

VI. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The analysis of potential environmental impacts associated with projected future development for the 15-year planning period indicates that certain impacts may not be avoided. Although some impacts may be lessened to some extent through the implementation of mitigation measures, they cannot totally be eliminated. This section identifies the above mentioned adverse environmental impacts which cannot be avoided.

A. LAND USE

Large tracts of vacant open space, brush, and active and inactive agricultural land will be altered as a result of projected future development. Agricultural production will be lost.

B. VEGETATION, WILDLIFE AND AQUATIC ECOLOGY

Future development in the Study Area will require the removal of existing vegetation which in turn may displace wildlife. Vegetation such as forest, brush, and crops will be converted to residential, commercial, and industrial uses.

Four wild Lupine populations were identified within the Study Area. This plant species is the principal larval food source of the Karner Blue Butterfly, a species currently included on the state endangered species lists. These wild Lupine sites are not expected to be disturbed. However, it is anticipated that common animal species will be disturbed as a result of future development. It is expected that some of these species will be displaced to other undeveloped areas and some will be displaced outside the Study Area. Mortality rates may increase as a result of increased competition for habitat.

C. TRANSPORTATION

Significant increases in traffic are expected in the Study Area as a result of future development. While roadway improvements as proposed will reduce associated impacts, the overall traffic volume will increase.

D. AIR QUALITY

The volume of the traffic on Study Area roadways is expected to increase during the planning period. Based on the Carbon Monoxide Hot Spot Verification Model, the estimated carbon monoxide levels which are produced by gasoline and diesel emissions from vehicles are expected to increase during the 15-year planning period. While proposed roadway and signalization improvements could mitigate some of the impacts, carbon monoxide levels in the Study Area are still expected to increase.

E. VISUAL RESOURCES

Future development of currently undeveloped lands will change the aesthetic character of the landscape within the Study Area. While mitigation in the form of landscaping, berms, architectural styles, and cluster development techniques will lessen projected impacts, they will not eliminate the effects on existing visual resources. This is particularly evident within the Watervliet Shaker Historic District.