

4.17 TRIBAL CULTURAL RESOURCES

This section evaluates the tribal cultural resources impacts of the proposed Plan.

4.17.1 EXISTING CONDITIONS

Assembly Bill (AB) 52, as discussed below, amended CEQA to add another category of cultural resource: tribal cultural resources (TCRs). TCRs are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe,” which are either “included in or determined to be eligible for inclusion in the California Historic Register” or “included in a local register of historical resources” (Public Resources Code [PRC] Section 21074). A lead agency may also determine, based on its discretion and substantial evidence, that a resource is a tribal cultural resource based on the criteria used to determine whether a historical resource is eligible for listing in the California Register of Historical Resources (CRHR) set forth in PRC Section 5024.1(c). In applying those criteria, the lead agency is to consider the significance of the resource to the relevant California Native American tribe (PRC Section 21074(a)(2)).

ETHNOGRAPHIC RESOURCES AND SACRED SITES

Ethnographic resources that are potential TCRs include sites, areas, and materials important to Native Americans for religious, spiritual, or traditional uses. These can encompass the sacred character of physical locations (mountain peaks, springs, and burial sites) or particular native plants, animals, or minerals that are gathered for use in traditional ritual activities. Villages, camps and activity areas, burials, rock art, rock features, and traditional hunting, gathering, or fishing sites may also constitute significant Native American cultural resources. TCRs tend to fall into distinctive categories that relate to cosmology or activities that took place. They are found throughout the region, but tend to be physical geographic landmarks or in areas close to a water source or resources (such as materials for tool making or readily available food), and on flatter ground. TCRs can be found on the surface, or buried. TCRs close to water sources that were originally just superficial can be buried over time by alluvial action. See additional discussion in Section 4.5, *Cultural Resources*.

TCRs are more likely to have been destroyed within historic urbanized and commercial areas; namely along the highly developed coastal region, although this does not preclude the presence in urban or developed settings of buried archaeological resources that may meet the definition of a TCR. A greater number of surficial TCRs and buried archaeological TCRs are more likely to have been previously documented as traditional cultural places, sacred sites, or archaeological sites resulting from cultural resources studies and outreach to Native Americans during environmental analysis for previous projects throughout the region. As discussed above, the NAHC maintains a confidential inventory of California Native American sacred sites, which may be archaeological sites, cultural landscapes, locations used for traditional resource gathering, or sacred places. An unknown number of these sites may meet the definition of a TCR. In addition, it is likely there are other TCRs in the Plan Area that have not been documented or evaluated. Large portions of the Plan Area have not been subjected to cultural resource survey or consultation with Native American tribes and may contain TCRs. Additionally, there are likely a number of documented archaeological resources, landscapes, and sacred places that have not been evaluated as TCRs.

A records search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) completed for the Plan Area was obtained from the NAHC on August 13, 2018. Results of the SLF search indicate that Native American cultural sites are present in the Plan Area. The specific locations and descriptions of the sites are

confidential. The NAHC also provided a list of tribes that are traditionally and culturally affiliated with the geographic area of the proposed Plan.

ANTICIPATED EFFECTS FROM CLIMATE CHANGE

Climate change may threaten tribal cultural resources due to sea-level rise submerging coastal lands, more frequent and severe precipitation events, higher temperatures, and higher incidence of wildfire. The San Diego region is likely to experience sea level rise of up to 1.2 feet by 2050, wetter winters and more intense precipitation that can lead to increased flooding, more intense heat waves and annual average temperatures increases of up to 4.8°F by 2050, and a longer and less predictable fire season. More details on future climate projections are available in Appendix C.

There is limited research on the climate impacts on tribal cultural resources in the San Diego region; however, there is some information about national impacts that could be relevant to tribes in the region. Climate change could pose various physical, economic, and social threats to tribal cultural resources (Marchand et al. 2017). Potential climate impacts include loss or damage of material culture; losses of ecological resources including agricultural land, traditional foods, forests and forest products; threats to tribal rights to fish, hunt, and gather; and loss of water supplies (Marchand et al. 2017, NWIFC 2016). While many similar impacts could occur for the general population, they may be more severe for indigenous populations who are more socio-economically vulnerable (Marchand et al. 2017).

Sea level rise and coastal erosion could damage or destroy coastal TCRs that are exposed to temporary or permanent coastal flooding (NWIFC 2016). Above-ground structures may be particularly exposed to coastal flooding, but a rising water table or salinization of water could potentially affect below-ground TCRs, such as archeological resources.

Extreme precipitation events may lead to more severe, more extensive, or more frequent flooding events on tribal lands. To the extent that TCRs are exposed to these floods, the TCRs may be physically damaged from the water or the debris it carries, or from the resulting erosion (Curry et al. 2011, Flanigan, Thompson, and Reed 2018). Extreme precipitation can also contribute to soil destabilization and landslides, which could damage or destroy TCRs.

Changes in temperature and precipitation could also damage cultural resources, although the extent to which these could negatively affect archaeological and cultural resources in the San Diego region has not been quantified. If freeze/thaw cycles become more frequent or dramatic, which can happen under warming scenarios, when temperatures rise above freezing during the day and then dip below freezing at night, rather than just staying below freezing, this can physically damage TCRs. Freeze/thaw cycles negatively affect stone and brick buildings structures (Rockman et al. 2016). Higher temperatures can cause faster rates of deterioration due to thermal stress and biological activity, more rapid decay of organic materials, heat stress on culturally significant vegetation, and loss of culturally significant habitat and species due to disease and temperature changes (Rockman et al. 2016). Heavy precipitation and flooding could damage cultural resources due to site erosion and destabilization, direct physical damage to the site, loss of artifacts due to flooding, and increased risk of post-flood subsidence (Rockman et al. 2016).

More frequent and intense wildfires may damage or destroy TCRs (Rockman et al. 2016, Curry et al. 2011, NWIFC 2016), particularly above-ground TCRs. Wildfires can increase damage to archaeologically relevant structures, alter the artifacts exposed to extreme heat, increase susceptibility to erosion and flooding, and exacerbate damages due to firefighting activities (Rockman et al. 2016). Wildfire could damage historical

structures or alter their distinct physical characteristics as older buildings may not have as robust defenses against wildfire as modern buildings (Rockman et al. 2016). Wildfires can also contribute to soil destabilization and landslides, which present risks to TCRs (Santin and Doerr 2016, NWIFC 2016).

It is possible that sea-level rise, flooding, wildfire, and landslides could reveal or damage human remains. Remains exposed to the environment from climate hazards may then be further damaged by extreme weather; for example, changes in temperature and precipitation could speed deterioration and decay, cause thermal stress, and cause erosion (Rockman et al. 2016).

4.17.2 REGULATORY SETTING

Cultural resources, which include TCRs, are indirectly protected under the provisions of the Federal Antiquities Act of 1906 (16 U.S. Code [USC] Sections 431 et seq.) and subsequent related legislation, regulations, policies, and guidance documents. Federal, State, and local regulatory frameworks related to the protection of cultural resources in California are presented in the regulatory setting of Section 4.5. Numerous laws and regulations require that federal, State, and local agencies consider the effects of a proposed project on cultural resources, which may include TCRs.

STATE LAWS, REGULATIONS, PLANS, AND POLICIES

AB 52 and Tribal Cultural Resources

In September 2014, the California Legislature passed AB 52, which added provisions to the PRC regarding the evaluation of impacts on TCRs under CEQA, and consultation requirements with California Native American tribes. AB 52 requires lead agencies to analyze project impacts on TCRs. (PRC Sections 21074 and 21083.09). The bill added a definition of “tribal cultural resources” in PRC Section 21074 (presented above), and added requirements for lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, and 21082.3). Also, as required by AB 52, the Governor’s Office of Planning and Research (OPR) updated Appendix G of the State CEQA Guidelines to provide sample questions regarding impacts on TCRs (PRC Section 21083.09).

Under AB 52, lead agencies must consult with tribes that have requested consultation and have a traditional and cultural affiliation with the geographic area of a proposed project (PRC 21080.3.1). To trigger the requirement to consult, a tribe must first send the lead agency a written request for formal notification of any proposed projects within the geographic area with which they are traditionally and culturally affiliated. If such a request is received, the lead agency must provide that tribe(s) notice within 14 days of either deciding to undertake a project or determining a project’s application is complete (PRC Section 21080.3.1(d)). If the tribe responds within 30 days with a request for consultation, the lead agency must begin the consultation process within 30 days receiving the request (PRC Section 21080.3.1(d)).

Regarding the consultation topics, the tribe can request to be consulted on the type of environmental review necessary, the significance of TCRs, the significance of the project’s impacts on TCRs, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation that the California Native American tribe may recommend to the lead agency” (PRC Section 21080.3.2(a)).

Regarding mitigation measures, AB 52 provides that if the tribal consultation process results in agreed-upon mitigation measures, then such measures must be recommended for inclusion in the environmental document if determined to avoid or lessen a significant impact on a tribal cultural resource (PRC Section 21082.3(a)). However, if the recommended mitigation is not included in the environmental document, if no mitigation

measures were agreed upon in consultation, or if no consultation occurred, and if the proposed project would cause a significant impact on a tribal cultural resource, the lead agency must consider feasible mitigation measures pursuant to PRC Section 21084.3 (PRC Section 21082.3(e)).

Results of the Regional Plan AB 52 Consultation Process

SANDAG regularly coordinates with the Interagency Technical Working Group on Tribal Transportation Issues (Working Group). The Working Group is composed of a representative from each federally recognized tribal government and California tribe in San Diego County that chooses to participate in the Working Group, and serves as a forum for tribal governments in the region to discuss and coordinate transportation issues of mutual concern with the various public planning agencies in the region. The Working Group is co-chaired by a tribal member and a member of the SANDAG executive staff. Tribal representatives are voting members of the Working Group, and SANDAG and other public agencies impacting tribal transportation issues serve as advisory members of the Working Group. The Working Group meets quarterly, as determined by the group. These meetings are not formal consultation pursuant to AB 52, but instead implement a Tribal Consultation Plan developed by the Southern California Tribal Chairmen's Association (SCTCA) and SANDAG (Appendix I of the proposed Plan) intended to guide consultation with tribes on regional transportation issues, including the development of the proposed Plan.

On October 5, 2016, in compliance with AB 52, SANDAG contacted representatives from the following 19 tribes in San Diego County, via certified mail, inviting each tribe to consult on the proposed Plan pursuant to AB 52. Of the nineteen tribes contacted, only the San Luis Rey Band of Luiseño Indians had previously requested to be notified of SANDAG projects.

- Barona Band of Mission Indians
- Campo Kumeyaay Nation
- Ewiiapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Reservation/Inaja Cosmit Band
- Jamul Indian Village of California
- La Jolla Band of Luiseño Indians
- La Posta Band of Mission Indians
- Los Coyotes Band of Cahuilla Indians
- Manzanita Band of Mission Indians
- Mesa Grande Band of Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseño Indians
- Pechanga Band of Luiseño Indians (recently gained trust land in San Diego County)
- Rincon Luiseño Band of Indians
- San Luis Rey Band of Mission Indians
- San Pasqual Band of Diegueño Indians

- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

Eleven tribes did not respond to SANDAG's invitation to consult on the proposed Plan; however, the following eight tribes responded to the invitation and requested to consult on the proposed Plan pursuant to AB 52:

- Campo Kumeyaay Nation
- Jamul Indian Village of California
- La Posta Band of Mission Indians
- Pala Band of Mission Indians
- Rincon Luiseño Band of Indians
- San Luis Rey Band of Mission Indians
- San Pasqual Band of Diegueño Indians
- Sycuan Band of the Kumeyaay Nation

On November 18, 2016, SANDAG formally initiated consultation with the eight tribes via certified mail. The letter included an invitation to an initial in-person meeting to discuss the consultation process, in a private meeting limited to the tribe's designated representatives and SANDAG, during a future public meeting of the Working Group, or through another approach preferred by the tribe. The letter suggested arranging a meeting for early 2017 and requested a reply.

On February 23, 2017, SANDAG and representatives from five tribes met at the Jamul Indian Village Tribal Community Center to discuss the proposed Plan and EIR. Attendees generally agreed that discussion should be continued at a future meeting. It was agreed that SANDAG would send a letter to all eight tribes that had requested AB 52 consultation, and invite them to attend a future meeting if they are interested. SANDAG agreed it would send such a letter. The five tribes that participated in this meeting were:

- Campo Kumeyaay Nation
- Jamul Indian Village
- La Posta Band of Mission Indians
- Pala Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation

On March 7, 2017, SANDAG sent a second letter to the eight consulting tribes requesting to meet regarding AB 52 consultation on the EIR, either in private or during a Working Group session. The letter suggested arranging a meeting for March or April 2017 and requested a reply. On March 15, 2017, SANDAG sent a follow-up email to each consulting tribe, with the March 7, 2017, letter attached, and requested a reply. To date, SANDAG has not received a response from seven of the eight consulting tribes.

On August 14, 2017, SANDAG and tribal representatives of the Rincon Luiseño Band of Indians met at the tribe's office. At that confidential meeting, SANDAG and the tribal representatives discussed the proposed Plan and the EIR's analytical approach, as well as the tribe's initial input on the proposed Plan and EIR and the Luiseño ancestral territory. On August 15, 2017, the Rincon Luiseño Band of Indians agreed to conclude consultation for the EIR via e-mail to SANDAG from Ms. Destiny Colocho, the tribe's Cultural Resources Manager. As a result

of the consultation, SANDAG will include the tribe in the distribution of the Draft EIR for the proposed Plan, and the tribe will be given the opportunity to provide comments on the EIR. On June 14, 2021, SANDAG sent a letter via certified mail to Ms. Colocho formally concluding consultation pursuant to PRC Section 21080.3.2(b).

At a quarterly Working Group meeting held on October 31, 2018, SANDAG shared an update on AB 52 consultation for the proposed Plan. The update described SANDAG's invitation to consult on the proposed Plan, the responses from eight tribes, the February 2017 meeting with five consulting tribes, and SANDAG's follow-up letters in March 2017 seeking to continue consultation on the EIR. SANDAG again invited consulting tribes to meet individually or collectively with SANDAG or to provide input through written or email correspondence, or provide a statement that it wished to conclude AB 52 consultation. To date, none of the tribes have responded to SANDAG's invitation to consult further on the EIR or to conclude AB 52 consultation.

On June 14, 2021, SANDAG sent letters to the seven consulting tribes who participated in initial AB 52 consultation on the EIR, but who have not responded to further efforts by SANDAG to continue consultation. This letter thanked the tribes for participating in consultation on the proposed Plan and respectfully concluded consultation pursuant to PRC Section 21080.3.2(b).

California Government Code Sections 6254(r) and 6254.10

California Government Code Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

4.17.3 SIGNIFICANCE CRITERIA

Appendix G of the CEQA Guidelines provides criteria for determining the significance of a project's environmental impacts, in the form of Initial Study checklist questions. Unless otherwise noted, the significance criteria specifically developed for this EIR are based on the checklist questions that address the criteria in CEQA Guidelines Appendix G. In some cases, SANDAG has combined checklist questions, edited their wording, or changed their location in the document in an effort to develop significance criteria that reflect the programmatic level of analysis in this EIR, and the unique characteristics of the proposed Plan and EIR.

Checklist questions for TCRs are provided in Section XVIII of CEQA Guidelines Appendix G. Criterion (a)(i) addresses TCRs that are listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k). Criterion (a)(ii) addresses TCRs determined to be significant by the lead agency pursuant to criteria set forth in PRC Section 5024.1 and the significance of the resource to a California Native American tribe. SANDAG has combined these checklist questions into TCR-1.

For purposes of this EIR, implementation of the proposed Plan would have a significant TCR impact if it would result in the following:

- TCR-1** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 that is either (1) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

4.17.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

- TCR-1 CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PUBLIC RESOURCES CODE SECTION 21047 THAT IS EITHER (1) LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN A LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(k); OR (2) DETERMINED BY THE LEAD AGENCY, IN ITS DISCRETION AND SUPPORTED BY SUBSTANTIAL EVIDENCE, TO BE SIGNIFICANT PURSUANT TO CRITERIA SET FORTH IN SUBDIVISION (c) OF PUBLIC RESOURCES CODE SECTION 5024.1**

ANALYSIS METHODOLOGY

This analysis examines the impacts on TCRs that would result from implementation of the proposed Plan.

Although TCRs may differ from other types of cultural resources, cultural resources records searches and outreach to the NAHC can identify previously reported cultural resources that may be TCRs. The impact analysis is based on the NAHC Sacred Lands File search completed for the proposed Plan and AB 52 consultation conducted between SANDAG and consulting tribes. Information obtained from the NAHC, tribes, and cultural resources records searches is used to determine if cultural resources may be TCRs that are listed or eligible for listing on the NRHP, CRHR, or a local register and are present in the Plan Area; and whether the proposed Plan would cause a substantial adverse change in the significance of a TCR that is listed or eligible for listing in the NRHP, CRHR, or local register.

A substantial adverse change to the significance of a historical resource is defined as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the cultural resource would be materially impaired (CEQA Guidelines Section 15064.5); this definition can also be applied to a substantial adverse change to a TCR.

Construction activities are more likely to disturb TCRs than operational activities because TCRs are most likely to be encountered during initial ground disturbance. For forecasted regional growth and land use change projects, as well as planned transportation network improvements, the likelihood of encountering TCRs is thus analyzed based on whether projects would require grading, excavation, or other ground-disturbing activities. Even minimal grading activities can encounter resources, as they have been discovered only inches below the surface. Ground-disturbing activities associated with infill, redevelopment, and infrastructure expansion have the potential to unearth these resources.

Impacts of operational activities on TCRs are unlikely to be significant, unless they impose a sustained change to the setting or viewshed of a TCR (thereby affecting the integrity of its setting and its significance).

2025***Regional Growth and Land Use Change***

From 2016 to 2025, regional population is forecasted to increase by 161,338 people (5 percent), 97,661 housing units (8 percent), and 115,328 jobs (7 percent). The 2025 regional land use pattern is shown in Figure 2-17. Approximately 79% percent of the forecasted regional population increase by 2025 is in the City of San Diego (58 percent), City of Chula Vista (12 percent), and City of Escondido (9 percent). Those same three jurisdictions accommodate approximately 78 percent of new housing units in the region by 2025, while the City of San Diego, National City, and the City of Chula Vista accommodate more than 70 percent of new jobs in the region by 2025.

In the City of San Diego, the communities with the highest proportion of the forecasted population and housing unit increases include Downtown, Mission Valley, Midway-Pacific Highway, and University Center. The highest proportions of forecasted job increases are in the communities of Downtown, University Center, Otay Mesa, and Kearny Mesa. In the unincorporated County, the communities with the highest proportion of the forecasted population and housing unit increases are Otay and North County Metro. The only significant increase in jobs over that period are in Otay.

Regional growth and land use change would result in potential impacts to TCRs resulting from a wide variety of construction and ground-disturbing activities, such as grading, excavation, and clearing, which remove or disturb soils and sediments. It is possible that buried archaeological resources meeting the definition of a TCR may be identified in relatively undisturbed open space or rural areas, such as the Otay and North County Metro communities as well as urban or developed settings.

The likelihood of encountering archaeological TCRs is greatest for projects that include grading and/or excavation of areas on which past grading and/or excavation activities have been minimal. Because archaeological sites have been found within inches of the ground surface throughout the San Diego region, even minimal grading activities can impact these resources. Excavation and soil removal of any kind, irrespective of depth, have the potential to yield archaeological TCRs. While new development and redevelopment occurring by 2025 in the region would mostly result in the intensification of previously developed areas, particularly in San Diego, Chula Vista, and Escondido, which make up the majority of growth during this timeframe, ground-disturbing activities associated with infill, redevelopment, and/or expansion of infrastructure have the potential to unearth and impact archaeological TCRs. Projects that include ground-disturbing activities in more rural or undeveloped portions of the region, such as portions of the Otay and North Valley Metro communities, may also directly impact TCRs of an archaeological nature, traditional natural resource gathering areas and sacred places.

Permanent indirect impacts from construction and operational improvements may result from potential access-related damage to TCRs when public accessibility is increased, which may happen with regional growth or land use change. The likelihood of unauthorized artifact collecting and destruction (intentional or unintentional) of TCRs of an archaeological nature, or of damage to or destruction (intentional or unintentional) of TCRs that are traditional places for gathering natural resources, cultural landscapes, or sacred places increases with ease of access. Recreational use, overland vehicle travel, and vandalism would degrade the integrity and traditional use of the TCRs. Regional growth and land use change may also impact the setting or viewshed of a cultural landscape or sacred place that may qualify as a TCR. Ensuring that appropriate measures are developed during project planning that would minimize or reduce damage to TCRs, coupled with tribal consultation, may reduce direct and indirect impacts.

Redevelopment and intensification of land uses may also result in the demolition, substantial alteration, or removal of a TCR. Adherence to the existing laws, regulations, and programs discussed in Section 4.5, and consultation with Native American tribes would avoid or reduce impacts on TCRs during construction of development projects associated with regional growth and land change, but there is no guarantee that they would reduce impacts to a less-than-significant level for all projects. Therefore, regional growth and land use change would cause a substantial adverse change in the significance of a TCR. This is a significant impact.

Transportation Network Improvements and Programs

As stated previously, numerous cultural resources have been documented in the San Diego region, some of which may be identified as TCRs during tribal consultation, and the potential exists for undocumented TCRs to be discovered. Given the region's rich cultural setting, construction of transportation network improvements included in the proposed Plan would likely encounter these resources.

Some of the improvements in the proposed Plan between 2016 and 2025 would involve only operational changes that would not require construction of new transportation or transit facilities, such as increasing service frequencies or new transit routes within existing right-of-way. These changes would generally not lead to impacts on TCRs.

However, improvements that would involve construction of new infrastructure or facilities could encounter TCRs. Highway improvements (such as lane expansions), construction of new Managed Lanes as part of the Complete Corridors program, and commuter rail upgrades as part of the Transit Leap program would require grading and other ground-disturbing activities.

Direct permanent impacts on TCRs may result from ground disturbance associated with construction, such as grading and excavation, for the planned transportation improvements stemming from the proposed Plan. The development of new transportation facilities, construction of additional lanes, or upgrades to existing facilities may have a relatively higher potential to directly impact TCRs of an archaeological nature, primarily by grading or excavation in previously undisturbed soil and by the disturbance of buried resources that have not been previously identified. Given that numerous prehistoric sites are known to exist along the shores, estuaries, lagoons, and bluffs of the San Diego coastline, grading and ground-disturbance activities along the rail corridor between Del Mar and Oceanside (for upgrades to Pacific Surfliner, COASTER, and Metrolink, for example) and I-5 from Manchester to Vandergrift in Oceanside (in order to add two new Managed Lanes, for example), have the potential to encounter archaeological resources that may meet the criteria of a TCR. TCRs could also be identified during construction of highway and road improvements such as new toll lanes on SR 11 to the Otay Mesa POE, Interchange and Arterial Operational improvements at SR 94 and SR 125, Otay Mesa Port of Entry, and more than 25 planned improvements to local arterial streets at locations throughout the region, including widenings and extensions of existing roadways, new or replaced bridges, and realignments. The potential for direct impacts on TCRs may be lower for improvements to existing facilities and modifications to existing roads because these areas have been previously disturbed. However, even if previously disturbed, excavation at depth has the potential to directly impact undocumented TCRs of an archaeological nature.

Direct impacts would be significant if TCRs cannot be avoided or preserved in place by project design or redesign and are destroyed or substantially altered. Disturbance of TCR features or places could impact the traditional use, or the cultural character and integrity, of the resource and may result in a significant impact if its contributing characteristics or the character of its physical setting is destroyed or substantially altered. Permanent direct impacts may be addressed by advance project planning and consulting with tribes that have requested consultation to ensure known TCRs are identified and avoided and preserved in place, or to develop

project alternatives that would minimize impacts on known TCRs. Permanent direct impacts on TCRs of an archaeological nature discovered inadvertently during project construction may be addressed by project redesign to avoid and preserve the TCR, and by tribal consultation focused on minimizing the impact.

Indirect impacts from construction and operational improvements may result from potential access-related damage to TCRs when public accessibility increases because of improved transportation networks stemming from the proposed Plan, for example, off-street bike trail projects that take users through open space, like the proposed San Diego River Trail Carleton Oaks Segment, or planned improvements to local arterial streets at locations throughout the region, including widenings and extensions of existing roadways. The likelihood of unauthorized artifact collecting and destruction (intentional or unintentional) of TCRs of an archaeological nature, or of damage to or destruction (intentional or unintentional) of TCRs that are traditional places for gathering natural resources, cultural landscapes, or sacred places increases with improved access. Recreational use, overland vehicle travel, and vandalism would degrade the integrity and traditional use of the TCRs. Ensuring that appropriate measures are devised during project planning that would minimize or reduce damage to TCRs, coupled with requested tribal consultation, may reduce indirect access-related impacts.

While there are State requirements in place to minimize adverse impacts on TCRs, there is still the potential for access-related damage associated with construction and operation of projects under the proposed Plan. Therefore, the potential direct regional impacts on TCRs related to the planned transportation improvements that could result in substantial alteration or removal of a TCR, and indirect impacts from access-related damage from transportation network projects and ongoing operations resulting from implementation of the proposed Plan are considered significant.

2025 Conclusion

Implementation of the proposed Plan would result in regional growth and land use change and transportation network improvements and programs that could cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, this impact (TCR-1) between 2016 and 2025 is significant.

2035

Regional Growth and Land Use Change

From 2026 to 2035, regional population is forecasted to increase by 149,500 people (4 percent), 121,650 housing units (9 percent), and 159,728 jobs (9 percent). The 2035 regional land use pattern is shown in Figure 2-18. Approximately 80 percent of the forecasted regional population increase between 2025 and 2035 is in the City of San Diego (71 percent), National City (7 percent), and City of Chula Vista (2 percent). Similarly, these three jurisdictions accommodate approximately 76 percent of new housing units and 70 percent of new jobs, respectively, between 2025 and 2035.

In the City of San Diego, the communities with the highest proportion of the forecasted population and housing unit increases include Downtown, Mission Valley, Kearny Mesa, and Midway Pacific Highway. The highest proportions of forecasted job increases are in the communities of Downtown, Kearny Mesa, University and Otay Mesa. In the unincorporated County, the communities with the highest proportion of the forecasted population and housing unit increases include Lakeside, North County Metro and Otay. The only significant increase in jobs over that period is in Otay.

As discussed in the 2025 analysis, many areas throughout the San Diego region have a high potential to yield TCRs. In addition to the potential for identifying buried TCRs in urbanized areas of the proposed Plan, such as

Downtown San Diego, Chula Vista and National City, the additional growth forecasted in the less developed portions of the San Diego region, such as Otay and North County Metro, may occur in areas where TCRs are present. TCRs may have been previously documented as archaeological sites, cultural landscapes, areas of traditional natural resource gathering, or sacred sites, and may be identified only through future consultation with Native American tribes.

Regional growth and land use change forecasted to occur throughout the region from 2026 to 2035 would result in additional construction and ground-disturbing activities, such as excavation, grading, clearing, demolition, alteration, or structural relocation, with the potential to directly impact TCRs. Forecasted growth and land use change would also result in indirect physical impacts on rural or open space areas, and thus increase the likelihood of physical impacts on TCRs located within those areas. For instance, increased recreational use of open space areas could affect the viewshed of a TCR, or promote erosion or increase the likelihood of damage to TCRs of an archaeological nature through increased traffic (foot or otherwise). Development and ground-disturbing activities, associated with infill, redevelopment, and/or expansion of infrastructure, have the potential to impact TCRs.

As discussed in the 2025 analysis, while adherence to existing laws, regulations, and programs would reduce impacts on TCRs upon implementation of the proposed Plan, there is no assurance that they would reduce impacts to a less-than-significant level. Given the potential for land use changes to cause substantial adverse changes in the significance of a TCR coupled with the nonrenewable nature of these resources if disturbed or altered, implementation of the proposed Plan would result in ground-disturbing activities and changes in setting related to regional growth and land use change that would cause a substantial adverse change in the significance of a TCR. This is a significant impact.

Transportation Network Improvements and Programs

As discussed in the 2025 analysis, there is a rich history of Native American presence in the San Diego region; therefore, the potential for identified and unidentified TCRs to be found within transportation network improvement and program areas is high. Some of the improvements in the proposed Plan completed between 2026 and 2035 would involve only operational changes that would not require construction of new transportation or transit facilities, such as increasing service frequencies or creating new transit routes, and therefore would have little impact on TCRs. However, improvements that would involve construction of new infrastructure or facilities could encounter TCRs. Transportation construction projects such as double-tracking at certain locations on the LOSSAN rail corridor, construction of the Del Mar Tunnel, new stations at Central Mobility Hub and Camp Pendleton, Anchor Mobility Hub at the San Ysidro Transit Center and grade separation at Leucadia Boulevard, as well as numerous road projects and improvements, would require grading, and potentially trenching, activities that remove and/or disturb the upper layer of soils and could unearth underlying TCRs of an archaeological nature, areas of traditional natural resource gathering, or sacred places.

Improvements along the I-5 corridor have the potential to impact TCRs that may be present along the shores, estuaries, lagoons, and bluffs of the San Diego coastline. Direct impacts would be significant if TCRs cannot be avoided or preserved in place by project design or redesign and are destroyed or substantially altered. Additional major transportation network improvements that could impact TCRs include new Managed Lanes and Managed Lane Connectors on SR 15, SR 52, SR 94, SR 78, SR 163, SR 125, I-5, I-8, I-15, I-805. Direct Access Ramps (DARs) are assumed at: I-5/Clairemont Mesa Blvd; I-5/Voigt Drive; and SR 125/Spring St/SR 94. Shoulder widening and straightening improvements on SR 67 from Maplevue to Dye Rd, and five additional improvements to local arterial streets. These projects also have the potential to impact TCRs resulting from ground disturbance or demolition.

Disturbance of TCR features or places could impact the traditional use, or the cultural character and integrity, of the resource and may result in a significant impact if its contributing characteristics or the character of its physical setting is destroyed or substantially altered.

Indirect impacts from construction and operational improvements may result from potential access-related damage to TCRs when public accessibility increases because of improved transportation networks stemming from the proposed Plan, for example, off-street bike trail projects that take users through open space, like the proposed Oceanside Inland Rail Trail. The likelihood of unauthorized artifact collecting and destruction (intentional or unintentional) of TCRs of an archaeological nature, or of damage to or destruction (intentional or unintentional) of TCRs that are traditional places for gathering natural resources, cultural landscapes, or sacred places increases with improved access. This has the potential to degrade the integrity and traditional use of the TCRs. Ensuring that appropriate measures are devised during project planning that would minimize or reduce damage to TCRs, coupled with requested tribal consultation, may reduce indirect access-related impacts.

Given the magnitude and location of several of the transportation network improvements and programs occurring between 2026 and 2035, and the number of additional transportation network improvements over those previously implemented by 2025, additional ground disturbances are anticipated. As a result, additional TCRs would be encountered during construction activities between 2025 and 2035.

As discussed in the 2025 analysis, while adherence to the existing laws, regulations, and programs discussed in Section 4.5 would reduce impacts on TCRs upon implementation of the proposed Plan, there is no assurance that they would reduce these impacts to a less-than-significant level for all future projects. Given the potential for transportation facilities to cause substantial adverse changes in the significance of TCRs coupled with the nonrenewable nature of these resources if disturbed or altered, implementation of the proposed Plan would result in ground-disturbing activities related to transportation network improvements and programs that would cause a substantial adverse change in the significance of a TCR. This is a significant impact.

2035 Conclusion

Implementation of the proposed Plan would result in regional growth and land use change and transportation network improvements and programs that could cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, this impact (TCR-1) between 2026 and 2035 is significant.

2050

Regional Growth and Land Use Change

From 2035 to 2050, regional population is forecasted to increase by 125,725 people (3 percent), 61,433 housing units (4 percent), and 164,843 jobs (8 percent). The 2050 regional land use pattern is shown in Figure 2-19. Approximately 78 percent of the forecasted regional population increase between 2036 and 2050 is in the City of San Diego (37 percent), San Marcos (13 percent), and City of Chula Vista (28 percent). Similarly, these three jurisdictions accommodate approximately 89 percent of new housing units and 72 percent of new jobs, respectively, between 2036 and 2050.

In the City of San Diego, the communities with the highest proportion of the forecasted population and housing unit increases include the Downtown, Midway Pacific Highway, and Uptown. The highest proportions of forecasted job increases are in the communities of Downtown, Otay Mesa, Kearny Mesa, and University City. In the unincorporated County, the communities with the highest proportion of the forecasted population

increases include Lakeside, North County Metro, and Valle de Oro. There are no housing units built in the Unincorporated area after 2035. The only significant increase in jobs over that period are in Otay.

As discussed in the 2025 and 2035 analyses, many areas throughout the San Diego region have a high potential to contain TCRs. In addition to the resource-sensitive areas mentioned in the 2025 and 2035 analyses, the additional growth forecasted in both the unincorporated County and western portion of the region between 2035 and 2050 would result in new development in areas such as Otay, and redevelopment in established urban areas such as Downtown, Kearny Mesa, and Midway-Pacific Highway. Additional construction and ground-disturbing activities, such as such as excavation, grading, clearing, demolition, alteration, or structural relocation, would occur with the potential to directly impact TCRs. Forecasted growth and land use change would also result in indirect physical impacts on open space areas, such as in the Otay planning area, and thus increase the likelihood of physical impacts on TCRs located within those areas, as well as changes in setting. For instance, increased recreational use of open space areas could promote erosion or increase the likelihood of damage to TCRs through increased traffic (foot or otherwise). Ground-disturbing activities associated with infill, redevelopment, and/or expansion of infrastructure have the potential to impact TCRs, as do changes in setting. With additional growth and increased development intensities, and increased use of open space areas, the extent of impacts on TCRs between 2036 and 2050 would be greater than that experienced by 2025 and 2035 as more resource-sensitive land would be disturbed over time.

As more land is disturbed and altered for new development and redevelopment between 2036 and 2050, the possibility of irreversible losses of significant TCRs becomes greater. As discussed in the 2025 and 2035 analyses, while adherence to the existing laws, regulations, and programs would reduce impacts on TCRs upon implementation of the proposed Plan, there is no assurance that they would reduce these impacts to a less-than-significant level for all future projects. Given the potential for land use changes to cause substantial adverse changes in the significance of TCRs, coupled with the nonrenewable nature of these resources if disturbed or altered, implementation of the proposed Plan would result in ground-disturbing activities and changes in setting related to regional growth and land use change that would cause a substantial adverse change in the significance of a TCR. This is a significant impact.

Transportation Network Improvements and Programs

As with the 2025 and 2035 analysis, the potential exists for identified and unidentified TCRs to occur in transportation network improvement and program areas between 2036 and 2050. Projects that would involve construction of new infrastructure or facilities could result in impacts. Major rail projects and improvements such as continued double-tracking along certain LOSSAN corridor locations, construction of Sorrento Mesa and UTC tunnels and new station at Balboa Avenue, and three new commuter rail lines between Downtown San Diego and El Cajon; National City to US Border, and Central Mobility to the US Border have the potential to impact TCRs resulting from ground disturbance or demolition. Highway improvements such as Managed Lane construction along I-5, I-8, I-15, I-805, SR 52, SR 54, SR 56, SR 125, and SR 905 would require grading and, potentially, trenching activities that remove and/or disturb the upper layer of soils, and could encounter underlying archaeological TCRs. Widening and road straightening along rural highways such as SR 76, SR 78, SR 79, SR 94, and I-8 would occur in areas that have seen relatively little development and would disturb new ground. Direct impacts would be significant if TCRs cannot be avoided or preserved in place by project design or redesign and are destroyed or substantially altered. Disturbance of TCR features or places could impact the traditional use, or the cultural character and integrity, of the resource and may result in a significant impact if its contributing characteristics or the character of its physical setting is destroyed or substantially altered.

Indirect impacts from construction and operational improvements may result from potential access-related damage to TCRs when public accessibility increases because of improved transportation networks stemming from the proposed Plan, for example, off-street bike trail projects that take users through open space, like the proposed San Luis Rey River Trail. The likelihood of unauthorized artifact collecting and destruction (intentional or unintentional) of TCRs of an archaeological nature, or of damage to or destruction (intentional or unintentional) of TCRs that are traditional places for gathering natural resources, cultural landscapes, or sacred places increases with improved access. This has the potential to degrade the integrity and traditional use of the TCRs. Ensuring that appropriate measures are devised during project planning that would minimize or reduce damage to TCRs, coupled with requested tribal consultation, may reduce indirect access-related impacts.

Given the magnitude and location of several of the transportation network improvements occurring between 2036 and 2050, and the number of additional transportation network improvements over those previously implemented by 2025 and 2035, additional significant ground disturbances are anticipated. It is possible that more TCRs would be disturbed between 2036 and 2050.

As discussed in the 2025 and 2035 analyses, while adherence to the existing laws, regulations, and programs would reduce impacts on TCRs upon implementation of the proposed Plan, there is no assurance that they would reduce these impacts to a less-than-significant level for all future projects. Implementation of the proposed Plan would result in ground-disturbing activities related to transportation network improvements and programs that would cause a substantial adverse change in the significance of the resource. Given the potential for transportation facilities to cause substantial adverse changes in the significance of TCRs coupled with the nonrenewable nature of these resources if disturbed or altered, this is a significant impact.

2050 Conclusion

Implementation of the proposed Plan would result in regional growth and land use change and transportation network improvements and programs that could cause a substantial adverse change in the significance of a TCR. Therefore, this impact (TCR-1) between 2036 and 2050 is significant.

Exacerbation of Climate Change Effects

Implementation of the proposed Plan may result in ground disturbances and increased foot activity due to construction, demolition, and increased recreational use of open spaces. These effects could result in increased erosion or disturb the upper layer of soils, unearthing underlying archaeological and historic architectural resources and causing a disturbance to buried resources. The proposed Plan could also result in an increase in development and thus impervious surfaces, which may result in increased runoff and flooding following heavy rain events, potentially damaging exposed archaeological or architectural resources. Climate change effects on cultural resources may be exacerbated by these impacts. Climate change is likely to result in increased erosion due to more wildfires, which burn vegetation and destabilize soil; more flooding, which results in runoff that increases erosion; and sea-level rise, which can worsen coastal erosion. Thus, the proposed Plan's impact on increased erosion and flooding may exacerbate climate change impacts that also increase erosion and flooding and thus affect tribal cultural resources.

MITIGATION MEASURES

TCR-1 CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PUBLIC RESOURCES CODE SECTION 21047 THAT IS EITHER (1) LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN A LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(k); OR (2) DETERMINED BY THE LEAD AGENCY, IN ITS DISCRETION AND SUPPORTED BY SUBSTANTIAL EVIDENCE, TO BE SIGNIFICANT PURSUANT TO CRITERIA SET FORTH IN SUBDIVISION (c) OF PUBLIC RESOURCES CODE SECTION 5024.1

2025, 2035, and 2050

TCR-1a Implement Tribal Cultural Resources Mitigation Measures for Development Projects and Transportation Network Improvements. During project-level CEQA review of development projects or transportation network improvements that would cause a substantial adverse change in the significance of a TCR, the County of San Diego, cities, and other local jurisdictions can and should, SANDAG shall, and other transportation project sponsors, can and should develop project-level protocols and mitigation measures with consulting tribes, consistent with PRC Section 21080.3.2(a) to avoid or reduce impacts on TCRs during construction and operation of development projects and transportation network improvements. The County of San Diego, cities, and other local jurisdictions can and should. SANDAG shall, and other transportation projects sponsors can and should identify these resources through records searches, survey, consultation, or other means, in order to develop minimization and avoidance methods where possible, and consult with Native American tribes participating in AB 52 consultation to develop mitigation measures for TCRs that may experience substantial adverse changes.

To assist AB 52 consultation, the County of San Diego, cities, and other local jurisdictions can and should, SANDAG shall, and other transportation project sponsors can and should comply with the following best practices for complying with AB 52:

- Get needed information in order to preserve the options of avoidance of cultural resources or preservation in place early in the planning process.
- Build working relationships with tribes that are traditionally and culturally affiliated to the project area or to the agency's geographic area of jurisdiction. In consultation, agencies should deal with officially designated representatives of the tribe who have written designation to speak on behalf of the tribe.
- Avoid inadvertent discoveries of Native American burials and work with tribes in advance to determine treatment and disposition if burials are inadvertently discovered.
- Unless the tribe agrees in writing, the project applicant or the project applicant's legal advisors, using a reasonable degree of care, should maintain the confidentiality of the information exchanged for the purposes of preventing looting, vandalism or damage to a tribal cultural resource and should not disclose the information to a third party.

In the absence of any specific mitigation measures developed during AB 52 consultation, the County of San Diego, cities, and other local jurisdictions can and should, SANDAG shall, and other transportation project sponsors can and should develop standard mitigation measures set forth in PRC Section 21084.3 (b).

The following are standard mitigation measures for TCRs.

1. Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
2. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - a. Protecting the cultural character and integrity of the resource
 - b. Protecting the traditional use of the resource
 - c. Protecting the confidentiality of the resource
3. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
4. Protecting the resource.

TCR-1b Implement Monitoring and Mitigation Programs for Development Projects and Transportation Network Improvements. During project-level CEQA review and during construction of development projects and transportation network improvements, the County of San Diego, cities, and other local jurisdictions can and should, SANDAG shall, and other transportation project sponsors can and should implement monitoring and mitigation measures to reduce impacts on both known and undiscovered TCRs, during construction and operation activities, as applicable, including but not limited to the following:

- Require TCR areas identified in any required monitoring and mitigation plan to be monitored during the grading phase of individual projects by a qualified archaeologist and tribal monitor.
- Should a previously undiscovered cultural resource be encountered during construction activities that is determined to be a TCR by the CEQA lead agency in consultation with Native American tribes, stop ground-disturbing activities and prepare and implement a mitigation plan consistent with standard mitigation measures set forth in PRC Section 21084.3(b), in cooperation with a qualified archaeologist (if applicable) and in consultation with Native American tribes.
- Integrate curation of archaeological artifacts and associated records in a regional center focused on the care, management, and use of archaeological collections if the artifacts must be excavated. This does not include Native American human remains and associated burial items, the disposition of which should be determined in consultation with the MLDs.

SIGNIFICANCE AFTER MITIGATION

2025, 2035, and 2050

Implementation of the proposed Plan would result in significant impacts on TCRs through construction and ground-disturbing activities, and increased access to TCRs, in 2025, 2035, and 2050. Implementation of mitigation measures TCR-1a and TCR-1b would reduce impacts through the development of mitigation measures resulting from tribal consultation, regulatory compliance, and mitigation monitoring. However, it cannot be guaranteed that all future project-level impacts can be mitigated to a less-than-significant level. Therefore, this impact (TCR-1) would remain significant and unavoidable.