

4.4 Water Resources/Floodplains

Groundwater conditions are not expected to be adversely affected by the proposed project, as explained in the preceding section. The ground surface would be restored to approximately the original contours and condition around excavations for support structure footings. Permanent changes to the topography would be minimal, with new access roads on the ground surface and no substantial grading outside the cleared roadway, a width of 12 feet or less. Construction would be monitored to minimize disturbance of biological and cultural resources, which would also minimize disturbance of soils. Given the nearly level topography, erosion and sedimentation due to surface disturbance is not anticipated to be substantial.

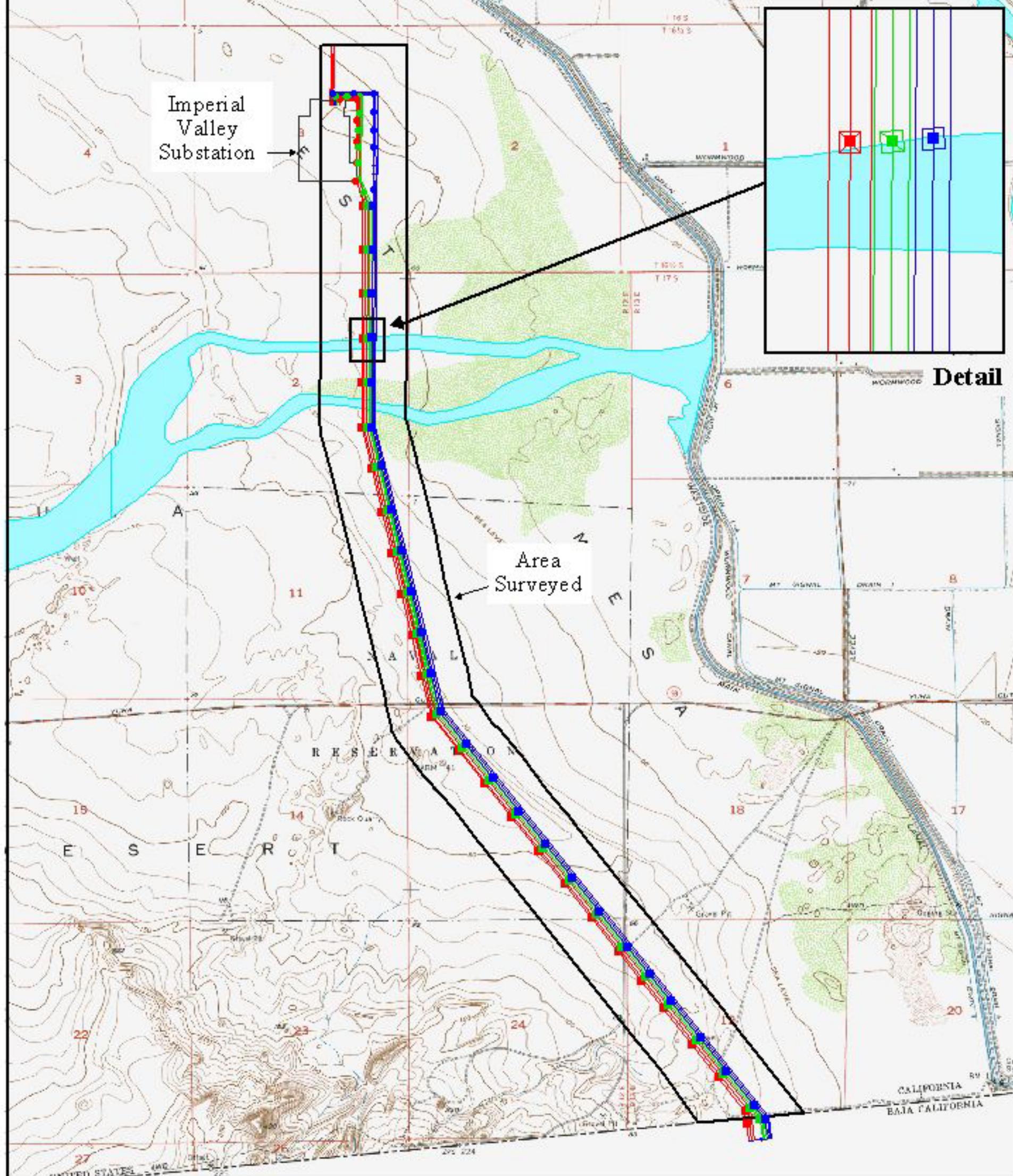
The only 100-year floodplain and largest drainage course in the proposed alignment is Pinto Wash. There are two other well-defined but smaller desert washes in the alignment (see Figure 3.5.1), but no other 100-year floodplains defined on FEMA maps. The 100-year floodplain at Pinto Wash consists of two separate areas, one on the north and one on the south. Lattice towers at location No. 21 in the BCP and SER transmission lines would be partly within the northern arm of the floodplain.

4.4.1 Floodplain/Wetland Assessment

This assessment of potential floodplain/wetland effects of the proposed project is included in this EA in accordance with DOE requirements in 10 CFR 1022.

Project Description

The nature and purpose of the proposed project are described in Chapter 2 and Appendix A of this EA. The FEMA-mapped floodplains in the vicinity of the proposed route and the area of floodplain that would be affected by the proposed project are shown in Figure 4.4.1. Some of the footings for the towers in the BCP and SER lines that would be within the floodplain are on the northern fringe of the Pinto Wash floodplain. The work area for the towers would also be partly in the floodplain, but the access roads for the towers could be located on the northern side of these towers and so could avoid the floodplain. The “high hazard area” of a floodplain is described in 10 CFR 1022 as “those portions of riverine and coastal floodplains nearest the source of flooding which are frequently flooded and where the likelihood of flood losses and adverse impacts on the natural and beneficial values served by floodplains is greatest.” Since the proposed project would affect only the extreme fringe of the Pinto Wash floodplain, which is not frequently flooded and is neither riverine nor coastal, it would not affect a high hazard area.



- Project Components**
- Existing SDG&E transmission line towers and poles ●
 - Proposed BCP transmission line towers (120 ft east of existing line) and poles ●
 - Proposed SER transmission line towers (240 ft east of existing line) and poles ●

 FEMA 100-year floodplain



FIGURE 4.4.1
Project Relationship to FEMA 100-year Floodplain

Floodplain/Wetlands Effects

A wetland delineation was performed for the proposed project as described in Appendix C. There are no wetlands in Pinto Wash that would be affected by the proposed project. Actions that would affect the 100-year floodplain would be construction of the footings for the proposed lattice towers at location No. 21. Excavations for the footings would be backfilled and the original ground contours would be restored. Restoration of natural conditions would be required by mitigation measures for biological resources listed in Section 2.2.6 of this EA. Only cylindrical sections of the footings three to four feet in diameter would protrude above the ground surface. Based on present plans, a maximum of two lattice tower footings for each transmission line would be in the 100-year floodplain. Therefore, there would only be a minimal permanent change to conditions in the floodplain, with minimal effects on natural and beneficial floodplain values.

Alternatives

The locations of the proposed transmission lines are constrained by the connection points to transmission lines in Mexico on the south and by the location of the IV Substation in the north. Alternative locations to the east and west that were considered but rejected are presented in Section 2.3 of this EA. Since the Pinto Wash floodplain runs west to east across the entire project area, the routes must cross the floodplain. Locations of the towers are determined by engineering factors, so that relocation of the towers at location No. 21 is not practical without redesign of the project. Since the towers at location No. 21 are on the extreme fringe of the floodplain, would have minimal effects on natural and beneficial floodplain values, and would not be incompatible development in the floodplains, alternatives to avoid the floodplain effects are not required.

4.5 Biological Resources

The proposed project would permanently impact 3.10 acres of Sonoran creosote bush scrub and 0.28 acre of desert wash. Temporary impacts would be approximately 14.96 acres of Sonoran creosote bush scrub and 0.46 acre of desert wash (Table 4.5.1). The acreage of Sonoran creosote bush scrub temporarily impacted includes 9.5 acres calculated as the area of potential effects for the transmission lines east and north of the IV Substation. The actual impact in that area would likely be less. In addition, the calculation of impacts for both vegetation communities does not account for the overlap of temporary impacts from work areas and pull sites at the lattice tower and monopole locations.

General impacts to wildlife in the project area may occur. Birds are highly mobile and would most likely move out of the way during construction. Many small terrestrial