CALIFORNIA HIGH-SPEED TRAIN

Environmental Report

Fresno to Bakersfield Section

Checkpoint C Summary Report

November 2013

CALIFORNIA High-Speed Rail Authority

U.S. Department of Transportation
Federal Railroad Administration

Wasco Housing Authority

The City of Wasco Housing Authority is currently planning to relocate this community to a parcel acquired with funding from the U.S. Department of Agriculture (City of Wasco Housing Authority 2013). The planned relocation, which would be assisted by the BNSF-Through Wasco-Shafter Alternative, would integrate this community with the northern portion of the City of Wasco and separate sensitive receptors from the effects of existing freight traffic on the BNSF right-of-way. After relocation of the Wasco Housing Authority farm worker housing that lies east of the BNSF tracks, the number of residual severe noise receptors would be reduced by 226 receivers.

The Authority is working with the city to accommodate other feasible elements of the City of Wasco Housing Authority's residential relocation program as a design feature of the BNSF-Through Wasco-Shafter Alternative. The selection of the BNSF-Through Wasco-Shafter Alternative would thus expedite implementation of the City's program for community integration, residential relocation, and reduction of existing land use conflicts between sensitive receptors and conventional rail.

Local Agriculture, Businesses, and Other Comments

Local agricultural interests in the Wasco-Shafter area have expressed support for the BNSF-Through Wasco-Shafter Alternative, including the mitigation approach and associated use of the BNSF right-of-way in the City of Wasco. Figure 7-2 depicts the location of each alignment and its relationship to existing transportation routes and agricultural lands.

The Wasco Shafter Ag Group is an entity consisting of 124 agricultural production and service-related businesses in the Wasco and Shafter area. The Ag Group previously submitted comments on the Revised DEIR/Supplemental DEIS indicating that the use of the Wasco-Shafter Bypass Alternative will result in greater effects on farmland (comment submitted on the Revised DEIR/Supplemental DEIS October 19, 2012). This assertion is consistent with the greater effects of a Wasco-Shafter Bypass Alternative on Prime Farmland (the best combination of physical and chemical features able to sustain long-term agricultural production) identified in Section 6.4.2.3 above.

The Wasco-Shafter Agricultural Group submitted a letter of support for the BNSF-Through Wasco-Shafter Alternative to the Authority on November 5, 2013, further detailing the concerns expressed in its comments on the Revised DEIR/Supplemental DEIS. With respect to impacts on agriculture, the Ag Group states that "[f]ewer acres of Important Farmland will be converted on the BNSF Alignment than the Bypass Alternative, contrary to that reflected in the [Draft EIR/EIS calculation of farmland conversion]." This conclusion is based on several factors, including the likelihood that 70 acres of farmland along the BNSF-Through-Wasco-Shafter Alternative would not in fact be converted, contrary to the calculation in the Revised DEIR/Supplemental DEIS. The letter further states that the Bypass Alternative will create additional small remnant parcels that cannot be farmed, increasing the amount of farmland that will be potentially converted or otherwise lost. The Ag Group letter also addresses farmland acreage that would be required for turnarounds, or the area required for equipment to turn around at the end of the row. Because the Bypass Alternative would affect many fields, the letter states that additional uncounted acreage would be converted for new turnarounds. Other impacts of the Bypass Alternative on agriculture, including increased costs imposed by the need to revise irrigation systems, are also discussed.

With respect to effects on the aquatic ecosystem, the Ag Group letter includes an analysis prepared by David Hartesveldt of Live Oak Associates, discussing the difference in the acreages of the water features affected by the two alternatives. The report states that there is no appreciable difference in the effects of those alternatives on the aquatic ecosystem, because the

water features along either alignment (with the exception of one agricultural basin on the Bypass alignment) provide little or no ecological functions or human values of the sort typically associated with aquatic ecosystems.

The Ag Group letter states that its support is based on "evaluation of a wide range of interests and factors, including that alignment's consistency with the project purpose, its furtherance of the public interest, and its relative effects on the environment compared to other alternatives." The support from such a large segment of the local community strongly supports selection of the BNSF-Through Wasco-Shafter Alternative.

Wilson Ag submitted a comment on the Revised DEIR/Supplemental DEIS stating that the splitting of parcels will actually lead to loss of agricultural lands and greater property ownership impacts (Wilson Ag August 15, 2012). This assertion is also consistent with the greater splitting of parcels associated with the Wasco-Shafter Bypass Alternative identified in Section 6.4.2.3, above.

The Wasco-Shafter Investment Company indicated a preference for a through-town alternative (BNSF-Through Wasco-Shafter Alternative), citing consistency with implementing legislation and avoidance of impacts on agricultural patterns of land use to the east, as well as the developing oil fields in the Shafter region (letter received October 13, 2011).

Neuhouse Farms indicated that the Wasco Shafter Bypass would affect 500 acres of their operations by interrupting irrigation systems, electrical distribution systems, and water storage reservoirs (September 16, 2012, Neuhouse 2012).

Semitropic Water Storage District indicated that the Wasco-Shafter Bypass Alternative would interrupt their water distribution system as well as operations for numerous agricultural land owners to the east of Wasco (comment submitted October 3, 2012, Semitropic Water Storage District, 2012).

The Kern Council of Governments, a regional transportation planning agency, expressed a preference for the BNSF-Through Wasco-Shafter Alternative because of the reduced impacts on transportation/circulation compared to the Wasco-Shafter Bypass Alternative (October 13, 2011). The Wasco-Shafter Bypass Alternative would close 16 roads in comparison to the BNSF-Through Wasco-Shafter Alternative, which only closes two.

Paramount Farms confirmed the substantial cost to the California Integrated Logistics Center, indicating lost revenues and costs in excess of $100 million and loss of approximately 500 acres of the facility (February 21, 2013). While the Paramount Farms estimate varies with the impacts estimated by the City of Shafter, both emphasize the severity of the potential impacts.

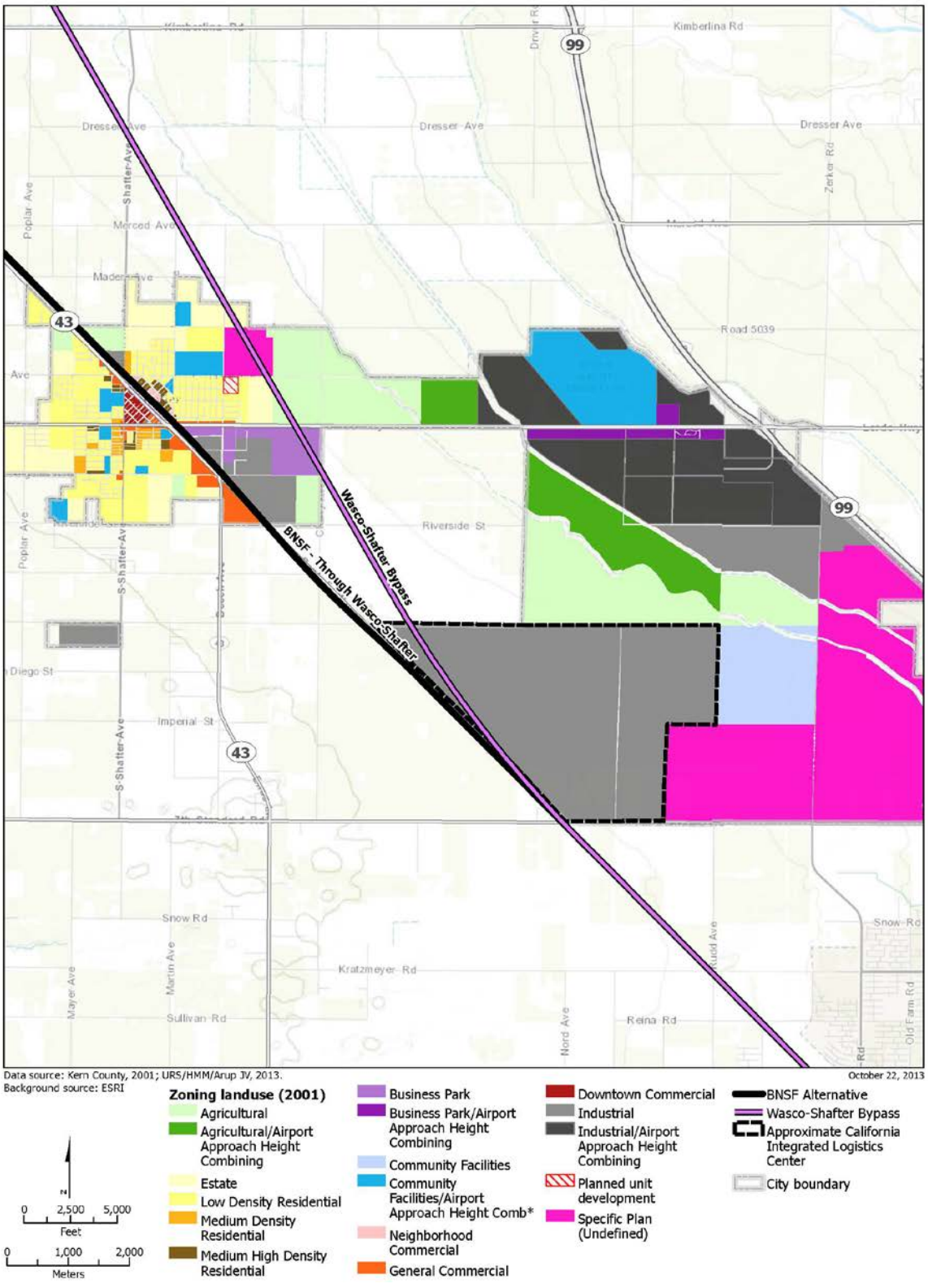

Figure 7-2
City of Shafter
Zoning Land use and California Integrative Logistics Center

As discussed above, the implementing legislation for the HST System indicates a preference for existing transportation right-of-way such as the BNSF corridor, "in order to reduce impacts on communities and the environment" (Sts. & Hy. Code § 2704.09[g]). This mandate requires consideration of the community concerns and preferences expressed in the Wasco-Shafter region, including the predicted loss of $250 million in revenue that the Wasco-Shafter Bypass Alternative would create for the City of Shafter in the near term. In addition, concerns expressed by the local agricultural community regarding the Wasco Shafter Bypass, and their strong preference for use of the BNSF-Through Wasco-Shafter Alternative must be considered because such comments identify severe disruptions to agricultural land uses and property ownerships along the Wasco-Shafter Bypass.

Potential impacts on local land uses and the economic base of the region warrant selection of the BNSF-Through Wasco-Shafter Alternative as the Proposed Preliminary LEDPA because the alternative best complies with project purpose as established by the Project's enabling legislation, and best provides for the needs and welfare of the local community. In addition, because local land use and economic interests are part of USACE's public interest review,(33 CFR 320.4[a][1]), and because local land use decisions are afforded deference (33 CFR 320.4[g][5]) the land use and economic effects of the bypass alternative weigh strongly in favor of the BNSF-Through Wasco-Shafter Alternative.

Deviating from existing transportation corridors has been necessary in some communities and regions to avoid community disruption and to achieve consistency with other important elements and purposes for the Project, as established in the Project's implementing legislation. In Wasco and Shafter, however, local and regional community preferences, and impacts on the local communities affected by the Wasco-Shafter Bypass Alternative, favor the selection of the BNSF-Through Wasco-Shafter Alternative. The Project's purpose, as established by the implementing legislation, supports the BNSF-Through Wasco-Shafter Alternative as the Proposed Preliminary LEDPA.

Conflicts with the North Shafter Oil Field and Cost Uncertainty

National, state, and local interests in supporting energy resource development also favor selection of the BNSF-Through Wasco-Shafter Alternative as the Proposed Preliminary LEDPA. Construction of the Wasco-Shafter Bypass Alternative would involve substantial costs to avoid damaging the unique, rapidly developing oil field known as the North Shafter Oil Field. As discussed below, the unknown nature of these costs, which could be many times larger than budgeted contingencies, support the finding that the Wasco-Shafter Bypass Alternative is not practicable.

The Section 404(b)(1) guidelines emphasize that alternatives are only practicable if they are available and capable of being used, considering cost (40 CFR 230.3[q]). Federal guidance on USACE review of permits also emphasizes that USACE should consider the compatibility of a project with local activities (33 CFR 320.4[g][5]). This same guidance identifies energy resources as an important national objective 33 CFR 320.4[n]). Each of these regulatory directives is considered in turn.

The capital costs identified by the Revised DEIR/Supplemental DEIS indicate that the BNSF-Through Wasco-Shafter Alternative would cost $293 million more than the Wasco-Shafter Bypass Alternative (Revised DEIR/Supplemental DEIS, page 5-7). This cost is based on 15% design. As the Revised DEIR/Supplemental DEIS observes, these costs will necessarily have to be revised as additional information about costs becomes available (Revised DEIR/Supplemental DEIS, page 5-2).

One important factor that affects the cost analysis, and therefore the practicability of the BNSF-Through Wasco-Shafter and Wasco-Shafter Bypass alternatives, is the unique nature of the oilfield through which the Wasco-Shafter Bypass Alternative would be constructed. While other alternatives in other Project area will be constructed in areas with oil wells, there is no other area that resembles the relatively newly developed and rapidly developing North Shafter Oil Field. The output and number of wells in this area has risen by more than 50% since 2010, even while California's total oil production has declined slightly. ("Fracking Tests Ties Between California 'Oil and Ag' Interests", *The New York Times,* June 1, 2013). Advances in drilling technology, high oil prices, and national policies favoring cleaner energy and less foreign oil dependency are encouraging oil company investment in the rural Wasco-Shafter area. The area is part of the geologically rich Monterey Shale formation, which makes up 2/3 of the United States' shale oil reserves. A recent *New York Times* article described the oil development potential of the area as possibly creating "the kind of oil boom seen in North Dakota and Texas, and could even transform California into the nation's top oil-producing state." (*Id.*)

The Wasco-Shafter Bypass Alternative would cut through the heart of this emerging energy resource development. Three Occidental Petroleum subsidiaries that operate in the North Shafter Oil Field (Vintage Petroleum LLC, Vintage Production LLC, and OXY USA Inc.), have estimated that the effect of the Wasco-Shafter Bypass Alternative would require compensation or mitigation that would cost in excess of $530 million. According to this estimate, the cost scenarios for mitigation for damage to wells and other facilities range from $268 million to $945 million. (Letter from Alan E. White, Vintage Production California LLC., to California High Speed Rail Authority, Feb. 21, 2013.) In contrast, the BNSF-Through Wasco Shafter route would have minimal impacts on oil resources and energy development in the area. (Id.)

This estimate includes the cost of purchasing mineral rights and exceeds preliminary cost estimates assumed by the Authority, which were based solely on the cost of capping and relocating wells. The extent (if any) to which mineral rights would need to be acquired is currently unclear, and the Occidental Petroleum letter may represent a high-end estimate of costs. However, it provides an expert perspective on costs that are very difficult to calculate with certainty at this stage of Project design.

Consequently, the risk of exceedingly high costs for the Wasco-Shafter Bypass Route must be considered in the context of the contingencies planned for the Project. As explained in the Revised DEIR/Supplemental DEIS, "At this stage of design, many project features have not been fully developed; therefore, early cost estimates include contingencies to account for changes in material costs and changes during project design. Currently, allocated contingencies (money reserves assigned to each cost category to cover risks associated with design uncertainty) are assumed to be between 10% and 25% of the estimated construction and right-of-way acquisition costs, and unallocated contingency (project reserves intended to cover unknown risks) is estimated at 5% of the construction and right-of-way acquisition costs." (Revised DEIR/Supplemental DEIS, page 5-3.). Even the lowest end of the estimate of costs associated with mitigation in the North Shafter Oil Field ($268 million) exceeds the contingency allocated for the Wasco-Shafter Bypass Alternative, which is $254 million (Revised DEIR/Supplemental DEIS, page 5-7).

The HST is a publicly financed capital project. Because the California legislature must approve funding, minimizing cost uncertainty for the project is imperative. In addition, any cost uncertainty associated with individual sections of the project accrues to the unavoidable cost uncertainty associated with the entire system. For these reasons, the Authority may not commit to an alternative that generates the range of cost uncertainty associated with the Wasco-Shafter Bypass Alternative. The Waco-Shafter Bypass Alternative is therefore impracticable on the basis of logistics and cost.