

7.0 | SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

INTRODUCTION

The following section provides information compiled on impacts that are found to significant and irreversible under the CGPU. Section 15126.2 (b) of CEQA Guidelines requires that the EIR discuss any significant impacts associated with the project. Section 15126.2 (c) of CEQA Guidelines requires that an EIR discuss “any significant irreversible environmental changes which would be involved in the proposed action should it be implemented”. Certain environmental impacts were found to be significant and irreversible, and will be described as short-term and long-term impacts.

LONG-TERM IRREVERSIBLE IMPACTS

Under the CGPU the current population of approximately 40,000 is expected to increase to 135,000 by 2035. Tripling the population within the Planning Area could affect many changes, including the built environment. Houses, commercial and business buildings, infrastructure, and increased use of natural resources could all experience changes under the proposed project. The visual environment would experience significant changes as the Planning Area would continue to support the project population growth. The construction of the existing environment under the CGPU would involve the commitment of energy, materials and human resources.

The commitment of energy, labor, and building materials would be commensurate with that of other projects of similar nature and magnitude. Land commitments would also be required to fulfill the vision of the CGPU, and create a permanent land loss replaced by structures to services the projected population. In addition to energy and building materials, labor would also be committed to the construction of buildings and infrastructure necessary to support the new development. The non-renewable labor to build and maintain the built environment would be considered energy that can no longer be used for any other purpose, and would commit itself to the development and monitoring of the project. The commitment of labor to implement the project would be a long-term and irreversible, as it cannot be regenerated, or prevented to implement the CGPU.

Energy consumption, and the permanent infrastructure needed for maintaining the Planning Area’s built environment as proposed by the CGPU would require extensive commitment from non-renewable energy sources including, natural gas, coal, and some electricity sources. The long-term uses and

implications of the energy resource consumption could create negative and significant environmental impacts, and would be irreversible upon implementation of the project.

In addition to energy consumption and land loss, other long term effects include traffic volumes and potential for congestion. This impact would affect noise within the Planning Area, increase of vehicle emissions, and increased infrastructure demand to service the increased vehicular traffic.

SHORT-TERM IRREVERSIBLE IMPACTS

Certain short-term irreversible impacts would take place upon implementation of the CGPU. The physical construction of the proposed built environment would require the extraction of enough resources to make the Planning Area habitable and thriving. The materials required to do so would include water; building materials such as steel, copper, sand, plastic, and chemical compounds. Once used, these materials are considered lost, and cannot be naturally regenerated. The source of such resources including quarries, rivers, or oil reserves, will experience a loss in natural materials. At the same time, the Planning Area will experience an increase in these materials that are not naturally conducive to the environment of the Planning Area and create synthetic aspects of the area. The impacts of using non-renewable resources could cause negative environmental impacts in the Planning Area, and from the sources of such materials.

During project implementation, the Planning Area may also experience significant levels of noise, dust, vehicular emissions, and other temporary impacts from construction of the proposed built environment. As the Planning Area develops, grading could also cause temporary erosion, especially along hillsides, where plant matter would normally prevent mudflows or top soil from shifting. Though these environmental impacts are temporary, the magnitude of the CGPU growth would cause significant irreversible impacts on short-term construction and implementation of the propose project. Greenhouse Gas