
5.0 ALTERNATIVES TO THE PROJECT

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5.1 INTRODUCTION

CEQA Guidelines Section 15126.6 (a) states that an environmental impact report shall describe and analyze a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The purposes of this process are to provide decisionmakers and the public with a discussion of viable development options, and to document that other options were considered within the application process.

This section identifies and examines the following range of alternatives:

- Alternative 1 - No Project
- Alternative 2 - Alternative Sites
- Alternative 3 - Alternative Aggregate Source
- Alternative 4 - Restricted Hours of Operation

Discussion of these alternatives focuses on substantial changes in project impacts anticipated with each alternative when compared with the project. Environmental impacts associated with each of these alternatives are compared with impacts resulting from the project. At the conclusion of this section, an “environmentally superior” alternative is identified.

5.2 ALTERNATIVE 1 - NO PROJECT

PRINCIPAL CHARACTERISTICS

The No Project alternative would involve the denial of all requested actions for the project. These include the rezone, the use permit for the quarry and the plants, the use permit for the truck repair shop and outdoor sales area, and the approval of the reclamation plan. The project site would remain in its current state, which includes the current land uses outlined in the Project Description, and no additional improvements would be made on the parcel.

Requirements for asphalt, concrete and other materials that would be provided by the proposed project would not be made available under the No Project alternative. Such materials would have to be provided by other sources. Some of these sources may be local, but others may be located farther away, particularly sources for asphalt. Transportation from these more distant sources would be required to satisfy local demands.

If the No Project alternative was implemented, the project site would become available for another activity. The current zoning of the parcel does permit heavy industrial uses. Considering the surrounding land uses, another heavy industrial activity would most likely locate on the site. However, what specific industry would locate there is not known; hence, it is impossible to evaluate the potential impacts of an alternative industrial use.

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COMPARATIVE IMPACTS

Aesthetics. The No Project alternative would not alter any existing visual resources, nor would it construct any structures that could be considered visually unappealing. Unlike the proposed project, however, the No Project alternative would not require a thicker natural screen between SR 89 and the site. Thus, motorists on SR 89 would still be able to see the existing structures and landscape on the site.

Air Quality. The No Project alternative would have no negative impacts on air quality in the vicinity.

Biological Resources. The No Project alternative would have no negative impacts on biological resources in the vicinity.

Geology and Soils. Since no new structures would be constructed under the No Project alternative, there would be fewer structures and workers within them subject to potential seismic and other geologic hazards. With no quarrying of the escarpment, landslide hazards would not increase.

Hazards and Hazardous Materials. No new hazardous materials would be introduced onto the site under the No Project alternative. The fire hazard would be the same as under the proposed project.

Hydrology and Water Quality. The No Project alternative would have no impacts on water usage or water quality in the vicinity. The potential flood hazard on the site and downstream would likely not change.

Noise. The No Project alternative would have no impacts on the existing noise environment in the vicinity of the project site. However, if more distant sources of materials must be used, this could increase truck traffic on roadways connecting the source to where the materials are needed, increasing noise levels along these roadways correspondingly.

Recreation. The No Project alternative would have no negative impacts on recreational facilities in the vicinity.

Other Impacts. The acceleration and deceleration lanes at the project site entrance, which are part of the proposed project, would not be constructed under the No Project alternative. Therefore, traffic safety on the portion of SR 89 at the entrance would be less than under the proposed project, although the significance of this decrease is not known. The loss of the lanes may be compensated by no increase in truck traffic.

With no zoning change, the entire parcel would become available for industrial uses. This may make it possible for a larger industrial activity, with significant environmental impacts, to locate on the site. However, such an occurrence is speculative, and potential impacts cannot be reasonably described without more specific information.

5.3 ALTERNATIVE 2 - ALTERNATIVE SITES

PRINCIPAL CHARACTERISTICS

The Alternative Sites alternative proposes a scenario in which the crushing and screening operation, the concrete batch plant, the asphalt plant and the outdoor sales area are located at other sites. The quarry would be permitted to operate at the site of the proposed project. Products from the quarry would be transported to the location of the plants for processing.

For this analysis, two sites have been selected as potential locations for the crushing and screening operation and the plants. Both locations have been designated for industrial activities by the Shasta County General Plan and other applicable plans, and both have potential space for additional activities. The two sites are:

- 1) The R&M Industrial Center, located west of and adjacent to Cassel Road approximately 1½ miles south of SR 299. Industrial activities are located both on and adjacent to the site, including Packway Materials to the south. Residences, including a mobile home park, are located in the vicinity. This alternative site is located adjacent to a mineral resource area designated by the County General Plan.
- 2) The industrial zone east of and adjacent to Black Ranch Road northeast of Burney. West of this site, and adjacent to Black Ranch Road, is a PG&E customer service center. The Burney Wastewater Treatment Plant is located north of the site. East of the site is the Burney Mountain Power biomass-fueled power plant and the proposed location of the Three Mountain Power Plant.

While both sites appear to have sufficient space to accommodate additional industrial activities, the actual availability of such spaces is not known. It is possible that no vacant land is available for the plants, in which case this alternative would not be feasible. For the purposes of this analysis, it is assumed that land is available at these sites to accommodate the proposed plants.

COMPARATIVE IMPACTS

R&M Industrial Center

Aesthetics. The industrial center area is located on a mostly grassy area with a rise to an area with some trees. The plants would be located on currently vacant land and would be visible from Cassel Road. The view from Cassel Road may be considered displeasing to some people, especially since there is no natural screening along the road. If the construction of the plants at this site is considered to have a negative impact on visual resources, the planting of trees and shrubs may be required. More vegetation may have to be planted at this site than at the proposed project site.

Air Quality. The air quality impacts generated by the plants would be transferred to the industrial

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center area; thus, air quality impacts would be less at the proposed project site. However, the negative impacts of plant operations could affect residents and workers in the vicinity of the industrial center. Impacts from quarry operations would be the same as under the proposed project.

Biological Resources. The plants would be located further away from known bald eagle and osprey habitat, so their impacts on these species would diminish. The impact of quarry operations on these species would remain the same as under the proposed project. It is not known if there are any jurisdictional wetlands on the industrial center site. Therefore, the impacts of this alternative on wetlands are not known.

Geology and Soils. Some faults that have been active within the last 10,000 years are in the vicinity of the industrial center, although they are not as close to the center as one fault is to the proposed project. Thus, ground shaking hazards at the center are similar to those at the proposed project site, although potentially not as severe. Other potential seismic hazards, such as liquefaction and landslides, are not significant at the center. Erosion hazards at the center are not significant.

Hazards and Hazardous Materials. Impacts under this alternative are similar to those under the proposed project, except that more residential areas could potentially be exposed to hazardous materials due to accidental spillage on Cassel Road.

Hydrology and Water Quality. Since the crushing and screening operation would be removed from the proposed project site, no wash water from the operation would be discharged and percolate into the aquifer beneath the site. The impacts of plant operations on groundwater beneath the center site are uncertain, because the groundwater hydrology is not known. No surface streams are in the immediate vicinity.

Noise. Noise impacts in the vicinity of the proposed project site would be reduced, as no plants would be located there. However, residents in the vicinity of the industrial center may be subjected to increased noise levels.

Recreation. No impacts on recreational facilities would occur under this alternative.

Other Impacts. Increased truck traffic on Cassel Road may occur under this alternative. While the road currently handles truck traffic from activities in and around the industrial center, the additional truck traffic generated by the plants could accelerate deterioration of the roadway, as well as increase safety hazards. In addition, more traffic would pass through the intersection of Cassel Road and SR 299, potentially increasing safety hazards there.

Black Ranch Road

Aesthetics. The plants would likely be screened from the view of motorists on SR 299, especially if the plants are located in the northern portion of the industrially designated area. Existing vegetation along SR 299 may be adequate to screen all structures. Additional vegetation or other

means of screening can be implemented if necessary.

Air Quality. Impacts would be similar to those at the industrial center. Since the plants would be in an industrial area at the edge of the community of Burney, the potential exposure of residents to emissions would likely be more limited than at the industrial center.

Biological Resources. Impacts would be similar to those at the industrial center.

Geology and Soils. The site is not located near an Alquist-Priolo EFZ; therefore, hazards from ground shaking would be less than under the proposed project. No other significant geologic or soil impacts are likely to occur.

Hazards and Hazardous Materials. Impacts would be similar to those at the industrial center, except that there would be limited exposure of residents to potential hazardous material spills, but more exposure of workers.

Hydrology and Water Quality. Impacts would be similar to those at the industrial center. Again, groundwater hydrology at the Black Ranch Road site is not known; therefore, potential impacts cannot be stated with certainty.

Noise. Noise impacts in the vicinity of the proposed project site would be reduced, as no plants would be located there. Since there are very few residents in the vicinity of the Black Ranch Road site, there would be less of a noise problem for residents than at the industrial center.

Recreation. Impacts would be similar to those at the industrial center.

Other Impacts. Increased truck traffic on Black Ranch Road may occur under this alternative. While the road currently handles truck traffic from the PG&E center, the additional truck traffic generated by the plants could accelerate deterioration of the roadway, as well as increase safety hazards. Also, sections of Black Ranch Road currently experiencing little truck traffic may carry significantly more, potentially contributing to accelerated deterioration of these sections. More traffic would pass through the intersection of Black Ranch Road and SR 299, potentially increasing safety hazards there.

The Three Mountain Final Staff Assessment, Part 1, indicates that two residential developments are proposed in the vicinity of the Black Ranch Road site. One development, approximately 300 acres in size, is proposed northwest of the site adjacent to Black Ranch Road. The other, slightly larger in acreage, is located south of the site across SR 299. Both of these developments are currently on hold. However, if these developments are eventually constructed, there could be conflicts between these residential uses and operations of the plants.

The significance of the conflicts would depend upon the actual form of both residential and industrial development that occurs, if any, in the Black Ranch Road vicinity. Since the actual form of

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development is not known, a discussion of potential impacts would be speculative.

5.4 ALTERNATIVE 3 - ALTERNATIVE AGGREGATE SOURCE

PRINCIPAL CHARACTERISTICS

The Alternative Aggregate Source alternative proposes the scenario that no quarry would be permitted on the proposed project site. Instead, material would be brought onto the site from other sources. The crushing and screening operation, the plants and the outdoor sales area would remain on the proposed project site.

According to a 1997 study prepared by the State Division of Mines and Geology, the nearest aggregate mine to the project site is the Braden Sand Pit and quarry, located approximately 2½ miles east. The Braden Sand Pit produces material of Portland cement concrete grade and of asphaltic concrete grade. No larger grade of material is apparently produced. The only existing developed source of asphalt concrete grade material in the Burney Basin is Hidden Valley Aggregate, located just north of Brush Mountain. This mine is operated by a competitor of Hat Creek Construction, and thus would not be a likely source of material. However, other sources could be developed along areas of exposed basalt along fault escarpments similar to the bluff located on the project site. Other aggregate mines are located throughout eastern Shasta County. They include the Jack Rabbit Flat Lava Rock mine southwest of Burney, which produces asphaltic concrete aggregate, and the Blue Sand Pit and Six Mile Hill Cinder Pits south of Fall River Mills. The latter two mines produce base aggregate.

COMPARATIVE IMPACTS

Aesthetics. Since there would be no quarry operations, impacts on the escarpment would be eliminated under this alternative. Other potential impacts would be the same as those under the proposed project.

Air Quality. Emissions generated by quarry operations would be eliminated under this alternative. However, emission from other operations would remain the same. This alternative may generate additional truck traffic, which would increase the amount of emissions from this source.

Biological Resources. Impacts on biological resources caused by quarry operations would be eliminated under this alternative. However, any impacts caused by other operations would remain.

Geology and Soils. Impacts under this alternative would be similar to those under the proposed project, except that the potential landslide hazard may decrease as a result of no quarry operations.

Hazards and Hazardous Materials. Impacts under this alternative would be similar to those under the proposed project.

Hydrology and Water Quality. Impacts under this alternative would be similar to those under the proposed project.

Noise. Noise levels generated from onsite activities would be reduced under this alternative, since there would be no quarry operations. However, noise from truck traffic may increase as material is brought onto the site for processing.

Recreation. Impacts under this alternative would be similar to those under the proposed project, except that impacts generated by quarry operations would be eliminated.

Other Impacts. Truck traffic would most likely increase under this alternative, as more shipments from outside aggregate sources would be needed to support plant operations. Many of the other potential sources of material are accessible by local or County roads which may not be constructed to support increased truck traffic. Thus, this alternative could have an impact on road conditions and traffic safety on these local roads.

5.5 ALTERNATIVE 4 - RESTRICTED HOURS OF OPERATION

PRINCIPAL CHARACTERISTICS

The Restricted Hours of Operation alternative is similar to the proposed project, except that the proposed operations would be limited to certain hours of the day. The hours to which operations would be restricted would be 7:00 a.m. to 7:00 p.m., which generally correspond to the daytime hours set forth in the Noise Element of the Shasta County General Plan. Since the CNEL noise measurement factors in increased noise sensitivity from the hours of 7:00 p.m. to 10:00 p.m., the hour of 7:00 p.m. was selected as the latest hour of operations. All other features of this alternative are the same as those of the proposed project.

COMPARATIVE IMPACTS

Aesthetics. Impacts under this alternative would be similar to those under the proposed project.

Air Quality. Impacts under this alternative would be similar to those under the proposed project, except that there may be lower average daily emissions due to the fewer hours of operation per day. However, the proposed operations may have to work extra days to satisfy customer demands; therefore, emissions may occur on more days under this alternative.

Biological Resources. Impacts under this alternative would be similar to those under the proposed project.

Geology and Soils. Impacts under this alternative would be similar to those under the proposed project.

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Hazards and Hazardous Materials. Impacts under this alternative would be similar to those under the proposed project.

Hydrology and Water Quality. Impacts under this alternative would be similar to those under the proposed project, except that more water may be used as a result of operations possibly working more days to satisfy customer demands.

Noise. Impacts under this alternative would generally be similar to those under the proposed project. However, the proposed operations may have to work extra days to satisfy customer demands; therefore, noise may occur on more days under this alternative.

Recreation. Impacts under this alternative would be similar to those under the proposed project.

Other Impacts. Under this alternative, the proposed operations may have to work extra days to satisfy customer demands, more days than under the proposed project. Therefore, truck traffic on those extra work days would increase accordingly.

5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As required by CEQA, the environmentally superior alternative is identified. The No Project alternative is determined to have the fewest impacts on the physical environment. Unlike the other alternatives, the No Project alternative would generate no adverse environmental impacts. However, the No Project alternative would not meet any of the objectives of the proposed project.

Under CEQA Guidelines Section 15126.6 (e)(2), if the environmentally superior alternative is the no-project alternative, then another environmentally superior alternative must be identified. Alternatives 2 and 3 would reduce or eliminate some of the adverse environmental impacts of the proposed project in the vicinity of the project site. However, in many cases, these adverse impacts would be moved to another location. Alternative 4 would reduce many of the adverse impacts of the proposed project without relocating them. Therefore, Alternative 4, Restricted Hours of Operation, is considered the environmentally superior alternative after the No Project alternative. However, as discussed earlier, Alternative 4 may spread potential adverse environmental impacts over a greater period of time than the proposed project.