

ENVIRONMENTAL CONSEQUENCES

ALTERNATIVE A: NO ACTION

Visitor Use and Experience

A coordinated federal program would not be undertaken to mark the routes and sites associated with the Old Spanish Trail, and no visitor facilities or interpretive programs focused on the Old Spanish Trail would be provided. Interpretive efforts would continue to be idiosyncratic and carried out on a local basis, and focus on local Old Spanish Trail resources. It would therefore be difficult for visitors to appreciate and understand the full story of the Old Spanish Trail and how it affected the people that used it. However, visitors might gain appreciation of one or more isolated stories associated with the Old Spanish Trail. In addition, few developed recreational opportunities would be available for those knowledgeable about the Old Spanish Trail.

Some confusion and misunderstanding on the part of visitors would result from the absence of coordinated interpretive programs and the likelihood that there would continue to be different and sometimes widely varying interpretations of the history. It is possible that there might be local designations of sites and segments that may not have been a part of the Old Spanish Trail. It is also possible that the perspectives of different ethnic groups, including the descendants of indigenous people, Hispanics, and others, would not be fully presented.

Natural and Cultural Resources

Under Alternative A, No Action, there would be no additional impacts on natural resources (such as soils, vegetation, air quality, water quality, wildlife, and threatened and endangered species) on National Park Service lands from development or visitor use; and natural resource protection would continue to vary on non-National Park Service sites.

Also under the No Action alternative, protection of significant historic sites, structures, and trail segments would continue to be fragmented and uncoordinated, and in most areas, funding and public education would be inadequate. However, over one-third of the trail is on existing federal lands and, where sites and trail segments are on the National Register of Historic Places or potentially eligible for nomination, they would receive some protection under existing federal resource preservation laws. Responsibility for protection would lie with local citizens, organizations, and governments. There would be limited opportunity to expand the number of documented sites and trail segments. Ethnographic and cultural landscape resources might continue to receive little attention. However, the Old Spanish Trail Association, local historical groups, and others would continue to encourage scholarly research relating to the trail and promote trail activities to the extent possible.

There would be limited coordinated research, protection, stabilization, or management of archeological sites, unless undertaken by an entity such as the Old Spanish Trail Association under Alternative A. Sites could continue to be subject to vandalism and inappropriate uses, and resources might be destroyed or irretrievably lost if the individual landowner's interest in resource protection is limited.

Without the benefit of additional protection, some historic sites and structures and trail segments significant to the Old Spanish Trail could fall into disrepair and eventually lose integrity.

The lack of coordination of historical research might contribute to redundant and/or fragmented research.

Socioeconomic Resources and Land Use

There would be no significant change in the socioeconomic environment under Alternative A. Federal, state, local, and private trail economic impacts on resources related to the Old Spanish Trail could result in some benefits to local economies. Increases in employment to local communities from additional development opportunities and increases in retail trade from tourism would be limited unless grassroots efforts were to stimulate trail site development, scenic byways, or other means of promoting the trail. Some activities and tourism opportunities might not occur because of a lack of designation, federal coordination, technical assistance, and opportunities for funding.

Under Alternative A, there would be no additional impacts on land use trends. Land use would continue to vary on sites or segments associated with the trail on private land, and be subject to development, which may not be appropriate for resource preservation.

ALTERNATIVE B: ESTABLISH THE OLD SPANISH TRAIL THROUGH OTHER DESIGNATIONS

Visitor Use and Experience

A wide variety of experiences would be available through Alternative B; however, a major commitment of time would be required to visit the sites and features. Most likely, visitors would follow the trail only in a region or local area. Experiences could vary considerably in quality, depending on the degree of coordination along the trail of thematic coordination and overall trail identity.

Under this alternative, people would be able to visit an identifiable geographic area that contains multiple Old Spanish Trail resources. Agencies, organizations, and so forth would have wide latitude as to the scope of historic and natural resources that could be integrated into the programs.

Visitors to the area could gain an understanding of how a journey along the Old Spanish Trail might have been. They could see the physical relationship among the routes and water sources, as well as understand the kinds of physical and social challenges that trail travelers encountered. Landscape features such as rivers, forests, deserts, and grasslands could be interpreted and visited by means of routes similar or identical to ones actually taken by travelers on the trail.

Some aspects of visitor experiences and interpretation would remain the same regardless of which recreational trail was visited. These include the opportunities to visit communities, landscape features, and other resources associated with the trail. Other aspects of visitor experiences and interpretation could vary from trail area to trail area because of geographic location and diverse natural and cultural resources and landscapes. People who visit only one trail portion would learn about the Old Spanish Trail, but visits to more than one trail portion would result in a greater understanding of the range and diversity of the story. Each trail segment could present its own unique interpretation. Conversely, interpretation of the Old Spanish Trail might not be the primary interpretive basis from segment to segment because local communities and organizations might choose to stress other historic events.

Natural and Cultural Resources

Under Alternative B, construction of interpretive waysides and signs would have minimal incremental effects on natural resources from the standpoint of acreage disturbed. These small, simple facilities probably could be built within existing rights-of-way or disturbed areas.

Overall impacts on vegetative and wildlife communities would be minimal. If the construction of trail facilities included trails and parking areas, it could displace and disturb soils in and around construction sites. Any adverse impacts on prime and unique farmlands as a result of construction and use would probably be minor. The extent of soil impacts is not known at this time. Disturbed soils could be revegetated. Vegetation would be subject to disturbance at construction sites, including those of trails, roads, and parking areas.

Animals in construction areas could be temporarily disturbed by equipment and personnel. Migration and use patterns would be expected to reestablish following development. Some mortality of resident individuals, such as rodents, could occur during construction, although this should not negatively affect populations or communities.

Under this alternative, there would probably be minor, indirect effects on overall habitat capacity caused by any new loss of vegetation and food source plants. Forage would be lost due to clearing for trail, road, and parking area construction; areas disturbed but unobstructed would eventually revegetate and be used by wildlife.

Some habitat for small ground- and tree-dwelling mammals and birds would be permanently lost, causing a decrease in the size of local wildlife populations that would be proportional to the habitat lost. Following construction, reclaimed areas should eventually be reinhabited.

Long-term impacts would include habitat fragmentation from increasing development and human use of habitats—especially in previously underdeveloped areas.

The primary water quality concerns associated with new construction are erosion and increased sedimentation affecting nearby waterways. Minor, temporary decreases in water quality would be caused by runoff from bare soils into waterways. Such impacts would generally be short term. Silt deposited in streams and rivers would eventually be moved downstream by natural flushing action. No long-term impacts on water quality would be anticipated under this alternative.

Paved parking areas, trails, and entrance and exit roads would increase the amount of impervious surface, thereby increasing the amount of storm runoff. Normally, the amount of impervious surface would be small in comparison to the size of the local drainage basin; thus, the increase in runoff would also be small.

The operation of heavy equipment would increase the potential for toxic organic compounds to enter local waterways. Accidental spills of diesel fuel, gasoline, hydraulic fluid, or other petroleum-based products could result in elevated but temporary concentrations of these substances. Post-construction water quality changes would be minimal.

Under this alternative, there would be minor, localized, short-term decreases in air quality caused by dust, particulates, fumes, and noise produced by construction equipment during site development. This impact would be minor, because disturbed areas at the development site would be relatively small.

Volatile hydrocarbons and other organic compounds in asphalt would enter the area for a short time after completion of construction.

Under Alternative B, archeological resources would not be afforded additional protection. However, any additional National Register of Historic Places designations developed as part of the alternative could help to protect trail resources. One-third of the trail is on existing federal lands and, where sites and trail segments are on the National Register of Historic Places or potentially eligible for nomination, they would receive some protection under existing federal resource preservation laws. There would be no coordinated trailwide research, protection, stabilization, or management of archeological sites. Protection of significant sites would continue to be the responsibility of local citizens, organizations, tribes, and government agencies. However, use of the commission management option could allow for the additional protection of archeological resources. This would occur because of the potential for assistance in resource protection to non-federal areas. Interpretive materials could inform visitors about the importance of helping to protect archeological sites and resources. This would be limited only to the areas designated as National Recreation Trail(s).

Under this alternative, additional protection for historic and ethnographic resources could occur, with increased recognition of the location of resources and increased interest in the trail on the part of agencies, organizations, and individuals. However, this protection of historic sites would continue to be fragmented and uncoordinated, and in most areas, funding and public education would be variable. However, use of the commission management option could allow for additional protection of historic resources. This would be limited only to the segments included as National Recreation Trail(s).

Under commission management, or with a strong central trail organization, greater emphasis on history could be provided. Many of those following the trail(s) might be interested and read ahead of, during, or after their visit, or turn to such entities as museums and arts for interpretation of the Old Spanish Trail. Localities might be inspired to provide funding in conjunction with presentations such as special events and guidebooks.

Socioeconomic Resources and Land Use

Under this alternative, there might be a modest increase in visitation, with subsequent economic benefits to local communities. Studies have shown that recreational trails can have considerable economic benefits depending on marketing, location, quality, access to population centers, and other factors; thus, it is difficult to project socioeconomic benefits without more information about the specific locations and characteristics of the recreational trail to be developed. The development of new trails, parking areas, and roads could result in economic benefits for local communities through employment, retail trade, and service industry increases. The addition of broad heritage tourism ties could further enhance the benefits of this alternative. Recreational trails in urban and suburban areas can enhance housing values.

Alternative B would not have much impact on the current trends in land uses along the Old Spanish Trail. The incremental conversion of agricultural lands, especially crop, orchard, and pasture—to subdivisions and similar development would likely continue. The rate of this transition would depend on agricultural market trends and changing land values. The development of recreational trails might contribute slightly to increasing local land values. It should be noted that most National Recreation Trails are on government lands, although there are notable, successful trails that involve private lands, at least in part. Rail and trail conversions may be possible in some areas. Federal, state, local, and non-profit agencies working with private owners may be able to develop strategies to protect current land

use. Strategies these groups might be able to employ, depending on their expertise and legal authority, could include technical assistance, cooperative agreements, scenic easements, grants, tax incentives such as preferential assessment, and acquisition of land interests. These actions would have a long-term beneficial effect on the protection of trail and adjacent resources, especially cultural landscapes.

The presence of recreational trails in an area might contribute to the overall attractiveness of the area, especially for retirees and vacationers. This could result in a slight increase in the rate of land conversion in these areas to commercial or residential use. The anticipated gradual increase of visitation to area attractions around trail development could result in an increase in demand for support services such as food, lodging, and gas. This would have minimal impact, if this type of development were part of historic use patterns, but it might have slightly negative impacts if these activities were introduced in areas that had traditionally been undeveloped or used for agriculture.

ALTERNATIVE C: ESTABLISH AN OLD SPANISH TRAIL NATIONAL HISTORIC TRAIL

Designation of an Old Spanish Trail National Historic Trail could help ensure the protection and interpretation of the trail in a more consistent and coordinated manner. The public and future generation would benefit from the protection of Old Spanish Trail sites and segments. The focus on overall interpretive themes would enable a wide range of the public to appreciate and understand the significance and importance of the Old Spanish Trail. Experience with other National Historic Trails has shown that not all private landowners, organizations, and state and local agencies choose to participate in trail programs, although federal agencies generally do participate. Only those non-federal sites and trail segments for which the owner or managing entity participate in trail programs will tend to benefit from or be impacted by trail programs.

Visitor Use and Experience

Like Alternative B, a wide variety of experiences would be available through Alternative C; however, a major commitment of time would be required to visit the sites and features. Most likely, visitors would follow the trail only in a region or local area. Experiences could vary considerably in quality depending on the degree of coordination along the trail of thematic coordination and overall trail identity.

Under this alternative, people would be able to visit an identifiable geographic area that contains multiple Old Spanish Trail resources, or the entire trail. Agencies, organizations, and so forth would be encouraged to integrate historic and natural resources relating to the primary period of significance of the trail into trail programs.

As in Alternative B, visitors could gain an understanding of how a journey along the Old Spanish Trail might have been. They could see the physical relationship among the routes and water sources, as well as understand the kinds of physical and social challenges that trail travelers encountered. Landscape features such as rivers, forests, deserts, and grasslands could be interpreted and visited by means of routes similar or identical to ones actually taken by travelers on the trail.

Visitor experiences and interpretation at participating National Historic Trail sites would have some consistency in terms of quality of site developments and interpretation. A base level of interpretation of the trail story would be provided to every visitor, with additional site-specific interpretation developed as appropriate. There would be opportunities to visit communities, landscape features, and other resources associated with the trail. Variation from trail area to trail area would be possible because of geographic location and diverse natural and cultural resources and landscapes. Visits to more than one

trail portion would result in a greater understanding of the range and diversity of the story. Each trail segment could present its own unique interpretation. Interpretation of other historic themes would be left to local communities, agencies, and organizations.

Cultural and Natural Resources

The designation of the trail as a National Historic Trail would encourage additional protection of resources through promotion of public interest, stimulation of grassroots management, research regarding the significance of sites and segments, technical assistance in preservation, provisions for public use (where appropriate), and potential funding. Resources on federal lands would receive increased protection, and designation would lead to additional mechanisms, incentives, and opportunities to protect resources on non-federal lands. Designation as a National Historic Trail also would lead to increased public awareness and recognition, which would help to ensure greater protection of resources. People might become more familiar with and connected to their cultural heritage and therefore might be more likely to participate in the protection of the resource.

The designation of the trail would result in increased visitation. With proper management, such an increase would not be likely to cause adverse impacts on trail resources. If visitor facilities and visitor opportunities were expanded without sound planning and effective coordination, there would be a potential for both natural and cultural resources to be adversely affected. Vegetation, wildlife, air and water quality, woodlands, soils, threatened and endangered species, critical habitat, floodplains, wetlands, prime farmlands, and historic and archeological resources could be negatively affected by development and visitors. If developments were considered or proposed for these resource areas, further analysis, under the National Environmental Protection Act, the Historic Preservation Act, and similar laws would be done on a site-specific basis in consultation with affected parties to mitigate any impacts.

Construction of interpretive waysides and signs would have minimal incremental effects on natural resources from the standpoint of acreage disturbed. These small, simple facilities probably could be built within existing rights-of-way or disturbed areas.

Overall impacts on vegetative and wildlife communities would be minimal. If the construction of trail facilities included trails and parking areas, it could displace and disturb soils in and around construction sites. Any adverse impacts on prime and unique farmlands as a result of construction and use would probably be minor. The extent of soil impacts is not known at this time. Disturbed soils could be revegetated. Vegetation would be subject to disturbance at construction sites, including those of trails, roads, and parking areas.

Animals in construction areas could be temporarily disturbed by equipment and personnel. Migration and use patterns would be expected to reestablish following development. Some mortality of resident individuals, such as rodents, could occur during construction, although this should not negatively affect populations or communities.

Under this alternative, there would probably be minor, indirect effects on overall habitat capacity caused by any new loss of vegetation and food source plants. Forage would be lost due to clearing for trail, road, and parking area construction; areas disturbed but unobstructed would eventually revegetate and be used by wildlife.

Some habitat for small ground- and tree-dwelling mammals and birds would be permanently lost, causing a decrease in the size of local wildlife populations that would be proportional to the habitat lost. Following construction, reclaimed areas should eventually be re-inhabited.

Long-term impacts would include habitat fragmentation from increasing development and human use of habitats—especially in previously underdeveloped areas.

The primary water quality concerns associated with new construction are erosion and increased sedimentation affecting nearby waterways. Minor, temporary decreases in water quality would be caused by runoff from bare soils into waterways. Such impacts would generally be short term. Silt deposited in streams and rivers would eventually be moved downstream by natural flushing action. No long-term impacts on water quality would be anticipated under this alternative.

Paved parking areas, trails, and entrance and exit roads would increase the amount of impervious surface, thereby increasing the amount of storm runoff. Normally, the amount of impervious surface would be small in comparison to the size of the local drainage basin; thus, the increase in runoff would also be small.

The operation of heavy equipment would increase the potential for toxic organic compounds to enter local waterways. Accidental spills of diesel fuel, gasoline, hydraulic fluid, or other petroleum-based products could result in elevated but temporary concentrations of these substances. Post-construction water quality changes would be minimal.

Under this alternative, there would be minor, localized, short-term decreases in air quality caused by dust, particulates, fumes, and noise produced by construction equipment during site development. This impact would be minor, because disturbed areas at the development site would be relatively small. Volatile hydrocarbons and other organic compounds in asphalt would enter the area for a short time after completion of construction.

Under this alternative, additional protection for historic, cultural, archeological, and ethnographic resources could occur, with increased recognition of the location of resources and increased interest in the trail on the part of agencies, organizations, and individuals. All trail projects would be subject to compliance with the Historic Preservation Act, and consultation and project review would occur with the State Historic Preservation Officer. Impacts to cultural resources would be avoided or mitigated as appropriate. Consultation would also occur with American Indian tribes to ensure appropriate protection of cultural and religious sites.

The availability of information about trail-related resources might increase the probability that sites could be vandalized and destroyed. Adverse impacts would be avoided through proper site selection, proper design, management of visitor use, law enforcement, site stewardship programs and consultation with state historic preservation offices and the Advisory Council on Historic Preservation. Designation and subsequent certification as a National Historic Trail component would provide the opportunity for landowners and local governments to receive technical assistance in preserving and protection their resources. This would help avert impacts from development and visitors on trail resources on non-federal lands.

Under Alternative C, archeological and historic resources at sites that do not participate in trail programs would not be afforded additional protection, unless a specific federal law mandates consideration of national trail protection. Experience on other National Historic Trails has shown that

with awareness of the existence of the trail, agencies completing Environmental Impact Statements or Environmental Assessments may contact the trail's administering agency. National Register of Historic Places designations developed as part of the alternative could help to protect trail resources. Such nominations may be done, with the owners' consent, even if the owners are not interested in having their sites certified as components of the National Historic Trail. Protection of other significant sites would continue to be the responsibility of local citizens, organizations, tribes, and government agencies.

Socioeconomic Resources and Land Use

Designation of the trail probably would lead to some increase in visitation and tourism revenues. These increases would not necessarily be significant on a regional and statewide scale. Tourism could increase in local communities along the trail corridor. The coordination of visitor services and interpretation along the trail could potentially increase tourism, and thus tourism revenues.

The effects on land values resulting from designation would be few and limited. Little land acquisition, if any, would be recommended. Restrictive language in the actual trail designation legislation, as has been used for other National Historic Trails, could limit federal land acquisition to willing sellers only. Some landowners would benefit from the sale of lands and easements. It is possible that local municipalities would prohibit incompatible development that would adversely affect trail resources. Landowners and developers could be adversely affected by such actions of local governments. Owners of adjacent property might benefit from such land use actions. Protected trail segments with recreational values might increase nearby residential property values. In some cases, there could be a loss in property values because of visitor use on adjacent properties. Adverse impacts would be mitigated by involving affected landowners and other interests in the protection of the trail and the natural and cultural landscapes that are near the trail.