Chapter 8 – Cultural Resources

This page intentionally left blank

Contents

This page intentionally left blank.

Chapter 8 Cultural Resources

This chapter is based on the background information and technical analysis documented in Appendix K, *Cultural Resources Technical Appendix*, which includes additional information and detail on cultural resource conditions and technical analysis of the effects of each alternative.

8.1 Affected Environment

The study area has a long and complex cultural history with distinct regional patterns that began more than 11,000 years ago. The first generally agreed upon evidence for the presence of Native American peoples in the study area is represented by the distinctive fluted spear points called Clovis points. The subsequent period from about 10,000 to 8,000 years before present is characterized in the archaeological record by a small number of sites with stemmed spear points instead of fluted spear points. Approximately 8,000 years ago, many California cultures shifted the main focus of their subsistence strategies from hunting to seed gathering.

Initial contact between Europeans and Native Americans occurred when Spanish missionaries and soldiers entered California from the south in 1769, eventually founding 21 missions along the California coast. This period was also characterized by the establishment military presidios, development of large tracts of land owned by the missions, and subjugation of the local Indian population for labor. This way of life began to change in 1822 when Mexico became independent of Spain. The mission lands were divided by government grants into large ranchos.

Extensive transportation systems were created to support the growing population of settlers. Many of the supply centers and shipment points along these transportation corridors developed into cities, towns, and settlements. During the latter part of the nineteenth century, American ranchers amassed large tracts of former rancho land and formed several great cattle empires. As settlements grew, farming increased. Irrigation was virtually unknown in California until the 1880s, when large-scale irrigation systems were developed to improve agriculture yields. Irrigation capabilities further expanded in the 1950s and 1960s with the implementation of multiple water projects.

The study area encompasses lands occupied by more than 40 distinct Native American cultural groups. Although most California tribes shared similar elements of social organization and material culture, linguistic affiliation and territorial boundaries primarily distinguish them from each other. Before European settlement of California, an estimated 310,000 native Californians spoke dialects of as many as 80 languages representing six major North American language stocks.

8.2 Effects of the Alternatives

The impact assessment considers changes to existing or potential cultural resources related to changes in Central Valley Project (CVP) and State Water Project (SWP) operations under the alternatives as compared with the No Action Alternative.

Because there is no ground disturbance involved in the action alternatives, the key mechanism for impacts on cultural resources is the potential for inundation and/or exposure of buried archaeological historic properties in a way that can cause damage or destruction to those properties. Because the coordinated long-term operation of the CVP and SWP is subject to Section 106 of the National Historic Preservation Act, Reclamation is responsible for compliance with Section 106. Compliance with Section 106 follows a series of steps, identified in its implementing regulations found at 36 Code of Federal Regulations Part 800, that include identifying consulting and interested parties, delineating an area of potential effects, identifying historic properties within the area of potential effects, and assessing effects on any identified historic properties, and resolving adverse effects through consultations with the State Historic Preservation Officer, Indian tribes, and other consulting parties.

The No Action Alternative is based on 2040 conditions. Changes that would occur over that time frame without implementation of the action alternatives are not analyzed in this chapter. However, the changes to cultural resources that are assumed to occur by 2040 under the No Action Alternative are summarized in this section.

Conditions in 2040 would be different than existing conditions because of the following factors:

- Climate change and sea-level rise
- General plan development throughout California, including increased water demands in portions of the Sacramento Valley

Under the No Action Alternative, Reclamation would continue with the current operation of the CVP, as described in the 2020 Record of Decision and subject to the 2019 Biological Opinions. The 2020 Record of Decision for the CVP and the 2020 Incidental Take Permit for the SWP represent current management direction or intensity pursuant to 43 CFR Section 46.30.

The No Action Alternative includes habitat restoration projects at a programmatic level, but these habitat projects require additional site specific environmental documentation. Thus, ground disturbance for habitat restoration projects would not materialize as a result of implementing the No Action Alternative. For the purpose of the analysis of the No Action Alternative, these habitat restoration projects are considered independent projects that will be considered under cumulative effects.

Under the No Action Alternative, land uses in 2040 would occur in accordance with adopted general plans, which could result in impacts to cultural resources. In terms of CVP operations, under the No Action Alternative, by the end of September, the surface water elevations at CVP reservoirs generally decline. It is anticipated that climate change would result in more short-duration high-rainfall events and less snowpack in the winter and early spring months. The reservoirs would be full more frequently by the end of April or May by 2040 than in recent historical conditions, potentially resulting in less exposure of previously inundated areas around reservoirs and therefore less exposure of potential cultural resources. However, as the water is released in the spring, there would be less snowpack to refill the reservoirs. This condition would reduce reservoir storage, thereby increasing the vertical height of the exposed but previously inundated area around reservoirs and potentially exposing cultural resources.

The No Action Alternative is not expected to result in potential effects to historic properties at reservoirs that store CVP water and in tributaries.

8.2.1 Project Activities with Potential to Affect Historic Properties

Alternatives 1 through 4 would make changes to the year-to-year magnitude of releases, pattern of releases within a year, rate of change in release rates (ramping), minimum instream flows, and other operational parameters at a variety of CVP facilities. If peak river flows or reservoir levels have substantial increases beyond the No Action Alternative, the action alternatives could result in erosion in areas with historic properties and has the potential to adversely affect the historic properties if they are present. However, storage changes are relatively small during each year type and follow existing patterns in reservoir storage. River flows would generally be within the range of fluctuations occurring under the No Action Alternative. Therefore, Alternatives 1 through 4 do not have the potential to adversely affect historic properties, if they are present, because no actions would result in alteration, damage, or demolition of historic properties. No mitigation is identified.

8.3 Mitigation Measures

No avoidance and minimization measures or mitigation measures have been identified for cultural resources.

8.4 Cumulative Impacts

The No Action Alternative would continue with the current operation of the CVP and is not expected to affect historic properties. The action alternatives would make changes to the year-to-year magnitude of releases, pattern of releases within a year, rate of change in release rates (ramping), minimum instream flows, and other operational parameters at a variety of CVP facilities. The magnitude of the changes is dependent on alternative and water year type. Under the action alternatives, there are no activities which include ground disturbing activities and/or alteration to a historic property and the range of flow fluctuations are within the range of flow fluctuations associated with the No Action Alternative. As such, the No Action Alternative and the action alternatives are not expected to result in cumulative impacts to cultural resources. as described in Appendix K *Cultural Resources* and Appendix Y, *Cumulative Impacts Technical Appendix*.