routine monitoring of rare plant resources on Lot A and H. The occurrence of non-native species outbreaks, or other examples of ecological disturbance as a result of indirect impacts of development in and around Lots A and H shall be reported in the annual biological monitoring reports and remedial action shall be recommended and implemented by the Conservation Entity.*

MM BR-1d *Construction to the rear portions of Lots 47, 48, 49, and 50 shall be restricted by means of building envelopes or building setback lines to prevent construction in the occupied Ashy-Gray Paintbrush habitat, wherever feasible.*

Special Status Wildlife

MM BR-2 *Trees and downed logs shall remain in place, to the extent that clearing is not required by the development process, and a 50-foot setback (measured on each side of the centerline) must be maintained along the deepest ravine at the eastern edge of the property. This measure will serve to preserve habitat for potential special status wildlife species.*

MM BR-3 *Given the negative results of on-site surveys in and the available technical and peer reviewed literature, negative effects to the San Bernardino flying squirrel are not expected. However, because marginal foraging habitat was found on-site, the following mitigation measures will be implemented in the lots with densely forested areas and snags. These mitigation measures are to be implemented to avoid and minimize impacts to San Bernardino flying squirrels:*

- *Restrict Project shall have a qualified biologist as a monitor just prior to and during all tree removal on-site.*
- *Minimize the removal of large coarse woody debris (>10cm diameter), which provide microhabitat for the growth of hypogeous fungi.*
- *Limit removal of standing snags (>25cm DBH) and large trees (>25cm DBH), which provide both structural complexity and potential nesting habitat.*
- *Prioritize the retention of large trees and snags with visible potential cavity nesting structures, which are associated with higher densities of northern flying squirrels.*

- *Minimize the loss of continuous canopy closure, especially in the drainages, which provides protection from predators while foraging and may play an important role in maintaining habitat connectivity.*
- *Project must compensate for the removal of suitable habitat through construction and erection of two nest boxes and one aggregate box per snag removed.*
- *Project is required to provide homeowners with information on the biology of the flying squirrel and suggest steps that homeowners can take to reduce their urban-edge effects.*
- *All subsequent home developers must comply with these provisions which shall be enforced by the County of San Bernardino through implementation of the Mitigation Monitor Reporting Program as mandated by CEQA.*

If the monitoring biologist observes a flying squirrel during pre-construction and/or construction monitoring, the biologist will immediately halt work until the occupied tree can be vacated prior to felling the tree; however, if the work is during the nesting season (generally March through May), when baby squirrels could be present, the nest will not be vacated until after the nesting season ends (June 1st), as cleared by the monitoring biologist.

MM BR-4 *Eagle perch trees identified in the 2002 Bonterra Consulting Bald Eagle Survey for Tentative Tract 16136, Moon Camp, Fawnskin, San Bernardino County, California, (see Appendix A of the Revised and Recirculated Draft EIR No. 2) shall be preserved in place upon project completion. If any of the designated perch trees should become hazardous and need to be taken down, replacement will be at a 5:1 ratio with the creation of artificial perch trees along shoreline designated open space. Prior to commencement of construction activity, applicant shall have a qualified consultant survey all trees on-site to determine the location of all perch trees to be preserved. Any development that may occur within the Project site and in the individual lots must avoid impacts to trees larger than 24 inches dbh and their root structures to the maximum extent feasible. If any additional non-perch trees on-site larger than 24 inches dbh are removed, then a replacement ratio of 2:1 shall be required and replacement trees shall be 24-inch box trees or larger. Whenever an eagle perch tree or other non-perch tree larger than 24 inches DBH is removed, the Homeowner's Association shall retain a qualified consultant to oversee removal and compliance with the replacement requirement. All construction or landscaping improvements, including irrigation, will be prohibited on or around the exposed root structures or within the dripline of these trees. These restrictions on development of the individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This measure shall be identified as a Note on the Composite Development Plan.*

MM BR-5 *Prior to vegetation clearing, grading, or other disturbance, the Project site shall be surveyed to identify all large trees (i.e., greater than 20 inches in diameter at 4.5 feet from the ground) within 600 feet from the high water line. Trees identified on the Project site as having a diameter in excess of 20 inches at 4.5 feet from the ground within 600 feet of the shoreline shall be documented and tagged. Any development that may occur within the Project site and in the individual lots shall avoid impacts to tagged trees and*

their root structures. If such trees cannot be avoided, their removal shall be coordinated with the County of San Bernardino to minimize impacts to the extent feasible. All construction or landscaping improvements, including irrigation, will be prohibited on or around the exposed root structures or within the dripline of these trees. These restrictions on development of individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This measure shall be identified as a Note on the Composite Development Plan.

MM BR-6 *Seven days prior to the onset of construction activities, a qualified biologist shall survey within the limits of project disturbance for the presence of any active raptor nests. Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFG.*

If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for raptors in the region of the Project site normally occurs from February 1 to July 30. To protect any nest site, the following restrictions on construction are required between February 1 and July 30 (or until nests are no longer active as determined by a qualified biologist): (1) clearing limits shall be established a minimum of 300 feet in any direction from any occupied nest and (2) access and surveying shall not be allowed within 200 feet of any occupied nest. Any encroachment into the 300/200-foot buffer area around the known nest shall only be allowed if it is determined by a qualified biologist that the proposed activity shall not disturb the nest occupants. Construction during the nesting season can occur only at the sites if a qualified biologist has determined that fledglings have left the nest.

MM BR-7 *Vegetation removal, clearing, and grading on the Project site should be performed outside of the breeding and nesting season (between February 1 and June 30), when feasible, to minimize the effects of these activities on breeding activities of migratory birds and other species. If clearing occurs during breeding season, a 30-day clearance survey for nesting birds shall be conducted. Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFG. If nesting activity is present at any nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code.*

MM BR-8 *The use of the boat dock for motorized boating shall be prohibited between the dates of December 1 and April 1. No motorized boats shall be allowed to launch or moor in the vicinity of the boat dock at any time during this period. This restriction shall be clearly displayed on signage at the entrance to the parking lot and on the boat dock visible from both land and water. This requirement shall also be published in the Homeowner's Association CC&Rs.*

Sensitive Natural Communities/Habitats

Wildlife Impacts/Indirect Impacts

MM BR-9 Street lamps on the Project site shall not exceed 20 feet in height, shall be fully shielded to focus light onto the street surface and shall avoid any lighting spillover onto adjacent open space or properties. Furthermore, street lights shall utilize low color temperature lighting (e.g., red or orange).

MM BR-10 Outdoor lighting for proposed homes on the individual tentative tracts shall not exceed 1,000 lumens. Furthermore, residential outdoor lighting shall not exceed 20 feet in height and must be shielded and focused downward to avoid lighting spillover onto adjacent open space or properties. These restrictions on outdoor lighting of the individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This requirement shall also be published in the Homeowner's Association CC&Rs.

MM BR-11 To limit the amount of human disturbance on adjacent natural open space areas, signs shall be posted, to the satisfaction of the Planning Director or appointee, along the northern and eastern perimeter of the Project site where the property boundary abuts USFS open space with the following statement: "Sensitive plant and wildlife habitat. Please use designated trails and keep pets on a leash at all times."

In addition, a requirement stating that residents shall keep out of adjacent open space areas to the north with the exception of designated trails will be published in the Homeowner Association CC&Rs and a map of designated hiking trails will be provided to all residents.

MM BR-12 Prior to recordation of the final map, a landscaping plan for the entire tract shall be prepared (inclusive of a plant palette) with an emphasis on native trees and plant species, and such plan shall be submitted to the County of San Bernardino for review and approval by a qualified biologist. The review shall determine that invasive, nonnative plant species are not to be used in the proposed landscaping. The biologist will suggest appropriate native plant substitutes or non-invasive, non-native plants. A note shall be placed on the Composite Development Plan indicating that all proposed landscaping (including landscaping on individual lots) shall conform to the overall approved tract map landscaping plan. A requirement shall be included stating that residents shall be restricted to the use of tree and plant species approved per the overall tract map landscaping plan. The Homeowner Association CC&Rs shall also require individual lot owners to use only tree and plant species approved per the overall tract map landscaping plan/plant palette.

Jurisdictional Delineation

MM BR-13 Prior to issuance of grading permits, the Project applicant shall obtain all required authorization from agencies with jurisdiction over all unavoidable impacts to State and federal jurisdictional lakes, streams, and associated habitat within the Project site. Impacted features shall be offset through on-site restoration, off-site restoration, or

purchase of credits at an agency-approved mitigation bank in the region at no less than a 3:1 for direct impacts and 1:1 for indirect impacts if impacts cannot be avoided.

Facts in Support of Finding:
Sensitive Plant Communities

Pebble Plain like Soils. Approximately 1,511 acres of pebble plain are known to exist in the San Bernardino Mountains, 60 percent (906 acres) of which occurs on public lands. In addition, according to the 2008 Supplemental Focused Special Status Plant Species Survey, Pebble plain soil conditions occurred on approximately 0.69 acres of the Project site, north of State Route 38 (SR-38). The report stated that it appeared as a distinct open patch within open Jeffrey pine forest in the western portion of the Project site and that the substrate in this area consisted of clay soil mixed with quartzite pebbles and gravel that were continually pushed to the surface through frost action. However, a Supplemental Focused Special Status Plant Species Survey (August 29, 2010) was conducted to respond to concerns raised in comments received on the 2010 RRDEIR. The Supplemental Focused Special Status Plant Species Survey (August 29, 2010) concludes that the prior biological surveys mischaracterized the 0.69 acre portion of the Project site as true pebble plain. As discussed in the Supplemental Focused Special Status Plant Species Surveys (August 29, 2010 and June 27, 2016), the area previously classified as pebble plain habitat is not actually pebble plain due to the lack of the two key indicator species. The 2010 Supplemental Focused Special Status Plant Species Survey findings augment the Supplemental Focused Special Status Plant Species Survey conducted by Dr. Krantz, dated June 29, 2008, providing an additional above-average precipitation year for observation. Therefore, based on the findings of the 2010 and 2016 Supplemental Focused Special Status Plant Species Surveys, no true pebble plain habitat exists, and the implementation of the Project will not result in a potentially significant impact due to impacts to this area of the Project. However, even if true pebble plain habitat existed on site and was adversely impacted by development of the Project, Mitigation Measure BR-1a would mitigate such impacts.

Mitigation Measure BR-1a requires permanent conservation of a 10-acre parcel, known as the Dixie Lee Lane parcel that contains high quality pebble plain habitat. Although Mitigation Measure BR-1a is intended to mitigate impacts to the Ashy-Gray Indian Paintbrush, the existence of high quality pebble plain habitat on that property would lessen any project impacts to the extent they occurred. According to the Supplemental Focused Special Status Plant Species Surveys (August 29, 2010 and June 27, 2016), the 10-acre Dixie Lee Lane pebble plain is estimated to contain very high densities of the two indicator species *Arenaria ursina* and *Eriogonum kennedyi austromontanum*, with an estimated population in the tens of thousands. Moreover, Dr. Krantz characterized the Dixie Lee Lane property as a “textbook example of this rare plant community.” Dr. Krantz further opined that, to the best of his knowledge, the Dixie Lee Lane property represents the highest density of pebble plain plant species of any privately held land in Big Bear Valley. The 2011 Alternative Project proposes to implement Mitigation Measure BR-1a to conserve the 10-acre Dixie Lee Lane pebble plain, ultimately preserving the very high densities of the two indicator species. Accordingly, the Project will have a less than significant impact on pebble plain habitat.

Special Status Plant Species Known to Occur on the Project Site

One Federally-listed Threatened and CNPS List 1B species, Ashy-Gray Indian Paintbrush; and five CNPS List 1B species, Parish's rock cress, Big Bear Valley woollypod, silver-haired ivesia, purple monkeyflower, and Bear Valley phlox, were observed on the Project site during the 2002, 2007, 2008, 2010, and 2016 Supplemental Focused Special Status Plant Species Survey. The surveys identified an herbaceous layer of Wright's matting buckwheat (in the western half of the Project site) and found inclusions of Ashy-Gray Indian Paintbrush and Parish's rock cress throughout an approximate 18.01-acre area of open Jeffrey pine forest. Silver haired ivesia was found to be concentrated entirely within the Project site's mapped pebble plain like soil conditions. Bear Valley woollypod was found in patches scattered throughout Jeffrey pine forest habitat on the Project site. Purple monkeyflower was found to be widely distributed on the pebble plain-like soils conditions in the conservation area, with a small portion of the population extending down the draw to the east into the southern half of proposed Lot 50. Finally Bear Valley phlox was found to be distributed in the open black oak woodland and under Jeffrey pines.

Development of the Project has the potential to significantly impact the aforementioned special status plant species. In addition to protecting the most exemplary and best quality habitat on-site (located within the newly-proposed Lot H Open Space Conservation Easement), all five of the CNPS List 1B status species observed on-site will be protected through Mitigation Measures BR-1b, BR-1d and BR-12 which provide for the establishment and management of conservation area encompasses the location of these plants.

Ashy-Gray Indian Paintbrush

As concluded within the Supplemental Focused Special Status Plant Species Survey (August 29, 2010), there are approximately 7.71 acres of ashy-gray Indian paintbrush habitat on the Project site, of which 4.84 acres would be permanently protected through the creation of open space Lot A and Lot H. On an occurrence basis, there are approximately 5,567 Ashy-Gray Indian Paintbrush occurrences are located within the Project site. Of the 5,567 occurrences, 4,895 will be permanently protected within the Open Space Conservation Easement of Lot A and H, representing 88 percent of the total occurrences of Ashy-Gray Indian Paintbrush within the proposed Project site. Of the remaining Ashy-Gray Indian Paintbrush plants within the boundaries of private Lots, plants within Lots 1, 47, 49, and 50, are all within the rear Lot building setbacks, as well as 20 plants on Lot 4, for a total of 127 plants.

Discrete counts of Ashy-Gray Indian Paintbrush occurrences were also conducted on Lots 1-5 of the revised Moon Camp subdivision, including the new Lots 1, 2, and 3. The new Lot 1 contains approximately 45 plants, all located within a 5 (five) meter radius of the southeast corner of the property, within the rear-lot and side-lot building setbacks. In addition, Ashy-Gray Indian Paintbrush plants on the new Lot 2 are scattered across the Lot, with approximately 150 plants.

The new Lot 3 contains approximately 175 plants. Lot 4 contains approximately 70 plants to the front-center of the Lot, and another 20 plants to rear of the Lot, within the required

building setback, for a total of approximately 90 plants; and Lot 5 contains approximately 30 plants and another approximately 40 Ashy-Gray Indian Paintbrush plants are in the road right-of-way across the front of Lot 5. Well Site Lot F and the associated access road contain approximately 80 plants. In total, the Project will impact approximately 672 occurrences of Ashy-Gray Indian Paintbrush occupying approximately 1.55 acres. Based on the foregoing, the reconfiguration of the Project and creation of permanent conservation easements covering the areas designated as Lot H and Lot A will permanently conserve approximately 88 percent of the Ashy-Gray Indian Paintbrush occurrences on the Project site (4,895 occurrences conserved, compared to 672 impacted occurrences). This on-site conservation of Ashy-Gray Indian Paintbrush occurrences results in mitigation for project impacts at more than a 7:1 ratio.

Additionally, Mitigation Measure BR-1a requires permanent conservation of the 10 acre, off-site, Dixie Lee Lane parcel that acts as further mitigation for impacts to the Ashy-Gray Indian Paintbrush. These 10 acres of pebble plain are private land located at the northern terminus of Dixie Lee Lane in the Sugarloaf area of Big Bear Valley. The 10 acres are fenced and exhibit very high densities of the two indicator species (*Arenaria ursina* and *Eriogonum kennedyi austromontanum*). Implementation of Mitigation Measure BR-1a will conserve the high quality pebble plain that is one of the best remaining examples of pebble plain habitat in private ownership and will protect the high density of pebble plain soil conditions. As indicated in the Supplemental Focused Special Status Plant Species Surveys (August 29, 2010 and June 27, 2016) performed by Dr. Krantz, the 10 acre parcel comprises habitat that can support the Ashy-Gray Indian Paintbrush and, in fact, during the survey, multiple occurrences of this plant species were observed. Accordingly, in addition to formal conservation of 88 percent of the Ashy-Gray Indian Paintbrush occurrences on the Project site, through conservation easements covering Lot H and Lot A, permanent preservation of the 10 acre Dixie Lee property will provide further mitigation for impacts to the Ashy-Gray Indian Paintbrush species. With the preservation of the Dixie Lee Lane property, the 2011 Alternative Project will permanently set aside 14.84 acres of Ashy-Gray Indian Paintbrush occupied habitat. With the inclusion of the Dixie Lee Lane property, On an acreage basis, the Project is mitigating impacts on an approximately 5:1 basis.

The on-site preservation of 88 percent of Ashy-Gray Indian Paintbrush occurrences and over 60% of the habitat acreage as well as implementation of Mitigation Measures BR-1a through BR-1d will reduce impacts to the Ashy-Gray Indian Paintbrush to less than significant levels on an independent and cumulative basis.

Special Status Plant Species Potentially Occurring on the Project Site

Special status plants known to occur on the Project site are described in the preceding subsection. As outlined within focused surveys and reports conducted in 2002, 2007, 2008, or 2010, various special-status plants could potentially occur on the Project site. Based upon location and site characteristics, six listed threatened or endangered species could potentially occur on the Project site. These include bird's foot checkerbloom (endangered), San Bernardino bluegrass (endangered), California dandelion (endangered), Big Bear Valley sandwort (threatened), southern mountain buckwheat (endangered), and slender-petalled thelypodium (endangered). In addition, 26 CNPS List 1B or 2 species could potentially occur on the Project site:

- Rock sandwort;
- Big Bear Valley milk vetch;
- Palmer's mariposa lily;
- San Bernardino Mountain owl's clover;
- Male fern;
- San Bernardino Mountains dudleya;
- Leafy buckwheat;
- San Bernardino Mountain gilia;
- Shaggy-haired alum root;
- Parish's alumroot;
- Short-sepaled lewisia;
- Lemon lily;
- Baldwin Lake linanthus;
- San Bernardino Mountain monkeyflower;
- Purple monkeyflower;
- Baja navarretia;
- Parish's yampah;
- Bear Valley phlox;
- Bear Valley pyrrocoma;
- San Bernardino butterweed;
- Prairie wedge grass;
- Southern jewelflower; and
- Grey-leaved violet.

According to the Supplemental Focused Special Status Plant Species Surveys conducted by Dr. Krantz (2008 and 2016), five special-status plant species were identified on the property. Special status plant species found by Dr. Krantz on the Project site included: Parish's rock cress, Bear Valley phlox, purple monkeyflower, and fuzzy rat-tail. The other potentially four occurring Pebble Plain special status plant species (Bear Valley sandwort, southern mountain buckwheat, San Bernardino Mountains dudleya, and Baldwin Lake linanthus) were not observed despite favorable conditions during both surveys and are presumably absent.

None of the five listed or special status Montane meadow plant species were identified on-site. The shoreline habitat was determined to be highly disturbed and ruderal in nature.

The area did not support a viable Montane meadow habitat capable of supporting listed or special status plant species.

A search the yellow pine habitat, particularly areas with rocky soils or outcrops identified one of the three CNPS List 1B plant species (Bear Valley Woollypad) as occurring on the Project site. The other two potentially occurring special-status plant species (Big Bear Valley milkvetch and southern yellow jewelflower) were not observed and are presumed absent.

The majority of special-status species observed on-site are confined to the western portion of the Project site. The creation of the Conservation Areas (Lot A and Lot H) provide conservation of occurrences and habitat for these species. Additionally, Mitigation Measure BR-1a will permanently preserve an additional 10 acres of habitat for the special status species. Therefore, impacts in this regard will be less than significant.

Special Status Wildlife Species

The Project would result in the loss of potential habitat for several special status wildlife species found on-site or potentially present on the Project site. For those species expected to occur, potential impacts were evaluated for the habitat that the species is expected to occupy.

Reptiles

Implementation of the Project may result in impacts on special status reptile species. One federal Species of Concern, the southern sagebrush lizard, has been observed on the Project site. Four additional species that are federal Species of Concern and/or State Species of Special Concern have potential to occur on the Project site. These species are the silvery legless lizard, coastal western whiptail, San Bernardino ringneck snake, and San Bernardino Mountain kingsnake. The loss of potential habitat and species would be considered potentially significant because development of the Project could substantially diminish habitat for wildlife in the region and reduce specific populations of reptile species of concern in the region to below self-sustaining numbers. However, mitigation measures BR-2 through BR-8 will reduce these impacts to special status wildlife species to a level of less than significant.

In addition, intensive surveys for the State-listed Threatened southern rubber boa were conducted on the Project site in the spring and summer of 2002 and an additional assessment was conducted by Dr. Glenn Stewart, PhD, Professor Emeritus of Zoology and Environmental Sciences, Cal Poly Pomona, in February 2007. Given the negative results of two independent focused survey techniques, the results of Dr. Stewart's assessment, and the lack of historical records in the immediate vicinity of the Project site, the survey report concluded that this species has a low potential to occur on the Project site.

Birds

Project implementation may result in impacts on special status bird species. Nineteen sensitive bird species (Federal Species of Concern, State Endangered Species and State Species of Special Concern) occur or have the potential to occur on the Project site and are discussed below.

Bald Eagle. The bald eagle was taken off the federal list of threatened species, but remains on the State endangered species list. Small wintering populations of bald eagle often occur in scattered mountain locations in the region. Big Bear Lake supports the largest wintering population of bald eagle in southern California and may include as many as 30 individuals in peak years. The bald eagle was observed using several trees on the Project site for perch and roost locations. A records search also demonstrated that some of the most utilized perch and roost trees on the north shore of the lake are located on the Project site. Seven of the identified perch trees are adjacent to the Big Bear Lake's shoreline. Perch trees are used for resting, for monitoring their territories for predators or other eagles, and for hunting. Steenhof (1978) investigation into bald eagle perch determined that proximity to a food source is most important factor in diurnal perch selection by bald eagles. Optimal perch trees are typically tall with an open growth structure that provide line-of sight-opportunities and that are near water (Steenhof, 1978 and Stalmaster and Newman 1979). In their study they also found that bald eagles used artificial perch trees more than would be expected from occurrence alone. In their study, the artificial perch trees provided the closer proximity to water, were generally taller than the native trees and had a greater open growth structure for line-of-site opportunities. Given artificial and native trees that provided comparable characteristics, bald eagle, are using artificial and native trees similarly. The study's conclusion was that artificial perch trees may be an effective tool as both a mitigation measure and a management strategy. For Moon Camp, the use of artificial perch trees that approximate the existing perch trees in terms of size, structure and proximity to the shoreline would compensate for the loss of native perch trees. It is recommended that the existing perch trees be surveyed for their overall health and expected longevity and that a plan for replacement be developed from this information. Replacement trees would be installed in advance to the projected loss of a perch tree to ensure there is no loss of perching opportunities.

It is also important to note that bald eagle populations have expanded in recent years, even as increasing human presence and activity near nesting and perching sites has increased. Bald eagle populations have increased in face of increasing human recreation and development along shorelines within prime eagle habitat. This combined growth in eagle populations and human populations have resulted in more frequent interactions with humans (Johnsgard 1990). Due to this increasing overlap with human populations and human activities, bald eagles have habituated to presence of humans. Observations of eagle populations suggest that many eagles are more accepting of eagle activities near nests and wintering sites (Watson et al. 1999, Anthony 2001, and Millsap et al. 2004). A recent newspaper article in The Washington Post by Gregory Lee Sullivan (February 29, 2016) quoted Kevin McGowan of the Cornell Lab of Ornithology as saying "the main thing is that they (bald eagles) just don't really care as much about people anymore" and are now found nesting in residential areas. He concluded that changes in the behavior of the bald eagle are the results of laws that protect the bird and have helped the species recover after nearly dying out in the early 1960s. The number of bald eagles breeding pairs in the lower 48 contiguous states has increased from a low of 487 in 1963 to 9,789 in 2006. As indicated above, the species was removed by USFWS from the endangered species list in 2007. Given that the Moon Camp area is not used by nesting pairs and only supports overwintering eagles and given the proposed mitigation measure for maintaining perch trees, the presence of 50 new homes in rural residential community of Fawnskin will not

adversely affect foraging behavior or other roosting behavior of the overwintering bald eagles. However, any construction activities in proximity to the identified perch and most trees are considered by the County as a significant impact under CEQA. Two pair of bald eagles were documented nesting at Big Bear during Spring/Summer 2007. As the bald eagle has recently nested at Big Bear, ongoing surveys of the Project site during breeding season is recommended to verify the continued absence of nesting bald eagles on the Project site.

Mitigation measures BR-4, B-6 and B-7 will reduce identified impacts to the bald eagles potentially occurring on the Project site. Although Mitigation Measures BR-4, B-6 and B 7 will reduce impacts to the bald eagle, implementation of the Project will directly impact eagle perch locations. Based on the County of San Bernardino criteria for determining impacts to bald eagles, any removal of perch trees or human activity resulting in light and/or noise impacts are considered a significant impact under CEQA. This threshold is so restrictive that there is no reasonable configuration to the Project that could avoid a significant impact to the bald eagle. Therefore, further project modifications would not avoid or substantially reduce the identified impacts to bald eagles. Therefore, impacts in this regard will remain significant and unavoidable.

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. The Cooper's hawk, long-eared owl, white-tailed kite, and California spotted owl also have potential to nest on the Project site. If an active raptor nest (common or special status species) were found on the Project site, the loss of the nest would be considered a violation of the California Fish and Game Code Sections 3503, 3503.5, and 3513. The loss of any active raptor nest occurring on the Project site would be considered significant.

Mitigation measures BR-4, B-6 and B-7 are imposed on the Project to minimize impacts to these species. Compliance with these mitigation measures would reduce potential impacts to these species to a level of less than significant.

Black Swift, Yellow Warbler, Hepatic Tanager, Purple Martin, and Gray Vireo.

Project implementation would reduce the amount of foraging habitat for these species. In addition, the hepatic tanager and purple martin have potential to nest on the Project site and implementation of the Project may impact active nests. The loss of potential 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 habitat for these species in the San Bernardino Mountains and National Forest.

Mammals

Project implementation may result in impacts on special status mammal species. No federally- and/or State-listed species have been observed on the Project site. However, 11 Federal Species of Concern and/or State Species of Special Concern have potential to occur on the Project site and are discussed below.

Pallid Bat, Spotted Bat, Small-Footed Myotis, Long-Eared Myotis, Occult Little Brown Bat, Fringed Myotis, Long-Legged Myotis, Yuma Myotis, and Pacific Western Big-Eared Bat.

The project site provides suitable foraging habitat for these bat species. Project implementation would reduce the amount of foraging habitat for these species. The pallid bat, smallfooted myotis, long-eared myotis, Occult little brown bat, fringed myotis, long-legged myotis, and Yuma myotis, also have potential to roost on the Project site. This impact would contribute to the cumulative loss of foraging and roosting habitat for these bat species. However, the loss of potential 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 and roosting habitat for these species in the San Bernardino Mountains and National Forest.

San Bernardino Mountain Flying Squirrel.

Although focused surveys for the flying squirrel were negative, the Project site provides suitable foraging and breeding habitat for this species. Project implementation would impact habitat for this species. However, the loss of potential habitat would be considered adverse, but less than significant, due to the limited amount of habitat loss relative to the availability of habitat for this species in the San Bernardino Mountains and National Forest.

Direct Impacts

Flora and Vegetation Type Impacts

A total of 57.05 acres of native and non-native vegetation types, including developed areas, would be impacted by the Project.

Jeffrey Pine Forest

A total of 50.72 acres of Jeffrey pine forest, including 13.81 acres of open Jeffrey pine forest, would be impacted by Project implementation. Approximately 58,526 acres of Jeffrey pine forest occurs in the San Bernardino National Forest and 141,604 acres in the Cleveland, San Bernardino, Angeles and Los Padres National Forests collectively. Approximately 4.2 acres of open Jeffrey pine forest will be permanently preserved by a conservation easement. Impacts on this vegetation type would be considered less than significant since this vegetation type is common throughout the San Bernardino Mountains and other mountain ranges in the region.

Lake Shoreline

A total of 4.0 acres of ruderal lake shoreline would be impacted by the Project. Man-made lakes are essentially distinct ecosystems, with an aquatic fauna and flora that bears little resemblance to what naturally occurs in the streams that formed them. However, a

Supplemental Focused Special Status Plant Species Surveys (August 29, 2010 and June 27, 2016) were conducted by Timothy Krantz, PhD to address comments submitted by concerned parties with regard to the Revised and Recirculated Draft EIR No. 2 for the Moon Camp 50-Lot Residential Subdivision, Tentative Tract 16136. The findings within both the 2008, 2010, and 2016 Supplemental Focused Special Status Plant Species Survey concluded that although there are some scattered occurrences of indicator plant species, wet meadow habitat no longer occurs along the shoreline portion of the Project site. This sensitive habitat has been replaced with mostly ruderal species and should be characterized as ruderal shoreline habitat. Therefore, impacts in this regard will be less than significant.

Developed

A total of 2.82 acres of disturbed vegetation in developed areas (SR-38) would be impacted by Project implementation. Impacts on this vegetation type would not be considered significant since this vegetation type is considered to have a low biological value.

Wildlife Impacts

The loss of habitat, loss of wildlife, wildlife displacement, and habitat fragmentation that would result from construction of the Project would not be considered significant because these impacts would not substantially diminish habitat for wildlife in the region nor reduce any specific wildlife populations in the region to below self-sustaining numbers.

Indirect Impacts

Indirect impacts are those related to disturbance by construction (such as noise, dust, and urban pollutants) and long-term use of the Project site and its effect on the adjacent habitat areas. The indirect impact discussion below includes a general assessment of the potential indirect effects (noise, dust and urban pollutants, lighting, human activity, and non-native species introduction), of the construction and operation of the Project.

Particular focus is placed on the indirect effects on the natural open space area from the Project, collectively referred to as edge effects. Edge effects occur where development, including roads, takes place adjacent to natural open space areas. Edge effects threaten the ecological integrity, recreational experience, aesthetic quality, public investment, and safety operations of preserved or undeveloped natural areas located adjacent to areas. When development is configured in a manner that creates a high ratio of development edge to natural open space, there is an increase in the potential impacts caused by human use (indirect impacts). These indirect effects that address both the short-term construction and long-term use of the Project site are outlined below.

Pebble Plains

The Polique Canyon pebble plains are situated on USFS land approximately 1,056 feet northeast of the project site, at an elevation of about 60m (200 feet) above the Project. Forest Service comments on the Revised and Re-circulated Draft EIR expressed concern that development of the property could represent an indirect impact to the pebble plains from foot traffic generated by the Moon Camp residents. However, according to the Supplemental Focused Special Status Plant Species Survey (August 29, 2010), there is no apparent footpath or trail connection between the Moon Camp property and the pebble plains. For Moon Camp residents to hike up to the pebble plains, they would have to

traverse up the 300+ meter-ridge with a 60m elevation gain across the brush-covered slope. Therefore, an indirect impact to the pebble plains would be unlikely.

Noise Impacts

Noise levels on the Project site would increase over present levels during and upon completion of construction of the Project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species. Upon completion of construction, noise levels on the Project site would increase as a result of increased human activity associated with residential uses. Both short and long-term noise impacts could potentially disrupt the foraging and roosting potential of the site for the bald eagle. Any interruption of the foraging and/or roosting behavior of the bald eagle would be considered a significant impact.

Noise attenuation measures will be implemented for the Project. (NOI-1 through NOI-4). However, both short and long-term residential noise impacts on the bald eagle would be considered an unavoidable significant impact of the Project.

Increased Dust and Urban Pollutants

Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs in the natural open space areas adjacent to the Project site. The respiratory function of the plants in these areas would be impaired when dust accumulation is excessive. These impacts are considered adverse; however, the Project will be consistent with SCAQMD Rule 403, which governs emissions of fugitive dust. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, the Project will implement mitigation measure AQ-1, further reducing impacts from dust. Compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 and mitigation measure AQ-1 will reduce impacts in this regard to a level of less than significant.

Night Lighting

Lighting of the residential units would inadvertently result in an indirect effect on the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife that are present along the boundaries of the natural areas of the Project site. Of particular concern is the effect on small ground-dwelling animals that use the darkness to hide from predators, and on owls, which are specialized night foragers. In addition, the increase in night lighting could discourage nesting and roosting along the lake shore. Most notably, lighting associated with the Project could disrupt roosting behavior of the bald eagle on the Project site. Long-term and short-term light attenuation measures will be implemented for the Project (Mitigation Measures A-1a, A-1b and A-4a through A-4f.). In addition, mitigation measures BR-9 and BR-10 will be implemented to require street lamps on the Project site not to exceed 20 feet in height, and be fully shielded to focus light onto the street surface and shall avoid any lighting spillover onto adjacent open space or properties. Furthermore, street lights will be required to utilize low color temperature lighting (e.g.,

red or orange). Mitigation measure BR-10 will also require outdoor lighting for proposed homes on the individual tentative tracts to not exceed 1,000 lumens. These restrictions on outdoor lighting of the individual lots must be clearly presented and explained to any potential prospective developers and/or homeowners prior to assumption of title and close of escrow. This requirement shall also be published in the Homeowner's Association Conditions, Covenants & Restrictions (CC&Rs). Therefore, with implement mitigation measures to reduce lighting impacts, the increased lighting would be considered less than significant.

Human Activity

The increase in human activity (i.e., noise, foot traffic) would increase the disturbance of natural open space adjacent to the Project site. Human disturbance could disrupt normal foraging and breeding behavior of wildlife remaining in adjacent areas, diminishing the value of these open space habitat areas. Most notably, residential activity associated with the Project could disrupt foraging and roosting behavior of the bald eagle on the Project site. Mitigation measure BR-11 will be implemented to limit the amount of human disturbance on adjacent natural open space areas by posting signs along the northern and eastern perimeter of the Project site where the property boundary abuts USFS open space with the following statement: "Sensitive plant and wildlife habitat. Please use designated trails and keep pets on a leash at all times." In addition, a requirement stating that residents shall keep out of adjacent open space areas to the north with the exception of designated trails will be published in the Homeowner Association CC&Rs and a map of designated hiking trails will be provided to all residents. Although the Project will implement mitigation measures to reduce impacts to open space habitat areas, the increased residential activity and habitat loss would be considered potentially significant.

Non-Native Species Introduction

The native habitat types within the natural open space areas adjacent to the Project site would be subject to greater pressure from non-native plant species within the developed portions of the Project site. Areas that have undergone disturbance generally contain a high number of non-native grasses and forbs that can successfully out-compete the native plants in the region. This will be especially true after initial project grading of the Project site. Should non-native plants establish themselves in these areas prior to the establishment of native plant species or non-native/non-invasive plant species in the landscape areas, the non-natives may become invasive in the natural open space areas. Left uncontrolled, these "weeds" may begin encroaching into the adjacent natural areas. These impacts could become significant if uncontrolled.

The Project will implement mitigation measure BR-12 to develop a landscaping plan for the entire tract (inclusive of a plant palette) with an emphasis on native trees and plant species, and such plan shall be submitted to the County of San Bernardino for review and approval by a qualified biologist. The review will determine that invasive, non-native plant species are not to be used in the proposed landscaping. The biologist will suggest appropriate native plant substitutes or non-invasive, non-native plants. A note will be placed on the Composite Development Plan indicating that all proposed landscaping (including landscaping on individual lots) shall conform to the overall approved tract map landscaping plan. A requirement will be included stating that residents will be restricted to

the use of tree and plant species approved per the overall tract map landscaping plan. The Homeowner Association CC&Rs shall also require individual lot owners to use only tree and plant species approved per the overall tract map landscaping plan/plant palette. Consistency with mitigation measure BR-12 will reduce impacts in this regard to a level of less than significant.

Jurisdictional Waters

Waters of the U.S. (Non-Wetland) Determination

Based on the results of the field observations and data collection, there was 0.15 acre of USACE jurisdictional “waters of the U.S.” identified within the Project site. The drainages are ephemeral; Big Bear Lake, although not included in the acreage calculation, is also considered jurisdictional by USACE. Utilizing the most current development plans, it was determined that the proposed improvements would impact up to 0.04 acres of waters of the U.S. under USACE jurisdiction. Therefore, recommendations were made to avoid the sensitive habitats, where feasible, and to mitigate off-site at 3:1 for direct impacts and 1:1 for indirect impacts if impacts couldn’t be avoided. Consistency with mitigation measure BR-13 will reduce impacts in this regard to a level of less than significant.

California Department of Fish and Game (1602) Jurisdiction

Based on the results of the field observations and data collection, RBF identified 0.15 acre of CDFG jurisdictional streambed. Utilizing the most current development plans, it was determined that the proposed improvements would impact up to 0.04 acre of CDFG jurisdiction waters of the State. Therefore, recommendations were made to avoid the sensitive habitats, where feasible, and to mitigate off-site at 3:1 for direct impacts and 1:1 for indirect impacts if impacts couldn’t be avoided. Consistency with mitigation measure BR-13 will reduce impacts in this regard to a level of less than significant.

Wildlife Movement

The development of the Project site would not impact designated wildlife corridors; however, it may affect local travel routes. Construction of the residential areas would result in reduced connectivity between Big Bear Lake as a water source to the contiguous open spaces on and to the north of the Project site. Additionally, construction of the Project—would result in increased traffic on the Project site by residents that would further impede movement of terrestrial wildlife currently crossing the site and SR-38. Although this impact is considered locally adverse, it is not considered significant because the impact does not substantially affect a regionally important wildlife movement corridor.

Potential Conflict With Regional and Local Policies/Plans

County of San Bernardino General Plan

The project site is located in unincorporated San Bernardino County and is subject to the provisions and policies of the County of San Bernardino General Plan. The General Plan contains a list of species considered Rare, Threatened, or Endangered by the County. Projects potentially impacting County-listed species must prepare an EIR to determine the significance of impacts on these species. Two plant species identified within the General Plan, Parish’s checkerbloom and bird’s foot checkerbloom, have the potential to occur on

the Project site. Krantz's 2008 Supplemental Focused Special Status Plant Species Survey, as well as the 2010 and 2016 updates, concluded that, during a normal precipitation year, neither of the two plant species were identified on site and they are not considered likely to occur on site.

County of San Bernardino Biotic Resources Overlay District

The intent of the BR Overlay District is to require the preparation of a biological technical report for projects within the BR Overlay District identifying impacts to biological resources and mitigation measures designed to reduce or eliminate Project-related impacts. The biological technical reports prepared as part of this Revised and Recirculated Final EIR No. 2 are intended to satisfy the requirements of the BR Overlay District.

Plant Protection and Management Ordinance—County of San Bernardino Development Code

Title 8, Division 9 of the San Bernardino County Development Code contains policies and requirements applicable to the Project site, including Section 89.0110(a), 89.0115(c), and 89.0205.

Section 89.0110(b) states that the provisions of this Division shall not authorize the removal of perch trees within identified American bald eagle habitat. Section 89.0115(c) requires that the County "may require certification from an appropriate tree expert or native plant expert that such tree removals are appropriate, supportive of a healthy environment and are in compliance with the provisions of this chapter." The Results of Bald Eagle Survey on Tentative Tract 16136, Moon Camp, Fawnskin, San Bernardino County, California, Bonterra Consulting Report (2002) and the Bald Eagle Count in Area, Moon Camp, Fawnskin, San Bernardino County, California, US Forest Services Report (2009), are intended to satisfy the requirements of this section (refer to Appendix A of this Revised and Recirculated Final EIR No. 2). The County shall make a determination based on the evidence presented herein and in the Forester's Report as to the significance of the Project impacts to native plants and compliance with the provisions of Division 9 of the County Development Code. The intent of Section 89.0205 is to treat coniferous tree species such that they don't present a risk of fire, and spread tree insect pests and infection. Compliance with this Section would be enforced by the County standard conditions and requirements during construction of the Project.

Wildlife Movement

The project site does not contain wildlife crossings or corridors. Nonetheless, the Project site could be used as a travel route connecting forest habitat to the north with Big Bear Lake. However, direct connection to open space areas north and east of the Project site are obstructed by SR-38. The importance of this travel route may be diminished by the vehicle traffic hazard associated with crossing SR-38 as well as the availability of similar habitat immediately adjacent to the east of the Project site.

Migratory Bird Treaty Act

There are a large number of bird species that were observed to use the Project site for nesting. Due to the difficulty locating nests of cavity-nesting and other species of birds, a

preconstruction nesting bird survey is not feasible. However, implementation of the Project may impact the nests of species covered by the MBTA, including the Cooper's hawk, purple martin, and hepatic tanager. Therefore, the Project should time tree removal to occur outside of the nesting period for birds, generally February through July. However, Mitigation Measure BR-7 will require tree removal to occur outside of the nesting period for birds, reducing impacts to a level of less than significant.

Cumulative Impacts

Significant and unavoidable adverse impacts from development of the Project related to Biological Resources have been identified for impacts to the bald eagle. Mitigation Measure BR-4 requires that eagle perch locations be preserved in place upon completion of the Project, and that any development that may occur within the Project site and in the individual lots must avoid impacts to trees larger than 24 inches diameter breast height (dbh) and their root structures. Still, even with the implementation of Mitigation Measure BR-4 and the establishment of nearly 6 acres of Conservation/Open Space set aside, some trees will still need to be removed from the Project site to allow for the development of the 50 residential lots. Additionally, due to the County's strict threshold for impacts to the bald eagle under CEQA, any human development and habitation on the Project site would result in a significant impact. This is considered a significant and unavoidable project-specific, as well as cumulative, impact.

Six listed threatened or endangered species could potentially occur on the Project site. These include bird's foot checkerbloom (endangered), San Bernardino bluegrass (endangered), California dandelion (endangered), Big Bear Valley sandwort (threatened), southern mountain buckwheat (endangered), ashy-grey Indian paintbrush (Threatened), and slender-petalled thelypodium (endangered). In addition, 26 CNPS List 1B or 2 species could potentially occur on the Project site. According to the Supplemental Focused Special Status Plant Species Survey conducted by Dr. Krantz (2008, 2010, and 2016), only the ashy-grey Indian paintbrush was observed on-site. Special status plant species found by Dr. Krantz on the Project site included: Parish's rock cress, Bear Valley phlox, purple monkeyflower, and fuzzy rat-tail. The other potentially four occurring Pebble Plain special status plant species (Bear Valley sandwort, southern mountain buckwheat, San Bernardino Mountains dudleya, and Baldwin Lake linanthus) were not observed despite favorable conditions during both surveys and are presumably absent.

None of the five listed or special status Montane meadow plant species were identified on-site. The shoreline habitat was determined to be highly disturbed and ruderal in nature. The area did not support a viable Montane meadow habitat capable of supporting listed or special status plant species.

A search the yellow pine habitat, particularly areas with rocky soils or outcrops identified one of the three CNPS List 1B plant species (Bear Valley woollypad) as occurring on the Project site. The other two potentially occurring special-status plant species (Big Bear Valley milkvetch and southern yellow jewelflower) were not observed and are presumed absent.

All but one, Bear Valley phlox, of the observed special-status species are confined to the western portion of the Project site. In addition, impacts to CNPS List 1B or 2 species special status plants, not listed as threatened or endangered (Section IV. B.4.) would generally not meet the CEQA threshold for mandatory findings of significance. As indicated previously, on-site and off-site mitigation is sufficient to mitigate impacts to the ashy-grey Indian paintbrush to less than significant levels both on a project specific and cumulative basis. Impacts to other special status plant species is similarly reduced to less than significant levels. When considered in connection with the development of the cumulative projects, the impacts of the Project on special status plant species are less than significant.

A total of 50.72 acres of Jeffrey pine forest, including 13.81 acres of open Jeffrey pine forest, would be impacted by Project implementation. Approximately 58,526 acres of Jeffrey pine forest occurs in the San Bernardino National Forest and 141,604 acres in the Cleveland, San Bernardino, Angeles and Los Padres National Forests, collectively. Approximately 4.2 acres of open Jeffrey pine forest will be permanently preserved by a conservation easement. Impacts on this vegetation type would be considered cumulatively less than significant since this vegetation type is common throughout the San Bernardino Mountains and other mountain ranges in the region.

A total of 4.0 acres of ruderal lake shoreline would be impacted by Project implementation. Man-made lakes are essentially distinct ecosystems, with an aquatic fauna and flora that bears little resemblance to what naturally occurs in the streams that formed them. Impacts on this vegetation type would be considered less than significant. A total of 2.82 acres of disturbed vegetation in developed areas (SR-38) would be impacted by Project implementation. Impacts on this vegetation type would not be considered significant since this vegetation type is considered to have a low biological value.

In summary, when considered in conjunction with the other cumulative projects, the Project would add incrementally to the cumulative significant impact on the bald eagle.

Accordingly, cumulative impacts to the bald eagle are considered significant and unavoidable.

D. CUMULATIVE IMPACTS

CEQA Guidelines Section 15130 requires identification of related projects, both public and private, that together with a proposed project could have cumulative impacts on the environment. There are several development projects in the general vicinity of the Project that may produce a cumulative impact on the community. These projects may produce community-wide and area-wide cumulative impacts related to traffic, noise, and air quality, in addition to various site-specific impacts.

Project contributions to cumulative impacts are “considerable” when viewed in connection with the effects of past, current, and “probable future projects.” The County of San Bernardino and City of Big Bear Lake have identified 12 development projects, in addition to the Project, that are either pending or recently approved, or in process of being

constructed within the Project area. These “cumulative” projects represent a total of 128 SFR, 133 MFR, 1 Cony Store/Gas Station/Residence, 2 Apartments, 61 Timeshares, 11,500 square foot Conference Center, and an Animal Park. If approved and constructed, these projects could introduce an additional 866 residents into the Big Bear Valley. This estimate is based on an average household size of 2.31 persons per household for standard single-family units based on data from the federal census.

Findings concerning cumulative impacts related to Geology and Soils, Public Safety, and Cultural Resources are contained within these individual impact sections above. In addition, findings related to cumulative impacts for other environmental impacts are also contained within individual impact sections above. However, this section includes comprehensive, detailed findings on cumulative impacts to (1) Aesthetics/Light and Glare; (2) Air Quality; (3) Biological Resources; (4) Hydrology and Water Quality; (5) Land Use and Planning; (6) Noise; (7) Public Services; (8) Traffic and Circulation; and (9) Utilities.

The evaluation of cumulative impacts has shown that all impacts associated with the Project can be reduced to less than significant levels except for Biological Resources, due to impacts to the bald eagle. When considered in conjunction with the other reasonably foreseeable cumulative projects, the Project would add incrementally to the cumulative significant impact to the bald eagle.

Aesthetics/Light and Glare

Build-out of the Project, together with cumulative projects, may alter the nature and appearance of the area and contribute to the loss of undeveloped areas. As development occurs in the Fawnskin area as well as the broader Big Bear Valley, residents and visitors in the area would notice the visual effects of development projects. Construction of currently approved and pending projects in the vicinity would permanently alter the nature and appearance of the area through the loss of undeveloped properties. Security and street lighting would introduce some light and glare to the area; however with adherence to development code requirements, these impacts can be minimized.

The significance of these visual/aesthetic changes is difficult to determine, since aesthetic value is subjectively determined and potential impacts are site-specific, and impacts are typically evaluated on a project-by-project basis. The County of San Bernardino identifies the Project site within a Scenic Resources (SR) Overlay District and SR-38 as a County Scenic Highway. The State of California has also designated this portion of SR-38 as a “Scenic Highway” and the U.S. Forest Service (USFS) has designated SR-38 as a “scenic byway.” The intent of the SR Overlay District is to “provide development standards that will protect, preserve, and enhance the aesthetic resources of the County.”

Thus, cumulative impacts in this area can be mitigated to less than significant levels by following the development standards of the SR Overlay District for building and structure placement, project design, access drives, landscaping, roads, undergrounding of utilities, grading and signs, in addition to the use of building materials that are consistent with the general character of the area, and proper lighting techniques to direct light on-site and away from adjacent properties. Although no mitigation measures were specifically

recommended to reduce cumulative impacts, Mitigation Measures A-1a through A-4f are required to further reduce the Project's impacts to Aesthetics/Light and Glare.

Project-specific impacts to Aesthetics/Light and Glare will be reduced to less than significant levels by the incorporation of mitigation measures, along with standard conditions and Conditions, Covenants & Restrictions (CC&Rs). Similarly, the Project's contribution to Aesthetics/Light and Glare is less than significant when considered in connection with cumulative projects and will not result in a significant cumulative impact.

Air Quality

Global climate change is an international phenomenon; the regulatory background and scientific data are changing rapidly. However, it is reasonable to apply the same requirements used for criteria pollutants; that significance is when a project results in a cumulatively considerable net increase of greenhouse gases (GHG). The following four-tiered approach was used to assess cumulative air quality impacts.

- Consistency with the South Coast Air Quality Management District (SCAQMD) project specific thresholds for construction and operation;
- Project consistency with existing air quality plans;
- Assessment of the cumulative health effects of the pollutants; and
- Cumulative impact of global climate change.

Cumulative Health Impacts

The South Coast Air Basin is in non-attainment for ozone, 10-micron or less particulate matter (PM₁₀), Fine particulate matter (PM_{2.5}), and Carbon monoxide (CO), which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect the health of sensitive individuals (i.e., elderly, children, and the sick). Therefore, when the concentration of those pollutants exceed the standard, it is likely that some of the sensitive individuals of the population experience health effects. The localized significance analysis demonstrates that during construction activities, no localized significance threshold was expected to be exceeded; therefore, the emissions of particulate matter, primarily in the form of fugitive dust, would not result in a significant cumulative health impact.

Long-term operational emissions are not expected to exceed SCAQMD's significance thresholds. Reactive organic gases (ROG) and Nitrogen oxides (NO_x) are precursors to ozone; and because ozone is a secondary pollutant (it is not emitted directly but formed by chemical reactions in the air), it can be formed miles downwind of the project site. Project emissions of VOC and NO_x may still contribute to the background concentration of ozone but such contributions would not be considered cumulatively considerable.

The combination of ozone and PM₁₀ can aggravate health effects. PM_{2.5} is a component of PM₁₀. The ambient air quality standard for both PM₁₀ and PM_{2.5} are exceeded in the Basin. Operational emissions of PM₁₀ and PM_{2.5} are not expected to exceed the regional significance threshold. Therefore, Project emissions may contribute to the background of

those pollutants, but such contributions would not be considered cumulatively considerable.

Long-term health effects from residential woodburning are not expected to create a significant impact. Implementation of Mitigation Measures AQ-3 and AQ-4 would create an environment where woodburning activities may contribute to the local wood smoke, but such contribution would not be considered cumulatively considerable. Thus, the Project's impact to Air Quality is less than significant when considered in connection with cumulative projects.

Greenhouse Gas (GHG) Emissions/Global Climate Change

The Project would not conflict with the attainment of the state's goals of reducing greenhouse gas emissions as dictated by AB 32. In addition, the Project will include design features that will further reduce the Project's contribution to global climate change. As such, the Project's potential to contribute considerably (either individually or cumulatively) to a global climate change impact through GHG emissions is less than significant.

Biological Resources

Significant and unavoidable impacts from development of the Project related to Biological Resources have been identified for impacts to bald eagle. Mitigation Measure BR-4 requires that eagle perch locations be preserved in place upon completion of the Project, and that any development that may occur within the Project site and in the individual lots must avoid impacts to trees larger than 24 inches dbh and their root structures.

Still, even with the implementation of Mitigation Measure BR-4 and the establishment of nearly 6 acres of Conservation/Open Space set aside, some trees will still need to be removed from the Project site to allow for the development of the 50 residential lots. This is considered a significant and unavoidable project-specific, as well as cumulative, impact.

Six special status plant species have been observed on the Project site: ash-gray Indian paintbrush; Parish's rock cress; Big Bear Valley woollypod; Bear valley phlox; purple monkeyflower; and silver-haired ivesia. Impacts to special status plants and plant communities will be reduced by implementation of Mitigation Measures BR-1a and BR 1b, which require creation of a 3.4-acre on-site conservation easement to preserve the Pebble Plain and a separate 1.98 acre conservation easement containing occupied Ashy-Gray Indian Paintbrush habitat, and creation of the 10-acre Dixie Lee Lane Pebble Plain Habitat conservation easement that will further mitigate impacts to Ashy-Gray Indian Paintbrush. Implementation of these Mitigation Measures will reduce impacts to plant species to less than significant levels. When considered in connection with the development of the cumulative projects, the impacts of the Project on special status plant species are less than significant.

A total of 0.69 acres of pebble plain like soil conditions occurs within the Project site. The Supplemental Focused Special Status Plant Species survey (August 29, 2010) concluded the soil conditions are not true pebble plain due to the lack of the two indicator species.

Although not considered a sensitive plant habitat and therefore, the Project will not result in a potentially significant impact due to modification of this area, Mitigation Measure BR-1a more than mitigates any impacts. Implementation of Mitigation Measure BR-1a would result in the preservation of an additional 10 acres of pebble plain habitat through the purchase of the off-site mitigation area. When considered in connection with the development of the cumulative projects, the impacts of the Project on pebble plain like soils are less than significant.

A total of 50.72 acres of Jeffrey pine forest, including 13.81 acres of open Jeffrey pine forest, would be impacted by Project implementation. Approximately 58,526 acres of Jeffrey pine forest occurs in the San Bernardino National Forest and 141,604 acres in the Cleveland, San Bernardino, Angeles and Los Padres National Forests, collectively. Approximately 4.2 acres of open Jeffrey pine forest will be permanently preserved by a conservation easement. Impacts on this vegetation type would be considered cumulatively less than significant since this vegetation type is common throughout the San Bernardino Mountains and other mountain ranges in the region.

A total of 4.0 acres of ruderal lake shoreline would be impacted by Project implementation. Man-made lakes are essentially distinct ecosystems, with an aquatic fauna and flora that bears little resemblance to what naturally occurs in the streams that formed them. Impacts on this vegetation type would be considered less than significant.

A total of 2.82 acres of disturbed vegetation in developed areas (SR-38) would be impacted by Project implementation. Impacts on this vegetation type would not be considered significant since this vegetation type is considered to have a low biological value.

In sum, when considered in conjunction with the other cumulative projects, the Project would add incrementally to the cumulative significant impact on the bald eagle. Accordingly, cumulative impacts to the bald eagle are considered significant. The Project would not result in a significant cumulative impact to any other biological resource.

Hydrology and Water Quality

For purposes of the drainage and water quality analysis, cumulative impacts are considered for projects in the same watershed as the project site, which would also drain into Big Bear Lake. The County of San Bernardino follows State standards for water quality. During construction, projects will be required to obtain coverage under the State's General Permit for Construction Activities that is administered by the California Regional Water Quality Control Board (RWQCB). The Project will obtain coverage under the statewide National Pollutant Discharge Elimination System (NPDES) permit for construction activities and develop and implement a Stormwater Pollution Prevention Program (SWPPP) to control erosion and protect water quality during the construction phase of the Project, as well as operate under an approved WQMP. The SWPPP must also implement other applicable BMPs as needed to keep pollutants away from stormwater. The SWPPP must also identify additional applicable measures taken during the storm season and when storms are anticipated.

It is assumed that any of the cumulative proposed projects would be required to comply with the same standards for urban runoff as outlined in the Santa Ana Region's NPDES Permit and Water Discharge Requirements, as a condition of approval. Each project would be required to prepare and implement a SWPPP for construction and a Water Quality Management Plan (WQMP) for long-term conditions after construction. Therefore, with adherence to the requirements of each project's respective NPDES permit and SWPPP requirements, no cumulative impacts would occur as a result of the Project.

Land Use and Planning

Development of the site under the Project would not result in any cumulative significant land use impacts. The Project involves a request for a General Plan Amendment from Rural Living—40 (minimum 40-acre lot sizes) (RL-40) to Single Family Residential with 20,000-square-foot minimum lot sizes (RS-20M). Upon approval of the General Plan Amendment, the Project will be developed consistent with the goals and policies of the Bear Valley Community Plan and the San Bernardino National Forest Land Use Management Plan and does not conflict with any applicable Habitat Conservation Plan (HCP) or any Community Conservation Plan.

The current land use designation of the Project site, RL-40, is a remnant of the previous General Plan. It appears that subsequent development on adjacent and nearby private properties in the Fawnskin community has converted to a higher density on a tract by tract basis, and now the Project site is bordered on the west, northwest and southeast by development with a typical residential lot density of 7,200 square feet or greater. Thus, the Project will have a lower density than other residential uses in the immediate area.

It is assumed that as other projects are implemented in the area, each new project will undergo the same review process as the Project, in order to preclude potential land use compatibility issues and planning policy conflicts. It is further assumed that cumulative development will progress in accordance with the City of Big Bear Lake and County of San Bernardino General Plan and Development Code, and that each individual project would be analyzed independent of other land uses, as well as within the context of existing and planned developments, to ensure that the goals, objectives and policies of the General Plans are consistently upheld. Thus, the Project's impacts on Land Use and Planning are less than significant when considered in connection with cumulative projects, and will not result in a significant cumulative impact.

Noise

Implementation of the Project, when combined with development of cumulative projects, would contribute to ambient noise levels in the vicinity. This increase would be due to both vehicular traffic noises along local roadways; noise associated with boating activities on the lake; and stationary noise sources from residences and other proposed land uses. The Project is required to reduce noise impacts to comply with County noise standards and to adhere to Development Code and General Plan requirements. Development of the project site would not contribute to ambient noise in excess of County noise standards and, therefore, does not contribute to a significant cumulative noise impact.

The evaluation of noise impacts is typically determined on a project-by-project basis in order to focus mitigation on a particular noise source. As such, future development proposals within the County would require separate discretionary approval and CEQA assessment, which would address potential noise impacts and identify appropriate attenuation measures where appropriate. Thus, the Project's contribution to Noise is less than significant when considered in connection with cumulative projects, and will not result in a significant cumulative impact.

Public Services

The Project site is located in an area that is served by existing public services. Service providers have indicated that the Project's incremental impacts can be sufficiently mitigated through various fire protection measures, design features, an Emergency Operations plan, implementation of mitigation measures and the payment of development impact fees and property taxes by future homeowners. Therefore, the Project would not result in a significant impact to Public Services when considered in connection with cumulative projects and will not result in a significant cumulative impact.

Traffic and Circulation

The Project would generate approximately 51 trips during AM peak hours, 51 trips during PM peak hours, and a total of 479 daily trips. The San Bernardino County Congestion Management Program (CMP) does not require analysis for projects that generate less than 250 peak hour trips; however, a long-range traffic analysis has been prepared for the Project. A total of 17 cumulative projects were identified by the County of San Bernardino and City of Big Bear staff as affecting the study intersections. Other developments are projected to generate 15,111 trip-ends per day, with 1,455 vehicles per hour during the AM peak hour and 1,455 vehicles per hour during the PM peak hour.

For 2010 With Project traffic conditions, including traffic generated by cumulative projects, no new traffic signals are projected to be warranted as compared to 2010 Without Project conditions. The following study area intersections are currently operating at an unacceptable level of service during both Friday PM and Sunday mid-day peak hours:

Big Bear Blvd (SR-18) (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- Big Bear Blvd (SR-18) (EW)

These intersections will continue to operate at unacceptable levels without improvements, but will improve to acceptable levels with the addition of traffic signals with no significant impact due to the Project.

For General Plan Buildout With Project Conditions, the following study area intersections would operate at an unacceptable level of service during both Friday PM and Sunday mid-day peak hours without improvements:

Big Bear Blvd (SR-18) (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- North Shore Drive (SR-38) (EW)

Stanfield Cut Off (NS) at:

- Big Bear Blvd (SR-18) (EW)

Driveway #1 (NS) at:

- North Shore Drive (SR-38) (EW)

Driveway #2 (NS) at:

- North Shore Drive (SR-38) (EW)

Traffic improvements are needed for existing conditions and projected conditions whether or not this Project is implemented. If needed improvements are installed, implementation of this Project will not significantly reduce the level of service off-site. Nevertheless, fair share costs for off-site improvements have been calculated in the amount of \$99,320 and will be paid as required by Mitigation Measure T-2.

The installation of on-site improvements as required by Mitigation Measure T-1, and the payment of fair share costs of improvements to impacted off-site roadway intersections will reduce traffic and circulation impacts related to the Project to a less than significant level. According to the traffic study, all study intersections are expected to operate at a level of service C or better during peak hours for the scenario analyzed with improvements installed. Other cumulative projects would also presumably be subject to fair share costs for necessary intersection improvements; thus, when considered in connection with cumulative projects, the Project's cumulative impact on traffic and circulation is less than significant and will not result in a significant cumulative impact.

Utilities

The Project site is located in an area that is served by utilities and has its own water wells on-site that, when developed, will be turned over to the Department of Water and Power (DWP) or to administer. Although water service is not presently provided to the project site, the site is immediately adjacent to the Fawnskin Water System, which is owned and operated by the Big Bear Lake Department of Water and Power (DWP). DWP has conducted a Water Feasibility Study and has provided a conditional will-serve letter to the

Applicant. DWP and County CSA 53C entered into an Outside Service Agreement for potable water services providing consent for DWP to serve the Project site. At its November 18, 2015 meeting, San Bernardino County LAFCO approved an exemption to Government Code Section 56133 to allow DWP to serve the Project site.

The DWP Water Feasibility Study calculates the Water Demand for the Project (50-lot subdivision) as:

- 250 gallons per day per connection x 50 lots = 12,500 gallons per day;
- 12,500 gallons per day x 365 days/year = 4,562,500 gallons per year; and
- 4,562,500 gallons per year is equal to 14 acre-feet per year.

The Water Supply for the Project's 14 acre-feet per year demand will come from two groundwater basins. Based on two separate reports prepared by Geoscience in 2000 and 2003, the annual groundwater recharge for Subarea A of the North Shore Subunit is between 14 and 44 acre-feet per year. In order to be as conservative as possible, the minimum recharge of 14 acre-feet per year will be utilized for Subarea A. There are also existing private wells that withdraw their water supply from Subarea A. "Private Wells Production" within Subarea A is 5 acre-feet per year. Subtracting the 5 acre-feet from the minimum recharge for Subarea A of 14 acre-feet leaves 9 acre-feet available to supply the Project. Existing Project Well FP-2 is capable of pumping the 5.6 gallons per minute that will produce the 9-acre-feet per year from Subarea A and will also produce the Maximum Day Demand of 15.27 gpm.

The remaining 5 acre-feet of Project Demand will be supplied from the Grout Creek Groundwater Subunit, Subarea D. Well FP-4, which was drilled by the developer in the northwest corner of the project site, will produce the 5 acre-feet per year, which is 3.1 gallons per minute. Geoscience (2003) reports the groundwater recharge of Grout Creek Subarea D to be between 32 and 99 acre-feet per year, with a midpoint of 66 acre-feet per year. At present, the only groundwater production in this subarea is from 11 private wells and is calculated to be 3 acre-feet per year. The additional 5 acre-feet per year of pumping from Well FP-4, combined with the existing 3 acre-feet per year of pumping, results in 8 acre-feet per year of total pumping, well below the low end of the recharge for Subarea D, which is 32 acre-feet per year.

The third existing, on-site well, FP-3, located to the east of the FP2 well, would not be equipped nor pumped, but will be used as a monitoring well to record groundwater levels.

In summary, the Project demand is 14 acre-feet per year. Well FP-2 is capable of producing 5.6 gallons per minute, which is 9 acre-feet per year from North Shore Subunit, Subarea A, and Well FP-4 will produce the 3.1 gallons per minute, which is 5 acre-feet per year from Grout Creek Subunit, Subarea D. Impacts to groundwater levels from pumping from FP-2 and FP-4 will be less than significant, with implementation of Mitigation Measure U1-b, which establishes annual groundwater production limits for FP-2 as 9 acre-feet per year, and FP-4 as 5 acre-feet per year, and implementation of Mitigation Measure U1-c, which stipulates that the grant deeds transferring ownership of Wells FP-2, FP-3 and FP-4

must include the pumping and extraction limitations included in Mitigation Measure U-1b. In addition, if the water purveyor desires to extract groundwater from Well FP-2 in excess of 9 acre-feet per year, the purveyor must conduct an independent environmental analysis and consider potential impacts at that time. Therefore, there is sufficient water available to serve the Project, and the impacts in regard to water supply for the project are considered less than significant with mitigation, when considered in connection with the development of other cumulative projects.

In addition to project design features and standard conditions and uniform code requirements that will be incorporated into the Project, Mitigation Measures U-1 through U-3 will be implemented to further mitigate utility impacts in the areas of solid waste, wastewater, natural gas, and electricity to the maximum extent feasible, which are less than significant with mitigation. Therefore, the Project would not add incrementally to a significant cumulative impact to utilities when considered in connection with the development of other cumulative projects and will not result in a significant cumulative impact.

Cumulative Impact Summary

The evaluation of cumulative impacts has shown that all impacts associated with the Project can be reduced to less than significant levels except for Biological Resources, due to impacts to the bald eagle. When considered in conjunction with the other reasonably foreseeable cumulative projects, the Project would add incrementally to the cumulative significant impact to the bald eagle.

E. PROJECT ALTERNATIVES

Section 7 of the 2004 DEIR analyzed the following five alternatives to Original Proposed Project, and evaluated these alternatives for their ability to meet the Project's goals and objectives. CEQA Guidelines Section 15126.6 requires consideration of alternatives to the Original Proposed Project. In this section, the Original Proposed Project is evaluated against a range of alternatives, including the Project (referred to below as the "Proposed Alternative Project"). CEQA requires the EIR include in its evaluation a No Project Alternative. Additionally, CEQA requires an EIR to describe a range of reasonable alternatives to the Project, which would feasibly attain the basic Project objectives, but would avoid or substantially lessen any of the significant environmental effects of the proposal. Thus, in order to develop a range of reasonable alternatives, the Project objectives must be considered when the County evaluates the alternatives.

The Original Proposed Project identified the following objectives:

- Provide up to 92 single-family residential lots to be developed as custom lots in the future;
- Establish single-family residential lots that are part of a planned development;
- Realign State Route 38 (SR-38) to improve the design of the roadway. More specifically, eliminate existing sharp curves of the roadway to minimize conflicts

on SR-38 and Project access roads. The proposed roadway realignment would also create the opportunity for lakefront residential lots; and

- Provide marina facilities for residents of Moon Camp to access Big Bear Lake.

1. No Project/No Development Alternative

CEQA requires that a specific “No Project” alternative shall be evaluated along with its impacts compared to the proposed project. The “No Project” analysis essentially evaluates existing conditions on the site. Under this alternative, existing uses on the property would remain as is and the site would not be developed. Assuming that the site remains undeveloped, all significant project-specific impacts will be avoided. However, according to CEQA, if the environmentally superior alternative is the “No Project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Finding: Based on the entire record, the County finds that the No Project Alternative would not fulfill any of the identified Project objectives. The No Project Alternative is not consistent with the primary project objectives, which are to provide single family residential lots to be developed with custom homes and to realign SR-38 to allow lakefront homes and a private marina for homeowners use. The No Project Alternative will not fulfill any of the Project objectives and therefore it is determined to be infeasible. This alternative is rejected.

2. No Project/Existing Designation Alternative

Implementation of the No Project/Existing Designation Alternative would be in accordance with the existing Official Land Use District Rural Living-40 (40-acre minimum lot size). At 62.43 acres, the site could be developed with up to 1.5 residential lots. This Alternative would be less intensive than the Original Proposed Project. Approximately three persons (1.5 housing units x 2.31 persons/household) would be added to the population of the Community of Fawnskin. It is further noted that in addition to a single-residential structure, other uses can be allowed including those in the “Additional Uses” section of the County Development Code, subject to a Conditional Use Permit.

Finding: Based on the entire record, the County finds that the No Project/Existing Designation Alternative would not fulfill any of the identified Project objectives. The No Project/Existing Designation Alternative would substantially decrease the intensity of the

environmental impacts associated development of the Original Proposed Project. By not realigning SR-38, the project site would maintain the majority of its existing visual character. The No Project/Existing Designation Alternative would substantially reduce all environmental impacts associated with the Original Proposed Project. However, this Alternative does not meet the objectives established for the Original Proposed Project, which are to provide a marina, realign SR-38 to allow lakefront homes and up to 92 single-family residential lots that would ultimately be developed with custom homes. Although the No Project/Existing Designation Alternative would in no way fulfill the project objectives, it is considered to be an environmentally superior alternative because it would

eliminate the significant unavoidable impacts associated with the Original Proposed Project. The No Project/Existing Designation Alternative will not fulfill any of the Project objectives and therefore it is determined to be infeasible. This alternative is rejected.

3. Reduced Density Without Road Alignment and Without Marina Alternative

For the Reduced Density, Without Road Realignment and Without Marina Alternative, development of 62 residential lots and associated infrastructure would occur on the north side of the existing SR-38. SR-38 would not be realigned and no residential development would occur to the south of the highway. The land area south of SR-38, along the lakefront, would be retained in its current state. Approximately 143 persons (62 housing units x 2.31 persons/household) would be added to the population of the Community of Fawnskin.

Finding: Based on the entire record, the County finds that the Reduced Density Without Road Alignment and Without Marina Alternative partially meets the project objectives but does not meet the primary objectives for the Project. The Reduced Density, Without Road Realignment and Without Marina Alternative would decrease the intensity of the environmental impacts associated with the proposed construction and operation of the Original Proposed Project. By not realigning SR-38, with this Alternative, the site would maintain the existing forested nature and visual character south of SR-38. Views of the Lake and mountain ranges would be retained from SR-38 and from uses to the east and west of the project site. This Alternative does not meet the primary objectives for the proposed Project, to provide a marina facility and realignment of North Shore Drive in order to improve the design of the roadway, which would also allow for lakefront lots to be developed. Therefore, this Alternative partially meets the project objectives, but falls short with only 62 residential lots, no realignment of SR-38 to create lakefront lots and no marina. This alternative is rejected.

4. Reduced Density Utilizing Proposed Project Redesign Alternative

For the Reduced Density, utilizing the proposed Project Redesign Alternative, development of 66 residential lots and associated infrastructure would occur on the project site and SR-38 would be realigned. Under this Alternative, 45 lots would be developed north of the repositioned SR-38, and 21 lots would be developed on the south of the highway. This Alternative would include a marina facility, with 72 boat slips. Approximately 153 persons (66 housing units x 2.31 persons/household) would be added to the population of the Community of Fawnskin.

Finding: Based on the entire record, the County finds that the Reduced Density, utilizing the proposed Project Redesign Alternative does not meet the primary objectives for the Original Proposed Project, which proposes 92 single-family residential custom lots. This Alternative would decrease the intensity of the environmental impacts associated with the construction and development of the Original Proposed Project. This Alternative would involve decreased residential densities to the south of SR-38, views of Big Bear Lake and the distant mountain ranges from SR-38 would be less obstructed, when compared to the Original Proposed Project. The Reduced Density, With Project Redesign Alternative would

reduce but not eliminate all environmental impacts associated with the Original Proposed Project. However, this Alternative only partially meets the project objectives, but falls short with only 66 residential lots. This Alternative is rejected.

5. Proposed Project Alternative.

The Proposed Project Alternative is the subdivision of the site into 58 lots, 50 numbered lots (residential lots) to be sold individually and developed into custom homes and 8 lettered lots, two would be designated as Open Space/Conservation easement; one would be designated as Open Space/Conservation and Neighbor Lake Access easement; three are the well sites; one would be potentially developed for an on-site reservoir, and one would be developed as the marina parking lot with a boat ramp. The Marina lot also includes some open space for the preservation of existing trees; however, because of the development of the parking lot and boat ramp, the lot would not be considered Open Space. Differences between the Original Proposed Project, the Proposed Project Alternative include the following:

- The Tentative Tract Map has been revised to reduce the number of lots from 95 lots to 58 lots by: 1) proposing larger lot sizes (minimum 20,000-square-foot lots—BV/RS-20M); 2) eliminating all residential development along the shoreline; and 3) creating three distinct conservation areas—one covering a portion of the shoreline south of SR-38 (this lot includes Neighborhood Lake Access), the other two encompassing the Ashy Gray Paintbrush habitat and bald eagle perches on the west end of the site. A third lettered lot consists of the parking lot/boat launch ramp, which also includes some open space, but because of the proposed use, cannot be referred to as Open Space/Conservation. Finally, there are three lettered lots for the existing water well sites and one lettered lot for the potential reservoir site. In addition, a 10-acre off-site pebble plain habitat would be purchased and dedicated as an off-site Conservation Easement.
- The request for a General Plan Amendment has been revised to reflect the larger minimum lot size and to re-designate the site from BV/RL-40 (minimum lot size 40 acres) to BV/RS-20M (minimum lots size 20,000 square feet) instead of the Original Proposed Project's BV/RS (minimum lot size 7,200 square feet).
- The proposed marina has been moved from the lake shore near the west side of the site to the east side of the site, and the size of the marina has been reduced from 103 slips to 55 slips, to reflect the proposed reduction in the number of residential lots to be developed. For the proposed marina parking lot, direct access from SR-38 is required, whereas under the Original Proposed Project, access to the marina parking lot was from private street A.
- The realignment of a segment of SR-38 has been deleted from the Proposed Alternative Project and no changes in the SR-38 configuration are now proposed. Because the road segment would not be realigned, the proposed removal of approximately 665 trees of the 2,760 trees identified on site would not occur. The incidence of tree removal to develop lots would also be reduced because larger lot sizes would allow homebuilders greater options in siting the homes to avoid trees.

No direct access to SR-38 from individual lots is proposed. Access to individual lots would be from the proposed public streets (A and B). Also, with the deletion of all lakefront residential lots south of SR-38, the need for five points of ingress/egress from the south side has been reduced to two for the marina parking lot, to allow traffic through the marina parking lot to flow. Residents' access from the project site north of SR-38 has been reduced from three streets to two, with the third street shown on the original site plan now proposed to be used for emergency access only.

Finding: Based on the entire record, the County finds that the Proposed Project Alternative does not fully meet the objectives established for the Original Proposed Project. The Proposed Project Alternative would result in reduced impacts to each environmental impact issue and is environmentally superior compared to the Original Proposed Project. The Proposed Project Alternative includes only 50 residential lots instead of 92; it proposes only 55 marina boat slips, and it would not realign SR-38 and create lakefront lots. However, it will meet the objective of establishing a single-family residential subdivision on the project site that would be developed with custom homes and will also provide a marina for homeowner use as originally planned. While several of the alternatives are environmentally superior to the Original Proposed Project, the Proposed Project Alternative is the preferred alternative and the environmentally superior alternative for the following reasons:

- The Proposed Project Alternative has the fewest number of residential lots, and the largest minimum lot size, with 12 of the lots over 1 acre in size;
- The Proposed Project Alternative includes 6.2 acres for conservation/open space and 10 acres of off-site Pebble Plain habitat would be preserved through a Conservation Easement. In addition, an area with the easternmost drainage that will be set aside for southern rubber boa habitat;
- The Proposed Project Alternative lessens the impacts of each impact area, and reduces significant impacts to Aesthetics Air Quality, and Water Supply to less than significant levels; and
- The Proposed Project Alternative would reduce the impacts to the greatest extent practicable, while maintaining a sound and fiscally feasible project.

Therefore, the Proposed Project Alternative is preferred and environmentally superior alternative. This Alternative is chosen.

VI. GROWTH INDUCING IMPACTS

CEQA requires a discussion of ways in which a Project could be growth inducing. This topic is discussed in Section 6.3 of the 2010 RRDEIR. CEQA Guidelines Section 15126.2(d) requires the evaluation of growth-inducing impacts of a proposed project. This discussion must address ways a project could encourage economic and population growth, or construction of additional housing in the surrounding area, either directly or indirectly.

Also required is a discussion of project characteristics, which may encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Growth inducement can take many forms. A project can remove barriers, provide access, or eliminate other constraints, which encourage growth that has already been approved and anticipated through the General Plan process. The “planned” growth would be reflected in land use plans that have been developed and approved with underlying assumptions that adequate supporting infrastructure will be built. This is perhaps best described as accommodating or facilitating growth, but for the purpose of this section, the term “inducing” is used.

Implementation of the Project would result in the development of up to 50 residential lots. Using the City of Big Bear Lake average household size multiplier of 2.31 persons per household, the Project has the potential to increase Fawnskin’s population by approximately 115 persons at buildout, or approximately 100 less than under the Original Proposed Project (92 Lots). The potential population growth under the Project represents an approximate 28 percent increase over the Community’s permanent population estimate of 409 persons (2000) and an approximately 8 percent increase over the Community’s peak weekend/holiday period population of 1,428 persons. Implementation of the Project, like the Original Proposed Project, would be considered growth inducing inasmuch as it would result in the construction of additional housing, consequentially fostering population growth.

However, based on the findings of the Environmental Impact Analysis (Section 4 of the Revised and Recirculated Draft EIR), the Project would not require the extension of new infrastructure, since infrastructure is available adjacent to the project site, and utility providers have indicated the ability to serve the site.

Overall, development under the Project would not require the substantial development of unplanned/unforeseen support uses and services. As a result, the Project would not result in significant growth-inducing impacts.

VII. STATEMENT OF OVERRIDING CONSIDERATIONS

In accordance with CEQA Guidelines Section 15093 and other applicable law, the County has, in determining whether or not to approve the proposed project, balanced the economic, social, technological, and other project benefits against its unavoidable environmental risks. The County of San Bernardino has determined that the significant unavoidable adverse project impacts related to the bald eagle, which may remain after mitigation, are acceptable and are outweighed by specific social, economic and other benefits of the project. In making this determination, the following factors and public benefits were considered as overriding considerations to the identified unavoidable significant adverse impacts of the proposed project:

- The proposed project provides a standard of quality that is considered appropriately matched with the quality of the physical environment and surroundings of Big Bear Lake and the San Bernardino mountain region.’
- The proposed project provides 50 single-family housing units in the community of Fawnskin. The proposed project fulfills the Bear Valley Community Plan’s Housing Element’s fundamental goal of providing a wide variety of housing opportunities to meet the needs of all economic segments of the community.
- The proposed project retains and protects the existing mountain character of the community, an identified goal of the Bear Valley Community Plan, by preserving viewsheds of the lake and leaving harmonious open spaces conservation areas. For example, the proposed project designates 6.2 acres to habitat, open space, and conservation areas, as well as the perpetual protection and maintenance of designated habitat areas on site and a 10-acre off-site parcel comprised of pristine pebble plain habitat. In addition, the proposed project designates nearly an acre to neighborhood lake access. The proposed project does not include any residential development along the lakeshore, conserving the scenic beauty of the lakeshore.
- The proposed project has a lower density than other residential uses in the immediate area. The proposed project, therefore, diversifies the housing types, lot sizes and density ranges available within the community.
- The proposed project will promote significant economic development within the community, including construction jobs, increased recreation, and increased tourism. As identified by the Bear Valley Community Plan, the local economy is driven by recreation and tourism. Construction and real estate sales, once a significant segment of the Bear Valley economy, has been hard hit by the recession and general lack of high quality building sites. The proposed project will add 50 high quality lake view building sites and provide jobs during both the construction of the streets and related infrastructure as well as later construction of individual custom homes. Custom home construction takes place over a number of years and greatly benefits the smaller local entrepreneurial contractors which further enhances the local economic benefits.
- The proposed project will result in increased revenue to the community as a result of property taxes and development impact fees generated by the proposed residential development. The increase in revenue will be utilized to provide enhanced public services.
- Mitigation Measures proposed in the FREIR provide for avoidance of direct impacts to the Bald Eagle through habitat restoration and avoidance of active nesting locations.

The County of San Bernardino, as the Lead Agency and having reviewed the FEIR and public records, adopts this Statement of Overriding Considerations, which has balanced the benefits of the Project against its significant unavoidable adverse impacts in reaching a decision to approve the Project.

VIII. CERTIFICATION OF EIR

The City finds that it has reviewed and considered the Final EIR evaluating the proposed Project; that the Final EIR is an accurate and objective statement that fully complies with CEQA and the State CEQA Guidelines; and that the Final EIR reflects the independent judgment of the County of San Bernardino. The County declares that no new significant information as defined by the State CEQA Guidelines section 15088.5 has been received by the County after circulation of the Draft EIR that would require recirculation. The County certifies the Environmental Impact Report based on the following findings and conclusions:

1. Findings:

a) CEQA Compliance: As the decision-making body for the Project, the County has reviewed and considered the information contained in the Findings and supporting documentation. The County determines that the Findings contain a complete and accurate reporting of the environmental impacts and mitigation measures associated with the Project, as well as a complete and accurate reporting of the unavoidable impacts and benefits of the proposed Project as detailed in the Statement of Overriding Considerations. The County finds that the EIR was prepared in compliance with CEQA and that the County complied with CEQA's procedural and substantive requirements.

b) Independent Judgment of Lead Agency: The EIR for the Project reflects the County's independent judgment. The County has exercised independent judgment in accordance with *Public Resources Code* section 21082.1(c)(3) in retaining its own environmental consultant, and directing the consultant in the preparation of the EIR. The City has independently reviewed and analyzed the EIR and accompanying studies and finds that the report reflects the independent judgment of the County of San Bernardino.

c) Significant Unavoidable Impacts/Statement of Overriding Considerations: The Project would have the potential for creating significant adverse impacts. These significant adverse environmental impacts have been identified in the EIR and will require mitigation as set forth in the Findings. Significant adverse impacts which cannot be mitigated to a less than significant level after mitigation include impacts to the Bald Eagle, as discussed in the Findings. The County has eliminated or substantially reduced environmental impacts where feasible as described in the Findings, and the County determines that the unavoidable significant adverse impacts to the Bald Eagle are acceptable due to the reasons set forth in the preceding Statement of Overriding Considerations.

2. Conclusions:

- Except as to those impacts stated above relating to Bald Eagles, all other significant environmental impacts from the implementation of the proposed Project have been identified in the EIR and, with implementation of the mitigation measures identified, will be mitigated to a less than significant level.
- Alternatives to the proposed Project, which could potentially achieve the basic objectives of the proposed Project, have been considered and rejected in favor of the proposed Project.

- Environmental, economic, social, and other considerations and benefits derived from the development of the proposed Project override and make infeasible any alternatives to the proposed Project or further mitigation measures beyond those incorporated into the proposed Project.

IX. ADOPTION OF MITIGATION MONITORING AND REPORTING PROGRAM

Pursuant to Public Resources Code section 21081.6, the County of San Bernardino as the Lead Agency hereby adopts the Mitigation Monitoring and Reporting Program attached to these Findings. In the event of any inconsistencies between the mitigation measures as set forth herein and the Mitigation Monitoring and Reporting Program, the Mitigation Monitoring and Reporting Program shall control.

X. APPROVAL OF THE PROJECT

Based on the entire record before the County of San Bernardino, including the above Findings and Statement of Overriding Considerations and all written and oral evidence presented to the County, the County of San Bernardino as the Lead Agency hereby approves the Project with all the mitigation measures and the Mitigation Monitoring and Reporting Program, as set forth in these findings.

XI. LOCATION AND CUSTODIAN OF RECORD

These documents and other materials that constitute the record of proceedings on which the County of San Bernardino as the Lead Agency has based the Findings contained herein are located at the County of San Bernardino, 385 North Arrowhead Avenue, San Bernardino, CA 92415. The custodian for these documents is Matthew Slowik, Senior Planner, Land Use Services Department for the County of San Bernardino. This information is provided in compliance with Public Resources Code §21081.6(a)(2) and State CEQA Guidelines §15091(e).

EXHIBIT F

GPA and TTM Findings

The applicant proposes to amend the General Plan Land Use Designation from Bear Valley/Rural Living - 40 acres (BV/RL-40) to Bear Valley/Single Family Residential (BV/RS – 20,000) on 62.43 Acres. Also proposed is Tentative Tract Map No. 16136 which will create 50 single-family residential lots with a minimum lot size of 20,000 square feet, an average lot size of 39,000 square feet and a range of lot sizes from 20,000 square feet to 2.7 acres (the “Project”).

FINDINGS - GENERAL PLAN AMENDMENT. [SBCC 86.12.060]

1. The proposed GPA is internally consistent with all other provisions of the General Plan and the Bear Valley Community Plan.

Consistency: The amendment is consistent with and will further the objectives, goals and policies of the County General Plan and the Bear Valley Community Plan and will not obstruct their attainment as indicated in Finding No. 9, below, and based on the evidence contained in the Project’s supporting documents.

2. The proposed GPA would not be detrimental to the public interest, health, safety, convenience, or welfare of the County.

Consistency: The amendment facilitates a Project that has incorporated appropriate conditions of approval and mitigation measures to protect and enhance public health, safety and welfare. The public interest will be served in that the Project will generate increased revenue to the community as a result of increased property taxes and development impact fees, resulting in enhanced local public services; the Project will promote significant economic development within the local community, including construction jobs, increased recreation and increased tourism, all of which support local businesses such as recreation/retail establishments, building supplies and materials establishments, as well as eating and lodging establishments; the Project, in providing lower density development than the existing residential development in the immediate area, will diversify the housing types, lot sizes and residential densities available within the community; the Project formally sets aside valuable habitat for the protection of the most sensitive biological resources by means of the establishment of conservation easements on both on-site and off-site lands; the Project formally establishes public access to the north shore of Big Bear Lake and conserves the scenic beauty of the lakeshore viewshed.

3. The proposed land use zoning district change is in the public interest, therefore will be a community benefit, and other existing and allowed uses will not be compromised.

Consistency: The Project will provide housing opportunities on 50 residential lots while maintaining the goals and policies of the County General Plan and the Bear Valley Community Plan. Existing and allowed uses in the area will not be compromised by the development of the Project site as proposed. The proposed Project retains and protects the existing mountain character of the community, an identified goal of the Bear Valley Community Plan, by preserving viewsheds of the lake and leaving harmonious open spaces and conservation areas. In addition, the Project designates nearly an acre to neighborhood lake access, does not include any residential development along the lakeshore, conserving the scenic beauty of the lakeshore, and has a lower density than other existing residential uses in the immediate area. The Project will also promote significant economic development within the community, including construction jobs, increased recreation and increased tourism.

- 4. The proposed land use zoning district change will provide a reasonable and logical extension of the existing land use pattern in the surrounding area.**

Consistency: The Project site is located with existing residential development to the north, northwest and southeast. Existing SR-38 will provide vehicular access to the Project site and all necessary public services and infrastructure are available.

- 5. The proposed land use zoning district change does not conflict with provisions of the Development Code.**

Consistency: The Project site conforms to the size and location criteria specified for the Single Residential land use district and all other applicable Development Code requirements.

- 6. The proposed land use zoning district change will not have a substantial adverse effect on surrounding property.**

Consistency: The Project includes appropriate mitigation measures and conditions of approval to ensure County performance standards are met and that the project will not have an adverse effect on the surrounding property.

- 7. The affected site is physically suitable in terms of design, location, shape, size, operating characteristics, and the provision of public and emergency vehicle (e.g., fire and medical) access and public services and utilities (e.g., fire protection, police protection, potable water, schools, solid waste collection and disposal, storm drainage, wastewater collection, treatment, and disposal, etc.), to ensure that the proposed or anticipated uses and/or**

development will not endanger, jeopardize, or otherwise constitute a hazard to the property or improvements in the vicinity in which the property is located.

Consistency: The site has been conditioned to ensure adequate water and wastewater needs of the Project have been met. Fire protection will also be provided by the County Fire Department, which has reviewed the Project and provided appropriate conditions of approval. The Project will have sufficient permitted solid waste storage and landfill capacity to accommodate the Project's solid waste disposal needs. The County has evaluated drainage associated with the Project and determined that impacts will be less than significant with the implementation of specified conditions of approval.

- 8. The Environmental Impact Report (EIR) adequately describes the environmental impacts that will result from the proposed Project and reflects the County's independent judgment.**

Consistency: The EIR determined that all impacts will be less than significant with mitigation measures, with the exception of impacts to the Bald Eagle. A Statement of Overriding Consideration is offered to address this impact. Appropriate mitigation measures have been incorporated for all other impacts into the Conditions of Approval and into the Mitigation Monitoring and Reporting Program. This will ensure that all other impacts are reduced to a level of non-significance.

- 9. The Project is consistent with the following specific General Plan and Bear Valley Community Plan Goals and Policies:**

General Plan

- a. Goal M/CO 1. Preserve the unique environmental features of the Mountain Region including native wildlife, vegetation and scenic vistas.

Consistency: On-site and off-site conservation areas are proposed which preserve unique environmental features affecting native wildlife and vegetation. The scenic vistas of Big Bear Lake are preserved by the removal of all originally-proposed lakefront residential development.

Policy M/CO 1.2. Protect scenic vistas by minimizing ridgeline development that would substantially detract from the scenic quality of major ridgeline viewsheds.

Consistency: The proposed project site is at a lower elevation than the existing residential development and National Forest land to the north. No major ridgelines will be affected by the proposed development.

- b. Goal M/CO 2. Maintain the health and vigor of the forest environment.

Consistency: The proposed Project sets aside approximately 6.2 acres of the site for Open Space, Neighborhood Lake Access and Conservation Easements in three lettered lots, plus another lettered lot designated for the marina parking lot. In addition, a 10-acre off-site pebble plain habitat currently owned by the Moon Camp property owner would be dedicated as a Conservation Easement. With no residential development along the lakeshore, the scenic beauty of the lakeshore is conserved. In addition, the use of the property's shoreline as Open Space/Conservation to preserve willow flycatcher habitat, and to minimize the number of trees that would be removed, would continue to provide habitat for a number of bird and mammal species that currently use the site.

- c. Goal M/CO 3. Conserve and protect surface and groundwater resources to meet the needs of a growing mountain population, to support the mountain environment and forest watershed and to preserve the quality of life for mountain residents and visitors.

Consistency: The County has prepared a number of studies to determine the level of service and infrastructure required of the Project, including Water and Sewer Feasibility Studies and a Traffic Impact Analysis, as well as an updated Focused Traffic Impact Analysis (2016). These studies show that the Project can provide water service for future residential development of the 50 lots via two on-site domestic wells (the third on-site well is a monitoring well) and that there is capacity within the existing sewer and wastewater treatment system to accommodate 50 new residential lots. Domestic potable water services will be provided by the City of Big Bear Lake, Department of Water and Power. The TIA also shows that with implementation of design improvements and the payment of the Applicant's fair share of road/signal infrastructure, impacts on Traffic and Circulation would be less than significant.

- d. Goal M/CO 5. Preserve the dark night sky as a natural resource of the Mountain Region.

Consistency: The project will comply with development code regulations pertaining to dark night sky protection and safety standards.

Bear Valley Community Plan

Goal BV/LU 1. Retain the existing mountain character of the community.

Consistency: The proposed residential development, with a minimum lot size of 20,000 square feet, and average lot size of 39,000 square feet are significantly larger than the existing residential development of 7,200 square foot lots and will not detract from the community character, areas with highly sensitive visual resources are not developed for residential uses, conservation areas are established to protect the most valuable biological resources within the Project area and the waterfront will become accessible to the public.

Policy BV/LU1.1. Require strict adherence to the Land Use Policy Map unless proposed changes are clearly demonstrated to be consistent with the community character;

Consistency: The proposed residential development, with a minimum lot size of 20,000 square feet, and average lot size of 39,000 square feet are significantly larger than the existing residential development of 7,200 square foot lots and will not detract from the community character, areas with highly sensitive visual resources are not developed for residential uses, conservation areas are established to protect the most valuable biological resources within the Project area and the waterfront will become accessible to the public.

Policy BV/LU1.2. In recognition of the community's desire to preserve the alpine character and protect the area's natural resources, project's that propose to increase the density of residential land uses... should only be considered if the following findings can be made:

- A. That the change will be consistent with the community character. In determining consistency, the entire General Plan and all elements of the community plan shall be reviewed.

Consistency: The proposed development, with a minimum lot size of 20,000 square feet, and average lot size of 39,000 square feet are significantly larger than the existing residential development of 7,200 square foot lots and will not detract from the community character and is compliant with all other aspects of the Community Plan.

- B. That the change is compatible with surrounding uses, and will provide for a logical transition in the plan area's development. One way to accomplish this is to incorporate planned development concepts in the design of projects proposed in the area.

Consistency: The proposed residential development, with a minimum lot size of 20,000 square feet, and average lot size of 39,000 square feet are significantly

larger than the existing residential development of 7,200 square foot lots and will be compatible with the existing surrounding land uses in the area.

- C. That the change shall not degrade the level of services provided in the area, and that there is adequate infrastructure to serve the additional development that could occur as a result of the change. Densities should not be increased unless there are existing or assured services and infrastructure, including but not limited to water, wastewater, circulation, police and fire, to accommodate the increased densities.

Consistency: All infrastructure, public facilities and services are available to serve the Project.

Policy BV/LU 1.3. Regulate the density of development in sloping hillside areas in order to reduce fire hazards, prevent erosion, and to preserve existing vegetation and the visual qualities of the plan area. One method this can be accomplished is by requiring adherence to the following hillside development standards required by the Fire Safety Overlay:

- A. Residential density: the density of a development for any tentative parcel map or tentative tract map in sloping hillside area shall be in accordance with the following criteria:
- i. One to four (1-4) dwelling units per gross acre on slopes of zero to less than 15% (0 - <15%);
 - ii. Two (2) dwelling units per gross acre on slopes of fifteen to less than thirty percent (15 - <30%);
 - iii. One (1) dwelling unit per three (3) gross acres on slopes of greater than thirty percent (30%) gradient.

Consistency: The Slope Analysis indicates that the Project could yield 142 dwelling units pursuant to the slope/density criteria established herein. The Project is only proposing 50 units.

Goal BV/CI 1. Ensure a safe and effective transportation system that provides adequate traffic movement while preserving the mountain character of the community.

Consistency: Traffic and Circulation are discussed in detail in Section 4.8 of the 2010 RRDEIR and confirmed in the 2016 Focused Traffic Impact Assessment. Mitigation measures incorporated into the Project design will ensure a safe and effective transportation system that provides adequate traffic movement while still preserving the mountain character of the community.

BV/CI 1.4. Preservation and protection of sensitive habitats shall have priority over road location, relocation or realignment, when other practical alternatives are available.

Consistency: Road locations have avoided sensitive habitats to the greatest extent practical.

BV/CI 1.6. Minimize the traffic load on mountain major highways and mountain secondary highways by requiring projects to minimize direct access to these main circulation roads.

Consistency: No residential lots front on or gain access from SR38.

Goal BV/CI 5. Ensure adequate water sources and associated infrastructure to serve the needs of existing and future water users in the Bear Valley Community Plan area.

Consistency: The County has prepared a number of studies to determine the level of service and infrastructure required of the Project, including Water and Sewer Feasibility Studies and a Traffic Impact Analysis, as well as an updated Focused Traffic Impact Analysis (2016). These studies show that the Project can provide water service for future residential development of the 50 lots via two on-site domestic wells (the third on-site well is a monitoring well) and that there is capacity within the existing sewer and wastewater treatment system to accommodate 50 new residential lots. Domestic potable water services will be provided by the City of Big Bear Lake, Department of Water and Power. The TIA also shows that with implementation of design improvements and the payment of the Applicant's fair share of road/signal infrastructure, impacts on Traffic and Circulation would be less than significant.

Policy BV/CI 5.1. Through the development review process, permit new development only when adequate water supply exists or can be assured.

Consistency: Water supply and service has been confirmed by the City of Big Bear Lake, Department of Water and Power.

Goal BV/CO 1. Preserve the unique environmental features of Bear Valley including native wildlife, vegetation and scenic vistas.

Policy BV/CO 1.6. Allow no more than 2 dwelling units per gross acre in "Known Day Use Area" eagle habitat and up to 4 dwelling units per gross acre in "Potential Day Use Areas" eagle habitat.

Consistency: The Project proposes less than one dwelling unit per gross acre.

Policy BV/CO 1.7 Construction and other building-related activities shall be restricted from December 1 through April 1 within "Known Day Use Area" eagle habitat.

Consistency:

Goal BV/OS 4. Ensure protection of lakes within the plan area and their role in meeting the recreation needs of locals and visitors

Policy BV/OS 4.3. Protect access to Big Bear Lake from the north shore.

Consistency: No lakefront residential development is proposed. Public access to the lake is provided.

FINDINGS: TENTATIVE TRACT MAP 16136 [SBCC Section 87.02.060]

1. **The proposed map, subdivision design, and improvements are consistent with the General Plan, any applicable community plan, and any applicable specific plan,** because the Project allows orderly residential development and as it is consistent with the following goals of the County General Plan:

Goal LU 1.2. The design and siting of new development will meet locational and development standards to ensure compatibility of the new development with adjacent land uses and community character.

Goal Implementation: The subdivision is to allow a development of the 50 residential lot community as an extension of residential uses North and West of the Project site.

In addition, Finding No. 1 for the General Plan Amendment, above, is incorporated herein by reference as thought fully set forth herein.

2. **The site is physically suitable for the type and proposed density of development site,** because the tract map includes adequate setbacks and access roads.
3. **The design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat,** because, except as to those impacts related to Bald Eagles, all significant environmental impacts from the implementation of the Project,

including biological resources, have been mitigated to a less than significant level with the implementation of appropriate mitigation measures. The Project's design and mitigation measures will provide for avoidance of direct impacts to the Bald Eagle through habitat restoration and avoidance of active nesting locations.

4. **The design of the subdivision and type of improvements are not likely to cause serious public health problems**, because the site location, the subdivision design, and the density proposed are such that hazards from flood, fire, noise and other potential public health hazards are minimal with the implementation of the proposed conditions of approval and mitigation measures.
5. **The design of the subdivision or the type of improvements will not conflict with easements acquired by the public at large for access through or use of, property within the proposed subdivision** because the recorded map will require all necessary public rights of easements to be shown. The development will provide legal and physical access to the site with proper documentation of those access rights. The conditions of approval shall require that any easement conflicts be resolved and that statements of concurrence be provided from utility companies, whose easements may be affected by the proposed development prior to recordation.
6. **The discharge of the sewage from the proposed subdivision into the community sewer system will not result in violation of existing requirements prescribed by the California Regional Water Quality Control Board**, because the proposed homes will connect existing sewer facilities, which is in compliance with the Regional Water Quality Control Board.
7. **The design of the subdivision provides, to the extent feasible, passive or natural heating and cooling opportunities** because the proposed lots will provide adequate building setback guidelines for the land use. In addition the future residences can add roof top solar as an accessory use.
8. **The proposed subdivision, its design, density and type of development and improvements conforms to the regulations of the Development Code and the regulations of any public agency having jurisdiction by law**, because the size and shape of the proposed lots are adequate for the type of residential development proposed, and appropriate agencies (including County Surveyor, County Public Works, County Fire, County Environmental Health Services, County Building and Safety, County Special Districts and LAFCO) have all reviewed and approved the Project design, the proposed conditions and the mitigation measures. The access roads, sewer and water service lines to all proposed parcels currently exist and any required modifications to these are required to be bonded prior to recordation and to be constructed prior to final inspection of any new construction on the new lots.