

## 29. Irreversible and Irretrievable Commitments of Resources

This chapter addresses irreversible and irretrievable commitments of resources. This category of loss typically applies to natural resources, but can also be a consideration for human cultural resources (cemeteries and historic features) and socioeconomic conditions. Irreversible means that the loss is permanent. For example, cutting down an old growth forest or demolishing a commercial downtown to construct a highway represents natural and socioeconomic losses (respectively) that are irreversible. Irretrievable refers to loss of productivity and applies to resources that can be restored but take a long time to reach pre-disturbance conditions. Filling a wetland constitutes an irretrievable commitment of resources, as the wetland can be reconstructed, but the re-establishment of the functional ecological community can take many years.

A number of natural and man-made resources would be expended in the construction and operation of this project, including the funding, building materials, energy and human effort that would be required to develop, construct and operate the passenger rail system. Few of these resources qualify as irreversible or irretrievable losses. These impacts are confined to property acquisition and loss of wetlands.

A number of partial and total property takings would be required for the construction of the passenger rail system. Although the Uniform Relocation Assistance Act provides assistance for uses displaced by public projects, meaning that it is likely that many of the displaced commercial enterprises would be re-established elsewhere, their loss in the study area represents an irreversible change. Property takings have been kept to the minimum necessary for the development of the project; however, as a result of the increased distance, Light Rail to Tenafly (Preferred Alternative) results in more acquisition than does Light Rail to Englewood Route 4.

The Build Alternatives are expected to require the acquisition of 4.30 to 4.73 acres of wetlands, depending on Build Alternative (Refer to Chapter 15: Wetlands for additional details). These wetland areas would be built upon to improve the right-of-way for rail passenger service, and as such represent an irretrievable commitment of resources to the project. As a result of the greater distance served, Light Rail to Tenafly (Preferred Alternative) results in greater wetlands impacts.

There is no mitigation for irreversible or irretrievable commitments of resources. Although the Northern Branch corridor wetland acreage acquired will be redeveloped in the Kane tract, which serves the same watershed as the affected wetlands do, the creation of new wetland acreage to maintain watershed water quality does not physically replace the wetlands in the same location as where they were taken. Consequently, although the function of the affected wetland areas can be mitigated, the loss of the discrete wetlands areas within the Northern Branch corridor cannot be mitigated and therefore constitute an irretrievable commitment of resources within the project study area.