

9 IRRETRIEVABLE AND IRREVERSIBLE COMMITMENTS OF RESOURCES

Irreversible and irremediable resource commitments are related to the use of non-renewable resources and the effects that the use of those resources have on future generations. Irremediable resource commitments involve the loss in value of an affected resource (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site). The proposed project would constitute an irreversible or irremediable commitment of non-renewable or depletable resources, for the materials, time, money, and energy expended during activities implementing the project.

In the short term, construction activities would require the consumption of fossil fuel and energy, as construction requires equipment that would use fuel, either gasoline or diesel, to operate. Irreversible and irremediable commitments to resources would be unavoidable (i.e., resulting emissions would contribute to overall air quality of the region) but would be minor and temporary.

The proposed clearing of trees and vegetation in the expansion area of the Honouliuli WWTP property would constitute an irreversible and irremediable loss of natural resources; however, proposed landscaping plans are recommended to include native vegetation plantings throughout the project area to minimize this loss. As noted previously, although this area is currently vegetated, it is a disturbed site.

Construction activities would require the manufacturing and use of materials. Following construction, unused materials would be reused or recycled whenever possible. Materials that cannot be recycled at the end of the project lifetime would become an irreversible and irremediable commitment of resources. However, no supplies are considered scarce and thus would not limit other unrelated construction activities in the region. The packaging of construction materials that cannot be reused or recycled, as well as other waste generated during construction activities, would result in an irreversible and irremediable allocation of landfill or other solid waste disposal capacity.

It is anticipated that the project would have both beneficial and adverse effects on non-residential development and employment in the area. The proposed project would create demand for construction materials and services, and hence direct and indirect (mostly construction- and industrial-related) employment in the project area; however, the use of the additional acreage to provide for additional facilities within the expansion area north of the existing Honouliuli WWTP site may result in loss of long-term development opportunity for other industrial growth. Footprints within the expansion area would be minimized to the extent possible.

In the long term, the upgraded facility would require fossil fuels to generate the energy for heating, cooling and ventilation. However, upgrades would be constructed with modern equipment that incorporates greater efficiencies than those achieved at the existing facilities. Therefore, although irreversible and irremediable commitments of resources are unavoidable (i.e., using oil for energy production), these impacts are anticipated to be minimal. In addition, there is a potential for energy recovery from digester gas or by utilizing new emerging technology for gasification of sewage sludge. However, at this time, it is not known if the net energy consumption could be feasibly reduced to favorable levels through the implementation of new technologies that are emerging on the market.

Failure to implement the proposed secondary treatment upgrade would result in a failure to comply with the consent decree.