

LINK21

CONNECT NORTHERN CALIFORNIA

STRATEGIC PROGRAM PLAN

CHAPTER 13: ENVIRONMENTAL

December 2022

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Prepared By:
Link21 Program Management Consultants (PMC)

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SHAREPOINT PATH

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ACRONYMS AND ABBREVIATIONS

ACRONYM/ABBREVIATION	DEFINITION
BART	San Francisco Bay Area Rapid Transit District
CCJPA	Capitol Corridor Joint Powers Authority
CEQA	California Environmental Quality Act
E&O Team	Engagement and Outreach Team
ECO	environmental constraints and opportunities
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
MPO	metropolitan planning organization
NEPA	National Environmental Policy Act
P&E Team	Planning and Engineering Team
PEL	planning and environmental linkages
PMC	Program Management Consultants
PMT	Program Management Team
PP	priority populations
TDLU	travel demand and land use

LINK21 PROGRAM TEAM NAMES

TEAM NAME	TEAM MEMBERS
PMC	The HNTB Team
PMT	BART/CCJPA + PMC
Consultants	Consultants supporting program identification/project selection
Link21 Team	PMT + Consultants

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13. ENVIRONMENTAL

13.1. Purpose

This chapter includes a high-level discussion on the development and implementation of the Link21 Program's (Link21) environmental strategy. In addition, it details key deliverables for the Environmental Team and key support services the Environmental Team provides to the other Link21 service categories.

The Program Management Team (PMT)¹ leads the development of the Link21 environmental strategy in close collaboration with the Environmental Consultant. The purpose of Link21's environmental strategy is to:

- Meet the requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), including adapting to evolving regulatory requirements.
- Identify the most efficient path to a buildable first project, which would likely include a San Francisco Bay crossing.
- Identify environmental requirements to position Link21 to compete for federal funding, including funding from the Federal Transit Administration (FTA) and Federal Railroad Administration (FRA).
- Inform and help guide stakeholder engagement regarding social and natural environmental factors for Link21 and its projects.
- Ensure an integrated environmental and planning process that includes meaningful stakeholder/public input, including equity communities, to new transbay passenger rail crossing project (Crossing Project) concepts and future project alternatives.
- Ensure early outreach and engagement with regulatory agencies.

The PMC will direct and collaborate with the Environmental Consultant to identify environmental opportunities and constraints that will inform the evaluation of Crossing Project concepts and future project alternatives and to implement Link21's environmental strategy.

13.1.1. Regulatory Background

CEQA requires California public agencies to identify and disclose any significant environmental impacts of a proposed project prior to making a final decision on its implementation. The project's potential environmental effects are disclosed to decision-makers and the public prior to project construction. During the CEQA analysis, feasible

¹ San Francisco Bay Area Rapid Transit District (BART)/Capitol Corridor Joint Powers Authority (CCJPA) and the Program Management Consultants (PMC)



project alternatives and measures (avoidance, minimization, and/or mitigation) are evaluated to limit the extent of environmental impacts.

Project alternatives in CEQA are limited to those that meet all (or most) of the project's defined objectives. CEQA applies the "rule of reason" to project alternatives and impact assessments allowing the public agency to make an objective, good-faith effort to fully disclose project impacts. Therefore, CEQA does not require the public agency to review every conceivable alternative for a proposed project. For Link21, the lead agency for CEQA will be the public agency primarily responsible for approving the project. It is anticipated that BART and/or CCJPA will be the lead agency(ies).

NEPA requires federal agencies to assess the environmental effects of their actions prior to making decisions, including funding and permitting decisions. For actions that will significantly affect the environment, projects are required to evaluate potential alternatives and prepare a detailed statement regarding any adverse effects that cannot be avoided. Link21 will likely pursue federal funding for the program's projects, and federal permits are anticipated. Therefore, Link21 project(s) will be required to comply with NEPA.

Under NEPA, a project's purpose and need statement defines the issue or existing deficiencies addressed by the action and justifies why a federal action is required. This statement is similar to the project objectives required under CEQA. Defining the purpose and need statement is a fundamental element of the NEPA process because it is used to identify the range of reasonable alternatives. Each alternative is rigorously evaluated and objectively considered.

Link21 will use its business case approach to develop and screen suitable project alternatives. For more on the business case, see Chapter 2.

Both CEQA and NEPA involve public engagement and stakeholder outreach prior to and during the formal environmental process. Chapter 11 outlines public engagement efforts for Link21. This engagement, coupled with the objective analysis of project alternatives, is used by state and federal agencies to identify a preferred alternative for a project. Both NEPA and CEQA require a formalized process to scope environmental documents and formal public meetings and opportunities for the public to comment on the environmental document(s).

For Link21, the potential lead federal agencies for NEPA include FTA and FRA. The federal lead will be determined by the funding source(s) targeted for the program's projects, and the federal lead agency will be responsible for ensuring compliance with NEPA with significant participation by BART/CCJPA. FTA and FRA assume that prior to the formal NEPA process project applicants for funding (BART/CCJPA) will undertake an integrated planning and environmental process (often referred to as a Planning and Environmental Linkages [PEL] process) to identify project alternatives. This integrated process must be demonstrated for a project to advance to NEPA and to ultimately receive federal funding.



PEL is a federal approach and requirement that integrates a project's planning and environmental review processes. The PEL approach allows social, environmental, and economic benefits and impacts to inform the planning process leading to the identification of project alternatives for inclusion in the formal NEPA process. Benefits of the PEL process include:

- Streamlining project development.
- Encouraging early avoidance and minimization of project impacts.
- Documenting early planning decisions.
- Encouraging early public involvement and incorporating feedback.
- Defining a range of alternatives (including elimination of unreasonable alternatives).
- Allowing early coordination and engagement with partner agencies.
- Facilitating the incorporation of early planning efforts into a project's future environmental document (NEPA) resulting in a more defensible document.

To demonstrate an effective PEL process, a project must meet the following requirements:

- Agency coordination/involvement (state, local, tribal, and federal agencies) is performed.
- Public involvement is ongoing and meaningful.
- Decisions are documented and made available for public reference.
- Federal lead agency is engaged/involved.

13.2. Strategy

Environmental deliverables will be consistent with Link21's overall development strategy. The overall Link21 environmental strategy is structured around the four development and delivery phases as follows:

- Phase 0: Program Definition
- Phase 1: Project Identification
- Phase 2: Project Selection
- Phase 3: Project Delivery



13.2.1. Phase 0: Program Definition and Phase 1: Project Identification

ENVIRONMENTAL STRATEGY

The nature of Link21, and its span across the 21-county Northern California Megaregion, is unlike even the largest projects previously undertaken by BART or CCJPA. It requires an environmental strategy that addresses the program's complexity, diverse geography, and ongoing planning. In 2021, the PMT identified potential environmental strategies for Link21's compliance under CEQA and NEPA in the *Draft Environmental Strategy Paper*.

The environmental strategy will continue to be developed to reflect the development of the Link21 Business Case, best practices reviews, ongoing agency/stakeholder coordination, and identification of a priority project(s) for the formal environmental process. The goal of the environmental strategy is to outline an environmental approach to achieve project-level environmental review in the most efficient and defensible manner possible.

EARLY IDENTIFICATION OF ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES

The Environmental Team identified high-level environmental constraints and opportunities (ECO) that could inform Link21's Phase 1 work (i.e., developing and refining Crossing Project concepts and future project alternatives). The ECO study area (**Figure 13-1**) included existing and planned passenger rail networks and transportation hubs, as well as future rail infrastructure and service improvements that may be considered as part of Link21. This study area was divided into numerous ECO subareas. Note that none of the ECO areas or subareas represent Crossing Project concepts or future project alternatives.

Environmental constraints were defined as a physical or social condition that could impede the ability for Link21 to meet its vision, goals, and objectives; impede the ability of priority populations (PP) to experience the benefits of Link21; result in substantial impacts on people or the environment due to infrastructure development; or substantially increase costs and time to implement Link21.

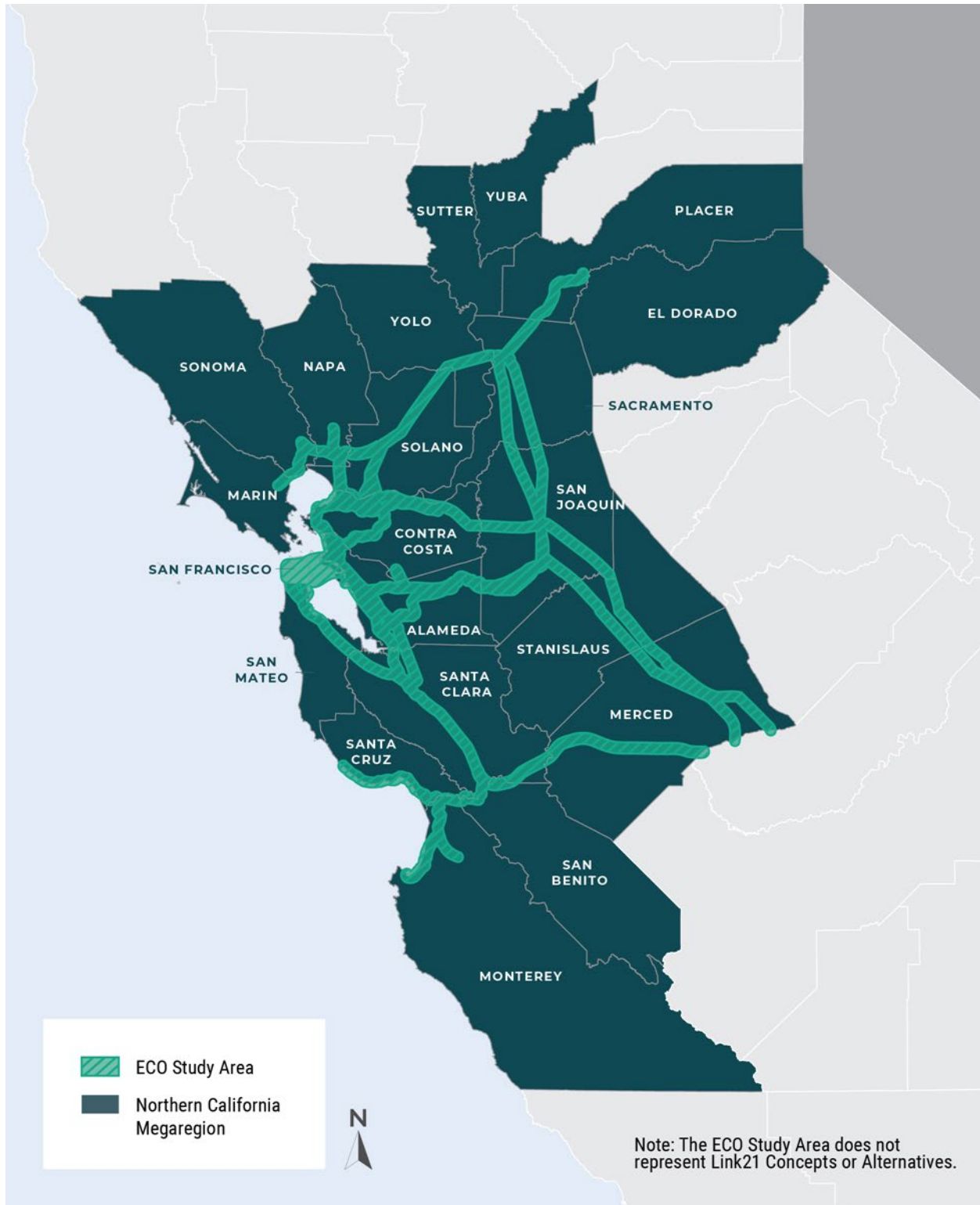
There were multiple reasons to identify constraints during the early phases of Link21. This work provided spatial data and relevant analysis to identify potential adverse effects that may occur due to rail infrastructure, allowing the program to evaluate potential avoidance and minimization of impacts during Crossing Project concept and future project alternative development. In addition, knowing constraints allowed the program to evaluate the environmental performance of different design options during the concept development process. Finally, identifying constraints demonstrated the program's consideration of environmental resources early in planning, which will ultimately support later environmental review (NEPA and CEQA).



In addition to constraints, both transportation opportunities (could further the Link21 vision, goals, and objectives and/or increase the ability of PP to experience the benefits of Link21) and environmental opportunities (could improve the environmental performance of Link21 in terms of reducing impacts or promoting benefits and/or an opportunity for collaboration between Link21 and other efforts that could advance other environmental priorities) were identified. Identifying these opportunities in the early phases of Link21 allowed the program to consider potential opportunities to further its goals to: transform the passenger experience, support economic opportunity and global competitiveness, promote equity and livability, and advance environmental stewardship and protection. Early identification of opportunities also allowed time for them to be considered in the development of Crossing Project concepts and future project alternatives. As with constraints, this demonstrated consideration of environmental and transportation opportunities from the earliest program phase, and it will ultimately support NEPA/CEQA efforts.



Figure 13-1. Link21 ECO Study Area



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ESTABLISH AN EQUITY BASELINE

Equity is at the core of Link21, and the program acknowledges that infrastructure projects have negatively affected communities that have been marginalized, including people of color and low-income and systemically disadvantaged communities in the past. These past harms have resulted in decreased mobility options for certain demographic groups, including barriers to rail access. Link21 is committed to doing things differently by understanding the current state of inequities in the Megaregion.

In order to understand the current state of inequities across the Megaregion, the Environmental Team prepared an equity baseline. This information will be used program wide to inform planning, design, and evaluation of projects that may advance as part of Link21. For additional information on Link21's focus on Equity, refer to Chapter 9.

LAND USE DATA METHODOLOGY

All Link21 service categories will require land use data in some form to execute their scopes, and these data are essential in supporting the Land Use Strategic Framework, which underpins the following:

- Business Case
- Identification of constraints and opportunities by which to evaluate potential Crossing Project concepts and future project alternatives
- Development of the integrated travel demand and land use (TDLU) models
- Advancement of Link21's equity goals

The Environmental Team developed a coordinated approach for the program to implement the collection of land use data. This effort would ensure that multiple service categories do not reach out to potential data sources, such as metropolitan planning organizations (MPO) and councils of government, to request, collect, and process the same or similar data.

ENVIRONMENTAL PLANNING SUPPORT

The Environmental and the Planning and Engineering (P&E) teams will work iteratively during program concept and future project alternative development. The Environmental Consultant will prepare a project concept environmental screening evaluation for the concepts developed by the P&E Team. This evaluation will include, but not be limited to, permitting risk (i.e., permitting timeframes, avoidance needs, mitigation strategies, etc.), environmental and social constraints/opportunities (including equity considerations), and environmental process considerations (CEQA/NEPA defensibility, public controversy, etc.). The purpose is to provide an evaluation of environmental impacts that will be combined with the evaluation of operational requirements, engineering feasibility, cost, equity and other considerations; identify key regulatory constraints that may impede an alternative or result in substantial mitigation obligations or permit risk; support the



reduction of environmental and equity impacts of the ultimate project where feasible; and document the consideration of alternatives for the later NEPA/CEQA process.

This work will be part of the documentation developed by Link21 for Stage Gate 2. This will document the integrated environmental and planning process and be the functional equivalent of a PEL report. Link21 must demonstrate it has met the spirit and goals of PEL requirements in order to advance to a formal NEPA Environmental Impact Statement (EIS) (i.e., Phase 2) and, ultimately, be awarded federal funding. Failure to meet PEL goals could result in schedule delays as additional coordination and analysis are conducted to meet federal requirements.

Additional Environmental Team planning support would include:

- Supporting the Business Case Team with evaluating the Crossing Project concepts.
- Reviewing, analyzing, and providing environmental expertise to support the TDLU Team's model inputs.
- Providing feedback on the Engagement and Outreach (E&O) Team's tribal outreach efforts to ensure compliance with state/federal guidelines (including NEPA and CEQA).

13.2.2. Phase 2: Project Selection

Environmental efforts during Phase 2 will include any necessary environmental documentation for the project alternatives identified for analysis. It is anticipated that an Environmental Impact Report (EIR) under CEQA and an EIS under NEPA will be needed for the first Link21 priority project(s). However, the level of required environmental documentation will be evaluated at a later date, and it will depend on the overall environmental strategy. All environmental documents, including subsequent EIR/EIS documents, will be prepared in accordance with the requirements of the CEQA/NEPA lead agencies.

Environmental efforts during this phase will include the necessary regulatory agency outreach and coordination. Efforts during Phase 2 will also include the preparation of materials for any project-related environmental public hearings and participation in any hearings.

13.2.3. Phase 3: Project Delivery

Environmental efforts during Phase 3 will support design efforts and construction of the project(s). This could include design and implementation of any avoidance, minimization, and/or mitigation measures that are identified by the environmental document(s). Efforts will also include securing the necessary regulatory agency permits, including any associated compensatory mitigation. It is intended that federal, state, and other permitting agencies use the Link21 CEQA and NEPA document(s) to support permitting as appropriate.



13.3. Implementation

This section summarizes the Phase 0 and Phase 1 efforts completed to date by the PMT and the Environmental Consultant.

13.3.1. Phase 0 Reports

ENVIRONMENTAL STRATEGY PAPER

The PMT identified four potential environmental strategies for Link21's environmental compliance under CEQA and NEPA in its *Draft Environmental Strategy Paper*. Strategies were identified based on prior team experience, a review of best practices, and consultation with practitioners. The goal of the environmental strategy is to get to (and through) a project-level review in an efficient manner and to deliver the project. The team continues to track regulatory changes for potential impacts to the overall environmental strategy.

ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES REPORT

During Phase 0, the Environmental Team prepared the *ECO Report*, which identified and discussed high-level constraints and opportunities that could be used to inform Link21's Phase 1 work. The Environmental Team identified social and environmental constraints and opportunities that were associated with each ECO subarea. Constraints and opportunities mapping included, but was not limited to, the social environment (PP, Section 4(f) resources, transit-oriented development opportunities, etc.), biological resources (waterways, special-status species, etc.), cultural and historic resources, hazardous waste and material concerns, and hydrologic resources (floodplains, sea level rise, etc.).

The *ECO Report* was distributed within Link21 as a reference for ongoing work by other service categories. In addition to the report and its associated analysis of constraints and opportunities, the spatial data used to generate the report's mapping was provided throughout the program for additional reference and analysis.

In addition to the *ECO Report's* use in the program concept and future project development process, the identified environmental constraints and opportunities will be used by the E&O Team as part of their Phase 1 public outreach efforts. Through these efforts, the general public and stakeholders will be able to verify and raise additional social and natural environmental issues. This feedback will be considered during program concept and future project alternative development as well. In July 2022, the *ECO Report* was posted to Link21's website. This provided an opportunity for the general public and stakeholders to learn about the major environmental constraints and opportunities the program is using to inform program concept and future project alternative development. The public was invited to provide feedback on the report through a comment form on the website. This feedback will be considered in program concept and future project alternative development.

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Note that the confidentiality of some identified resources, such as archaeological sites, will not be available to the public. Per the *Environmental Onboarding Confidentiality Memorandum*, the Environmental Team was charged with evaluating and protecting the identity and locality of confidential resources prior to distribution of the *ECO Report* within Link21 and/or to the public.

During Phase 1, the Environmental Team will update the Phase 0 *ECO Report* to reflect an expanded study area. This additional area was necessary to reflect the program work completed by the P&E Team, which expanded the area for potential infrastructure and service improvements. This update will ensure all Crossing Project concepts and future project alternatives that are developed by the P&E Team consider social and environmental constraints and opportunities. The updated version of the *ECO Report* will be provided on the Link21 website prior to the fall 2022 outreach.

EQUITY BASELINE REPORT

The Environmental Consultant prepared an *Equity Baseline Report* that summarizes the Megaregion's demographics, the current distribution of burdens as identified by the Link21 Team, and current travel behaviors of communities in the Megaregion. In addition, the report highlights the disparities between the general population as a whole and PP, including communities that have been marginalized, as defined by Link21.

The *Equity Baseline Report* was finalized at the start of Phase 1. This document was circulated internally within Link21 for its reference during outreach activities and to inform Crossing Project concepts. The report was summarized in an executive summary, which was posted to the project website before the fall 2022 outreach series.

LAND USE DATA MANAGEMENT REPORT

The Environmental Team coordinated with each service category regarding their land use data needs and documented its findings in the *Land Use Data Management Report*. This report summarized relevant land use data that was required by the various service categories in Phase 1 and provided an approach and recommendations for how the data could be collected, processed, and managed in a coordinated and cost-effective manner. The report recommended identifying a coordinated process for the collection and ongoing management of land use data.

The *Land Use Data Management Report* was finalized in August 2022. The PMT will consider the recommendations made by the Environmental Consultant for data collection and processing during Phase 1. The Environmental Consultant continues to coordinate with MPOs to obtain data and provide feedback in regular program-wide land use meetings.



13.3.2. Phase 1 Environmental Planning Support

P&E TEAM SUPPORT

The Environmental Team continues to work collaboratively with the P&E Team to incorporate the findings of the *ECO Report* into Crossing Project concepts and future project alternatives. This iterative process will contribute to the program's effective implementation of PEL. The two teams will ensure social and environmental constraints and opportunities are considered during Phase 1 planning efforts.

E&O TEAM SUPPORT

The Environmental Team has provided (and will continue to provide) feedback on the E&O Team's outreach efforts. This includes coordinating with tribal communities to ensure compliance with state/federal guidelines, including NEPA and CEQA, and serving in an advisory role for the E&O Team's tribal coordination efforts.

Additionally, the Environmental Team mapped Environmental Justice populations within the Metropolitan Transportation Commission's region. These populations were identified in accordance with FTA methodology. This mapping will facilitate a comparison of Environmental Justice populations and PP previously identified by the program, allowing the E&O Team to confirm outreach is being conducted with all equity communities.

13.3.3. Stage Gate 2 Support

Stage Gate 2 will be the decision point that concludes Phase 1. As part of Stage Gate 2's documentation, the program must demonstrate PEL as part of its development process to identify and to ultimately recommend the project(s) that should advance. The Environmental Team continues to support the preparation of Stage Gate 2 documentation in its early definition to appropriately demonstrate PEL and to produce select deliverables throughout the work plan to append to this documentation as evidence.