

**STATE ROUTE 76 SOUTH MISSION ROAD TO INTERSTATE 15
SAN DIEGO COUNTY, CALIFORNIA
DISTRICT 11-SD-76 PM 12.1/17.7; I-15 PM 46.1/47.3
EA: 257100 PI:1100000189**

RECORD OF DECISION

This Record of Decision (ROD) was developed pursuant to 40 Code of Federal Regulations (CFR) 1505.2 and 23 CFR 771.127. The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA) has identified the need to reduce local and regional congestion, from current and projected residential, commercial and population growth surrounding the State Route 76 (SR-76) project corridor; improve the SR-76 shoulder widths, stopping distance and sight distance to current Caltrans standards in the unincorporated communities of Bonsall and Fallbrook, County of San Diego, California.

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project are being, or have been, carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

Caltrans identified the Existing Alignment Alternative (Alternative 1) including a partial cloverleaf interchange design, for the SR-76 highway improvement project in the Final Environmental Impact Statement (Final EIS). Interchange improvements include adding two loop on-ramps, realign and widen the existing on- and off-ramps, and widening the bridge structure over I-15. The Existing Alignment Alternative proposes to modify the existing Park and Ride facility, located north of SR-76 between Old Highway 395 and the southbound I-15 off-ramp. An area south of SR-76, between Old Highway 395 and the southbound I-15 on-ramp, was also evaluated for potential future expansion of the Park and Ride facility within Caltrans right-of-way. Under the Existing Alignment Alternative, six signalized intersections will occur at specific locations along the alignment for local access, and channelization lanes will be constructed at specific intersections to improve intersection operation.

Caltrans based its decision on the Final EIS, evaluation of all substantive comments on the Final EIS, and supporting technical studies prepared for the proposed project. With the adoption of a Record of Decision (ROD) by Caltrans and the use of the Final EIS and supporting technical studies, Caltrans will proceed with the knowledge that the project has been approved.

A. DECISION

This ROD approves the Preferred Alternative (Existing Alignment Alternative) identified in the SR-76 South Mission to I-15 Final EIS. After public review of the Draft EIR/EIS and full consideration of the technical studies prepared, public comments, Native American and resource agency input, Caltrans selected the Existing Alignment Alternative including a partial

cloverleaf interchange design for the widening and realigning of SR-76. The selected alternative will widen the existing facility to four lanes and generally follow the current SR-76 roadway, will include construction of loop on-ramps, widened on and off-ramps and bridge structure widening at the SR-76/I-15 interchange. Caltrans, in cooperation with the Federal Highway Administration (FHWA), prepared a Final EIS for the subject project (FHWA-CA-EIS-10-01-F) that identified the Existing Alignment Alternative with a partial cloverleaf interchange as the Environmentally Preferred Alternative. Under Section 404(b) (1) of the Clean Water Act, the Existing Alignment Alternative was also identified as the Least Environmentally Damaging Practicable Alternative (LEDPA). The federal resource agencies involved in the implementation of the NEPA/404 MOU concurred with the LEDPA determination.

B. ALTERNATIVES CONSIDERED

Based on input from the community, Native Americans, and resource agencies as well as on engineering and environmental analysis, the Existing Alignment Alternative including the partial cloverleaf interchange design has been identified by the Project Development Team as the Preferred Alternative for the SR-76 highway improvement project.

In accordance with Section 404 of the Clean Water Act, an alternatives analysis was developed during the NEPA/404 MOU coordination meetings with the resource agencies, which compared all of the alternatives under consideration and the alternatives carried forward for further study, is included in the Final EIS as Table 2-2.

Existing Alignment with 70-mph Design Speed (Alternative 1): Alternative 1 was designed to follow the current SR-76 roadway along the northern edge of the San Luis Rey River. Similar to the Preferred Alternative, the four-lane road would have a design speed of 70 miles per hour (mph) with a total roadway width of 128-feet from edge of shoulder to edge of shoulder. With the higher design speed, the curve radii and superelevation rates for this alignment were increased to meet current Caltrans design standards for stopping sight distance. This alternative would move the proposed roadway alignment away from the current SR-76 alignment at several locations, impacting 84.6 acres of the 100-year flood and a rise of water surface elevation by 6 inches as compared to the Preferred Alternative impacting 55.9 acres with a rise of water surface elevation of 3 inches. Other impacts include: 9.7 acres of U.S. Army Corp (USACE) jurisdictional waters and wetlands; 39 acres of California Department of Fish and Game (CDFG) jurisdictional waters and wetlands; 159 acres of Multiple Species Conservation Program (MSCP) areas within a Pre-Approved Mitigation Area (PAMA); wildlife corridors; requires 58 acres of new right of way and approximately 85 million in additional funding; all of which are greater impacts than the Preferred Alignment. This alternative was considered not feasible due to the larger radii needed for the increased design speed; it did not follow the curvy alignment of the current roadway and resulted in increased environmental and right of way impacts.

Southern Alignment – North (Alternative 3): Alternative 3 followed an alignment south of and crossed the San Luis Rey River east of South Mission Road and generally followed the southern side of the river and then recrossed the river to converge with the current SR-76 roadway near Star Track Way. The two bridge structures required slightly different locations than those proposed by the Southern Alignment Alternative carried forward in the EIS. The placement of these two bridge structures would result in a rise in water surface elevation of 2.2 feet. The area south of the roadway would be removed from the floodplain and could result in future development in the rural project area. This alternative would construct a four lane road

with a width of 94 feet. This alternative was aligned away from the existing SR-76 and had minimal impacts to private property south of the San Luis Rey River. However, a large portion of this alternative was aligned in the existing floodplain and wetlands, as it followed the San Luis Rey River. The current SR-76 would serve as a frontage road for local access between South Mission Road and Old Highway 395, allowing this alternative to not impact or connect to local access points which would adversely impact the community. This alternative would impact 967.3 acres of the 100 year floodplain, would permanently impact 10.7 acres of USACE jurisdictional waters and wetlands and 25 acres of CDFG jurisdictional waters and wetlands, wildlife corridors, and 160.3 acres inside MSCP within PAMA. As a result of potential adverse impacts associated with this alternative, the Southern Alignment Alternative – South was developed to minimize impacts. This alternative was considered to have substantial floodplain and wetland impacts; visual impacts and costs.

Northern Alignment Alternative without tunnels (Alternative 5): Alternative 5 followed the current SR-76 alignment between South Mission Road and Gird Road and then diverged towards the north, between Gird Road and Old Highway 395, to pass through the hills in order to minimize environmental impacts to waters and wetlands along the river valley. Existing intersections with SR-76 between Gird Road and Old Highway 395 would be relocated to the new SR-76 alignment to the north. The remaining portion of the current SR-76 roadway between Gird Road and Old Highway 395 would be used as a frontage road providing local access. Cut slopes of up to 40 feet or 50-feet in height caused adverse impacts to Federal and State threatened and endangered species and sensitive habitat, businesses, and residents. This alternative was considered not feasible due to the increase in project costs resulting from the large cut slopes and environmental impacts needed to construct the segment between Gird Road and Old Highway 395.

Northern Alignment Alternative with tunnels (Alternative 6): Alternative 6 followed the alignment of the Northern Alignment Alternative without tunnels -Alternative 5, discussed above, but lowered the vertical profile to the east of Gird Road to create two tunnels through the hillsides to avoid environmental impacts. The two underground segments of the realigned roadway would have two tunnels each, one eastbound and one westbound, each carrying two lanes of traffic. This alternative would have a total roadway width of 128 feet and the diameter of each tunnel is 39 feet. The overall tunnel length was approximately 1.5 miles. Existing intersections with SR-76 between South Mission Road and Old Highway 395 would be relocated to the new roadway alignment. The remaining portion of the current SR-76 roadway, between Gird Road and Old Highway 395 would be used as a frontage road providing local access. By using tunnels to go through the hillsides, this alternative avoided the massive cut and fill slopes involved with Alternative 5 above. This alternative was considered not feasible because of the additional project costs due to the two tunnels. Elimination of access to several local roads was a substantial adverse impact to the community.

Wetland Avoidance Alternative: The wetlands avoidance alternative for an alignment north of the San Luis Rey River valley would prohibit any bridge crossings of the San Luis Rey River and would be farther north than the existing SR-76 from South Mission Road to Star Track Way. This section would pass through more rugged terrain, in two sections, to avoid wetlands in the San Luis Rey River corridor. Because of the existing topography, massive cut slopes and tunneling would be required through areas of elevated terrain to maintain an acceptable roadway width required to construct a four-lane conventional highway. The wetland avoidance alternative would increase the project footprint; require numerous property acquisitions and the

relocation of businesses and private residents. This route would have required the relocations of local road intersections, possible realignment of local road segments and construction of new access points to numerous properties near the route. This alternative would increase project impacts, substantially impact the community and have considerable engineering and construction challenges which would extend the design and construction schedules and adds an estimated \$360 million to the project costs. Therefore the Wetland Avoidance Alternative was not identified as the LEDPA.

Floodplain Avoidance Alternative: An alternative to avoid impacts to the floodplain were explored. In the current conditions, the intersection of South Mission Road and SR-76 is within the 100-year floodplain; therefore, complete avoidance of the floodplain by either the Preferred Alternative or Southern Alignment Alternative would require raising the SR-76/South Mission Road intersection above the flood level without placement of fill in the floodplain. A viaduct or bridge structure would be needed to do so. The Preferred Alternative would require berm construction from South Mission Road to 1,200 feet east of Star Track Way with encroachment into 55.9 acres of the floodplain. To entirely avoid impacts to the floodplain in this stretch of the project area, the bridge or viaduct would be extended the entire distance to the eastern limit of the encroachment near Star Track Way. Based on the length of this bridge, construction would add approximately \$280 million to the project cost. This alternative would not support incompatible floodplain development, interrupt any transportation routes upstream, or substantially increase risks to life or property. For the above reasons, the Floodplain Avoidance Alternative was not identified as the LEDPA.

Lilac Road Alternative: The Lilac Road Alternative was reviewed when proposed by USFWS and CDFG staff during initial scoping and early NEPA 404 MOU meetings. The Lilac Road proposal suggested construction of SR-76 farther to the south along Lilac Road with a new interchange at the intersection of Lilac Road and I-15. Issues with the Lilac Road Alternative include 1) the lack of continuity in the route, including termini on the west and east side of I-15, which results in out of direction travel and 2) the mountainous topography in the area. The distance between the proposed new Lilac Road Interchange and that of the current SR-76/I-15 interchange would not meet FHWA standards for 2-mile interchange spacing in rural environmental and require a new access point approval from FHWA. The Lilac Road structure is several hundred feet above the I-15 freeway. It is 40 feet wide with one lane in each direction and spans 695 feet between solid granite walls. Due to this elevation difference, making ramp connections would require approximately 0.75 to one mile in each direction to connect ramps to the freeway to satisfy Caltrans Design Standards for ramps, a maximum 8 percent grade which would require substantial grading, drilling and blasting to meet these design standards. Old Highway 395 is less than 0.5 mile from I-15 and realigning SR-76 would require modifications to the Lilac Road/Old Highway 395 intersection. Constructing SR-76 on this new alignment would have required a much wider right-of-way footprint than currently exists for Lilac Road. The new right-of-way would encroach on a fire station, a school and relocation of numerous residents along Lilac Road. This alignment would adversely impact sensitive species and their habitat, would bring new noise and visual impacts to a rural area currently not subjected to the highway-traveling public. For the above reasons, the Lilac Road Alternative was not identified as the LEDPA.

No Build Alternative

The No Build Alternative represents the option of no action. Under the No Build Alternative, no new SR-76 facilities would be constructed and the current SR-76 would continue to serve as the principal access between South Mission Road and I-15. This alternative did not propose any changes to the existing number of lanes or the configuration of existing intersections along the corridor. The No Build Alternative would retain its original design features such as tight curve radii, narrow shoulders, and limited sight distances. With the No Build Alternative, traffic would continue to increase, which will cause longer delays and further degrade level of service (LOS). The No Build Alternative would not improve access for bicyclists and pedestrians nor would it provide additional arterial or interchange capacity or operational improvements. After evaluating the project alternatives, Caltrans determined that the No Build Alternative was not acceptable because it would not meet the project purpose and need, therefore, it was not identified as the LEDPA.

SELECTED ALTERNATIVE (ALTERNATIVE 1)

The Selected Alternative consists of the following major components:

- Expansion to four lanes from South Mission Road to the SR-76/I-15 interchange and will be widened for approximately 5.6 miles. The posted speed limit will be determined after construction and on completion of appropriate traffic studies; it is anticipated to be 55 miles per hour (mph).
- Two westbound and two eastbound lanes will be separated by a median 22 to 42 feet wide (29-foot typical median width) and a concrete barrier.
- Between South Mission Road and just east of I-15, the Preferred Alternative is primarily located along the current SR-76, but shifts north or south to provide for more gradual curves. In some locations on the current SR-76, remainder pavement sections will be removed and those areas will be revegetated.
- At-grade, signalized intersections will be constructed at South Mission Road, Via Monserate, Gird Road, Old Highway 395, the I-15 southbound ramps, and the I-15 northbound ramps. Construction of these signalized intersections will include standard safety lighting, which will be the only lighting provided as part of the project.
- Left-turn channelization and median openings will be provided at the following unsignalized intersections:
 - Sweetgrass Lane
 - Star Track Way/Sage Road access point
- The SR-76/I-15 interchange will be constructed as a partial cloverleaf configuration. Two-lane loop on-ramps are proposed for each direction of travel for the SR-76/I-15 interchange.
- The existing two-span, single-frame, cast-in-place, prestressed, post-tensioned concrete box girder bridge over I-15 will include widening approximately 54 feet to accommodate 6 lanes, which will include extending the abutments and adding additional columns to support the construction. The widening will consist of building a new (cast-in-place box girder) bridge adjacent to the existing 64-foot-wide bridge. The proposed bridge structure will match the existing structure depth and foundation type. The hexagonal flared

columns will maintain the same shape and appearance of the existing columns; aside from these columns, no other architectural treatment is proposed.

- Existing pavement areas will be used as an access point at Star Track Way/Sage Road.
- Acceleration and deceleration lanes will be added to enhance roadway operations, where feasible.
- The project design will be context-sensitive, recognizing the rural character of the adjacent communities. This will be achieved by constructing naturally appearing graded slopes, where feasible, that reflect pregraded contours or simulate natural terrain. Where space allows, undulating contour grading will be employed to minimize the typical straight cut-and-fill appearance of manufactured slopes. This method will soften the visual impact of long or high slope banks and reduce visual contrast with the existing terrain. Granite rock that is blasted and cut will be shaped, to the extent possible, to achieve a rough, natural-appearing surface.
- Underpasses will be used along the roadway to facilitate drainage and wildlife movement. The underpasses will be constructed using pipe materials. These features will vary in width from approximately 3 to 10 feet, and will range in height to accommodate various sizes of wildlife.
- A detention basin will be constructed along the Preferred Alternative at the western side of the intersection of SR-76 and Ramona Drive.
- The existing SR-76 bridge across Live Oak Creek and adjacent to Gird Road will be removed and replaced with a wider, longer, higher bridge located to the south due to the realigned roadway. The work will consist of constructing a single-frame, three-span reinforced concrete slab bridge that will be approximately 105 feet long and 125 feet wide, and 11 feet above the existing stream surface. This bridge will also be used as an access point between trails that are north and south of SR-76 that will be part of the San Luis Rey River Park, to be used by hikers, bicyclists, and equestrians.
- Permanent wildlife fencing will be placed along the edge of the right-of-way in various locations between the San Luis Rey River and the roadway. Wildlife escape areas will also be incorporated.
- To reduce impervious surface areas, the area south of SR-76 between Old Highway 395 and the southbound I-15 on-ramp is evaluated in the EIS for potential future expansion of the Park and Ride facility within Caltrans right-of-way. The northwestern Park and Ride facility will be expanded by 3.9 acres as part of this project.
- The project will extend from post mile 12.1 to 17.7 along SR-76. Along I-15, the post miles will extend from 46.1 to 47.3.

The estimated cost of construction for the Selected Alternative will be approximately \$201 million. There will be multiple construction stages for the project, most likely two.

The first stage of construction will consist of all work at the SR-76/I-15 interchange, including bridge widening and ramp work. It will also include a portion of SR-76 from approximately 0.11 mile west of the intersection of SR-76 and Old Highway 395 to just east of the SR-76/I-15 interchange. Construction will occur in a manner to maintain the current level of traffic flow on SR-76. The second stage will be construction of the portion of SR-76 between South Mission Road and 0.11 mile west of Old Highway 395. Construction requiring lane closures will be conducted at night as much as possible to reduce traffic disruption.

See the Final EIS Section 2.1.2 and Figures 2.1-2a through 2.1-2g for additional information regarding the Preferred Alternative.

RATIONALE FOR IDENTIFICATION OF THE SELECTED ALTERNATIVE

Environmentally Preferred Alternative

In compliance with implementing regulations for NEPA, 40 Code of Federal Regulations (CFR) 1505.2, consideration must be given to the alternative determined to be environmentally preferred.

As described above, the Existing Alignment Alternative was identified as the Environmentally Preferred Alternative. The Preferred Alternative will be a more cost-effective solution for the project's purpose and need. The total estimated cost for the Preferred Alternative is \$201 million, compared to \$322 million for the Southern Alignment Alternative. Although the Southern Alignment Alternative would have permanently impacted less acreage of sensitive vegetation, the Preferred Alternative will have less effect on the functions and values of the remaining sensitive vegetation. The Southern Alignment Alternative could also have resulted in additional potential impacts associated with upgrading the current SR-76 to County standards, and would have affected an area of greater biological diversity in which there is little development and no major roads paralleling the San Luis Rey River. The Preferred Alternative will be entirely on the northern side of the river the Southern Alignment Alternative would have crossed the river in two places, introducing noise, light, and glare to the riparian corridor and decreasing ecosystem stability. The Preferred Alternative will not affect the ecosystem south of the river.

Both alternatives would have incorporated measures designed to allow wildlife to safely cross the highway. The Preferred Alternative will follow the existing wildlife barrier created by the current SR-76 roadway, but will increase the width of this wildlife barrier. The Southern Alignment Alternative would have created a new barrier to wildlife movement, in addition to the current SR-76 roadway, where none exists now. The Preferred Alternative will have fewer impacts to wildlife connectivity within a Pre-Approved Mitigation Area (PAMA) of the draft North County Multiple Species Conservation Plan (NCMSCP) than the Southern Alignment Alternative.

The Preferred Alternative will encroach into less of the San Luis Rey River's 100-year floodplain than the Southern Alignment Alternative would have (55.9 acres vs. 79.8 acres) and will have less effect on the water surface elevation in the event of a 100-year flood (a rise of 3.0 inches vs. 6.7 inches). The Preferred Alternative will cause a smaller increase in velocities of water in the San Luis Rey River channel during flooding than the Southern Alignment Alternative. The Preferred Alternative will not cause existing nonerosive velocities to increase to erosive velocities for either 10-year or 100-year storms. At the two bridge crossings in the Southern Alignment Alternative, columns and abutments could have created the potential for nonerosive velocities to increase to erosive velocities

The Preferred Alternative will follow the route of existing SR-76 as much as possible through areas of semirural residential development. The Southern Alignment Alternative would have created a new major roadway south of the river, in an area designated by the County for very low density development, while leaving existing SR-76 in place north of the river as a County road.

The Preferred Alternative will primarily follow the current SR-76 roadway north of the San Luis Rey River, while the Southern Alignment Alternative would have introduced a new transportation corridor south of the river, would have included the construction of new bridge structures and other associated roadway features in a largely undeveloped area, and would have resulted in higher visual impacts.

The County General Plan Circulation Element shows SR-76 as a major road following the Existing Alignment Alternative. As a new major transportation element south of the San Luis Rey River, the Southern Alignment Alternative would have been inconsistent with applicable transportation planning documents. The Southern Alignment Alternative, by providing access to lands south of the river, could have increased pressure to allow development in that area where only very low density development, and no major roads, exist or are planned.

The Southern Alignment Alternative would have resulted in greater permanent direct impacts to critical habitat for coastal California gnatcatcher and southwestern arroyo toad, compared to the Preferred Alternative. Overall, the Southern Alignment Alternative would have been more likely to constrict wildlife movement.

Other Considerations

The alignment of the Preferred Alternative is recognized in local planning documents. The Preferred Alternative will be consistent with all of the goals and policies in the land use, mobility, conservation and open space elements of the Bonsall Community Plan, Fallbrook Community Plan, and San Diego County General Plan. The Southern Alignment Alternative would have been inconsistent with local planning documents and would have added a transportation element south of the San Luis Rey River that is not currently recognized in plans. The Southern Alignment Alternative would have constructed two new bridge structures which adversely impacts fish passage and cumulatively would increase bridge structures to seven with a 10-mile stretch of the San Luis Rey River.

The Preferred Alternative will require less right-of-way than the Southern Alignment Alternative, and is estimated to cost approximately \$121 million less than the Southern Alignment Alternative. The total estimated cost for the Preferred Alternative is \$201 million, compared to approximately \$322 million for the Southern Alignment Alternative.

C. SECTION 4(f)

The County of San Diego Department of Parks and Recreation has developed the San Luis Rey River Park Master Plan along the San Luis Rey River corridor which establishes a framework for the creation of the approximately 1600 acre San Luis Rey River Park (River Park) from the Old Bonsall Bridge easterly past I-15. The park would include active and passive recreation areas, an open space preserve and a multi-use trail system. The planned and informal trails are included as part of the Community Trails Master Plan (CTMP) with the trails traversing both private and public lands. The CTMP identifies general alignments for the proposed trails, meaning that “general location of a future trail within a designated corridor so that the specific alignment can be determined at the time of actual acquisition, implementation and/or construction. The designated corridor is usually, but not always, considered to be one-quarter mile wide.”

The County of San Diego has purchased approximately 500 acres within the River Park with some parcels immediately adjacent to the current SR-76 roadway alignment. The Southern

Alignment Alternative was estimated to impact approximately 13.1 acres within the River Park while the Preferred Alternative (Existing Alignment) is estimated to impact approximately 8.3 acres. The impacts are primarily to planned and informal trails with the Southern Alignment Alternative impacting approximately 273 linear feet of the proposed San Luis Rey River South Trail while the Preferred Alternative would impact 273 linear feet of the San Luis Rey River South Trail and 96.5 linear feet of the San Luis Rey River North Trails on land that is publicly owned. Conversion of these areas to transportation use would not be consistent with the designated function of the River Park. However, the portion of land requiring use does not possess any features or attributes that, if lost, would impede the ability of the River Park to function in its intended use, as defined in the San Luis Rey River Park Master Plan. Therefore, since the project would not adversely affect any of the activities, features, or attributes of the parcels that qualify the resource for protection under Section 4(f), it was proposed as *de minimis*.

Since 2005 representatives of the County have attended Caltrans Project Development Team meetings, NEPA 404 integration meetings and other planning and miscellaneous meetings in order to coordinate the two projects simultaneously. During negotiations with the County of San Diego, Caltrans has proposed to incorporate portions of the planned and informal trails into the SR-76 project fill slopes, where feasible. Additionally, Caltrans has proposed construction of undercrossings sufficient to accommodate equestrian and other trail users as part of the SR-76 highway project. The County of San Diego would agree that the impacts of the SR-76 highway project on River Park parcels are 4(f) *de minimis* upon Caltrans signing a Memorandum of Understanding (MOU) that would require Caltrans to construct trails in the SR-76 project vicinity where trails can be accommodated. This proposed trail construction would mitigate the SR-76 project impacts so that they would not adversely affect the future features, attributes or activities of the proposed River Park. The MOU would also require Caltrans to construct trails outside of the highway right of way in what were previously “temporary project impact” areas. Since trail construction would change these temporary impact areas to permanent impacts, further increasing the highway impact footprint, the County of San Diego would be responsible for mitigating any permanent impacts from the trails through additional environmental review and documentation. The MOU would also state that Caltrans would request a revised Biological Opinion from the U.S. Fish and Wildlife Service and would modify CEQA/NEPA documents as necessary.

The County of San Diego Department of Parks and Recreation, as the agency with jurisdiction over the River Park, concurred with the *de minimis* finding by signing the September 21, 2011, letter included as Appendix L in the Final EIS.

D. SUMMARY OF BENEFICIAL ENVIRONMENTAL IMPACTS

The proposed improvements to the SR-76 corridor will maintain or improve projected future traffic operations. The Preferred Alternative will result in better roadway segment operations and intersection operations in the year 2030 compared to operations projected for 2030 without construction of the project, which will reduce traffic congestion and improve circulation along SR-76 and local roadways connected to SR-76.

The alignment of the Preferred Alternative is recognized in local planning documents and will follow the existing SR-76 roadway to the maximum extent possible along the northern edge of the San Luis Rey River Valley. The Preferred Alternative will be consistent with the goals and policies in the land use, mobility, and conservation and open space elements of the Bonsall Community Plan, Fallbrook Community Plan, and San Diego County General Plan. The

Preferred Alternative is a transportation improvement that is designated in each of the adopted County plans, as opposed to the Southern Alignment Alternative, which would have been inconsistent with some of these goals and policies. The Preferred Alternative will also be consistent with the 2050 Regional Transportation Plan (RTP), the 2010 Regional Transportation Improvement Program, the San Luis Rey River Park Master Plan, and the San Diego County Community Trails Master Plan.

The Preferred Alternative will reduce head-on collisions by installing a median barrier that will separate the opposing flows of traffic. Openings in the barrier will only be provided at some intersections, while most other access points to the highway will be limited to right-in/right-out turns onto and off of the facility. Elimination of some left turns will also reduce the potential for broadside-type accidents typically associated with left turns. Additionally, the Preferred Alternative will provide 10-foot-wide shoulders along the corridor that will provide better sight distance and additional pavement for vehicles to pull over in emergencies.

As a part of the project, the interchange loop on-ramps will be added and off-ramps will be widened and realigned to improve the geometrics of the ramps and improve interchange operations and efficiency.

Sidewalks (5 feet in width) will be provided on both sides of the highway around the SR-76/I-15 interchange to accommodate pedestrian traffic. A Class III Bike Route will provide for shared shoulder use with pedestrian, bicycle, and motor vehicle use consistent with the current plan for the SR-76 corridor. Bicycle-friendly design elements will be incorporated, whenever feasible, including 10-foot-wide outside shoulders, bicycle-friendly drainage systems, and bike refuge lanes at signalized intersections. The nonmotorized component of the project includes continued use of the existing Regional Bikeway System, the Bus Bicycle Rack program, and the Bicycle Locker program at Park and Ride lots. Pedestrian and bicycle facilities will improve accessibility and safety for pedestrians and bicyclists.

Sidewalks and curb ramps will be in compliance with California state laws and federal Americans with Disabilities Act (ADA) regulatory standards. Existing sidewalks will be maintained, upgraded as needed for accessibility, or relocated along the new roadway alignment.

This project is being developed along with the County of San Diego Department of Parks and Recreation to coordinate with the San Luis Rey River Park. A Memorandum of Understanding (MOU) outlining the areas of involvement between the County and Caltrans is currently being developed. The SR-76 project will provide locations for a series of multi-use trails, staging areas, fencing, and at-grade equestrian crossings for the County Park that could be constructed during the roadway phase of this project.

The Preferred Alternative will not support incompatible floodplain development, interrupt any transportation routes upstream, or substantially increase risks to life or property. The Preferred Alternative will not provide new access or direct access to the affected floodplains. Access to the highway will be controlled, and built above the base floodplain elevation.

The Preferred Alternative will consist of approximately 41.6 acres of treated impervious surface and approximately 21.1 acres of untreated impervious surfaces, which will be 66 percent of treated impervious surfaces compared to the existing facility (26.7 acres) which has no treatment.

The Preferred Alternative will include directional fencing and road undercrossings to reduce wildlife traffic mortality incidents, to improve regional and local wildlife corridors, and to enhance wildlife movement associated with the existing SR-76 facility. The Preferred Alternative will also include a new bridge crossing at Gird Road near the confluence of Live Oak Creek at the San Luis Rey River that could be used as a wildlife crossing.

The Preferred Alternative will require less right-of-way than the Southern Alignment Alternative and is estimated to cost approximately \$119 million less than the Southern Alignment Alternative.

The Preferred Alternative will follow the current SR-76 roadway where feasible and possible along the northern edge of the San Luis Rey River Valley, while the Southern Alignment Alternative would have constructed new bridge structures along with associated roadway features in a largely undeveloped area and would have resulted in higher visual impacts.

The Preferred Alternative will not result in any air quality threshold exceedences. Furthermore, the Preferred Alternative is estimated to reduce regional carbon monoxide emissions by 20 tons per day by 2015 compared to the No Build Alternative and is estimated to reduce regional carbon monoxide emissions by 10 tons per day by 2030 compared to the No Build Alternative.

This project is being developed along with the County of San Diego Department of Parks and Recreation to coordinate with the San Luis Rey River Park. A Memorandum of Understanding (MOU) outlining the areas of involvement between the County and Caltrans is currently being developed. The SR-76 project will provide locations for a series of multi-use trails, staging areas, fencing, and at-grade equestrian crossings for the County Park that could be constructed during the roadway phase of this project.

E. SUMMARY OF ADVERSE ENVIRONMENTAL IMPACTS AND MITIGATION

Implementation of the project includes construction and operational impacts. Chapter 3 of the Final EIS provides a detailed discussion of potential impacts resulting from the project, and identifies specific measures to avoid, minimize, and mitigate impacts. Adverse impacts and mitigation are summarized below.

Land Use

The project area is generally composed of agricultural and equestrian facilities, estate residential homes and open space associated with the San Luis Rey River and hilly topography, all connected by small-scale winding two-way roads. The project would affect the existing land use, especially during construction.

Mitigation Measures

Caltrans has undertaken efforts to integrate the project with the adjacent/adjoining communities of Bonsall and Fallbrook. Caltrans and the County of San Diego are working cooperatively to avoid land use compatibility conflicts between state transportation facilities and the River Park.

Every attempt is being made to minimize the effects to land use and still meet project requirements. Wherever possible, the Preferred Alternative has been designed to follow the

current SR-76 alignment to minimize impacts to land use and has undergone several design iterations to avoid and/or minimize potential impacts to land use.

Farmlands

While the preferred alternative would be consistent with local community plans and the San Diego County General Plan, it would be inconsistent with the goals of these plans by converting both active farmland and agricultural soils that have the potential to support farming activities to transportation uses. This alternative includes cut slopes which would impact 1.2 acres of Williamson Act contracted farmland located at the intersection of SR-76 and Ramona Drive. The farmland conversion would be longitudinal and the farming activities would continue on the remainder of the parcel. This alternative would impact a total of 118.3 acres of farmable soils (0.08 percent of the total County farmland).

Mitigation Measures

Various parcels have been purchased as mitigation for project impacts including Stacco, Time Out Holdings, Jeffries Ranch, Tabata, Vessels, Rincon and Lilac Ranch which are proposed for restoration and preservation from future development. In order to minimize impacts to residential areas along the northern edge of SR-76, some curve corrections have been re-designed to shift south slightly, which would leave portions of the old roadway pavement to be removed and those areas revegetated thereby minimizing the adverse impacts to farmland from the project. During the right of way process, efforts would be made to add agricultural easements to the sales of these remnant farmland parcels or excess lands such as may be created at areas of curve corrections, if any. These efforts would maintain community character and cohesion since including larger mitigation parcels in areas designated for preservation would prevent future unplanned commercial or other development within the rural areas of Bonsall and Fallbrook.

Community Character and Cohesion

The preferred alternative would be consistent with all of the goals and policies in the land use, mobility, and conservation and open space elements of the Bonsall Community Plan, Fallbrook Community Plan and San Diego County General Plan. SR-76 is a transportation improvement that is designated in each of the adopted County plans. It would also be consistent with the 2030 and recently adopted 2050 RTP, the San Luis Rey River Park Master Plan and the San Diego County Community Trails Master Plan. The preferred alternative would widen the existing SR-76 roadway and increase the carrying capacity of this portion of the highway, which in turn could change the small-town image of the surrounding area. Since the preferred alternative would be constructed along the current roadway, the project would not divide an established community. The preferred alternative would impact the rural character of the communities by altering the visual landscape through landform modification to steep slopes and removal of a variety of vegetation types, including mature trees and substantial masses of plant materials due to modifications in roadway geometry and configuration.

Mitigation

The preferred alternative has been designed with input from the community to avoid unnecessary impacts to community character and cohesion. Community groups and agencies

that participated in community outreach meetings and events include: Bonsall Area for Rural Community (BARC); the Bonsall Sponsor Group; County of San Diego Department of Public Works and Department of Parks and Recreation; North County Fire Protection District; Vista, Fallbrook and Bonsall Kiwanis Clubs; Rancho Monserate and Sycamore Ranch Homeowner Associations; Bonsall and Fallbrook Chambers of Commerce; and the Fallbrook Land Conservancy. In addition to community outreach, design iterations of the preferred alternative have effectively minimized impacts to homes, businesses and visual resources. Use of visual measures such as the proposed plant palette, wall/bridge treatments and light fixtures would ensure that the rural community character is protected as much as possible; a rural community identity can be fostered using these measures. Revegetation using duff, hydroseeding, plantings, temporary irrigation and replacement in-kind/similar native species along with management and monitoring plans would ensure that the habitat types are self-sustaining over the long-term. Measures to mitigate removal of vegetation would include removal of nonnative plants such as arundo and replanting riparian areas with willow, cottonwood and/or sycamore trees to increase shade canopy, aid in restoring riparian habitats and help treat runoff to minimize impacts to water quality. The plan palette would consist of native trees, shrubs, and ground covers that are similar in composition to the adjacent habitats and that reinforce the landscape concept. The preferred alternative would maintain the pastoral landscape of the area south of the San Luis Rey River that would have been adversely impacted by the Southern Alignment Alternative. Spaces within developed and urbanized areas, such as the pavement removal areas, may be landscaped with noninvasive ornamental plant materials which would aid in visually reducing the scale of the proposed highway improvements.

Visual

Generally, the expectations are for a cohesive scenic rural experience with minimal distractions and disruptions from the presence of traffic and the scattering of existing residential development and commercial use. The primary viewers within the project area and the larger viewshed would be motorists, surrounding residences, commercial employees and patrons, and recreational users. The entire SR-76 highway is eligible for Scenic Highway designation.

The existing visual quality of the SR-76 corridor is moderate to moderately high along the current alignment and high within the river valley itself. This is due primarily to the abundance of native and riparian vegetation and topographic relief associated with the river and the general open rural character. In areas where the preferred alternative would follow the current SR-76 roadway, the visual impact to the immediate areas would be less pronounced, as only the highway would be widened. However, the visual impacts for the overall project would be moderate, primarily due to the extent of landform modification to the steep hillsides along the north side of SR-76 between Gird Road and Old Highway 395. Major grading operations and resulting landform alterations that harshly contrast with the existing visual environment would occur. In addition, the paving and construction of segments of the preferred alternative into areas south of the SR-76 roadway would introduce a new segment of the transportation corridor. The preferred alternative would not require any bridge structures over the San Luis Rey River and therefore would not impact the visual integrity of the existing mature riparian vegetation along the riverbed or the open river valley. Even though the preferred alternative would primarily remain along the current SR-76 roadway alignment, incursions into the river basin would occur due to modification in roadway geometry and configuration. These modifications would disturb existing mature vegetation and add a substantial amount of paved surface area. The preferred alternative would result in moderate to high visual impacts.

Mitigation

Existing scenic and visual resources would be preserved to the extent possible, which includes preservation of existing mature trees, shrubs, and groundcovers along the north side of SR-76. Sustainable landscape treatment would be designed to help reinforce and maintain the rural and riparian character of the project area, minimize the adverse visual impacts resulting from construction, provide visual cohesion, and control erosion. Landscape design would reflect existing natural tree and shrub massing while softening and enhancing the project area would be used for maximum visual effect. Replacement plantings of the same species would occur in areas where mature trees and shrubs would be removed during construction, especially where exposed graded slopes contrast sharply with the adjoining vegetated slopes. Successful revegetation of manufactured slopes is critical for restoring visual quality and character to the project area. Visual mitigation is also used for Community Character and Cohesion.

Mitigation for specific roadway elements:

Park and Ride Facility: The Park and Ride facility may introduce a substantial amount of paving and lighting to the project area. An irrigated landscape buffer of native trees and vegetation would be planted along the eastern and northern boundaries of the Park and Ride facility to help screen it from the surrounding residences and motorists traveling on I-15. Additionally, streetscape planting and landscaped medians, including trees and plant material, would be included in the parking areas. The Park and Ride is located adjacent to an existing interchange that uses standard interchange lighting, including lighting on large poles. The lighting would be appropriate for the rural nature of the area and would include elements such as glare shields and amber bulbs.

Exposed Rock/Rock Slope Protection: Rock slope protection (RSP) in the form of stone riprap would be used on exposed fill slopes along the edges of the transportation corridor to protect the SR-76 from river encroachment. The RSP would be installed and covered in dirt to facilitate revegetation with native plant material in accordance with the landscape concept plan and be consistent with the surrounding plant palette. Areas of REP that are exposed, specifically in areas of drainage outfalls, and cannot be covered and planted may be coated with a rock stain to create an aged effect. After blasting or cutting, exposed rock surfaces would be coated with the same rock stain.

Walls: Walls may occur at various locations and would be consistent with the rural character of the project area. Walls would be earth tones, with consideration to screening the walls with vines or planting.

Fences: Fencing would be treated as a decorative element within the landscape whenever feasible. Split rail or comparable style would be considered in this area to reinforce the rural experience. In instances requiring chain-link fencing, the fencing would be galvanized with a finish/color that maintains the rural character of the project area.

Pavement: In some areas where the project results in excess pavement, the pavement would be removed and those areas revegetated where portions of the current highway would no longer be needed due to curve corrections.

Barriers and Guardrails: Median barriers would be earth tones. The introduction of decorative surface treatment has the potential to attract undue attention to this roadway element. Guardrails are subject to engineering feasibility and traffic safety, but efforts would be

made to incorporate guardrail materials that maintain the rural character of the project area. Earth-toned materials would be considered, as they further reinforce the existing rural experience.

Lighting: While Caltrans would strive to be consistent with the County of San Diego night-time lighting requirements, the poles and fixtures would be selected based on their contribution to the overall landscape character of the project area. Because lighting is used at signalized intersections, this roadway element can be used as a gateway feature, and to serve as a subtle alert to motorists of an approaching change in character or roadway configuration. When selecting lighting fixtures, particular attention would be paid to the scale, texture, color and ability to satisfy the lighting requirements. The lighting would be appropriate for the rural nature of the area and would include such elements as glare shields and amber bulbs to minimize impacts to sensitive habitat and minimize glare.

Hydrology and Floodplain

Five floodplain encroachments are associated with the preferred alternative. All floodplain encroachments would be longitudinal. The total floodplain encroachment for the preferred alternative would be 55.9 acres with an impact to the water surface elevation of the 100-year floodplain, equal to a maximum increase of 3.0 inches. Encroachment 1 is located near the intersection of SR-76 and South Mission Road. The encroachment is 16.4 acres and is due to direct roadway/side slope encroachment and RSP placement to protect the fill slopes against erosion. Encroachment 2 is located west of Via Monserate. This encroachment is 2.86 acres and is due to RSP placement to protect the fill slopes against erosion. Encroachment 3 is located east of Via Monserate. This encroachment is 2.28 acres and is due to RSP placement to protect the fill slopes against erosion. Encroachment 4 is located south of SR-76 near Flowerwood. This encroachment is 1.20 acres and is due to RSP placement to protect the fill slopes against erosion. Encroachment 5 begins west of Gird Road and ends east of Star Track Way. This encroachment is 33.2 acres and is due to RSP placement to protect the fill slopes against erosion. The five encroachments associated with the preferred alternative have potential impacts to the following natural and beneficial floodplain values: water quality; plants and animals; wildlife habitat; wetlands and agriculture. Since the 100-year flood would still be contained within the existing floodplain boundaries, there would be no increased risk to life or property associated with the proposed improvements. No additional roadways would flood upstream from the proposed I-15 bridges. Therefore, no transportation routes would be interrupted or terminated beyond existing conditions. No new access and no direct access to the affected floodplains would be provided by the preferred alternative. Access to the facility would be controlled, and the highway would be build above the base floodplain elevation.

Mitigation

The preferred alternative would require that cross culverts be used under the highway to convey flow from the creeks north of the project to the San Luis Rey River. The culverts would be designed within headwaters rising above an elevation that would cause undesirable backwater depths or outlet velocities. The cross culverts would be used along the roadway to facilitate drainage and wildlife movement. In an effort to minimize the encroachment, slope designs were reduced from 4:1 (horizontal to vertical) to 2:1; which minimized the footprint in the floodplain. In an effort to minimize Encroachment 1, the alignment was adjusted to the north, out of the floodplain as much as possible. Moving the alignment further north completely out of the floodplain would adversely impact the community by requiring acquisition of four buildings in the

strip mall near South Mission Road. Avoidance of Encroachment 2 would require the alignment to be moved north, potentially displacing four single-family residences. Encroachment 3 was for substantial grading cuts if the floodplain was to be completely avoided. This would increase the visual impact and overall cost of the project. Encroachment 3 has been minimized by relocated the alignment as far to the north as possible, without causing acquisition of additional right-of-way and by balancing the height of the cuts to minimize visual impacts. Avoidance of Encroachment 4 would require the alignment to be moved north. This would necessitate the acquisition of three single-family residences and construction of large cut-slopes and/or retaining walls. Avoidance of Encroachment 4 would require acquisition of additional right-of-way and would create greater visual impacts. Encroachment 5 is required to minimize visual impacts and costs associated with large cuts that would have resulted if the preferred alternative were located farther to the north completely out of the floodplain. This area has been redesigned to minimize this encroachment.

Water Quality and Storm Water Runoff

The receiving water body for the project is the San Luis Rey River, with drainage through the river and its associated tributaries. The current SR-76 roadway consists of 26.7 acres of untreated impervious surfaces. The preferred alternative would increase the impervious surfaces to 62.7 acres with treatment of approximately 66 percent of roadway runoff. The preferred alternative would have a disturbed soil area of approximately 193 acres. The partial cloverleaf interchange design would have a disturbed soil area of approximately 50 acres. This design would treat 13.9 acres which is 54 percent of the total roadway runoff under post construction conditions. This alternative would leave 12.0 acres of untreated impervious surfaces. There is the potential for toxic spills to occur under unintended circumstances, if such a situation were to occur, hazardous waste personnel would be the first responders. There would be a temporary movement/recirculation of water, if dewatering was necessary. The water would be returned to the San Luis Rey River and would percolate back to groundwater. The targeted design constituents (TDCs) in the San Luis Rey River and phosphorus and Total Nitrogen as N. The TDCs listed for the San Luis Rey River are not from vehicles.

Mitigation

The preferred alternative provides greater treatment than current conditions. The preferred alternative would treat approximately 66 percent of roadway runoff. The partial cloverleaf interchange design would treat 54 percent of total roadway runoff under post construction conditions. Several design iterations were investigated during project development to minimize impacts to the river wherever possible. Complete avoidance of the floodplain is not practicable.

The SWMP describes the procedures and practices that Caltrans would implement to reduce the discharge of pollutants to the storm water drainage system that serves the highway and highway-related properties, facility and activities as well as the associated receiving waters. The SWMP divides the BMPs into separate categories of project development, from the planning and design phases through the construction, operations and maintenance phases. The preferred alternative would follow and install construction site BMPs; Design Pollution Prevention BMPs and Treatment BMPS as required. See Section 3.14.4 in the Final EIS.

Air Quality

In addition to the widening of SR-76, the project includes other associated improvement to the northern Park and Ride facility adjacent to SR-76 between Old Highway 395 and I-15. The Park and Ride facility would not generate vehicle trips, but rather would provide a facility for carpooling of existing traffic, thereby reducing vehicle trips on area roadways. The preferred alternative would widen SR-76, thereby adding capacity to this roadway segment. While additional capacity would be facilitated, the widened segment would provide an estimated maximum ADT of less than 20,000 which would be substantially less than the FHWA threshold value of 140,000 AADT, the minimum volume for higher potential MSAT effects (Quantitative Analysis). Therefore, the preferred alternative would not be included in Category 3. By default, the preferred alternative would be included in category 2 and would have a low potential for MSAT effects. This assessment is based on FHWA guidance that projects that do not meet the criteria for Category 1 or Category 3 should be included in Category 2.

According to the CO Protocol, the project is considered satisfactory; therefore, no localized CO impacts would occur. Emissions would likely be lower than present levels in the design year as a result of USEPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from the national projections that MSAT emissions in the study area are likely to be lower in the future.

The principal criteria pollutants emitted during construction would be PM₁₀ and PM_{2.5}. The source of the pollutants would be fugitive dust created during clearing, grubbing, excavation, and grading; demolition of structures and pavement; vehicle travel on paved and unpaved roads; and material blown from unprotected graded areas, stockpiles, and haul trucks. A secondary source of pollutants during construction would be engine exhaust from construction equipment. The principal pollutants of concern would be nitrogen oxide (NO_x) and volatile organic compound (VOC) emissions that would contribute to the formation of O₃, which is a regional nonattainment pollutant.

Mitigation

The following measures will avoid or minimize impacts to air quality:

- Comply with Caltrans Standard Specification Section 10: Dust Control or with Caltrans Standard Specification Section 14-9.03: Dust Control;
- Minimize land disturbance;
- Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas;
- Suspend grading and earth moving when wind gusts exceed 25 mph unless the soil is wet enough to prevent dust plumes;
- Stabilize the surface of dirt piles, if not removed within two days;
- Limit vehicular paths on unpaved surfaces and stabilize any temporary roads;
- Minimize unnecessary vehicular and machinery activities;
- Sweep streets where sediment is tracked from the jobsite onto paved roads and immediately after soil-disturbing activities occur or off-site tracking is observed.

- Revegetate disturbed land, including vehicular paths created during construction, to avoid future off-road vehicular activities; and,
- Locate construction equipment, and truck staging and maintenance areas as far as feasible and nominally downwind of schools, active recreation areas, and other areas of high population density.

Riparian Communities

The Preferred Alternative will permanently impact 32.65 acres of riparian and wetland vegetation. The Preferred Alternative will also temporarily impact 10.60 acres of riparian communities.

Mitigation Measures

Compensatory mitigation for riparian and wetland habitats will consist of a combination of creation and restoration of habitats at the Tabata (24.1 acres) and Vessels (110.6 acres) sites.

Jurisdictional Waters of the U.S.

Although the Preferred Alternative has been designed to avoid other highly sensitive resources adjacent to the river, some impacts to wetland and riparian communities and to USACE jurisdictional Waters of the U.S. will be unavoidable.

The Preferred Alternative will permanently impact 4.61 acres of jurisdictional Waters of the U.S., and temporarily impact 3.99 acres of Waters of the U.S. Permanent impacts will result from ground disturbance where new roadway will be constructed within wetland habitat, while temporary impacts will occur during construction activities for the project. Temporarily impacted areas will be restored following construction. The Preferred Alternative will also result in indirect impacts to 11.75 acres of Waters of the U.S.

Mitigation Measures

Unavoidable impacts to USACE jurisdictional wetlands require compensatory mitigation. Temporary impacts to jurisdictional waters will be compensated at a 1:1 ratio with on-site restoration of the same habitat type that was temporarily disturbed. Indirect impacts will be compensated at a 1:1 ratio with off-site restoration of the same habitat that was indirectly disturbed. Permanent impacts to coastal and valley freshwater marsh, mulefat scrub, southern cottonwood-willow riparian forest, southern willow scrub, and open water are proposed be compensated at a 3:1 ratio with no net loss. Permanent impacts to disturbed wetland are proposed to be compensated at a 1:1 ratio. Permanent impacts to USACE jurisdictional wetlands will be mitigated at off-site mitigation sites through a combination of creation, restoration, and enhancement at the Tabata and Vessels properties.

Threatened and Endangered Species

On September 22, 2011, Caltrans received a Biological Opinion (BO) from the USFWS on the Preferred Alternative (FWS-SDG-09B0003-11F0420). In the BO, the USFWS determined that the project, with mitigation incorporated, will not be likely to jeopardize the continued existence

of the coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, arroyo toad, or San Diego ambrosia.

Coastal California Gnatcatcher and Critical Habitat

The Preferred Alternative will impact up to four individual (two pairs) coastal California gnatcatchers. Additionally, the proposed project is located within and adjacent to Designated Critical Habitat Unit 5 for coastal California gnatcatcher. The Preferred Alternative will impact gnatcatcher critical habitat as follows: permanent direct impacts to 41.79 acres, temporary direct impacts to 30.19 acres, and indirect impacts to 31.92 acres.

Mitigation Measures

Caltrans will mitigate for impacts to coastal California gnatcatcher and its critical habitat by preserving 90.79 acres of gnatcatcher critical habitat on the Groves and Tabata properties, which are located almost entirely within Unit 5 of designated gnatcatcher critical habitat. In addition, although it is currently highly disturbed and was not included within the critical habitat designation, Caltrans has proposed to conserve and restore the 162-acre Vessels property. This preservation will occur directly adjacent to gnatcatcher critical habitat along the San Luis Rey River, helping to maintain gnatcatcher dispersal through Unit 5. Further, Caltrans has agreed to restore all of the project's temporary impact areas with native species, with the exception of small areas adjacent to landscaped or developed areas where planting native species would provide little or no biological value. This will include extensive areas that are currently vegetated with nonnative species, including the SR-76/I-15 interchange, which is located at a pinch point within the critical habitat linkage. The proposed conservation and restoration will help maintain the functions of Unit 5 to support core coastal California gnatcatcher populations and provide connectivity between gnatcatchers in San Diego and Riverside Counties. Additional mitigation measures detailed in the Final EIS and BO for impacts to coastal California gnatcatcher and their critical habitat are described below:

- Where feasible and practicable, all temporary impact areas will be revegetated and restored with native species, with the exception of small, isolated areas adjacent to landscaped or developed areas where planting native species will provide little or no biological value. The SR-76/I-15 interchange will be included in the area to be restored with native species. Prior to impact occurrence, a restoration plan will be developed for the temporary impact areas. Following the completion of construction activities, the restoration plan will be implemented for a minimum of 5 years, unless success criteria are met earlier and all artificial water has been off for at least 2 years.
- A Caltrans project biologist will monitor construction to ensure that the project is implemented consistent with the measures described herein.
- All vegetation clearing for the project will occur between September 16 and February 14 to avoid the coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and arroyo toad breeding seasons. Clearing may commence earlier in the fall if the Caltrans project biologist demonstrates to the satisfaction of the Carlsbad Fish and Wildlife Office (CFWO) that all breeding is complete.
- A minimum of three focused surveys, on separate days, will be conducted to determine the presence of coastal California gnatcatchers in the project impact footprint. Surveys will begin a maximum of 30 days prior to performing vegetation clearing/grubbing, and

one survey will be conducted the day immediately prior to the initiation of vegetation clearing.

- The Caltrans project biologist and/or biological monitor will be on site during initial clearing and grubbing and weekly during project construction that occurs within 500 feet of off-site coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, arroyo toad, and ambrosia habitat to ensure compliance with all conservation measures.
- If any gnatcatchers are found within the project impact footprint, the Caltrans Project Biologist will request that the resident engineer direct construction personnel to begin vegetation clearing/grubbing in an area away from the gnatcatchers. It will be the responsibility of the Caltrans Project Biologist to ensure that gnatcatchers will not be injured or killed by vegetation clearing/grubbing. A Caltrans biologist will walk ahead of clearing/grubbing equipment to flush birds towards areas of coastal sage scrub to be avoided and will record the number and location of gnatcatchers disturbed by vegetation clearing/grubbing. The Caltrans Project Biologist will notify the CFWO at least 7 days prior to vegetation clearing/grubbing. Responsibilities of the biological monitor under this mitigation measure are described in greater detail in the BO prepared for the project. Additional mitigation measures for impacts to coastal California gnatcatcher and its critical habitat are provided in the BO prepared for the project.

Least Bell's Vireo and Critical Habitat

The Preferred Alternative will result in permanent direct impacts to up to six individual (three pairs) least Bell's vireos and indirect impacts to 11 individual (approximately six territories) least Bell's vireos. Additionally, the project is located within the San Luis Rey area of designated critical habitat for least Bell's vireo. The Preferred Alternative will result in impacts to least Bell's vireo critical habitat as follows: permanent direct impacts to 63.15 acres, temporary direct impacts to 32.6 acres, and indirect impacts to 73.72 acres.

Mitigation Measures

Caltrans will mitigate for impacts to least Bell's vireo and its critical habitat through the creation of 95 acres of riparian vegetation and the restoration of 38.30 acres on the Tabata and Vessels properties, resulting in a net increase in riparian vegetation in the San Luis Rey River area. In addition, the conservation of 184.70 acres of least Bell's vireo critical habitat, including all restored and created riparian habitat, will help maintain the long-term viability of least Bell's vireo critical habitat in the San Luis Rey River area and the ability of this critical habitat unit to support a core population of least Bell's vireo.

Measures described for protection of California coastal gnatcatcher above would also provide protection for least Bell's vireo. Additional mitigation measures for impacts to least Bell's vireo and its critical habitat are described below and are provided in the BO prepared for the project.

- If maintenance of a wetland restoration/enhancement area potentially occupied by least Bell's vireos or southwestern willow flycatcher is necessary between March 15 and September 15, a qualified biologist will survey for least Bell's vireos and southwestern willow flycatcher within the creation/restoration/enhancement area, access paths to it, and other areas susceptible to disturbances by creation/restoration/enhancement site

maintenance. Surveys will consist of three visits separated by 2 weeks starting April 10 of each maintenance/monitoring year. Restoration work will be allowed to continue on the site during the survey period. However, if least Bell's vireos or southwestern willow flycatcher are found during any of the visits, the Caltrans Project Biologist will notify and coordinate with the CFWO to identify measures to avoid and/or minimize effects to the least Bell's vireos and/or the southwestern willow flycatcher (e.g., nests and an appropriate buffer will be flagged by the biologist and avoided by the maintenance work).

Southwestern Willow Flycatcher and Critical Habitat

The Preferred Alternative will result in indirect impacts to four individual (two pairs) southwestern willow flycatchers. Additionally, the project is located within the San Diego Management Unit of the Coastal California Recovery Unit of southwestern willow flycatcher critical habitat. The Preferred Alternative will result in impacts to southwestern willow flycatcher critical habitat as follows: permanent direct impacts to 37.13 acres, temporary direct impacts to 10.93 acres, and indirect impacts to 56.36 acres.

Mitigation Measures

Caltrans will mitigate for impacts to southwestern willow flycatcher and its critical habitat through the conservation of 102.1 acres of flycatcher critical habitat and the creation of 95 acres of riparian vegetation and the restoration of 38.30 acres on the Tabata and Vessels properties. Some of the proposed riparian restoration and creation is within the critical habitat unit, and some is outside, but contiguous with, the critical habitat boundaries. All of the proposed conservation, restoration, and creation on the Tabata and Vessels properties will contribute to the goals of maintaining a large population of southwestern willow flycatchers and providing population connectivity within the San Diego Management Unit of southwestern willow flycatcher critical habitat.

Southwestern willow flycatcher and least Bell's vireo require similar habitat. Therefore, mitigation measures described above for least Bell's vireo will be applicable to the southwestern willow flycatcher as well.

Arroyo Toad and Critical Habitat

The Preferred Alternative will result in permanent direct impacts to up to four individual arroyo toads, temporary impacts to two individual arroyo toads, and indirect impacts to eight individual arroyo toads. Additionally, the project is located within designated arroyo toad Critical Habitat Unit 14. The Preferred Alternative will result in impacts to arroyo toad critical habitat as follows: permanent direct impacts to 77.98 acres, temporary direct impacts to 64.27 acres, and indirect impacts to 102.07 acres.

Mitigation Measures

Caltrans will mitigate for impacts to arroyo toad by conserving and restoring 220.27 acres of arroyo toad critical habitat on the Groves, Tabata, and Vessels properties, which are located within the same critical habitat unit that is being affected by the project. Proposed restoration on the Vessels property, in particular, is anticipated to restore aquatic habitat for breeding and non-breeding activities and upland habitat for foraging and dispersal. Although the Vessels property contains upland habitat, recent surveys have been negative for the arroyo toad, likely

because the San Luis Rey River channel is deeply incised as it passes the Vessels property, and the property is dominated by nonnative grassland. The proposed restoration is anticipated to restore the identified primary constituent elements for arroyo toad critical habitat to this property by recontouring the channel to restore hydrology to the property and increase accessibility to arroyo toads.

An arroyo toad translocation monitoring program will be developed and implemented. The program will be provided to the CFWO for review and approval. As required by the BO, the program will include the following requirements:

- Prior to clearing, grubbing, and construction activities, a Caltrans project biologist will monitor arroyo toad breeding activity in those project areas containing or adjacent to breeding habitat. The biologist will determine when egg clutches or larvae are no longer present in the waterway (generally late May at lower elevation, June at higher elevation). When sign of breeding is no longer evident, an exclusionary fence will be installed and clearance surveys initiated.
- Prior to clearing, grubbing, and construction activities, arroyo toad exclusionary fencing will be installed around the perimeter of all work areas within potential arroyo toad habitat.
- Prior to the initiation of construction activities, but after exclusionary fencing has been installed, a minimum of six consecutive night surveys for arroyo toads will be conducted within the fenced area by the approved arroyo toad biologist. Surveys will continue until there have been 2 consecutive nights without toads inside the fence.
- The approved arroyo toad biologist will monitor all groundbreaking activities that occur within areas demarcated with arroyo toad exclusion fencing to salvage and relocate arroyo toads and to quantify “take” of arroyo toads.
- If construction would occur in arroyo toad breeding habitat during the active season for arroyo toad (March 15 through July 31) while water is flowing in the creek or has ponded within the action area, the approved arroyo toad biologist will monitor potential arroyo toad breeding habitat to determine whether egg clutches, larvae, or juveniles are present in the waterway. If eggs, larvae, or juvenile arroyo toads are found, the biological monitor will request that the resident engineer halt work in the area until sign of breeding is no longer evident.
- All activities conducted for geotechnical work will also be monitored by a Caltrans arroyo toad biologist who will salvage and relocate arroyo toads and quantify take of arroyo toads. Arroyo toad translocation and monitoring methodology for the geotechnical work will be defined and documented in coordination with the CFWO.
- The approved arroyo toad biologist will maintain a complete record of all arroyo toads encountered and relocated in association with the project. The date and time of observation, sex, physical dimensions, PIT-tag code, coordinates/specific location of capture and release, and photographs (when possible) will be recorded and provided to the CFWO within 30 days of the completion of translocation. Additional details on the arroyo toad translocation monitoring program are provided in the BO prepared for the project.
- If nighttime construction is necessary, all project lighting (e.g., staging areas, equipment storage sites, roadway) will be selectively placed and directed onto the roadway or construction site and away from sensitive habitats. Light glare shields will be used to

reduce the extent of illumination into sensitive habitats. No nighttime construction or lighting will occur in arroyo toad breeding habitat during the active season (March 15 – June 30).

San Diego Ambrosia and Critical Habitat

The Preferred Alternative will result in less than 0.01 acre of permanent direct impacts to occupied ambrosia habitat. The Preferred Alternative will not result in any temporary direct impacts or indirect impacts to occupied ambrosia habitat. Additionally, the project is located in and adjacent to designated ambrosia Critical Habitat Unit 4, Subunits 4A and 4D. The Preferred Alternative will result in impacts to San Diego ambrosia critical habitat as follows: 1.5 acres of permanent direct impacts, temporary direct impacts to 0.60 acre, and indirect impacts to 2.06 acres.

Mitigation Measures

Caltrans will mitigate for impacts to San Diego ambrosia by conserving and restoring ambrosia habitat as well as salvage/translocation. Approximately 20.89 acres of ambrosia critical habitat will be conserved, including 0.28 acre occupied by the species on the Groves property, within the same critical habitat unit that is being affected by the project. The project will result in the conservation of 20 percent of Unit 4, consisting of 80 percent of Subunit 4B. In addition, Caltrans will restore all of the project's temporary impact areas with native species, with the exception of small areas adjacent to landscaped or developed areas where planting native species would provide little or no biological value. This restoration is anticipated to improve the function of this critical habitat unit.

Prior to construction, all ambrosia within the direct impact area (approximately 2,633 ramets on less than 0.01 acre) will be salvaged and translocated to the Morrison mitigation property, which is near the salvage location. The translocation will be implemented by a biologist with a history of translocating sensitive plant species. The locations where the ambrosia ramets will be transplanted have been approved following field review by the Carlsbad office of USFWS. The translocated ambrosia population will be monitored for a minimum of 5 years to document success or failure of the translocation effort.

CUMULATIVE IMPACTS

The EIS considered 23 other past, present, and reasonably foreseeable projects within the San Luis Rey River basin likely to be affected by the SR-76 project. Refer to the Cumulative Impacts discussion in Section 3.29 of the Final EIS for further information.

The Final EIS conclusions regarding cumulative impacts for the Preferred Alternative are provided below.

Riparian Communities Cumulative Effects

The sensitive riparian communities potentially impacted by the project include arrowweed scrub, arundo-dominated riparian, coastal and valley freshwater marsh, disturbed wetland, elderberry scrub, mulefat scrub, nonvegetated channel, open water, southern arroyo willow riparian forest, southern cottonwood-willow riparian forest, southern willow scrub, and tamarisk scrub. The

Preferred Alternative will result in direct permanent and temporary impacts to 43.12 acres of riparian and wetland communities.

Cumulative project impacts will affect many acres of the same types of sensitive riparian communities. These future projects in the RSA, viewed collectively, constitute a cumulative impact to riparian communities. The contribution of the project Preferred Alternative will result in a considerable contribution to cumulative impacts prior to mitigation.

Mitigation Measures

In addition to the compensatory mitigation measures for impacts to riparian and wetland habitat communities described above, specific measures will also be implemented to reduce impacts by controlling the limits of construction and disturbance, and reducing effects of runoff. Those measures will also protect biological functions and values adjacent to the project area. Additional measures to further avoid and reduce impacts to these sensitive resources will be incorporated into project implementation via responsible preconstruction planning and construction activities. Such measures include preconstruction meetings, contractor awareness programs, temporary fencing and signage for all sensitive resource areas immediately adjacent to the project footprint, the presence of biological monitors during construction activities adjacent to riparian communities and wetlands, and the implementation of and strict adherence to standard BMPs. Mitigation for impacts will conform to a “no net loss” policy for riparian communities and thereby avoid considerable contribution to cumulative impacts.

Jurisdictional Waters of the U.S. Cumulative Effects

The project will affect a 5.5-mile-long stretch of the San Luis Rey River. Riparian and wetland areas surrounding the project are associated with the San Luis Rey River, Live Oak Creek, and unnamed drainages that traverse the survey area, and, to a lesser extent, drainages and seeps from municipal storm water or sewer systems, irrigation, and roadway runoff. The Preferred Alternative will result in 32.53 acres of direct permanent impacts to jurisdictional waters.

Multiple projects would impact jurisdictional wetlands and waters when developed. Based on available information, more than 25 acres of jurisdictional waters and wetlands would be impacted by these projects. While the federal policy of “no net loss” would suggest that there would ultimately be no net loss in the acreage of wetlands within the RSA, there is no way to comprehensively assess the success of project-specific mitigation efforts in terms of either wetland acreage created or restoration of wetland function. The project, prior to mitigation, will contribute to cumulative impacts.

Mitigation Measures

Mitigation for project impacts will result in no net loss of wetland habitat or wetland functions and values. Impacts to jurisdictional waters will be mitigated as described above. Development of a conceptual mitigation, maintenance, and monitoring plan is required for wetland mitigation for federal and state wetland permits. This plan will include details regarding site preparation (e.g., grading), planting specifications, and irrigation design, as well as maintenance and monitoring procedures. The plan will outline yearly success criteria and remedial measures should the mitigation effort fall short of the success criteria.

Avoidance and minimization measures have been incorporated into the project that are designed to offset any biological effects related to jurisdiction waters and wetlands. Therefore, after mitigation, the project will not make a considerable contribution to cumulative impacts.

Threatened and Endangered Species Cumulative Effects

Impacts to four federally listed wildlife species and one federally listed plant species are anticipated as a result of the project, including the coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, arroyo toad, and San Diego ambrosia. Temporary indirect impacts during construction and permanent indirect impacts during operations to these five species could result from implementation of the project. Direct impacts are also anticipated to federally designated critical habitat for each of the five federally listed species.

Based on available environmental analysis, other cumulative projects in the RSA have the potential to impact the four threatened and endangered wildlife species, along with other listed species. Based on available environmental analysis, two other cumulative projects in the RSA have potential impacts to San Diego ambrosia. Planned development in the RSA is expected to result in direct impacts to, and in loss of habitat for, both wildlife and plant threatened and endangered species. For this reason, the potential impacts to threatened and endangered plant and animal species from the project would be cumulatively considerable prior to implementation of mitigation measures.

Mitigation Measures

Avoidance, minimization, and mitigation measures for the threatened and endangered plant and animal species discussed in this section will be largely habitat-based and will include those mitigation measures discussed above. These mitigation measures offset biological impacts of the proposed project, as determined by the Final EIS and BO. Therefore, there is no considerable contribution to cumulative impacts.

F. MONITORING OR ENFORCEMENT PROGRAM

In accordance with the September 22, 2011 BO issued by USFWS, an approved biological monitor will send monthly email reports, including photographs, to the Caltrans biological monitor. These email reports will document that authorized impacts were not exceeded and document general compliance with all conditions. In addition, within 120 days of project completion, the biological monitor will submit a final report to the Caltrans project biologist. Post-project monitoring will be conducted to determine the effectiveness of wildlife connectivity features. Post-project monitoring will be conducted for a minimum of 3 years, and annual reports will be sent to the CFWO each year.

Also in accordance with the BO, Caltrans will monitor and report on compliance with established "take" thresholds for coastal California gnatcatchers, least Bell's vireo, and arroyo toads associated with the project.

An Environmental Commitment Record (ECR) has been completed for the project. The ECR summarizes the commitments made during the environmental process and is used to ensure that all mitigation measures identified in the Final EIS are executed during the appropriate stage(s) of the project. Refer to Appendix F of the Final EIS for a copy of the ECR.

G. RESPONSE TO COMMENTS ON THE FINAL EIS

The availability of the Final EIS was published in the Federal Register on January 27, 2012. The 30-day review period on the document closed on February 27, 2012. One comment letter was received.

The United States Environmental Protection Agency (EPA) provided comments in a letter dated February 27, 2012, and these comments are summarized below. Responses to each comment are also provided:

General Remarks: EPA has coordinated with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to provide early regulatory agency input for this transportation project pursuant to the NEPA/Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU). EPA appreciates the efforts of Caltrans in including EPA in the environmental impact statement development through this forum.

EPA rated the Draft Environmental Impact Statement as Environmental Concerns – Insufficient Information (EC-2) due to the need for an expanded indirect effects analysis for waters of the U.S. for each of the alternatives and to further identify avoidance and minimization opportunities for the Existing Alignment Alternative. EPA's primary concerns were resolved in the FEIS. EPA will continue to be available to provide feedback on refinements of the conceptual mitigation plan and to further assist on minimizing project impacts to environmental resources.

Comment #1

EPA appreciates the additional qualitative analysis provided on mobile source air toxics in the FEIS Response to Comments. While EPA is not recommending further analysis, we continue to disagree with claims in the FEIS that “. . . available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with implementation of the proposed project.” (p. 3-237). Tools and models are available that EPA (as well as other agencies) routinely use effectively. Both EPA and California Office of Environmental Health Hazard Assessment have long-standing experience and published, peer-reviewed guidance for evaluating long-term health effects, including cancer risk. EPA recommends that the Record of Decision update incorrect statements regarding technical shortcomings and uncertain science.

Response to Comment #1

EPA has developed and provides information on the fundamental principles of risk-based and public health assessments for air toxics and how to apply those principles in different settings as well as strategies for reducing risk at the local level. While EPA has the authority to issue standards to address certain air toxics risks, in many cases these risks may be more appropriately and more effectively addressed at the State and local level, rather than at the federal level. Specifically, State and local air agencies may wish to address issues that are of concern on a state-wide, area-wide, community-wide, or individual neighborhood basis, and for areas in the immediate vicinities of specific air toxics sources. The methodology described below, called risk assessment, is the process for evaluating:


- The sources of air toxics released to the environment;
- How the released chemicals move and change in the environment;
- Who may be exposed to the chemicals and at what levels?
- How exposures may occur;
- The toxic effects of the chemicals in question and how potent; and
- How likely it is that the potentially exposed people will experience harm because of the exposures.

This kind of information can be extremely helpful to decision makers as they try to balance the competing concerns of protecting public health, fostering economic development, and evaluating issues of fairness and equity.

What is known about mobile source air toxics (MSAT) is still evolving. As the science progresses FHWA will continue to revise and update its guidance. Caltrans follows FHWA guidance for air quality conformity as this was not a function that was delegated under SAFETEA-LU. FHWA expects that a number of significant improvements in model forecasting and air pollution analysis guidance are forthcoming from EPA. The FHWA, in conjunction with EPA and a consortium of State departments of transportation, are studying the concentration and physical behavior of MSAT, mobile source PM 2.5, and other criteria pollutants. The FHWA's ongoing work in air toxics includes a research program to better understand and quantify the contribution of mobile sources to air emissions, the establishment of policies for addressing mobile source emissions in environmental reports, and the assessment of scientific literature on health impacts associated with motor vehicle emissions.

RECORD OF DECISION APPROVAL

3/23/12
Date


Laurie Berman
District Director
California Department of Transportation