

1.0 Introduction

This appendix provides a general description of construction activities, focused on levee construction. It is based on the Program Environmental Impact Report (PEIR) for the 2012 Central Valley Flood Protection Plan (CVFPP) (California Department of Water Resources [DWR] 2012).

2.0 Mobilization

Construction activities for levees and related infrastructure, begins with a mobilization phase. This phase involves installing temporary construction offices, setting up staging areas, and transporting equipment to the work site. Creating access to the site is often a necessary step, as is confirming contracts for raw materials that must be acquired from offsite sources.

- **Staging areas:** One or more staging areas are typically required for storage and distribution of construction materials and equipment. These areas are usually located in or near active construction sites and may be relocated as construction progresses, especially for long, linear levee improvement projects. Staging areas often include parking for construction workers.
- **Access and haul routes:** Access and haul routes are used to transport materials among borrow sites, staging areas, and construction sites. Access routes are also used by project personnel. These routes typically consist of public roads near construction sites; however, temporary new off-road haul routes may be constructed between borrow sites, staging areas, and construction sites. Projects involving construction near water may use barges to transport equipment and materials along water routes. Some newly constructed roadways may be retained for permanent use when needed to provide ongoing access for operation and maintenance (O&M) activities (e.g., for newly constructed levee segments not served by a previously existing road).
- **Borrow sites:** Borrow sites are areas from which earthen materials are removed for use in construction, and are typically developed for large-scale projects. Sites nearest to the construction areas are usually preferred. Excavation depths for borrow sites typically range from 2 to 10 feet, depending on volume requirements, the quality and extent of material available, and the method of reclaiming the borrow site. For example, in some instances, lowering the floodway can both provide materials suitable for construction and restore ecosystem processes. However, borrow sites can create isolated depressions that cause drainage issues and strand fish, so they must be sited carefully. The preparation and reclamation of borrow sites are similar to the processes used for construction sites (described below).