

*Issues (and Supporting Information Sources):*

**III. AIR QUALITY** -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporation</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SETTING**

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently to affect air quality.

The project area includes the Burney Falls, Bowman Ditch, and Ahjumawi property, and the McArthur Swamp and Glenburn Dredge Site located in Shasta County at the extreme northern end of the Sacramento Valley Air Basin (Sacramento Valley). Sacramento Valley includes Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba counties, the western portion of Placer County, and the eastern portion of Solano County. The Sacramento Valley Air Basin has been divided into two planning areas, the Northern Sacramento Planning Area and the Broader Sacramento Planning Area. The northern area covers seven counties including Shasta County.

The Klamath and Coastal Mountains flank Shasta County to the northwest, and the Cascade Mountains to the northeast and east. The topography of the area, coupled with the relatively calm winds and fairly stable atmospheric conditions create a high potential for significant air pollution in the area. Generally, the County experiences moderate to very poor capability to disperse pollutants, particularly in combination with persistent regional subsidence inversions (i.e.,

warmer air overlying cooler air), leading to conditions under which pollutant concentrations can accumulate.

Shasta County is currently designated attainment or unclassified for all national ambient air quality standards. The northern area of Sacramento Valley including Shasta County, called the Northern Sacramento Planning Area, is classified as a moderate non-attainment area for state ozone and PM-10 standards (California Air Resources Board, 2000). The Shasta County area is attainment or unclassified with respect to other state standards. The Shasta County Air Quality Attainment Plan, last updated in 1998, is the adopted ozone plan for the County. The plan contains control programs for stationary sources and transportation-related sources. Shasta County has also adopted an Air Quality element as part of its General Plan. The element contains a number of objectives and policies related to preservation and improvement of air quality. The element also describes a strategy to evaluate air quality impacts of projects and suggests a uniform method for applying mitigation measures in addressing the impacts.

The Shasta County Air Pollution Control District (SCAPCD) is the agency primarily responsible for implementing and enforcing air quality regulations in Shasta County. SCAPCD is also responsible for preparing air quality plans (or portions thereof) for its jurisdiction. SCAPCD regulates air quality through its permit authority over most types of stationary emissions sources and through its planning and review activities. The district exercises permit authority through its *Rules and Regulations*. There would be no emissions sources associated with the project that would be subject to the permitting requirements of the air district. Self-propelled construction equipment used in land grading, paving, leveling, digging or other similar operations are exempt from permit requirements of the APCD. However, certain rules apply to all projects, such as Rule 3.16 on fugitive, indirect or non-traditional sources, and Rule 3.15, which imposes restrictions on use of cutback and emulsified paving materials.

## AIR QUALITY IMPACT DISCUSSION

- a) As described earlier, the project is situated in an area for which air quality attainment plans for ozone have been developed that show how the area will achieve the state ozone standard. The ozone plan relies on both local air district stationary source control programs and statewide mobile source control programs. The plan also relies on assumptions regarding growth of population and employment in the area, but, since the project does not represent a land use development proposal nor would the project be growth-inducing, the project would not conflict with the plan's assumptions regarding population and employment.

The project involves the market appraisal, transfer and donation of certain lands to DPR and CWA. Proposed project activities also include the implementation of the MSMP and reopening of the Glenburn Dredge site car-top boat launch. Activities subsequent to transfer of lands would mainly be actions to improve, protect and create wildlife habitat, stabilize levees and improve vegetation and grazing management. These actions would be implemented over a period of five years following the land transfers. If and when these

activities are implemented, some physical disturbance of the area resulting from minor construction activities (e.g. levee stabilization and wetland creation) will occur. Construction activities would result in emissions from the use of mobile construction equipment and from generation of automobile trips to transport construction materials and workers. This would generate emissions of ozone precursors and carbon monoxide. However, the emissions standards established for construction equipment and on-road motor vehicles under statewide mobile source control programs are enforced on vehicle and engine manufacturers, rather than on the end-users of the equipment or vehicles. Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plan.

- b) The project would be located in a region that experiences occasional exceedances of the state ozone and PM-10 standards. Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>) under the influence of wind and sunlight. PM-10 is both a regional and local air pollutant since some sources, such as motor vehicle exhaust, are more regional in nature while others, such as construction activities, have a more local effect.

Actions subsequent to the transfer of lands would involve excavation and grading activities, which would cause minimal emissions of NO<sub>x</sub>, ROG, CO and PM-10 from construction equipment. Construction activities would temporarily affect pollutant concentrations in the project area primarily due to fugitive dust sources generated from earthmoving activities and vehicle travel over unpaved surfaces or paved surfaces heavily laden with earthen materials (e.g., from soil inadvertently spilled onto the traveled way). Fugitive dust emissions from construction activity will vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Soils within the McArthur Swamp tend to have a high silt content and are more inherently prone to generating large quantities of dust. In the absence of mitigation measures, there may be circumstances when project construction activities would result in significant quantities of dust, and as a result, local visibility and PM-10 concentrations could be adversely affected on a temporary and intermittent basis during the construction period.

To reduce this potentially significant effect to a less-than-significant level, the receiving parties (CWA and RMA) would adopt and implement Standard Mitigation Measures (SMMs), as a condition of approval of the grading permit, required by the SCAPCD. Implementation of these mitigation measures would reduce the chance that air quality standards would be violated in the vicinity of the project area or that visibility would be significantly affected during the construction period. This would also provide the basis for the project's compliance with SCAPCD Rule 3.16.

Therefore, with implementation of the required mitigation measures as described below, the project would not result in a significant effect on local pollutant concentrations.

**Impact III.1: Emissions from construction-related activities would cause a temporary increase in local particulate matter concentrations.**

**Mitigation Measure III.1: During construction the following measures shall be implemented to control fugitive dust and particulate emissions in compliance with SCAPCD SMMs. The SMMs shall be included as conditions of approval to the grading permit issued by the Shasta County Environmental Health Department and, as appropriate shall appear on the final construction plans submitted for the permit's approval. A copy of the grading permit shall be submitted to the CPUC's Mitigation Monitor prior to the commencement of ground disturbing activities.**

- **All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air quality standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.**
- **All areas (including unpaved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.**
- **All on-site vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.**
- **All land clearing, grading, earth moving, or excavation activities on the project site shall be suspended when winds are expected to exceed 20 miles per hour.**
- **All inactive portions of the development site shall be seeded and watered until a suitable grass cover is established.**
- **The contractor shall be responsible for applying non-toxic stabilizers (according to manufacturers specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours), in accordance with the Shasta County Grading Ordinance.**
- **All trucks hauling dirt, sand, soil or other loose material shall be covered or shall maintain at least two feet of freeboard in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.**
- **All material transported offsite shall be either sufficiently watered or securely covered to prevent a public nuisance.**
- **During initial grading, earth moving, or site preparation, the project shall be required to construct a paved (or dust palliative treated) apron, at least 100 feet in length, onto the project site from the adjacent paved road(s).**

- **Paved streets adjacent to the development site shall be swept or washed at the end of each day to remove excessive accumulations of silt and/or mud which may have accumulated as a result of activities on the development site.**
- **After construction, the transfer recipient shall re-establish ground cover on the construction site through seeding and watering in accordance with Shasta County Grading Ordinance.**

**Significance After Mitigation: Less than significant.**

- c) The project would be located within a multi-county area that is designated “non-attainment” for state ozone and PM-10 standards. The project would result in emissions of ozone precursors (ROG and NO<sub>x</sub>) and PM-10 [and its precursors (i.e., ROG, NO<sub>x</sub>, and sulfur oxides)] during the temporary construction phase which would be mitigated through the adoption of the standard mitigation measures required by the air district. The project would not generate emissions over the long-term during its operational phase. Therefore, over the long-term, the project would not result in cumulatively considerable net increases of non-attainment pollutants, or their precursors. And during the short-term, the net increase in non-attainment pollutants associated with construction would be reduced to a less-than-significant (and less than cumulatively considerable) level through implementation of standard mitigation measures required by the air district.
- d) There are no sensitive receptors in the immediate vicinity of the project area that would be affected by project emissions. The City of Burney is located approximately 20 miles southwest of the McArthur-Burney Falls Memorial State Park. The town of McArthur is located 6.5 miles immediately southwest of the Ahjumawi Lava Beds State Park and McArthur Swamp. Due to the distance separating the sensitive receptors from the project area where temporary emissions would occur, and due to the fact that transfer recipient would adopt the required SMMs to mitigate construction impacts, the potential for exposure of sensitive receptors to substantial pollutant concentrations would be less than significant. Over the long-term, there would be no emission sources associated with the project. Therefore, over the long-term, the project would not result in exposure of sensitive receptors to substantial pollutant concentrations.
- e) The project would not include the types of emissions sources or activities that are normally associated with odor impacts.

## REFERENCES

Shasta County Planning Division. 2000. Shasta County General Plan, Section 6.5: Air Quality.

Shasta County Air Quality Management District. 2001. Rules and Regulations.

Shasta County Air Quality Management District. 1998. Air Quality Attainment Plan.

California Air Resources Board. 2000. 2000 State and National Area Designation Maps of California.

Michael Kusson, 2001. Shasta County Air Quality Management District. Verbal Correspondence: May 2001.