MEMORANDUM OF UNDERSTANDING BETWEEN CALIFORNIA HIGH-SPEED RAIL AUTHORITY AND STATE WATER RESOURCES CONTROL BOARD

A. BACKGROUND

This Memorandum of Understanding (MOU) is entered into by the California High-Speed Rail Authority (AUTHORITY) and the State Water Resources Control Board (STATE WATER BOARD) (the AUTHORITY and the STATE WATER BOARD are each also individually referred to as "Party" and collectively as "PARTIES"). The AUTHORITY, an agency of the State of California, is responsible for planning, designing, building and operating the first statewide high-speed train (HST) system in the nation, the California High Speed Train Project (Project). The HST system will connect the mega-regions of the state, contribute to economic development and a cleaner environment, create jobs and preserve agricultural and protected lands. The STATE WATER BOARD is responsible for issuing approvals for AUTHORITY's proposed discharges of dredged and fill material to waters of the state related to the construction of the Project. For purposes of this MOU between the AUTHORITY and the STATE WATER BOARD, the Project is comprised of ten (10) separate project sections as set forth below:

- San Francisco to San Jose
- San Jose to Merced
- Merced to Sacramento
- Merced to Fresno, including the Central Valley Wye
- Fresno to Bakersfield
- Bakersfield to Palmdale
- Palmdale to Burbank
- Burbank to Los Angeles
- Los Angeles to Anaheim
- Los Angeles to San Diego

The AUTHORITY seeks expedited preparation, consideration and issuance of Clean Water Act section 401 water quality certifications (certifications) and/or waste discharge requirements (WDRs) (certifications and WDRS are collectively referred to herein as "Permits") for discharges of dredged and fill material to waters of the state, including waters of the U.S. No other permits or authorizations issued by the STATE WATER BOARD or the California regional water quality control boards are addressed in this MOU. The AUTHORITY understands that it shall enroll in, or apply for, any other necessary permits, including NPDES permits, as required under state and federal law.

Expedited permitting is necessary to ensure that the time period stipulated in the granting of federal funds for construction of the Project is achieved. The receipt of this funding is predicated upon completion of construction by dates specified by the Federal Railroad Administration. This MOU is also intended to facilitate the AUTHORITY's objective to obtain approval of all proposed discharges of dredged or fill material associated with construction of the project.

This MOU supplements an Interagency Agreement (IA) between the AUTHORITY and the STATE WATER BOARD that implements a Budget Change Proposal for the AUTHORITY to reimburse the STATE WATER BOARD for its work related to the issuance of Permits for discharges of dredged and fill material to waters of the state. The reimbursement is necessary to augment STATE WATER BOARD staffing to meet the AUTHORITY's timeline; it is in addition to payment by the AUTHORITY of fees for Permits for discharges of dredged and fill materials established by the STATE WATER BOARD by regulation.

The parties acknowledge that the STATE WATER BOARD: (a) is responsible for complying with all laws; including but not limited to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the federal Clean Water Act; and the California Environmental Quality Act, as applicable, that apply to preparing, reviewing, commenting on, and considering the Permit applications or Permit Documents; (b) must not knowingly release deficient Permit applications or Permit Documents; and (c) must exercise its independent judgment in determining the adequacy of the Permit applications and Permit Documents. Notwithstanding any other provision in this MOU, including Attachment A and Exhibit 1 thereto, the STATE WATER BOARD will exercise its independent judgment in determining whether and how to approve discharges to all waters of the state, including both waters of the United States and non-federal waters of the state.

This MOU addresses the investigation, review, and/or preparation of all required documents related to processing the Permit applications and compliance with permit conditions, including but not limited to: review and comment on, and/or preparation, of documents required under the Porter-Cologne Act, federal Clean Water Act, and CEQA. These documents include draft reports, presentations, special investigative study reports, site inspection reports, memoranda, draft resolutions, white papers, draft permits, amendments, habitat mitigation and monitoring plans, or other documents supporting final actions on the Permit applications (collectively, Permit Documents).

This MOU is not legally binding on either Party, and does not limit either the AUTHORITY's discretion with respect to the Project or the STATE WATER BOARD's discretion with respect to its regulatory authority, nor infers that either of the Parties' management or governing bodies will act in a particular manner other than those matters specifically described herein, with respect to the Project. Nothing in this MOU creates any legal rights, obligations, benefits, or responsibilities, substantive or procedural, enforceable at law or in equity, by any Party or non-Party.

This MOU will become effective upon signature of both Parties. This MOU shall remain in effect until the AUTHORITY completes construction of the Project, but may be revised or terminated at any time upon written agreement by the Parties.

B. STAFFING NEEDS

This MOU sets forth a process agreed-upon between the AUTHORITY and the STATE WATER BOARD to ensure that the requirements of the AUTHORITY's environmental documents and applications for proposed discharges of dredged and fill material are efficiently met and that reduces the expected processing time by the STATE WATER BOARD for any required submittals or other documentation.

All deliverables and timelines detailed below are contingent upon the successful programming of sufficient STATE WATER BOARD staff, which shall take between one (1) to four (4) months of time from implementation of this MOU. The services provided by the STATE WATER BOARD under this MOU shall be performed by appropriately qualified STATE WATER BOARD staff. STATE WATER BOARD staff funded by this MOU shall have an in-depth knowledge of the Clean Water Act and Porter-Cologne. Qualifications include successful completion of an undergraduate or higher degree in relevant sciences and experience preparing similar permits, agreements, mitigation planning documents and experience in compliance implementation and documentation.

The AUTHORITY shall not direct or participate in preparing any Permit, except to the extent that AUTHORITY provides data, information, and relevant application documents requested by the STATE WATER BOARD's Project Manager. The AUTHORITY shall provide access to Project sites where access is possible, inform the STATE WATER BOARD of schedules and priorities for Projects and Permits as necessary to retain funding commitments for, or to facilitate construction of any phase of the HST System.

The STATE WATER BOARD shall appoint a Project Manager to manage processing the Permit applications and amendments. The Project Manager will direct staff and facilitate the completion of the STATE WATER BOARD's responsibilities during the administration of this MOU and will serve as coordinator for delivery of reports and notices to the AUTHORITY. The STATE WATER BOARD agrees that the Project Manager shall make all work associated with the Projects the first priority for STATE WATER BOARD staff assigned pursuant to this MOU.

In addition to a Project Manager, STATE WATER BOARD shall appoint adequate staff to process permit applications and amendments and document compliance with issued permits for the Projects within the time desired by the AUTHORITY. The STATE WATER BOARD has estimated that this additional work will require 3.0 Environmental Scientist positions (or equal) and 0.3 position of legal staff at the STATE WATER BOARD. A portion of these positions may be comprised of other STATE WATER BOARD staff and management positions, and/or regional water quality control board positions, as determined by the STATE WATER BOARD. It is the responsibility of the STATE WATER BOARD to coordinate with regional water quality control board staff.

C. FEES

The Authority is responsible for submittal of all regulatory fees for the Project as required by regulations adopted by the STATE WATER BOARD. The Parties agree that the personnel services provided under this MOU are in addition to regular fees, and that these services are provided in order to expedite the baseline process supported by the regulatory fees.

D. COORDINATION AND EXPEDITED PROCESSING

Meetings, Conference Calls, Field Reviews

The STATE WATER BOARD will participate as needed, and when requested by the AUTHORITY, in Project-related coordination meetings, conference calls, field reviews and project and mitigation site tours. The AUTHORITY will participate as needed, and when requested by the STATE WATER BOARD, in Project-related meetings. Where practicable, the Party requesting the meeting will coordinate the meeting.

Each Party will respond to requests for information from the other Party at each meeting; and respond to questions orally, via email or written, as appropriate considering the needs of the AUTHORITY and the STATE WATER BOARD.

Each Party will respond to phone calls or email messages from the other Party as promptly as possible, but not later than within two (2) business days, except during periods of annual leave, illness, or when AUTHORITY project review or training requires the STATE WATER BOARD to be away from the office (or home base) for more than one (1) day at a time.

For each meeting, the parties will determine which Party shall prepare and distribute meeting minutes. Meeting minutes will be prepared and distributed within ten (10) days of the meeting. The Party that did not prepare and distribute the meeting minutes will respond in writing within ten (10) days with concurrence or any requested changes.

Data Sharing

The STATE WATER BOARD and the AUTHORITY will share, as appropriate, the most current regulatory and resources information, including Geo Spatial Information (GIS) mapping and data layers, with each other to assist with permit processing.

Inter-Agency Coordination

The STATE WATER BOARD will coordinate with affected regional water quality control board staff and staff of other Federal, State, and local agencies, as appropriate, in the review of the AUTHORITY's environmental documents and federal and state permits issued for current or future Project sections. The STATE WATER BOARD, rather than the regional water quality control boards, will issue the Permits for the Project. The AUTHORITY will use its best efforts to facilitate coordination between the United States

Army Corps of Engineers (Corps), United States Environmental Protection Agency, United States Fish and Wildlife Service, the California Department of Fish and Wildlife, and the STATE WATER BOARD regarding Project compensatory mitigation planning and review as appropriate based on the jurisdiction and responsibilities of those respective agencies.

CEQA and Project Consultation

For topics that fall within the regulatory purview and/or permitting authority of the STATE WATER BOARD, the AUTHORITY will request early coordination with the STATE WATER BOARD prior to the submittal of an application. The AUTHORITY will provide drafts of administrative, draft, and final CEQA documents. The STATE WATER BOARD will:

- Participate in conference calls and/or in-person meetings about early coordination prior to submittal of an application. The AUTHORITY will provide adequate notice to the STATE WATER BOARD of any planned consultation. While the STATE WATER BOARD will make every effort to be available as needed, inability of STATE WATER BOARD staff to attend emergency or last-minute consultation shall not be regarded as a deviation from this obligation.
- Provide technical reviews, analyses and comments in a timely manner on administrative and public review drafts of administrative, draft and final CEQA documents. The STATE WATER BOARD will provide review and comments on engineering and related construction specifications only to the extent that such engineering and construction specifications directly affect the STATE WATER BOARD's obligations under its permitting authority.

Supporting Documentation

Within thirty (30) days of receipt from the AUTHORITY, STATE WATER BOARD will review and provide written comments on AUTHORITY-prepared methodology reports, field work results, and approaches to impact analysis and mitigation when required. The 30-day review and response schedule applies to each of these individual deliverables.

Within thirty (30) days of receipt from the AUTHORITY, STATE WATER BOARD will respond in writing to the AUTHORITY regarding mitigation proposals.

Within fifteen (15) days of receipt of the AUTHORITY's surveys of potential impacts to waters of the state or the potential for discharge of any material into a waters of the state, STATE WATER BOARD will provide the AUTHORITY with an initial determination as to which features are subject to regulation under Porter-Cologne as surface waters of the state that are not waters of the United States. The STATE WATER BOARD will defer to the Corps and the United States Environmental Protection Agency for waters of the United States jurisdictional determinations. The AUTHORITY is encouraged to request that the Corps delineate all aquatic resources (including those that are not waters of the United States) that may be impacted by the project to assist the STATE WATER BOARD

with its determinations regarding impacted surface waters of the state.

Permit Applications

The AUTHORITY will submit applications for Permits in accordance with Attachment A and Exhibit 1, thereto. STATE WATER BOARD will review all permit applications and respond with comments in writing within thirty (30) days to inform the AUTHORITY whether or not the application is complete and whether or not a permit is needed. If the STATE WATER BOARD determines that additional information is needed, it shall notify the AUTHORITY within the same thirty (30) days.

The STATE WATER BOARD will provide a full and complete list of any deficiencies and additional information needed to support permitting decisions with its initial review of an application. Later requests for supplemental information may be required, if critical information needs are found to exist after review of the information provided at the request of the STATE WATER BOARD during the 30-day application review period. Such requests by the STATE WATER BOARD shall be made within thirty (30) days after submittal of the supplemental information. The AUTHORITY agrees to provide additional information in response to supplemental requests that stem from such newly identified needs in order for continued consideration of applications by the Water Boards. Delays of over 45 days in submittal of supplemental information by AUTHORITY may affect the STATE WATER BOARD's ability to complete subsequent process steps.

STATE WATER BOARD will review supplemental application material within twenty (20) days of receipt. The STATE WATER BOARD will deem the application complete or seek clarification or added detail if necessary, within the 20-day period.

STATE WATER BOARD staff will review any new additional information provided. If staff finds that additional information is still required to support a permitting decision, the AUTHORITY may continue to develop the information needed. The AUTHORITY may also invoke the "Dispute Resolution" provisions provided below.

Once an application is determined to be complete by the STATE WATER BOARD, staff will prepare draft Permits and place the matter on the earliest available STATE WATER BOARD meeting agenda or prepare the matter for approval by the Executive Director. This process typically will require up to 65 days for completion.

As part of the previous step, when required by Water Code section 13167.5, the STATE WATER BOARD will provide notice and a minimum 30-day opportunity for the public to comment on proposed waste discharge requirements by providing persons and public agencies with a known interest in the project with a copy of the draft waste discharge requirements and/or by posting a draft of the waste discharge requirements on the STATE WATER BOARD's website. For water quality certifications that do not include the issuance of waste discharge requirements, the STATE WATER BOARD may provide notice and a minimum 21-day opportunity for the public to comment on the application for water quality certification by providing persons and public agencies with a known interest

in the Project with a copy of the public notice and/or by posting public notice of the application on the STATE WATER BOARD's website. The notice and opportunity to comment may include a public hearing.

STATE WATER BOARD will consider the comments and may modify the proposed Permit in response to the comments, and will adopt the proposed, or amended Permit within 65 days of the end of the 30-day comment period for waste discharge requirements, or within 65 days of determining that the application is complete for water quality certifications. In any event, the parties acknowledge that, for discharges of dredged or fill material that do not require issuance of a water quality certification, Water Code section 13264 authorizes the AUTHORITY to commence discharge prior to the issuance of waste discharge requirements under specified circumstances.

The AUTHORITY and the STATE WATER BOARD's Project Manager reserve the right to request a change to this MOU's tasks or schedules for any specific Permit application, which the AUTHORITY shall review within five (5) working days, and may, at the AUTHORITY'S discretion, either approve, deny or request that the STATE WATER BOARD meet and confer regarding the requested change. The Parties agree that a request for change to this MOU shall not extend the schedule for processing of any Permit applications in a manner that jeopardizes timely funding or construction of the Project(s), and any request or change that extends the schedule for processing of any Permit applications must be agreed to and approved by the AUTHORITY. Changes to this MOU or a work plan may relate to the need for new or additional information on the Projects, or by the discovery of additional issues during the course of the analysis. Requested variations to this MOU must be made by providing timely notice of any need to change this MOU, and shall provide a reasonably detailed explanation of reasons for the change(s). The notice provided to change a work plan or to vary from this MOU, shall include, at a minimum, the following:

- A list of the specific tasks, information and Permit Documents required to continue and complete review and processing of the Permit applications or amendments.
- 2. A revised work plan for the completion of the investigation and review of the information and Permit Documents related to these tasks.
- 3. A notification if the additional tasks may require participation in any STATE WATER BOARD hearings or meetings on the additional information and Permit Documents.
- 4. Any impacts that may result to the approved schedule for the Permit(s) and Project(s) that may result from the requested change in the scope of work identified in the work plan.

Permit Compliance Support

The STATE WATER BOARD will provide staff to support consultation of permit compliance for each Project section during the period between permit issuance through construction of the Project. Tasks may include, but will not be limited to: (1) consultation with AUTHORITY staff and/or representatives for permit condition interpretations and implementation (including ad hoc questions), (2) compliance enforcement, (3) review of daily/weekly/monthly compliance monitoring reports, (4) review of pre-and post-construction survey reports and mitigation monitoring reports, (5) compliance tracking and communication via the AUTHORITY web-portal referred to as Environmental Mitigation Management and Assessment (EMMA)(relevant to Permits) and (6) conduct field visits.

Dispute Resolution

Any disagreements or disputes regarding implementation of this MOU that cannot be amicably resolved by staff of the AUTHORITY and the STATE WATER BOARD, will be resolved through a dispute resolution method available under this MOU and as described in this section. In keeping with the spirit of collaboration, nothing in this section precludes any other traditional or nontraditional approaches to dispute resolution.

Dispute resolution is intended to be expeditious, practical, respectful, and accessible. All the methods of dispute resolution, including elevation, are available at any point on a voluntary basis. Elevation, as necessary, is encouraged. The elevation process is intended to resolve issues quickly, keep the Project and/or Project section reviews on schedule, and maintain constructive working relationships.

This MOU affords the following methods for dispute resolution:

A. Informal Notice

Throughout this MOU process, the AUTHORITY or STATE WATER BOARD should verbally communicate pending problems/potential issues as early as possible. If an elevation appears likely, the AUTHORITY should begin framing the elevation briefing paper, coordinating the development of the briefing paper with the STATE WATER BOARD, and scheduling the elevation meeting.

B. Representatives for Elevation

When the AUTHORITY or STATE WATER BOARD initiate an elevation, the AUTHORITY and STATE WATER BOARD should provide the name(s) and contact information of the executive and legal level representatives who have been identified to speak for their respective agency.

C. Briefing Paper

A cooperatively prepared briefing paper is a key component of the elevation. The AUTHORITY will send the briefing paper to the representatives along with a draft agenda at least ten (10) calendar days prior to the elevation.

D. Elevation Process

Convening an elevation requires the AUTHORITY and STATE WATER BOARD to:

- (a) Notify and schedule the representatives who will resolve the dispute and the staff who will brief them;
- (b) Coordinate, develop, and distribute an elevation briefing paper; and
- (c) Arrange for and identify funding for a neutral facilitator, if necessary.

If an elevation is triggered, but resolution is reached prior to the elevation meeting, the AUTHORITY or STATE WATER BOARD will send notification to the other Party that the issue is resolved and the elevation meeting is not required. Completion of the formal elevation process, including mid-level and senior-level elevation, should be within sixty (60) calendar days of receipt of written notification to initiate elevation.

E. Failure of elevation

If senior-level elevation does not resolve the issue, the AUTHORITY and STATE WATER BOARD may request a more formal dispute resolution process, which will be organized by the requesting agency.

Legal and Management Coordination

The STATE WATER BOARD staff under this MOU shall provide consultation with the STATE WATER BOARD's legal and management staff to ensure efficient review and signatures of documents (such as permit amendments, mitigation planning documents, etc.) or other legal agreements.

E. INFORMATION REPORTS

The STATE WATER BOARD shall provide reports to the AUTHORITY's Contract Manager with the following information on a semi-annual basis, or on a basis that Project Manager and AUTHORITY otherwise agree to in writing: (a) the number of STATE WATER BOARD (and Regional Board staff if consulted) staff engaged in review and preparation of all Permit applications and Permit Documents related to Projects proposed by the AUTHORITY, (b) all Permit applications that STATE WATER BOARD staff are working on for the AUTHORITY, (c) the progress on investigation and review of all environmental information and preparation of all Permits applied for by the AUTHORITY.

Dated	Eileen Sobeck, Executive Director State Water Resources Control Board		
Dated	Brian Kelly, Chief Executive Officer California High-Speed Rail Authority		

Attachment A

1. Items required for a Complete Application for Clean Water Act section 401 Certification (certification) and/or Waste Discharge Requirements (WDRs)

A complete application shall include:

- (a) The name, address, email address, and telephone number of the AUTHORITY's contact person or agent (if an agent is submitting the application).
- (b) A full, technically accurate description of the entire activity.
- (c) Complete identification of all federal licenses/permits being sought for or applying to the proposed activity, including the:
 - (1) federal agency;
 - (2) type (e.g., individual license, regional general permit, nationwide permit, etc.);
 - (3) license/permit number(s) (e.g., nationwide permit number), if applicable; and
 - (4) file number(s) assigned by the federal agency(ies), if available.
- (d) Complete copies of either:
 - (1) the application(s) for federal license(s)/permit(s) being sought for the activity, or,
 - (2) if no federal applications are required, any notification(s) concerning the proposed activity issued by the federal agency(ies), or,
 - (3) if no federal notifications are issued, any correspondence between the AUTHORITY and the federal agency(ies) describing or discussing the proposed activity.

If no application, notification, correspondence or other document must be exchanged between the AUTHORITY and federal agency(ies) prior to the start of the activity, the application shall include a written statement to this effect.

(e) Copies of any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document is available, a list of all remaining agency regulatory approvals being sought shall be included.

- (f) A copy of any draft or final CEQA document(s), if available, prepared for the activity. Although CEQA documentation is not required for a complete application, the certifying agency shall be provided with and have ample time to properly review a final copy of valid CEQA documentation before taking a certification action or issuing WDRs.
- (g) The correct regulatory fee deposit, as identified in California Code of Regulations, Title 23, Sections 2200 and/or 3833. (Once all project information is received, STATE WATER BOARD will verify the correct fee amount.)
- (h) A complete project description, including:
 - (1) Name(s) of any receiving water body(ies) that may receive a discharge.
 - (2) Type(s) of receiving water body(ies) (e.g., at a minimum: river/streambed, lake/reservoir, ocean/estuary/bay, riparian area, or wetland type).
 - (3) Location of the activity area in latitude and longitude, in township/range, or clearly indicated on a published map of suitable detail, quality, and scale to allow the certifying agency to easily identify the area and water body(ies) receiving any discharge.
 - (4) For each water body type reported under Subsection (h)(2) of this Section, the total estimated quantity of waters of the state that may be adversely impacted temporarily or permanently by a discharge or by dredging.

The estimated quantity of waters to be adversely impacted by any discharge shall be reported in acres and (for channels, shorelines, riparian corridors, and other linear habitat) linear feet, except that dredging estimates shall be reported in cubic yards.

- (5) The total estimated quantity (in acres and, where appropriate, linear feet) of waters of the state, by type (see Subsection (h)(2) of this Section) proposed to be created, restored, enhanced, purchased from a mitigation or conservation bank, set aside for protection, or otherwise identified as compensatory mitigation for any anticipated adverse impacts. If compensatory mitigation is to be provided in some other form, that shall be explained.
- (6) A description of any other steps that have been or will be taken to avoid, minimize, or compensate for loss of or significant adverse impacts to beneficial uses of waters of the state.
- (7) The total size (in acres), length (in feet), where appropriate, type, and description of the entire project area, including areas outside of jurisdictional waters of the United States.

- (8) A brief list/description, including estimated adverse impacts of any projects implemented by the AUTHORITY within the last five years or planned for implementation by the AUTHORITY within the next five years that are in any way related to the proposed activity or that may impact the same receiving water body(ies) as the proposed activity. For purposes of this item, the water body extends to a named source or stream segment identified in the relevant basin plan.
- (i) If surface waters that are waters of the state, but not waters of the U.S., are present, a delineation of those waters of the state in accordance with the procedures specified below. In addition, if waters of the U.S. are present, any preliminary or final wetland delineation report that was submitted to the Corps.
- (j) The date or dates upon which the project activity will begin and end; and, if known, the date or dates upon which the discharge will take place.
- (k) Map(s) with a scale of at least 1:24000 (1" = 2000') and of sufficient detail to accurately show (1) the boundaries of the lands owned or to be utilized by the AUTHORITY in carrying out the proposed activity, including the location, dimensions and type of any structures erected or to be erected on the plotted lands for use in connection with the activity and the location, (2) the extent of waters of the state within the boundaries of the project, as well as waters of the state outside of the boundary of the project that could be affected by the project. This mapping and verification process will consist of two steps: the verification of the accuracy of the map (i.e., the physical boundaries and extent of aquatic resources); and a determination of federal jurisdiction or lack thereof (non-federal waters). The process by which the aquatic features will be mapped in these instances are consistent with mapping protocol used to process Water Quality Certifications through Section 401 of the Clean Water Act and historically accepted by the Regional Water Quality Control Boards and the STATE WATER BOARD as valid mapping protocol. Therefore, the verified map will be an accurate representation of the extent of waters of the State. The STATE WATER BOARD may require that the map(s) be submitted in electronic format (e.g., GIS shapefiles).

¹ In cases of clay-pan aquatic resources (specifically within the Bakersfield/Palmdale Section) State waters will be mapped using the claypan mapping methodology reviewed and approved by the Corps and the STATE WATER BOARD titled "Detailed Methodology for Delineating Certain Claypans as Aquatic Resources (including Wetlands) and Jurisdictional Waters of the State" and dated June 2, 2016. The verified map will be an accurate representation of the extent of waters of the State.

- (I) A description of the waters proposed to receive a discharge of dredged or fill material, including but not limited to: a description of the discharge at each individual impact location, quantity of impact at each location rounded to the nearest tenth of an acre and linear feet, (where applicable) if a fill/excavation discharge, or cubic yards, if a dredging discharge; assessment of potential direct and indirect impacts to listed beneficial uses; identification of existing water quality impairment(s); the source of water quality impairment(s), if known; and the presence of threatened or endangered species or critical habitat. To the extent feasible, consistent identification codes for identified water bodies shall be used in all application materials.
- (m) For the purpose of developing compensatory mitigation, the AUTHORITY may use either the Corps' mitigation ratio checklist or another method approved by the STATE WATER BOARD.
- (n) An analysis of alternatives. The AUTHORITY must show that a sequence of actions has been taken to first avoid, then to minimize, and lastly compensate for adverse unavoidable impacts to waters of the State. For sections requiring a Corps 404(b)(1) analysis, the STATE WATER BOARD shall defer to the Corps' determinations on the adequacy of the alternatives analysis, or rely on a draft of the 404(b)(1) alternatives analysis if no final determination has been made. For sections that do not require a Corps 404(b)(1) analysis, the STATE WATER BOARD, as a Responsible Agency under CEQA (Public Resources Code section 21069), will follow the process proscribed by CEQA Guidelines section 15096 (specifically with respect to alternatives section 15096(g)). The STATE WATER BOARD shall utilize its role as a Responsible Agency under CEQA to review and comment on the alternatives analysis in the Authority's EIR as well as on the sufficiency of the AUTHORITY's avoidance, minimization, and mitigation measures pursuant to Section IV.B.1. The alternatives analysis in the AUTHORITY's EIR shall be sufficiently detailed for the STATE WATER BOARD to determine compliance with Section IV.B.1. The Parties further recognize that the STATE WATER BOARD may require, during review of the permit application, that the AUTHORITY implement additional avoidance, minimization, and mitigation measures for the AUTHORITY's approved project section pursuant to the STATE WATER BOARD's authority under the Porter-Cologne Act and Section 401 of the Clean Water Act. For sections that contain waters of the State which are also federal waters (for which a Corps 404(b)(1) analysis is prepared) and non-federal waters, the STATE WATER BOARD shall rely on the Corps' analysis and its authority as a Responsible Agency under CEQA for non-federal waters. The analysis and level of documentation should be commensurate with the level of impacts of the Project on the aquatic environment. For sections authorized by the Corps utilizing an existing Nationwide Permit, to the extent that the impacts are not considered in a project level Corps 404(b)(1) analysis, the Authority shall provide a description of any steps that have been or will be taken to avoid and minimize the loss of, or significant impacts to, beneficial uses to waters of the State.
- (o) In cases where temporary impacts are proposed, a draft restoration plan for restoring areas of temporary impact to pre-project conditions including, at a minimum, the following: the objectives of the restoration plan; a work schedule; plans for grading of

disturbed areas to pre-project contours; a planting palette with plant species native to the area; seed collection locations; an invasive species management plan; a description of performance standards used to evaluate attainment of objectives; the timeframe for determining attainment of performance standards; and maintenance requirements (e.g. watering, weeding, and replanting). The level of detail in the restoration plan shall be sufficient to accurately evaluate whether the restoration offsets the adverse impacts to aquatic resources attributed to the Project. Prior to issuance of the certification or WDRs, the AUTHORITY shall submit a final restoration plan that describes the restoration of all temporarily disturbed areas to pre-project conditions.

- (p) A draft compensatory mitigation plan developed using a watershed approach containing the items below. Draft compensatory mitigation plans shall include the elements listed below.
 - (1) Proposed compensatory mitigation projects will be sited consistent with federal, State and local laws, regulations and ordinances, including relevant Federal Aviation Advisory Circular on Hazardous Wildlife Attractants on or near Airports (AC No: 150/5200-33, 5/1/97).
 - (2) A watershed profile for the project evaluation area for both the proposed dredge or fill project and the proposed compensatory mitigation project. The scope and detail of the watershed profile shall be commensurate with the magnitude of impact to aquatic resources associated with the Project, and shall describe the overall abundance, diversity, and condition of aquatic resources in the project evaluation area. The watershed profile shall include a map and report characterizing the location, abundance, and diversity of aquatic resources in the project evaluation area, and a report characterizing the condition of aquatic resources in the project evaluation area and the environmental stress factors affecting condition. In some cases, field data may need to be collected in the project evaluation area to confirm the reported condition. Some or all of the information may be obtained from a watershed plan.
 - (3) A description of how the compensatory mitigation plan, whether located inside or outside the project watershed area, does not cause a net loss of the overall abundance, diversity, and condition of aquatic resources, based on the watershed profile. The level of detail in the plan shall be sufficient to accurately evaluate whether compensatory mitigation offsets the adverse impacts attributed to a project.
 - (4) Preliminary information about ecological performance standards, monitoring, and long-term protection and management.
 - (5) A timetable for implementing the proposed mitigation plan. If the mitigation plan includes buffers, design criteria and monitoring requirements for the buffers.

2. Delineation of Non-Federal Wetlands and other Surface Waters of the State that are not Waters of the United States

The STATE WATER BOARD will rely on any Corps-approved aquatic resource delineation within the boundaries of waters of the U.S. unless the lack of vegetation was the sole reason why an area was not delineated as a wetland. In such cases, any such unvegetated areas should be classified as a wetland for the STATE WATER BOARD. A delineation of wetlands that are waters of the State but not waters of the United States potentially impacted by the project shall be performed by the AUTHORITY consistent with Sections II and III of the State Wetland Definition and Procedures for Discharges or Dredged or Fill Material to Waters of the State.

To determine the lateral extent of the non-wetland waters of the state in ephemeral/intermittent channel forms in the Arid West, the delineation methods described in the manual(s) below will be used:

- U.S. Army Corps of Engineers, Engineer Research and Development Center.
 2008. Lichvar, Robert W. and McColley, Shawn M. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual.
- U.S. Army Corps of Engineers, Regulatory Guidance Letter No. 05-05, Ordinary High Water Mark Identification (December 7, 2005) http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl05-05.pdf
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3. Amendments to STATE WATER BOARD Requirements Regarding Applications and Delineation Methods

The STATE WATER BOARD adopted amendments to the requirements that apply to applications for discharges of dredged or fill materials to waters of the state and the methodology for delineating certain aquatic features. The effect of those amendments on the Project is set forth in Exhibit 1.

Exhibit 1: High-Speed Rail Authority Compliance with Statewide Wetland Definition and Discharge of Dredged and Fill Materials Procedures

I. Purpose.

This memorandum memorializes the agreement between the State Water Resources Control Board (State Water Board) staff and High-Speed Rail Authority (Authority) staff regarding the Authority's compliance with the requirements of (1) the State Water Board - Authority Memorandum of Understanding (MOU), as amended and (2) the Statewide Wetland Definition and Discharge of Dredged and Fill Procedures (Procedures) with respect to applications for Section 401 water quality certifications (WQC) and amended WQCs with material changes submitted after the effective date of the Procedures.¹

II. Background.

On April 2, 2019, the State Water Board adopted the Procedures, which (i) define what is considered a wetland and include a framework for determining if a feature defined as a wetland is a "water of the state" subject to regulation; and (ii) specify requirements for permit applications to discharge dredged or fill material to waters of the state. As adopted, the Procedures specify on page 4, footnote 9 that "In cases where the applicant is a state agency and is acting as the CEQA lead agency for one or more projects otherwise subject to this section, and that state agency is a party to an existing written agreement (e.g., memorandum of understanding) with the State Water Board that sets out alternative procedures and requirements regarding the submission, review, or approval of project applications, the permitting authority shall apply the terms and conditions of the agreement in lieu of the terms and conditions of [Section IV]." This language allows for continued adherence to the MOU between the Authority and State Water Board governing the submittal and review of applications.

The Office of Administrative Law (OAL) approved the Procedures on August 28, 2019. Pursuant to the Procedures, the effective date is nine months after OAL approval. Accordingly, the Procedures became effective **May 28, 2020.**

¹ The discussion also applies to applications for waste discharge requirements pursuant to Cal. Water Code § 13260 *et seq*.

III. Rules Governing Authority Compliance with the Procedures.

The following rules apply to the Authority's upcoming applications for new WQCs and applications requesting material amendments to the existing WQCs that cover Construction Package (CP) 1 (Merced to Fresno) and Construction Packages 2/3 and 4 (Fresno to Bakersfield):

Upon the effective date of the MOU, amendments to the existing Merced to Fresno and Fresno to Bakersfield Section WQCs are:

- a. Able to rely on delineations previously submitted to State Water Board so long as the project, as amended, does not affect aquatic resources that were not previously delineated. Section II and III of the Procedures shall not affect the previous delineation unless the lack of vegetation was the sole reason why an area was not delineated as a wetland. In such cases, any such unvegetated areas should be classified as a wetland for the State Water Board.
- b. Required to comply with Sections II (Wetland Definition) and III (Wetland Delineation) where a new delineation is required to add a new, previously undelineated area to the WQC.
- c. Not required to comply with Section IV (Procedures for Regulation of Discharges of Dredged and Fill Material to Waters of the State) per footnote 9, as described above.

Upon the effective date of the MOU, applications for new WQCs are:

- a. Required to comply with Sections II (Wetland Definition) and III (Wetland Delineation).
- Not required to comply with Section IV (Procedures for Regulation of Discharges of Dredged or Fill Material to Waters of the State) per footnote 9.

Table 1, Procedures Compliance for Applications for New and Amended WQC, lists applications for new and amended WQCs and identifies the MOU and Procedures' compliance requirements for each application by applying the rules listed above.

Table 1: Procedures Compliance for Applications for New and Amended WQCs

Section WQC Application, Application Date*	Before Effective Date – Procedures N/A	After Effective Date – Required Compliance w/ Procedures (Sections II &	After Effective Date – Required Compliance w/ Procedures (Section IV)
M-F (<i>amend</i>) for new CVY crossings, addendum forthcoming Fall 2019	X (1)		
M-F (amend) to modify the crossing at Schmidt Creek Tributary (delineation on file), Summer 2020		X (2a)	0 (2a)
F-B (<i>amend</i>) for new LGA crossings, Summer 2020		X (2b)	0 (2c)
SJ-M (new), Summer 2020		X (3a)	0 (3b)

^{*} Dates are approximate and used for illustrative purposes.

^{**} Per the rules listed above, an "X" indicates the rule in the table that governs the listed application and a "0" indicates that compliance is not required per the rules listed above. The numbers in parenthesis refer to the rule number listed above.