The California High-Speed Rail Authority (Authority) is issuing a draft supplemental environmental impact report pursuant to the California Environmental Quality Act (CEQA) entitled “Merced to Fresno Section: Central Valley Wye Draft Supplemental Environmental Impact Report/Environmental Impact Statement” (referred to below as “Draft Supplemental EIR/EIS”). This document was prepared as a supplement to the 2012 Final Merced to Fresno Section Final Environmental Impact Report/Environmental Impact Statement (Merced to Fresno Final EIR/EIS), which was certified/approved by the Authority as CEQA lead agency and by the Federal Railroad Administration (FRA) as the National Environmental Policy Act (NEPA) lead agency. The present Draft Supplemental EIR/EIS contains all the content required by CEQA and NEPA, however, FRA has not signed the document for publication under NEPA. The Authority as CEQA lead agency is therefore issuing the Draft Supplemental EIR/EIS pursuant to CEQA only at this time for public and agency comments under CEQA. Accordingly, content in the Draft Supplemental EIR/EIS that is specific or pertaining to NEPA is for information only at this time and should not be interpreted to be the opinion or conclusion of FRA or any other federal agency. See below for more information about future potential steps under NEPA.

On January 31, 2018, the State of California formally applied to participate in the Surface Transportation Project Delivery Program (known as NEPA Assignment), pursuant to the legal authority under 23 U.S.C. 327, where the Authority would assume federal environmental review responsibilities under NEPA, as assigned by FRA under a Memorandum of Understanding (MOU). On May 2, 2018, FRA published the final NEPA Assignment application and draft MOU in the Federal Register for a public comment period that ended on June 1, 2018. As of the date of this publication, the MOU has not been signed and FRA retains its responsibilities under NEPA and other federal environmental laws.

With this notification, the Authority publishes the joint Draft Supplemental EIR/EIS and begins the CEQA comment period for 48 days. The Authority is issuing this document solely for purposes of compliance with CEQA and other applicable State laws.

The Authority presently is uncertain regarding future NEPA steps related to the Merced to Fresno Section Central Valley Wye. The Authority will pursue collaboration with FRA to issue a draft supplemental EIS for public comment pursuant to NEPA in the future. Depending on the timing of issuance of a supplemental EIS and its specific content, the Authority may choose to either complete the CEQA process by issuing a Final Supplemental EIR with responses to comments received during this CEQA public review period, or alternatively it may choose to prepare a combined Final Supplemental EIR/EIS with FRA. Under either approach, the Authority Board will review the information in the Final Supplemental EIR or EIR/EIS, including comments and responses, in considering whether to approve the project.
Because this document was developed to serve as a joint Draft Supplemental EIR/EIS, it includes NEPA analysis and references to the “Federal Railroad Administration,” “FRA,” and the FRA logo. These references do not imply that FRA has formally approved or issued this document. The Authority is solely responsible for the contents of this document and is issuing this document solely for purposes of compliance with State law. Furthermore, references to FRA or to NEPA-specific analyses which have been retained in this document do not have a substantive or material effect on the content, analyses, technical documentation, findings, or conclusions of the document as they pertain to CEQA requirements. The Authority has decided to retain the NEPA-required contents in this document to provide the public with a complete picture of the environmental analysis performed to date for the project.

2  CEQA Document Date

In June 2018, the Authority determined that the Draft Supplemental EIR/EIS was complete as a CEQA document. The Authority moved forward with printing the Draft Supplemental EIR/EIS for public release in September 2018 and signed the document in July 2018, anticipating that FRA would either sign the document for release under NEPA or assign NEPA responsibilities to the Authority under NEPA Assignment, but neither has yet occurred.

Accordingly, the Draft Supplemental EIR/EIS shows a date of September 2018, primarily on the title pages and footers. Although FRA has not formally signed the Draft Supplemental EIR/EIS for release under NEPA, the Authority, as CEQA lead agency, has decided to proceed now with a CEQA-only release of the document and materials which have a print date of September 2018. The Authority is taking this action to continue to advance the project and seek the public’s input on the project through the CEQA process. Prior to issuing this document, the Authority considered whether the passage of time between June 2018 and this May 2019 CEQA-only release necessitated any changes to the text and determined that no changes were necessary other than to address the 2018 CEQA Guidelines Amendments, as discussed in the next section.¹

3  Consistency of Draft Supplemental EIR/EIS with 2018 CEQA Guidelines Amendments

On December 28, 2018, the Governor’s Office of Planning and Research (OPR) published amendments to the State CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3, Section 15000 et seq.), considered effective on that date. These are collectively referred to hereinafter as the 2018 Guidelines Amendments. The 2018 Guidelines Amendments apply prospectively only. New requirements apply to steps in the CEQA process not yet taken on the date when agencies must comply, which is no later than the 120th day after the effective date or April 27, 2019 for all provisions except Section 15064.3, which agencies must comply with by July 1, 2020.

If a document meets the content requirements in effect when the document is sent out for public review, the document shall not need to be revised to conform to any new content requirements in the CEQA Guidelines amendments taking effect before the document is finally approved.

The Draft Supplemental EIR/EIS was completed and printed in September 2018, prior to the publication of the 2018 Guidelines Amendments. However, the text of the Draft Supplemental EIR/EIS is consistent with the 2018 Guidelines Amendments for each of the following relevant sections, as the discussions below detail:

- Section 15064 (b)(2) – Thresholds of significance
- Section 15064.3 – Vehicle miles traveled
- Section 15064.4 – Determining significance of greenhouse gas emissions
- Section 15064.7 – Use of environmental standards as thresholds of significance
- Section 15086 – Consultation with nearby transit agencies

¹ Chapter 10, Draft Supplemental EIR/EIS Distribution, of the Draft Supplemental EIR/EIS includes a subsection 10.4, Elected Officials, identifying elected officials who will receive notification regarding the release of the document. The list at subsection 10.4 was current as of June 2018. Because some officeholders have changed, notification will be sent to officeholders as of April 12, 2019 for each of the federal, state, and local offices noted.
• Section 15124 – Project objectives and project benefits
• Section 15125 – Environmental setting and baseline.
• Section 15126.2(a) – EIR should be focused on impacts of the project on the environment
• Section 15126.2(b) – Energy impacts
• Section 15126.4 – Use of performance standards as mitigation
• Section 15155 – Water supply analysis
• Section 15370 – Definition of “mitigation” expanded to include conservation easements
• Other changes to the Appendix G checklist

3.1 Section 15064 (b)(2) – Thresholds of Significance

The amendment to this section requires a lead agency to briefly explain how compliance with a specific threshold means the project’s impacts are less than significant. The Authority has used thresholds in each resource category of the environmental document based largely on language in Appendix G of the CEQA Guidelines to determine the level of significance of impacts under CEQA, and the CEQA thresholds of significance are presented in each resource section, entitled “Determining Significance under CEQA.” Additionally, the discussion of every impact in each of the resource topics includes a “CEQA Conclusion” for each impact, including those determined to be less than significant. The CEQA Conclusions section explains why impacts would be less than significant based on a particular threshold(s), consistent with the amendment.

3.2 Section 15064.3 – Vehicle Miles Traveled

The 2018 Guidelines Amendments added this new section which addresses metrics for assessing project transportation impacts. The new Section 15064.3 provides that vehicle miles traveled (VMT) is generally the most appropriate metric to assess transportation impacts and that projects that reduce VMT should be presumed to cause a less than significant impact. The guideline amendments state that a project’s effect on automobile delay (most commonly analyzed in terms of “level of service” or LOS) shall not be characterized as a significant environmental impact. The guideline amendment states that a lead agency may elect to be governed by the provisions immediately, but that beginning on July 1, 2020, the provisions shall apply statewide. As of April 2019, the Authority has not decided whether to elect to be governed by the provisions prior to July 1, 2020. For the reasons stated below, however, such lack of decision is of no consequence because transportation impacts of the Central Valley Wye would be less than significant using either LOS or VMT as the significance threshold.

The discussion of transportation impacts in Section 3.2, Transportation, of the Draft Supplemental EIR/EIS continues to discuss transportation impacts in terms of automobile delay and uses an LOS-based threshold of significance that characterizes certain increases in delay to be significant under CEQA. Even applying this LOS-based threshold, however, no significant transportation impacts in terms of LOS are identified for the Merced to Fresno Section: Central Valley Wye. This is principally due to the fact that the study area for the Draft Supplemental EIR/EIS is mainly rural, does not include a station and thus does not include station-related vehicular traffic.

As discussed in the Merced to Fresno Project Section Final environmental document,2 the project section, as part of an operational HSR system, is forecast to lead to substantial reductions in VMT in Merced, Madera, and Fresno counties (Merced to Fresno Section Final EIR/EIS, volume 1, pp. 3.2-36 to 37). Accordingly, even if the Authority applies a VMT threshold in place of an LOS threshold, the impact is still less than significant under CEQA because the Merced to Fresno Project Section, including the Central Valley Wye, reduces regional VMT, and therefore aligns with the statutory goals in SB 743 (Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts in CEQA, Dec. 2018, p. 23). Moreover, the Merced to Fresno Project Section, as part of the larger Phase 1 HSR system, is specifically identified in the California Air Resources Board’s (CARB’s) 2017 Scoping Plan Update as a foundation of a sustainable transportation system that can help to achieve the statewide VMT reductions necessary to meet the state’s 2030 and 2050 climate change goals (CARB, California’s 2017 Climate Change Scoping Plan, Nov. 2017, pp. ES-8, 12-13, 75-76). Even if the Authority applies a threshold of

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2 Merced to Fresno Section Final Environmental Impact Report/Environmental Impact Statement (Merced to Fresno Final EIR/EIS)
consistency with CARB’s 2017 Final Scoping Plan strategy for VMT reduction as indicative of no significant adverse environmental impact, the Merced to Fresno Project Section, including the Central Valley Wye, are fully consistent, and the impact would be less than significant.

3.3 Section 15064.4 – Determining Significance of Greenhouse Gas Emissions

The amendments to this section provide clarifying language in regard to determining the significance of impacts from greenhouse gas (GHG) emissions, including the use of quantitative or qualitative analysis, considering the project’s consistency with the State’s long-term climate goals, and the use of models. The amendments state that a lead agency should focus on the project’s reasonably foreseeable incremental contribution when determining significance of GHG emissions, and which state that a lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies, provided that substantial evidence supports the agency’s analysis of how those goals or strategies address the project’s incremental contribution to climate change and its conclusion that the project’s incremental contribution is not cumulatively considerable. The Draft Supplemental EIR/EIS discusses the project’s consistency with CARB’s Scoping Plan, which is the State’s compilation of state goals and strategies. As described in the CEQA Conclusion for Impact AQ#4, Permanent Direct and Indirect Impacts on Global Climate Change—Greenhouse Gas Emissions, in Section 3.3, Air Quality and Global Climate Change, of the Draft Supplemental EIR/EIS, the HSR project is included in the AB 32 scoping plan as “Measure #T-9” and would be consistent with the state’s 2020 goal. Furthermore, as noted above, the Merced to Fresno Project Section, as part of the larger Phase 1 HSR system, is specifically identified in CARB’s 2017 Scoping Plan Update as a foundation of a sustainable transportation system that can help to achieve the statewide VMT reductions necessary to meet the state’s 2030 and 2050 climate change goals. In addition, as described in the Draft Supplemental EIR/EIS, the project would reduce GHG emissions relative to baseline conditions. Therefore, the Draft Supplemental EIR/EIS is consistent with the amendments to Section 15064.4.

3.4 Section 15064.7 – Use of Environmental Standards as Thresholds of Significance

The amendments to this section provide clarification on the use of environmental standards as thresholds of significance and defines the term “environmental standard”. Each of the resource sections in the Draft Supplemental EIR/EIS includes a subsection entitled “Laws, Regulations, and Orders” that identifies the applicable environmental regulations used as environmental standards and any applicable updates or additions to the legal and regulatory framework that have occurred since publication of the original Merced to Fresno Final EIR/EIS. Furthermore, each impact discussion includes a CEQA Conclusion Section that explains how standards avoid specific project impacts. Therefore, the Draft Supplemental EIR/EIS is consistent with the amendments to Section 15064.7.

3.5 Section 15086 – Consultation with Nearby Transit Agencies

The amendment to this section provides clarifying language that, during the draft EIR public review period for a project of statewide, regional, or area-wide significance, a lead agency’s consultation with other agencies should include public transit agencies with facilities within one-half mile of the proposed project. As documented in Chapter 9, Public and Agency Involvement, the Authority consulted with the City of Chowchilla (which operates limited fixed and on-demand transit services) on multiple occasions, as well as with the Madera County Transportation Commission. In addition, this document will be provided to those public agencies with facilities within one-half mile of the proposed project for their review and comment. Therefore, the Draft Supplemental EIR/EIS is consistent with the amendment to Section 15086.

3.6 Section 15124 – Project Objectives and Project Benefits

The amendment to this section states that a lead agency can include project benefits in the statement of the objectives sought by the proposed project. Chapter 1, Introduction and Purpose, Need, and Objectives, of the Draft Supplemental EIR/EIS provides detailed project objectives and describes project benefits, consistent with the amendment to Section 15124.
3.7 Section 15125 – Environmental Setting and Baseline

The amendments to this section clarify the EIR requirement to describe the existing environmental setting for the project and the use of existing or future conditions as the baseline for determining whether an impact is significant based on published CEQA case law. The amendments identify that a lead agency must generally identify existing conditions as they exist at the time of the notice of preparation but may also define existing conditions based on historic conditions or conditions expected when the project becomes operational provided these are supported with substantial evidence. The amendments specify that a lead agency may use projected future conditions as the sole baseline is substantial evidence demonstrates that use of existing conditions would either be misleading or without informative value to decision-makers and the public. The Draft Supplemental EIR/EIS identifies environmental conditions at the time the environmental analysis was commenced (i.e., 2015) for the purposes of the CEQA analysis. The discussion of certain topics (e.g., transportation, air quality, energy) also compares future conditions in 2040 with and without the project, consistent with the amendment to Section 15125.

3.8 Section 15126.2(a) – EIRs to be focused on impacts of project on the environment

The amendments to Section 15126.2(a) revise it to reflect the California Supreme Court’s decision in California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369. In this decision, the Supreme Court held that “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents” but must analyze hazards that the project might cause or risk exacerbating by bringing development and people in the area affected.

In addition to providing clarifying language at Section 15126.2(a), the 2018 Guidelines Amendments included changes to the Appendix G Checklist in several topic areas, such as Geology and Soils and Hydrology and Water Quality, that help checklist users clarify whether a given project would result in a significant environmental impact.

As further detailed below in the topic-by-topic review of changes to the Appendix G Checklist, the Draft Supplemental EIR/EIS is consistent with the revised Section 15126.2(a) because it focuses on the project’s effects on the environment, while also considering the potential for causing or exacerbating hazards.

3.9 Section 15126.2(b) – Energy Impacts

Prior to the 2018 Guidelines Amendments, details regarding energy impact analysis were included in Appendix F of the CEQA Guidelines. The 2018 Guidelines Amendments added an “Energy” section to the Appendix G CEQA Checklist, which include the following questions regarding the potential energy impacts of a project:

Would the project:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Section 3.6, Public Utilities and Energy, of the Draft Supplemental EIR/EIS fully addresses the energy-related questions that have been added to Appendix G. Section 3.6 states that while there would be energy expended during construction, energy-saving measures have been incorporated into the alternatives that would minimize both electricity and fossil fuel consumption. Further, the energy used for construction would be temporary and not require an increase in peak- or base-load capacity for electricity and other forms of energy or additional long-term capacity for either fossil fuel or electricity energy. Energy used for construction would be fully offset within approximately 3 years of project operations. This is because high-speed rail is an energy-efficient mode of transportation and would provide a travel alternative that is less energy-intensive than other modes of transportation currently used for travel within the state, such as personal vehicles and commercial air flights. The Draft Supplemental EIR/EIS states that project operations of any of the Central Valley Wye alternatives would result in long-term energy.
savings. Accordingly, the Draft Supplemental EIR/EIS concludes that both construction and operations of any of the Central Valley Wye alternatives would result in a less-than-significant impact relative to energy consumption.

Section 3.6 of the Draft Supplemental EIR/EIS further states that the Merced to Fresno Section: Central Valley Wye would comply with State’s Renewable Portfolio Standard Program, AB 1493, Title 24, and other regulations that govern renewable energy and energy efficiency. Section 3.6 also notes that some localities have policies encouraging renewable energy/energy efficiency and that none of the Central Valley Wye alternatives would conflict with these local policies. Therefore, the analysis and impact conclusions of Section 3.6 referenced above conform to the 2018 Guidelines Amendments concerning energy impacts.

3.10 Section 15126.4 – Use of Performance Standards as Mitigation

The amendment to Section 15126.4 updates the CEQA Guidelines with published case law to allow for the specific details of a mitigation measure to be developed after project approval when it is impractical or infeasible to include those details during the environmental review, provided that the lead agency: (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the types of potential actions that can feasibly achieve that performance standard. Where applicable, the Draft Supplemental EIR/EIS includes these requirements for mitigation measure details that cannot be predicted at this time: for example, noise mitigation measure NV-MM#3, Implement Proposed California High-Speed Rail Project Noise and Vibration Mitigation Guidelines, provides a detailed stepped approach to addressing noise impacts, including commitment to the mitigation, performance standards, and types of potential actions. Similarly, biological resources mitigation measure BIO-MM#3. Prepare and Implement a Habitat Mitigation Plan, provides a detailed approach to addressing impacts to the aquatic habitats for multiple special-status species, which includes specific requirements, performance standards and a range of potential actions. Therefore, the Draft Supplemental EIR/EIS is consistent with the revised Section 15126.4.

3.11 Section 15155 – Water Supply Analysis

The amendment to this section provides clarification of water supply consultation and analysis for projects triggering water supply analyses where cities or counties serve as lead agencies, as described by the California Supreme Court in Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412. Because the Authority is a state lead agency, this Guidelines Section does not apply. Nevertheless, the Authority has developed a water use assessment contained in Appendix 3.6-B, to support the discussion of the project’s demand for water and the availability of water supplies that is consistent with the holding in Vineyard Area Citizens for Responsible Growth and the revised Section 15155.

3.12 Section 15370 – Definition of “mitigation” expanded to include conservation easements

The amendment to this section clarifies that compensation can serve as mitigation and includes an example of establishing a conservation easement. The Draft Supplemental EIR/EIS identifies conservation easements as a form of compensatory mitigation in Chapter 3.7, Biological Resources and Wetlands, and Chapter 3.14, Agricultural Lands, consistent with the amendment definition.

3.13 Revisions to Appendix G Environmental Checklist

The Draft Supplemental EIR/EIS uses the Appendix G environmental checklist questions as thresholds for determining the significance of impacts. The 2018 Guidelines Amendments made numerous text changes to the checklist within Appendix G of the CEQA Guidelines. The majority of these text changes are clarifications to address court interpretation of the CEQA statutes that have occurred over time. The Authority reviewed all of these text changes to the Appendix G environmental checklist and determined that language clarifications would not change the analysis and conclusions of the Draft Supplemental EIR/EIS. Checklist questions that were changed as a result of the 2018 Guidelines Amendments follow; deletions are depicted in bold strikeout text, and additions are depicted in bold underline text. For brevity,
only the revised Appendix G checklist questions are included. Following each summary of text changes is a discussion of the consistency of the Draft Supplemental EIR/EIS with the revision.

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

This change clarified that evaluation of visual character or quality should be focused on public viewpoints and that analysis in urbanized areas should also evaluate conflicts with zoning and other regulations concerning scenic quality.

Section 3.16, Aesthetics and Visual Resources, of the Draft Supplemental EIR/EIS considers the potential for the project to result in temporary and permanent visual impacts. The analysis was based on a widely accepted methodology for assessing visual impacts established by the Federal Highway Administration. The analysis identified key viewpoints (KVPs) as representative of the different types of landscapes present within the visual resource area, and compares existing and simulated with-project conditions. Each of the KVPs are from public areas, namely local roads and highways in the project vicinity where project related elements are proposed to be added with one or more of the Central Valley Wye alternatives. The Central Valley Wye alternatives are located in non-urbanized areas, so the other part of the amendment is not relevant.

Because the KVPs exclusively examined public views, the analysis and impact conclusions of Section 3.16 conform to the revised Appendix G language concerning aesthetics and visual resources.

II. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

d) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

c) Expose sensitive receptors to substantial pollutant concentrations?

d) Create objectionable Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?

The elimination of prior language in sub (b) was to eliminate duplication with sub (a), which already asks whether the project would conflict with or obstruct implementation of the applicable air quality plan. The language on odor was revised to focus on a project’s potential to cause adverse impacts to a substantial number of people, rather than on the potential for the project to cause a subjective “objectionable” odor.

Section 3.3, Air Quality and Global Climate Change, of the Draft Supplemental EIR/EIS, considers impacts to air quality and the potential to conflict with or obstruct implementation of air quality plans, including by violating air quality standards or well resulting in a cumulatively considerable net increase in criteria pollutants. The slight revision to the Appendix G checklist questions for these topics do not change the analysis.

The Draft Supplemental EIR/EIS does not include a detailed analysis of odors from operations of the Central Valley Wye alternatives because the potential for that type of impact has not changed from that which was described in the Merced to Fresno Final EIR/EIS (Authority and FRA 2012: page 3.3-71). That analysis considered the issue of odors broadly in terms of nearby sensitive land uses, and the revision to
the Appendix G checklist would not change that prior analysis. Therefore, the analysis and conclusions in Section 3.3 are consistent with the revised Appendix G language for air quality.

VI. BIOLOGICAL RESOURCES

Would the project:

  c) Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The only change in these checklist questions was to add that analysis should consider potential impacts to both state and federally protected wetlands. Section 3.7, Biological Resources and Wetlands, of the Draft Supplemental EIR/EIS, considers both waters of the state and federally protected wetlands on page 3.7-25 under the section concerning Aquatic Resource Delineation and California Rapid Assessment Method for Wetlands and Riparian Areas. Therefore, the analysis and conclusions in Section 3.7 are consistent with the revised Appendix G language for biological resources.

V. CULTURAL RESOURCES

Would the project:

  a) Cause a substantial adverse change in the significance of a historical resource pursuant to as defined in § 15064.5?

  c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

  C d) Disturb any human remains, including those interred outside of dedicated cemeteries

These changes clarified that Guidelines Section 15064.5 does more than provide a definition of historical resources, but also provides detailed criteria to use in considering whether a project could cause a substantial adverse change in such a resource. Section 3.17, Cultural Resources, of the Draft Supplemental EIR/EIS, specifically subsection 3.17.5.4, Determining Significance Under CEQA, draws definitions of historic resources, impact criteria, and significance evaluation from the whole of CEQA Guidelines Section 15064.5, which was unchanged by the 2018 Guidelines Amendments.

In addition, these changes relocated the consideration of potential impacts to paleontological resources from the heading of “Cultural Resources” to “Geology and Soils.” Per the current version of the Authority’s Environmental Methodology Guidelines (first adopted in 2007, with major updates in 2009, 2010, and 2014), paleontological resource impacts are considered as part of the Geology and Soils analysis, consistent with the 2018 Guidelines Amendments. Based on the foregoing, the analysis and conclusions in Section 3.17 are consistent with the revised Appendix G language on cultural resources.

VI. ENERGY

As noted in the above discussion of changes to Guidelines Section 15126.2(b), Section 3.6, Public Utilities and Energy, of the Draft Supplemental EIR/EIS, fully addresses the new questions added to the Appendix G checklist as a result of the 2018 Guidelines Amendments.

VI. GEOLOGY AND SOILS

Would the project:

  a) Expose people or structures to Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

    i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

    ii) Strong seismic ground shaking?

    iii) Seismic-related ground failure, including liquefaction?
iv) Landslides?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The changes to these checklist questions were intended to reflect that agencies must consider direct and indirect impacts to geology and soils resources, and to help lead agencies better focus their analyses on whether a given project would cause or worsen seismic risks (as opposed to impacts of existing geology and soils on the project). In addition, the evaluation of paleontological resource impacts was moved from the cultural resource section to the Geology and Soils section.

As set forth in Section 3.9, Geology, Soils, Seismicity, and Paleontological Resources, of the Draft Supplemental EIR/EIS, the methodology considered in the analysis takes into account both primary and secondary seismic impacts in assessing the project’s impacts and therefore considers both direct and indirect impacts associated with the project’s impacts related to geology, soils, and seismicity.

Section 3.9 of Draft Supplemental EIR/EIS does analyze the potential exposure of HSR passengers, employees, and structures to existing geological and soil hazards, which is technically an analysis of the impact of the environment on the project. While such questions about the impact of the environment on the project were deleted from Appendix G per the CBIA v. BAAQMD California Supreme Court ruling, the document concludes that the project would not result in significant impacts to HSR passengers, employees, or structures due to risks from existing geological or soil hazards, and thus the document does not identify any CEQA impacts due to impacts of the environment on the project and thus is consistent with the change in Appendix G.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The above changes to some of the hazards questions in the Appendix G checklist clarify that a project’s proximity to an airport can create an impact related to excessive noise, delete the prior question concerning safety hazards near private airstrips, and delete language in relation to wildland fire hazards.

Section 3.11, Safety and Security, of the Draft Supplemental EIR/EIS, identifies several airports and airstrips within two miles of the Central Valley Wye alternatives. Moreover, Section 3.4, Noise and Vibration, assesses the potential for the project to cause noise or vibration impacts. The analysis in Section 3.4 takes into account existing and with-project noise levels in the resource study area, which would include noise associated with existing airports and airstrips, among other noise sources, such as roadways, existing rail operations, and existing agricultural operations. Therefore, the conclusions in Section 3.4 fully account for the potential noise and vibration effects of construction and operations of the Central Valley Wye alternatives. In addition, the Central Valley Wye alternatives would not add new
noise-sensitive receptors and would thus have no potential to increase the number of people near airports/airstrips who could be exposed to excessive noise from airport/airstrip operations.

Regarding safety hazards and private airstrips, Section 3.11 of the Draft Supplemental EIR/EIS does analyze potential safety in the vicinity of private airstrips and concludes that the Central Valley Wye alternatives would not result in any such impacts.

With regard to the changes concerning potential direct or indirect exposure of people or structures to wildland fires, other changes to the Appendix G checklist questions included the addition of a new subsection XX entitled “Wildfire.” Please see the discussion under subsection XX, Wildfire below, which provides further detail on how the document addressed potential wildfire risks within Section 3.11. Section 3.11 of the Draft Supplemental EIR/EIS documents that the project is outside any very high or high fire hazard severity zones and would be constructed and operated in an area defined by actively farmed land, further limiting fire risk exposure. Based on the foregoing, the analysis and conclusions in Sections 3.4 and 3.11 are consistent with the revised Appendix G language on hazards.

X. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

b) Substantially deplete decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site;

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

(iv) impede or redirect flood flows?

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
These changes were intended to consolidate and clarify questions on the Appendix G checklist concerning water quality and the potential of project elements, including impervious surfaces, to have hydrology related effects. The changes also clarify that the assessment of groundwater impacts should take the sustainable management of groundwater basins into account. In addition, the changes eliminate several prior questions that concerned impacts of the environment on a project, which were determined to no longer be CEQA impacts per the CBIA vs. BAAQMD California Supreme Court ruling.

As set forth in Section 3.8, Hydrology and Water Resources, of the Draft Supplemental EIR/EIS, the analysis investigates the potential for the project to violate water quality standards, violate waste discharge requirements, or otherwise substantially degrade water quality. Section 3.8 references the 2014 Sustainable Groundwater Management Act and further states that the groundwater basins in the area have been in a state of critical overdraft. Section 3.8 concludes that construction and operations of any of the Central Valley Wye alternatives would have a less-than-significant impact to groundwater resources because the alternatives would have minimal interference with groundwater recharge, would draw groundwater only for construction, and would result in some lands being taken out of agricultural use and thus reducing draws on local groundwater resources during operations. In addition, the analysis in Section 3.8 considers the potential for new impervious surfaces as a result of the Central Valley Wye alternatives to contribute to related hydrology and water quality effects.

Section 3.8 of the Draft Supplemental EIR/EIS does analyze the potential exposure of HSR passengers, employees, and structures to flooding and related risks, which is technically an analysis of the impact of the environment on the project. While such questions about the impact of the environment on the project were deleted from Appendix G per the CBIA v. BAAQMD California Supreme Court ruling, the document concludes that the project would not result in significant impacts to HSR passengers, employees, or structures due to flooding or related risks, and thus the document does not identify any CEQA impacts due to impacts of the environment on the project and thus is not inconsistent with the change in Appendix G. Based on the foregoing, the analysis and conclusions in Section 3.8 are consistent with the revised Appendix G language on hydrology.

XI. LAND USE AND PLANNING

Would the project:

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The changes above clarify that a mere conflict with a pertinent plan or policy is not itself a significant environmental impact and that a CEQA evaluation must determine whether any such conflicts would cause a significant environmental impact. In addition, the changes deleted the prior question about HCPs and NCCPs as redundant to a question in the Biological Resources section.

Section 3.13, Land Use and Planning, of the Draft Supplemental EIR/EIS notes the review of all pertinent federal and state laws, as well as local plans and policies. The document notes that the project would be consistent with all federal and state laws. While the Authority as a state agency is not required to comply with local plans and policies, Section 3.13 includes a review of such plans and policies. Section 3.13 notes that the Central Valley Wye alternatives would be inconsistent with a number of city and county policies concerning the potential conversion of agricultural land to non-farm uses. Section 3.14, Agricultural Farmland, fully analyses the potential for the Central Valley Wye alternatives to result in significant environmental effects to farmland because the alternatives would convert farmland to a transportation use.
Because Section 3.13 and 3.14 collectively address policy conflicts and resultant significant environmental effects, the analysis and conclusions in Sections 3.13 and 3.14 is consistent with the revised Appendix G language on land use.

XIII. NOISE

Would the project result in:

a) **Exposure of persons to or generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project** in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b) **Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels**?

c) **A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project**?

d) **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project**?

e) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The changes above are intended to help lead agencies focus their analyses on the potential for a given project to generate new sources of noise. The changes deleted two checklist questions considering whether a project could result in a substantial permanent or temporary increase in ambient noise levels. The changes consolidated two checklist questions concerning airports and airstrips, allowing for greater efficiency in developing checklist responses. In addition, the changes eliminate several prior questions that concerned impacts of the environment on a project, which were determined to no longer be CEQA impacts per the *CBIA v. BAAQMD* California Supreme Court ruling.

Section 3.4, Noise and Vibration, of the Draft Supplemental EIR/EIS contains an analysis of the project’s noise and vibration impacts based on methodologies appropriate for a large-scale project such as the construction and operation of high-speed passenger rail. While the Draft Supplemental EIR/EIS does identify the previous version of checklist questions as the basis for determining CEQA significance, the nature of the high-speed rail project as well as the chosen methodologies focus the analysis on the potential for each of the Central Valley Wye alternatives to generate noise and vibration during both construction and operational phases, which is consistent with the 2018 Guidelines amendments. None of the Central Valley Wye alternatives would add people or buildings; therefore, the analysis in Section 3.4 was not focused on whether the project would expose new people to existing noise and vibration (which would be a non-CEQA issue of the impact of the environment on the project), but instead on the potential for the Central Valley Wye alternatives to generate new sources of noise and vibration that would potentially expose existing people and buildings to significant increases in noise and vibration (which remains a CEQA issue).

While the 2018 Guidelines Amendments consolidated two questions related to air operations under the heading of noise, the amendments retain a similar question under the heading of hazards and hazardous materials (see the discussion of “Hazards and Hazardous Materials” above and the discussion of consideration of potential impacts related to proximity to airports and airstrips). The Draft Supplemental EIR/EIS consolidates all airport and airstrip related questions within Section 3.11, Safety and Security. Based on the foregoing, the analysis and conclusions in Sections 3.4 and 3.11 are consistent with the revised Appendix G language on noise.
XIV. POPULATION AND HOUSING

Would the project:

a) Induce substantial **unplanned** population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Displace substantial numbers of existing **people or housing**, necessitating the construction of replacement housing elsewhere?

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The changes above are intended to help lead agencies focus their analyses on the potential for projects to result in growth not previously accounted for such as in an adopted general plan or specific plan or similar adopted document. The changes above also consolidated the two checklist questions concerning displacement into a single question.

Section 3.18, Regional Growth, of the Draft Supplemental EIR/EIS considers the growth-inducing potential of the Central Valley Wye alternatives. Because the Central Valley Wye alternatives considered in the Draft Supplemental EIR/EIS do not include any interfaces with the public (such as stations) or a maintenance facility that could generate permanent employment, the analysis in Section 3.18 refers back to the regional growth context and conclusions from the Merced to Fresno Final EIR/EIS, from which the need for a supplemental Central Valley Wye analysis was initiated. Both the Merced to Fresno Final EIR/EIS as well as the Draft Supplemental EIR/EIS examine historical population and employment trends as well as future projections for each based on state, regional, and local data. Both the Merced to Fresno Final EIR/EIS as well as the Draft Supplemental EIR/EIS for the Central Valley Wye alternatives set forth conclusions about the potential for various alternatives to induce growth in excess of what is planned or projected for the region.

Section 3.12, Socioeconomics and Communities, of the Draft Supplemental EIR/EIS provides a complete analysis of the potential for the Central Valley Wye alternatives to displace residences (people), as well as commercial and industrial businesses, agricultural operations, and community/public facilities. Because Sections 3.12 and 3.18 collectively address the potential for unplanned growth inducement as well as displacements of people and housing, the analysis and conclusions in Sections 3.12 and 3.18 are consistent with the revised Appendix G language on population growth.

XVII. TRANSPORTATION/TRAFFIC

Would the project:

a) Conflict with a **an applicable program plan, ordinance or policy establishing measures of effectiveness for the performance of addressing** the circulation system, **including transit, roadway, bicycle and pedestrian facilities? taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

b) **Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

d) **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

e) **Result in inadequate emergency access?**
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The changes to these checklist questions are largely associated with the addition of CEQA Guidelines Section 15064.3 as part of the 2018 Guideline Amendments. This new section states that VMT is generally the most appropriate metric to assess transportation impacts and that projects that reduce VMT should be presumed to cause a less than significant impact. The 2018 Guidelines Amendments state that a project’s effect on automobile delay (most commonly analyzed in terms of “level of service” or LOS) shall not be characterized as a significant environmental impact. The guideline amendment states that a lead agency may elect to be governed by the provisions immediately, but that beginning on July 1, 2020, the provisions shall apply statewide. Please see the discussion above regarding the addition of Section 15064.3, which notes that the Central Valley Wye alternatives (as part of the statewide HSR system) would substantially reduce VMT and are therefore consistent with this Guideline amendment.

The checklist changes above also reflect the clarification that the assessment of a project’s design to increase transportation hazards is best focused on that project’s potential to introduce hazardous geometric elements. Section 3.11, Safety and Security, of the Draft Supplemental EIR/EIS, includes an analysis of the potential for the Central Valley Wye alternatives to cause both temporary (i.e., construction-period) and permanent (operations) hazards to motorists, pedestrians, and bicyclists, such as might result from project-related roadway realignment, bridges and structures, and other elements. Further, as stated in Section 3.2, Transportation, each of the Central Valley Wye alternatives would be fully grade-separated and therefore would have no effects on any other form of transportation once operational.

Because Sections 3.2 and 3.11 demonstrate consistency with VMT reduction and with other changes to the transportation checklist questions, the analysis and conclusions in Sections 3.2 and 3.11 are consistent with the revised Appendix G language on transportation.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects?

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

d) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years from existing entitlements and resources, or are new or expanded entitlements needed?

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

f) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The 2018 Guidelines Amendments provided many clarifying changes to the Appendix G checklist utilities questions. Regarding wastewater, the changes consolidated previously duplicative questions concerning assessment of water quality related questions from two checklist sections (Utilities and Hydrology and
Water Quality) to one (Hydrology and Water Quality). As set forth in Section 3.8, Hydrology and Water Resources, of the Draft Supplemental EIR/EIS, the analysis investigated the potential for the project to violate water quality standards, violate waste discharge requirements, or otherwise substantially degrade water quality.

The changes also clarified that an environmental review should consider the potential for utility relocation to result in significant environmental impacts, in a manner similar to the evaluation of new or expanded utilities. While Section 3.6, Public Utilities and Energy, was originally drafted with the previously stated CEQA checklist question regarding utilities, potential utility conflicts and the need for relocation of such utilities are included in the design of all Central Valley Wye alternatives. Therefore, the impact analysis in all resource sections in the Draft Supplemental EIR/EIS fully evaluate the potential impacts from utility relocations associated with construction and operations of the Central Valley Wye alternatives.

The changes also updated the checklist question regarding water supply assessment to reference the methodology for water supply assessment that evolved from the 2007 decision in Vineyard Area Citizens for Responsible Growth v. Rancho Cordova (40 Cal. 4th 412). This methodology emphasized consideration of long-term water supplies in light of the state’s well-documented propensity for high degrees of yearly variation in available potable water.

Because the Central Valley Wye alternatives do not include any maintenance facilities or stations, water use would be required only for construction, not maintenance or operations. While no long-term water supply would be needed for operations of any of the Central Valley Wye alternatives, the Merced to Fresno Section Final EIR/EIS considered water supply needs associated with longer-term station and maintenance facility operations in a manner consistent with then-applicable requirements. Section 3.6 of the Draft Supplemental EIR/EIS examines water availability for construction, but with a horizon year appropriate to the expected start and duration of construction; no long-term water supply is needed.

Finally, the changes updated two checklist questions related to solid waste, including a recognition of the extensive body of state and local regulations adopted over the past two decades regarding solid waste management, waste reduction, and recycling. The changes help lead agencies focus their analyses on waste reduction and not the mere assessment of local and regional landfill capacity. Section 3.6 of the Draft Supplemental EIR/EIS acknowledged state laws (such as AB 939) and local policies (as included in the 2030 Merced County General Plan) concerning solid waste. Because the Central Valley Wye alternatives do not include any maintenance facilities, stations, or other facilities which would result in new sources of waste generation, none of the alternatives would directly generate solid waste requiring disposal. The analysis in Section 3.6 estimated the amounts of construction waste and noted the Authority’s standard construction practice of seeking to divert as feasible any construction/demolition solid waste from landfills by reuse and/or recycling.

Because Sections 3.6 and 3.8 demonstrate consistency with changes concerning wastewater, water supply, utilities, and solid waste, the analysis and conclusions in Sections 3.6 and 3.8 are consistent with the revised Appendix G language on public utilities.

**XX. WILDFIRE**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- **a)** Substantially impair an adopted emergency response plan or emergency evacuation plan?
- **b)** Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- **c)** Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- **d)** Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?
The 2018 Guidelines Amendments added a new "Wildfire" section to Appendix G. The new checklist questions asked the Lead Agency to determine if a project would be located in or near state responsibility areas or very high fire hazard severity zones and thus potentially adversely impact adopted emergency response plans, exacerbate wildfire risks, require the installation of new infrastructure that either may exacerbate wildfire risk or result in impacts to the environment, or expose people/structures to significant risk of flooding, landslides, or drainage changes.

Section 3.11, Safety and Security, of the Draft Supplemental EIR/EIS fully addresses these criteria related to wildfire as it presents the resource study area for the project is outside any state responsibility area or very high fire hazard severity zones. The same section also provides evidence that the project is largely within agricultural areas which generally lack combustible fuels and would not conflict with an adopted emergency plan.

Because Section 3.11 addresses the new questions concerning wildfire potential, the analysis and conclusions in Section 3.11 is consistent with the revised Appendix G language on wildfire.

XXIX. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

This change to the CEQA checklist question added the clarifying term "substantially" to help lead agencies make more appropriate significance conclusions for all potential physical environmental impacts. The previous wording of the question left open an ambiguity that may have led lead agencies to conclude a significant impact occurred if any measurable degradation, even if extremely minute, were found. The analysis and conclusions within Sections 3.7, Biological Resources and Wetlands, and 3.17, Cultural Resources, of the Draft Supplemental EIR/EIS are each based on detailed methodology that attribute significant impact conclusions to substantial adverse changes. As such, the conclusions in those sections are consistent with the new language.

3.14 Summary of Changes from Appendix G Checklist

As noted above, the 2018 Guidelines Amendments made numerous text changes to the checklist within Appendix G of the CEQA Guidelines, and the majority of these text changes are clarifications which address changes to the interpretation of the CEQA statutes that have occurred over time due to court decisions. The Authority reviewed all of these text changes and found that the analysis and conclusions of the Draft Supplemental EIR/EIS are consistent with the 2018 Guidelines Amendments and that the refinements to the Appendix G checklist do not change any of the significance conclusions in the Draft Supplemental EIR/EIS for the reasons described in the preceding sections.

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