Chapter 13 Cultural Resources

This chapter describes cultural resources in the project area, and how the project alternatives could affect these resources.

Words in **bold** and acronyms are defined in Chapter 32, Glossary and Acronyms.

13.1 Affected Environment

Cultural resources are nonrenewable resources associated with human occupation or activity related to history, architecture, archaeology, engineering, and culture. **Historic properties**, as defined by 36 CFR 800, the implementing regulations of the National Historic Preservation Act (NHPA), are a subset of cultural resources that are eligible for inclusion in the National Register of Historic Places (NRHP). They are defined as any district, site, building, structure, artifact, ruin, object, work of art, or natural feature important in human history at the national, state, or local level. Historic properties include both historic and **pre-contact** resources. Pre-contact resources are those that pre-date contact between Euro-Americans and Native Americans.

Previous cultural resource studies have been completed in certain portions of the project area resulting in the identification of known cultural resources. However, given its size, most of the project area has not been surveyed for cultural resources making it likely there are previously undiscovered cultural resources in the project area. The probability of encountering previously undiscovered cultural resources along the action alternatives varies. Topographic features and known sites are strong predictors of the presence of cultural resources (e.g., cultural sites are more common in flat areas near water sources). The distribution of both known and unknown cultural resources along the action alternatives is likely to be unequal because specific landforms and water bodies vary among the alternatives. For example, relatively flat land next to a river with historic fish runs, or near a natural travel corridor where historic Indian place names are found would have a greater likelihood of cultural resources than steep slopes or uplands away from a river or stream.

Based on existing models, the location of known cultural sites, and land features, BPA developed a predictive analysis of the likelihood of encountering previously undiscovered cultural resources for each action alternative (see Section 13.2.2.1, Predictive Analysis and Cultural Resource Sensitivity Scores).

The project is within three physiographic regions primarily in Washington, with a small portion in Oregon: the Willapa Hills, Southern Cascades, and the Portland Basin. The archaeological record indicates that this area has been occupied by human populations for at least 10,000 years (Ozbun, et al. 2011). The project extends through lands traditionally inhabited by two Native American groups: the Cowlitz and the Chinook. Most of the project area is within the traditional territory of the Cowlitz, which includes a large portion of inland southwest Washington from the Columbia River to the foothills of the Cascade Range. The area was also traditionally frequented by the Klickitat who historically resided east of the Cascade Range, but ventured into southwest Washington to procure root crops and berries and occasionally resided in Cowlitz territory. During the winter, Cowlitz villages of four to five houses and 30 to 50 people and sometimes up to 300 people were established along the Cowlitz River from its confluence with the Columbia River to 40 miles upstream. Some people would stay in the villages year round, but most left in May and traveled to prairies to collect and process roots.

Seasonal fishing camps were also established to catch salmon and other fish (Ozbun, et al. 2011).

The southern end of the project is within the traditional territory of the Chinookan group known as the Multnomah. Their territory extended just south of the mouth of the Kalama River to the vicinity of the Sandy River. Chinook villages were also near the Columbia River between the mouths of the Cowlitz and Washougal rivers. Chinook winter villages tended to be larger than those of the neighboring Cowlitz. The Chinook wintered in cedar-gabled structures usually occupied by two to four related families, but households of 10 or more families were also known to occur. In early spring, families would leave the villages for seasonal camps where they gathered and processed resources. Important fish resources included salmon, sturgeon, steelhead, and eulachon. Important plant resources included roots, mainly wapato and camas, and berries (Ozbun, et al. 2011).

The arrival of Europeans and other non-Native Americans in the Pacific Northwest in the late eighteenth century greatly altered the traditional native way of life. Disease, traders, missionaries, and new technology had considerable impacts on the Native American people. Diseases such as malaria are estimated to have decimated native populations by 30 percent or more by the early 1800s. The fur trade introduced new goods and new modes of exchange into complex traditional trading systems. By about 1810, posts were established in the interior regions from the Pacific coast, and these posts were the first permanent non-Native American settlements in the region. The British Hudson's Bay Company (HBC) dominated this trade by the 1820s and continued to be the primary foreign presence in the region until the 1850s. Fort Vancouver in modern Vancouver, Washington, was the regional headquarters of the HBC fur trade empire (Ozbun, et al. 2011).

By 1846, most Euro-American settlements in the area were south of the Columbia River, or in areas along the Deschutes in central Oregon, and Cowlitz and Skookumchuck rivers in southwestern Washington. American settlements became commonplace in the 1850s after the establishment of the Oregon Territory in 1848, which gave inhabitants legal claims and rights, as did the passage of the Donation Land Claim Act by Congress in 1850. This increase in Euro-American settlements led to attempts to establish treaties between the settlers and the Tribes. In 1855, Isaac Stevens, the Washington Territorial Governor, tried to persuade the Chinook, Cowlitz, and other groups in Western Washington to cede most of their lands to the U.S. Government. This attempt was unsuccessful and no treaties were signed with the Chinook or the Cowlitz. Some Chinookan groups who resided in Oregon did sign a treaty with the Oregon Superintendent of Indian Affairs in 1851, but this treaty was never ratified. This left most Chinookan groups and all Cowlitz groups without a treaty with the U.S. government for lands (Ozbun, et al. 2011).

BPA was created in 1937 during the Great Depression to transmit and market Columbia River hydropower generated by the Bonneville and Grand Coulee dams. The impact of BPA on the Pacific Northwest, which saw 3,000 circuit miles of transmission lines constructed and interwoven into existing transmission lines from 1939 to 1945, was immense. During World War II, BPA's "Master Grid" energized important wartime industries such as shipyards in Portland and Vancouver, and airplane plants in the Puget Sound region (Kramer 2009). BPA played a major role in the promotion of public power in the Pacific Northwest, leading to the formation of public utility districts and, with the Rural Electrification Administration, many rural cooperatives. Such efforts delivered low-cost power, expanded electric service regionally, and

contributed to the modernization and growth of small Pacific Northwest communities in the years following World War II (Kramer 2009).

13.1.1 Area of Potential Effect

As defined by the National Historic Preservation Act (NHPA), the **area of potential effects** (APE) is the geographic area where historic properties could be changed as a result of the project. The APE for each action alternative is 500-feet wide along the existing and proposed rights-of-way, varying acreage for the four substation sites (Sundial: 40 acres, Monahan: 67 acres, Baxter: 47 acres, Casey: 63 acres), and 50-feet wide for the proposed new and improved access roads outside of the right-of-way.

13.1.2 Pre-Contact and Historic Archaeological Sites

Background research on previous work done within the APE indicated that 39 **archaeological resources** have been previously documented in the APE. This includes 33 archaeological resources recorded in the Washington Department of Archaeology and Historic Preservation (DAHP) database and six resources identified in previous survey reports, but not officially recorded. These 39 archaeological resources consist of 17 pre-contact sites, 17 **historic sites**, and five multi-component sites (i.e., where both pre-contact and historic cultural materials are present). The pre-contact sites include four village locations, 10 **lithic** scatter sites, and three isolated artifact (i.e., a single artifact) sites. The 17 recorded historic sites include two farmstead sites, two abandoned roads, five cemeteries, two grave markers, one debris scatter, one mine, one rock feature site, one aircraft crash site, one hydroelectric site, and one site consisting of irrigation system remnants (Ozbun, et al. 2011).

Many of the recorded pre-contact sites in the APE are near major waterways including Lacamas Lake, the Washougal River, and the Columbia River. Fewer archaeological sites have been identified in upland areas in the eastern and northern portions of the project area. Similarly, few archaeological sites have been identified in the APE for the eastern and northern portions of the action alternatives. However, fewer archaeological surveys have been conducted in these areas. Most known archaeological resources in the APE are along southern portions of the actions alternatives, specifically segments 25, 40, and 52, an indication of both the importance of certain areas within these segments to pre-contact and historic populations and that more cultural resource studies have been conducted in these areas (Ozbun, et al. 2011).

Of the 39 resources recorded within the APE, only one site, the pre-contact Parkersville site, has been determined eligible to the NRHP (National Register of Historic Places). Three resources have been determined not eligible for listing in the NRHP and the remaining 35 resources, including both recorded and unrecorded sites, have not been evaluated for eligibility (Ozbun, et al. 2011).

13.1.3 Traditional Cultural Properties

Federal agencies are responsible under the NHPA to work with tribal and other cultural communities to identify Traditional Cultural Properties that may be affected by federal undertakings. A **Traditional Cultural Property** (TCP) is a property type that can be listed on the NRHP. Similar to other potentially eligible property types, the significance and eligibility of a TCP is “derived from the role the property plays in a community’s historically rooted beliefs, customs

and practices" (Parker and King 1998). These sites are important in maintaining a community's historic identity and help preserve and perpetuate traditional knowledge and culture. The nature of a TCP depends on the meaning given to it by the living cultural community, and that community must play a central role in the identification, evaluation, and treatment of the property (Hutt 2006).

Traditional Cultural Properties may be a single site, a district, or a cultural landscape. They may be archaeological, historic or **ethnographic** in nature. Ethnographic is defined here as identifying with a specific culture or group. The TCP setting is variable and may include urban neighborhoods, rural communities, natural settings, or prominent landform features. A wide range of community resources important to ethnic groups throughout the United States are considered TCPs, including communities such as the German Village in Columbus, Ohio, or Chinatown in Honolulu, Hawaii. In the Pacific Northwest, much of the focus of TCP evaluation has been on American Indian communities, and the 1992 amendment to the NRHP specifically notes that properties of religious and cultural significance to Indian Tribes may be determined to be eligible for listing on the NRHP (16 USC 470a(d)(6)(A)).

Many Native American communities displaced from their traditional homelands by European settlement maintain ongoing cultural links with their historic traditional use areas. They recognize TCPs that are often outside of their modern reservation settings based on pre-European contact settlement and subsistence activities. These TCPs include traditional hunting areas, plant gathering and fishing sites, village locations, archaeological sites, rock image sites, places of historical importance, places that are featured in tribal legends, historic trails, burial grounds, ceremonial use areas, and sacred landscapes. Many variables can contribute to a sacred landscape, such as **myth-time stories** attached to the location. These stories detail creation beliefs for the Tribes and hold religious significance. Sacred landscapes have a strong socio-cultural connection to tribal people.

There are 27 locations classified as ethnographic cultural resources either within or within the immediate vicinity of the action alternatives. Ethnographic resources include many listed from ethnographic research and historic documents (e.g., maps) and others identified in consultation with the Cowlitz Indian Tribe. These resources are specific locales with particular cultural significance to the Tribes. Should BPA decide to build this project and select an alternative that may impact one or more of these ethnographic resources, BPA would seek to avoid the resource, or determine its eligibility as a TCP and consider means of addressing any adverse effects.

13.1.4 Historic Resources

There are 16 previously recorded historic resources within the project area. **Historic resources** are defined as extant buildings, structures and objects that will meet the minimum age requirement for eligibility for listing in the NRHP within 5 years. A resource must be at least 50 years old to be eligible, must have historic significance under one or more designated criteria, and it must have retained its integrity. Of the 16 historic resources identified, three have been determined eligible for the NRHP, five have been determined not eligible and eight have not been evaluated. BPA's transmission network, which includes all existing BPA transmission lines and facilities constructed up to 1974, is a historic resource that is considered to be eligible to the NRHP.

13.2 Environmental Consequences

General impacts that would occur for the action alternatives are discussed below (including a discussion of the predictive analysis), followed by impacts unique to each alternative.

13.2.1 Impact Levels

Impact levels are based on available information or on the potential of an area or site to have cultural resources that could be affected. BPA will conduct a cultural resource survey of the preferred alternative and consult with the appropriate entities.

Impacts would be **high** where project activities would cause the following:

- adversely affect NRHP eligible sites or "**red-flags**" (cultural resources to which potential effects are considered difficult or impossible to avoid)

Impacts would be **moderate** where project activities would cause the following:

- adversely affect any known archeological resources that have not yet been evaluated as eligible for the NRHP
- adversely affect historic resources that have not yet been evaluated as eligible for the NRHP

Impacts would be **low** where project activities would cause the following:

- Affect a cultural resource determined to be ineligible for the NRHP

No impacts would occur if no known, eligible resources are adversely affected.

13.2.2 Impacts Common to Action Alternatives

Construction of substations, towers, staging areas, placement of temporary pulling and tensioning sites, counterpoise installation, access road improvements and new road construction, and limited installation of wood poles for fiber optic cable (fiber would generally be installed on the towers) have the potential to damage or destroy any cultural resources that are present. Visual elements that alter the character or setting of cultural resource sites are forms of disturbance, as are direct physical impacts to site integrity. Increased access to cultural resources from project construction, operation, and maintenance can increase vandalism and looting.

If existing substations, transmission lines and towers that are eligible for listing on the NRHP are altered or replaced as part of the project, there could be an adverse effect on these properties based on the historic nature of some of BPA's infrastructure.

BPA attempts to avoid known sites whenever possible and uses trained cultural resource monitors on large-scale projects to ensure unidentified sites are not inadvertently affected. Sites are identified using several methods including archaeology, oral history, and historical research. Archaeological sites would be delineated both by surface observations and subsurface testing before construction to avoid physically disturbing sites during construction. Appropriate mitigation procedures would be in place to stop construction activities and determine protective

measures (e.g., avoidance) if artifacts are found (see Table 3-2). Unknown sites should not be disturbed with these procedures in place.

Operation and maintenance of the transmission line and substations would not directly affect cultural resources as the area will have been surveyed before project construction and any impacts to the sites will have been previously determined and mitigated if needed. Maintenance of towers or access roads would not affect known resources. If any maintenance activities need to occur outside of tower locations or off access roads, a review of sensitive areas would be required to avoid disturbing cultural resources.

13.2.2.1 Predictive Analysis and Cultural Resource Sensitivity Scores

Given the general inaccessibility of the proposed routes for the action alternatives and the extensive area covered by the APE, BPA developed a predictive analysis to assess the potential for cultural resources along each alternative. A background review and literature search was performed for the route segments, access roads and substation sites. The review included environment, archaeology, **ethnography**, and history data within the APE. Cultural resource data specific to the segments, access roads and substations were then compiled to estimate the cultural sensitivity of each action alternative. Using the Washington Statewide Predictive Model and known cultural resources, each individual route segment was given a cultural sensitivity "score." The cultural sensitivity score provides a basis for comparison among the action alternatives and reflects both the number and significance of known cultural resources within each route segment and for each substation, as well as the probability of encountering previously undiscovered cultural resources.

The Washington Statewide Predictive Model uses environmental variables such as elevation, slope, soils, aspect, proximity to water, surface geology, and landforms as predictors of cultural resources. The model also uses background data compiled from the Washington State DAHP database and the Oregon State Historic Preservation Office (SHPO) database, and other historic materials such as Sanborn Fire Insurance maps and Metsker maps.

Information was also compiled from ethnographic research and historic documents, and from the Cowlitz Indian Tribe. The Cowlitz identified specific areas of importance to them that were flagged for the analysis.

BPA calculated sensitivity scores for each alternative and option to determine which of the action alternatives may have a higher likelihood of cultural resource impacts. The four background areas noted above (environmental, archaeological, ethnographic and historic) were studied independently to determine their "raw" scores, which were then added together for a total score for each segment and then each alternative and option. Each variable was given a number on a scale of 0-100, "normalized" within its variable, and then these four values were calculated to get a median score for each segment. The route segments were then added together to give a total score for each alternative and option (see Table 13-1). Access roads were assigned to route segments for the calculation of the cultural sensitivity scores. Substation site scores were calculated separately and then added to the alternative or option scores. The higher the sensitivity score, the more likely there are cultural resources located in the alternative or option. For a complete description of the scoring system, please see Appendix I.

Table 13-1 Cultural Resource Sensitivity Scores[1, 2]

Alternatives and Options	Cultural Sensitivity Score	Previously Identified Sites within the APE for the Action Alternatives		
		Archaeological	Historic	Ethnographic
West Alternative	**498**	**27**	**18**	**13**
West Option 1	+21	+1	N/C	N/C
West Option 2	+53	-6	-5	-1
West Option 3	+42	-4	N/C	N/C
Central Alternative	**435**	**17**	**1**	**5**
Central Option 1	+12	-1	N/C	+3
Central Option 2	+51	-1	+3	+6
Central Option 3	-26	N/C	+4	N/C
East Alternative	**394**	**14**	**6**	**12**
East Option 1	+11	-1	N/C	-2
East Option 2	+31	+3	N/C	+1
East Option 3	-5	N/C	N/C	N/C
Crossover Alternative	**463**	**12**	**9**	**8**
Crossover Option 1	+57	-1	N/C	+3
Crossover Option 2	+35	+1	N/C	+2
Crossover Option 3	+34	+1	N/C	+2

Notes:

1. The scores for each option represent the net change from the action alternative. They were calculated as the total score of the option's segments minus the total score of the segments the option replaces.
2. Substation sites are included in the sensitivity scores.

Source: AINW 2011

13.2.2.2 Sundial Substation

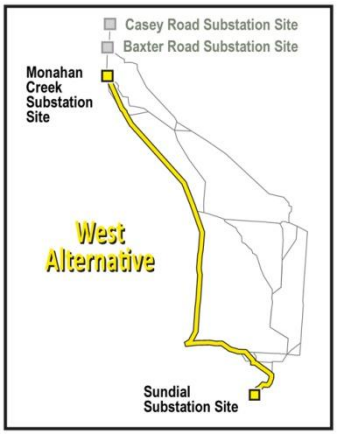
The Sundial site has a cultural sensitivity score of 25. The site has a high probability for historic resources because it is close to BPA's Troutdale Substation, a historic property that has been determined eligible to the NRHP. This site has a very low probability for archaeological or ethnographic resources, due to the site's location in a previously-disturbed industrial area near other substations, and because the presence of existing transmission lines makes it more likely that archaeological resources have been damaged or destroyed by construction of the existing infrastructure. Because the historic Troutdale Substation could be affected by the project, impacts at the Sundial site would be **moderate**.

13.2.3 Castle Rock Substation Sites

Impacts common to action alternatives are in Section 13.2.2. The remaining sections discuss impacts unique to each alternative, and recommended mitigation measures.

The Monahan Creek and Baxter Road sites have the same cultural sensitivity score of 24. This higher score is likely due to their proximity to creeks. The Casey Road site has the lowest score at 15. The three substation sites are in remote areas that have been previously logged and are next to existing transmission lines that may have disturbed archaeological resources previously. Logging activities and transmission lines in the area may also contribute to a higher possibility that historic resources are present (i.e., historic transmission lines and historic logging camps). Because there are historic transmissions lines present in the area of the Monahan Creek, Casey Road and Baxter Road sites, impacts would be **moderate**.

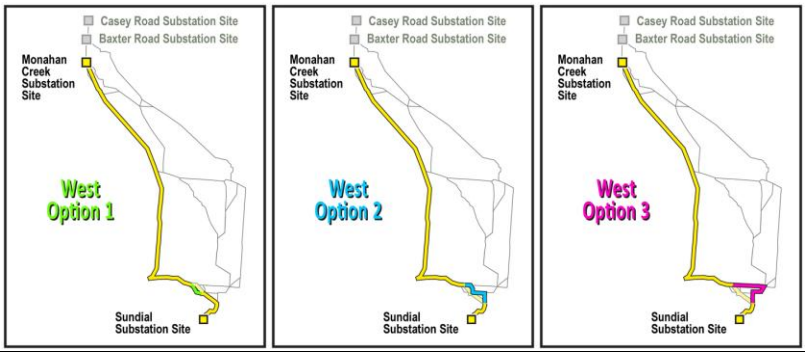
13.2.4 West Alternative and Options



The West Alternative is the most likely culturally sensitive action alternative because it crosses areas within large population centers that contain a greater number of known sites (see Table 13-1). A greater number of sites are known probably because more cultural surveys have been completed in these areas compared to the other alternatives, and also because the areas are more suitable for habitation because of environmental factors (i.e., access to resources, and flatter topography).

Segments in the southern half of the West Alternative have the highest probability of cultural resources present (segments 25, 40, 46, and 52). These segments are in highly populated areas containing a number of previously recorded sites. Segments that have resources at proposed tower sites are 2, 4, 9, 25, 36b, 41, 45, 50, and 52. In Segment 25, known sites that could be disturbed by towers include a trail, a historic grave marker, an ethnographic fishing location, a cemetery, a lithic scatter, and an ethnographic prairie. Segment 4 has ethnographic village sites, the historic Northern Pacific Railroad site, and the Ostrander Tunnel and Portal. Segment 52 (the southernmost segment common to all action alternatives) has a lithic scatter, a historic site, and the Parkersville site, which is listed on the NRHP. The other segments also have sites that include trails, and ethnographic villages.

West Option 1 removes three segments with known cultural resources and substitutes two segments with known resources. Segment 40 has resources including a historic road and a historic grave marker. Segment 46 has some of the same resources, including the same historic marker.



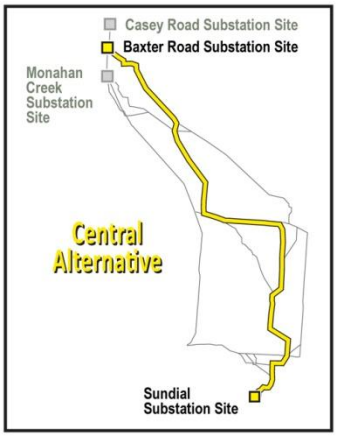
West Option 2 removes the same three segments as West Option 1 and also removes Segment 50; all four removed segments have towers proposed at known cultural resource locations. However, West

Option 2 adds four new segments which also have cultural resources at proposed towers sites: segments 36, 36a, 37, and 43. These resources include a village and ethnographic prairie.

West Option 3 removes four segments that have proposed towers at known cultural resources and adds three segments (36, 36a and 37) that have known resources at tower sites.

Because the West Alternative and its options have NRHP eligible sites or red-flags at proposed tower locations, have unevaluated sites at tower locations and have historic transmission resources that may be impacted by project activities, the West Alternative and its options would create **moderate-to-high** impacts on cultural resources.

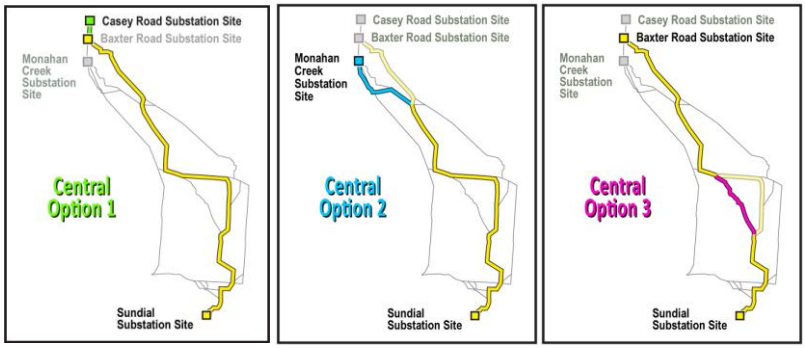
13.2.5 Central Alternative and Options



The Central Alternative has the second lowest cultural sensitivity score. This is partially because this alternative is in a less-populated area with fewer previous surveys completed. The segments that have the highest score and are more likely to have cultural resources that could be affected are segments 4 and 52.

The Central Alternative has five segments (10, 28, 52, B and F) that have known cultural resources at proposed tower locations. These resources include trails, villages, and lithic scatters.

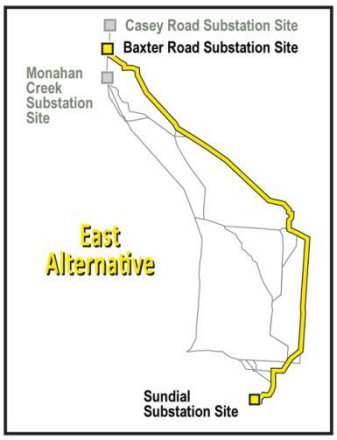
Central Option 1 adds Segment A, which has the same trail at a tower location as segments B and F. Central Option 2 removes these two segments, but adds three other segments that could also cause impacts to resources because of tower location (segments 1, 4, and 5). These resources include an ethnographic village site.



Central Option 3 removes Segment 28 that has known resources (ethnographic trail and prairie) at proposed tower locations and adds Segment 30, which also has a proposed tower on the same ethnographic trail.

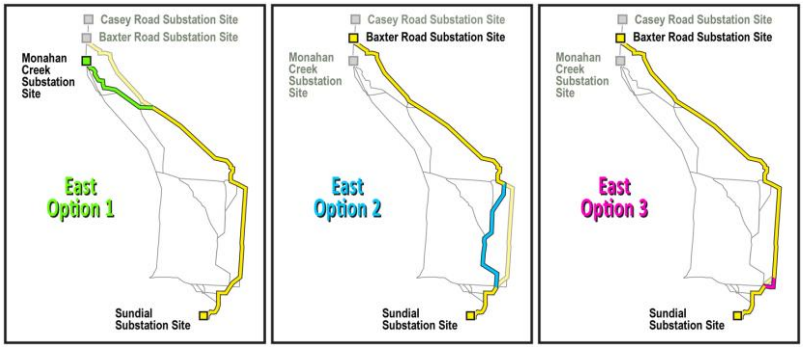
Because the Central Alternative has historic BPA transmission lines present and the Central Alternative and its options have NRHP eligible sites or red flags located at a proposed towers, the Central Alternative and its options would create **moderate-to-high** impacts to cultural resources.

13.2.6 East Alternative and Options



The East Alternative has the lowest cultural sensitivity score, likely because it does not cross through as many highly populated areas, is in an area with more topography, steeper slopes and higher elevations, and is less likely to have been used by Tribes as often as the other action alternatives. Two segments that have a higher probability of affecting cultural resources are segments 3 and 52. Segment 3 has two ethnographic resources that could be affected by tower construction. Segment 52 is common to all alternatives (see Section 13.2.4, West Alternatives and Options).

Although the East Alternative has the lowest probability to affect cultural resources, it does have towers proposed at known cultural resources. These are in segments 52, B, F, K, O, and W. These known resources include historic military roads, trails, and lithic scatters.

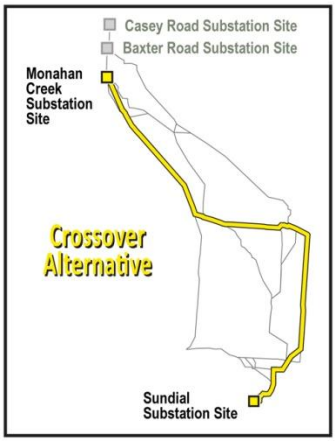


For East Option 1, which has a higher sensitivity score than the East Alternative segments it replaces, segments B and F are removed and are replaced by segments 3, 7, 11, and J. Segment 3 has several known cultural resources and has a high sensitivity score. Segment 3 is the only new segment that has known cultural resources that may be affected by direct tower impacts (village site).

For East Option 2 segments O, Q, and S are removed and replaced by segments U, V, P, 35, and T, but only one of the added segments (Segment U) has a known cultural site that may be affected by a proposed tower (trail). East Option 3 adds only one segment (Segment R), which replaces Segment Q, resulting in nearly the same sensitivity score. There are no known sites at proposed tower locations.

Because the East Alternative and its options have NRHP sites or red-flags at proposed tower locations, unevaluated sites at proposed tower locations, and areas where BPA's historic transmission system is present, the East Alternative and its options would create **moderate-to-high** impacts to cultural resources.

13.2.7 Crossover Alternative and Options

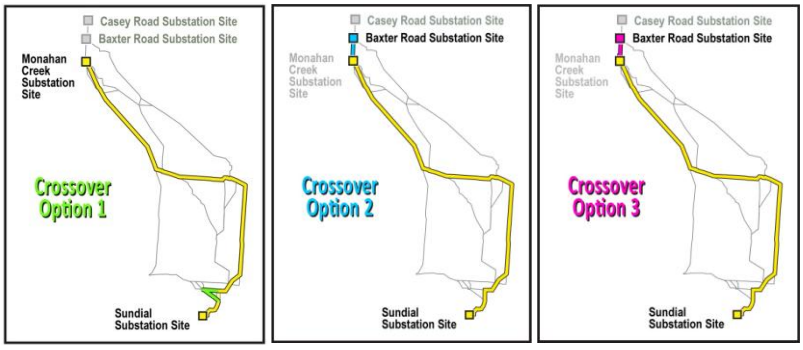


The Crossover Alternative has the second highest cultural sensitivity score. The likely reason for the higher score is that this alternative has a number of segments that occur in highly-populated areas and more surveys have been conducted in those areas. The segments that have the highest probability of impacts to cultural resources are the same as the Central Alternative: segments 4 and 52. South of Segment 4, the probability for impact to cultural resources lowers dramatically (see Sections 13.2.4, West Alternative and Options, and 13.2.5, Central Alternative and Options).

Within the Crossover Alternative, seven segments have towers proposed at known cultural resources: segments 2, 4, 9, 52, N, O, and W. Resources that could be affected by the proposed towers are the same from segment to segment and include trails, village sites, and lithic scatters.

For Crossover Option 1, segments 47, 48, and 50 replace Segment 51. Segments 47 and 50 both have towers that may impact sites (ethnographic prairies and a village site).

For Crossover Option 2, segments C and E are added and only Segment C has a tower where it could affect a historic military road. Crossover Option 3 adds segments D and E. A proposed tower affecting the historic military road is in both segments.



Because the Crossover Alternative and its options have NRHP sites or red flags at proposed tower locations, unevaluated sites and historic transmission infrastructure, the Crossover Alternative and its options would cause **moderate-to-high** impacts to cultural resources.

13.3 Recommended Mitigation Measures

Mitigation measures included as part of the project are identified in Table 3-2. No additional mitigation measures have been identified to further reduce or eliminate adverse cultural resource impacts by the action alternatives.

13.4 Unavoidable Impacts

Some effects of the project may not be physical or direct in nature. The new transmission line could affect the viewshed of nearby sites or culturally significant areas that have yet to be identified. While these effects could be partially mitigated by various construction methods, including double-circuiting, they cannot be eliminated completely. BPA will continue to conduct studies (including a cultural resource survey on the preferred alternative) and consult with appropriate entities to identify resources and the effects that could result from each action alternative.

13.5 No Action Alternative

The No Action Alternative would have no impact on cultural resources in the project area because no new transmission lines, towers, access roads, or substations would be constructed. Impacts from operation and maintenance of existing lines and substations would continue unchanged. Impacts from disturbances from other activities in the area such as logging, land development, and transportation and other infrastructure improvements would continue.