

### Mitigation Measures

The mitigation measures for this alternative would be similar to the Proposed Action's measures F1, F2 and F3. Because of the reduced acreage of the NFSA subject to increased erosion and sedimentation, it is probable that the desilting/debris Basins A, B and C would be eliminated onsite, but basins would be added to drainages at the alternate sites. In fact, at least four and probably five basins would be needed if all areas are used. All impacts would be reduced to less than significant.

#### **3.2.3.7 Reduced Quantity Mining Concept Alternative Analysis**

##### Impacts

The Reduced Quantity Mining Concept Alternative reduces site exposure to surface erosion due to mining by approximately 24 acres, but does not change the number of debris basins required at the site. All of the flood prevention measures applicable to the Proposed Action would be applicable to this alternative (measures F1, F2, and F3); however, the actual placement of the debris basins would differ and would need to reflect potentially reduced runoff volumes.

##### Mitigation Measures

The mitigation measures for this alternative would be similar to the Proposed Action's measures F1, F2 and F3, reflecting adjustments for probable decreased runoff volumes. All impacts would be reduced to less than significant.

#### **3.2.4 Water Quality**

##### **3.2.4.1 No Action Alternative**

##### Impacts

No mining onsite would occur under the No Action Alternative, and no plan for erosion control would be implemented. Therefore, existing conditions onsite would eventually result in potential significant impacts on water quality in the Santa Clara River because of sedimentation from the unreclaimed quarry.

##### Mitigation Measures

Since no action would be taken, no mitigation would be required for this alternative, and potentially significant impacts on water quality would remain.

### 3.2.4.2 Reduced North Fines Storage Area Alternative Analysis

#### Impacts

The impact of this alternative on surface water quality would be essentially the same as for the Proposed Action. Because the area of disturbance by mining activity would be reduced by approximately 15 percent under this option, there would be a slightly reduced potential for erosion and sedimentation. However, all runoff from within the general area to be mined, including some natural areas, will pass through desilting/debris basins prior to discharge to natural drainages. No significant impacts will occur.

The potential for impacts on groundwater quality due to the Reduced NFSA Alternative was evaluated due to the increased depth of excavation. The final elevations of this alternative in Cut 3 would be 150 feet above and 1,500 feet away from the nearest point on the Santa Clara River. In comparison, in the Proposed Action, Cut 3 would be 300 feet above and 1,500 away from the nearest point on the Santa Clara River. This deeper cut would not be in the boundary of a groundwater basin, and the material to be excavated is a conglomerate which is a sedimentary rock formation. No additional impact over that of the Proposed Action is anticipated.

#### Mitigation Measures

Mitigation measures WQ1 through WQ 5 would all apply to this alternative. As with the Proposed Action, impacts would be reduced to less than significant.

### 3.2.4.3 Batch Plant Location Alternative Analysis

#### Impacts

The impact of this alternative would be similar to the Proposed Action but this alternative would include impacts at the Project Site as well as the alternative batch plant location. Stormwater Pollution Prevention, Spill Control and Countermeasures and drainage programs would need to be implemented for the alternative batch plant location as well as the Project site. The alternative batch plant location is at a lower elevation placing it in closer proximity to groundwater and to the Santa Clara River, which provides less protection with regard to water quality.

#### Mitigation Measures

Mitigation measures WQ1 through WQ5 would be implemented for this alternative. As with the Proposed Action, impacts would be reduced to less than significant under this alternative.

#### **3.2.4.4 Addition of Water/Reclaimed Water Alternative Analysis**

##### Impacts

The use of water from an outside source could introduce new or higher concentrations of water pollutants to the Project site. Imported water can be higher in chlorides and can contain possible biological components such as predators, competitors and parasites as compared to local water. Reclaimed water typically contains higher concentrations of total dissolved solids, chlorides, nitrates and ammonia. Therefore the use of imported or reclaimed water could result in increased impacts on water quality and on the unarmored threespine stickleback. Due to potential additional impacts related to imported water, water which does not meet local water standards or Basin Plan objectives may not be acceptable for use at the Project site.

##### Mitigation Measures

Mitigation measures WQ1 through WQ5 would be implemented for this alternative. An additional mitigation measures would be required under this alternative to ensure that the imported water is acceptable for use at the site. Impacts would be reduced to less than significant under this alternative, with the implementation of these mitigation measures.

#### **3.2.4.5 Product Transportation Alternative Analysis**

##### Impacts

The impact of this alternative on surface water quality would be similar to the Proposed Action. A Stormwater Pollution Prevention Plan, Spill Control and Countermeasures Plan and a drainage plan would need to be implemented for the rail loading location as well as the Project site.

##### Mitigation Measures

Mitigation measures WQ1 through WQ5 would be implemented for this alternative. As with the Proposed Action, impacts would be reduced to less than significant under this alternative, with the implementation of these mitigation measures.

#### **3.2.4.6 Alternative North Fines Storage Area Analysis**

##### Impacts

The impact of this alternative on surface water quality would be essentially the same as for the Proposed Action. Although the area of disturbance for the alternative NFSA would be increased under this option, additional debris basins would be provided for the alternate areas. All runoff from the alternative NFSA will pass through these debris basins prior to discharge to natural drainages. Therefore, no significant change in water quality impacts would occur.

### Mitigation Measures

Mitigation measures WQ1 through WQ5 would be implemented for this alternative. As with the Proposed Action, impacts would be reduced to less than significant under this alternative, with the implementation of these mitigation measures.

#### **3.2.4.7 Reduced Quantity Mining Concept Alternative Analysis**

##### Impacts

Although the area of disturbance by mining activity would be reduced under this option all runoff from within the general area to be mined, including some natural areas, will pass through desilting/debris basins prior to discharge to natural drainages. The impact of this alternative on surface water quality would be essentially the same as for the Proposed Action.

##### Mitigation Measures

Mitigation measures WQ1 through WQ5 would be implemented for this alternative. As with the Proposed Action, impacts would be reduced to less than significant.

#### **3.2.5 Noise**

##### **3.2.5.1 No Action Alternative**

##### Impacts

With the retention of the site as open space, there would be no mining activity and no associated noise impacts. Ambient noise levels onsite would remain unchanged for the foreseeable future. As other development occurs in the site vicinity, an incremental increase in offsite noise levels would result from additional traffic volumes. There would be no significant impacts of this alternative.

##### Mitigation Measures

No mitigation measures are required for the No Action Alternative.

##### **3.2.5.2 Reduced North Fines Storage Area Alternative Analysis**

##### Impacts

##### Construction Noise Impacts

Construction activities and noise sources related to the development of this alternative would be similar to the Proposed Action. The assumed construction noise level of 89 dBA at 50 feet from the source is applicable to this alternative. Based on the topography of the site and the distance