

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

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### 5.1 SUMMARY OF THE STAFFS' ENVIRONMENTAL ANALYSIS

The Agency Staffs have determined that construction and operation of the North Baja Pipeline Expansion Project would result in adverse environmental impacts. These impacts would be most significant during the period of construction. This determination is based on a review of the information provided by North Baja and further developed from data requests; field investigations; scoping; literature research; alternatives analysis; and contacts with Federal, State, and local agencies, and individual members of the public. The Agency Staffs have concluded, however, that the Project would be an environmentally acceptable action. Although many factors were considered in this determination, the principal reasons are:

- 99 percent of the proposed pipeline facilities would be constructed in or adjacent to various existing rights-of-way;
- no new permanent right-of-way would be required for the B-line, and the permanent rights-of-way for the Arrowhead Extension and the IID Lateral would be limited to a maximum width of 35 feet and 30 feet, respectively;
- North Baja would implement its CM&R Plan, SPCC Plan, HDD Plan, Traffic Management Plans, Blasting Specifications, PRMM Plan, Dust Control Plan, Fire Prevention and Suppression Plan, Site-specific Residential Construction Mitigation Plans, OHV Plan, POD, and Unanticipated Discovery Plan for Cultural Resources to protect natural and cultural resources and residential areas during construction and operation of the Project;
- use of the HDD method would avoid disturbances to the beds and banks of the Colorado River, the All-American Canal, and the East Highline Canal and associated wetlands/riparian areas;
- the appropriate consultations with the FWS, the CDFG, the SHPOs, and Native American tribes would be completed before North Baja would be allowed to begin construction in any given area; and
- an environmental inspection and MMP would ensure compliance with all mitigation measures that become conditions of the FERC Certificate, the CSLC's amended lease, and other approvals.

In addition, the Agency Staffs developed specific mitigation measures to further reduce the environmental impact that would otherwise result from construction of the Project. The FERC and CSLC staffs are recommending that these mitigation measures be attached as conditions to any authorizations issued by the FERC and the CSLC. These mitigation measures are presented in Section 5.6. The BLM will present, in its Records of Decision for the North Baja Pipeline Expansion Project, its own recommendations that incorporate the concurrence or non-concurrence of the BOR and the FWS.

Table 5.1-1 presents a summary of the Project's potential environmental impacts and the mitigation measures identified to avoid or reduce each impact. The impacts are classified before and after mitigation in accordance with the CEQA significance classifications. Table 5.1-1 also lists the agency(ies) responsible for monitoring each of the mitigation requirements. With a few exceptions,

discussed in Section 5.4, North Baja's proposed and/or the Agency Staffs' recommended mitigation would reduce potential environmental impacts to less than significant levels. Table 5.1-1 is the basis for the MMP that would be implemented during construction and operation of the North Baja Pipeline Expansion Project.

## 5.2 ALTERNATIVES CONSIDERED

The No Project Alternative was considered. The Agency Staffs concluded that while the No Project Alternative would eliminate the environmental impacts identified in this EIS/EIR, North Baja would not be able to provide transportation for LNG-source natural gas from the Mexican pipeline system into the United States to meet the demand for natural gas in California and other southwestern U.S. markets. This means customers in the southwestern United States would likely have fewer and potentially more expensive options for obtaining natural gas supplies in the near future. This might lead to alternative proposals to develop natural gas delivery or storage infrastructure, reduced use of natural gas, and/or the use of other sources of energy.

It is possible that the infrastructure currently supplying natural gas to the proposed market area could be developed in other ways unforeseen at this point. This might include constructing or expanding regional pipelines as well as LNG import and storage systems. Any construction or expansion work would result in specific environmental impacts that could be less than, similar to, or greater than those associated with the proposed Project. Increased costs could potentially result in customers conserving or reducing use of natural gas. Although it is possible that additional conservation may have some effect on the demand for natural gas, the level of conservation efforts, as described in the CEC's *2005 Integrated Energy Policy Report* (CEC 2005a), is not expected to significantly reduce the long-term requirements for natural gas or effectively exert downward pressures on gas prices.

Denying North Baja's applications could force potential natural gas customers to seek regulatory approval to use other forms of energy. California regulators are promoting renewable energy programs to help reduce the demand for fossil fuels. While renewable energy programs can contribute as an energy source for electricity, they cannot at this time reliably replace the need for natural gas or provide sufficient energy to keep pace with demand.

Alternatives involving the use of other existing or proposed LNG or natural gas facilities to meet the stated objectives of the proposed Project were evaluated. None of these system alternatives could meet the Project objectives within the time frame of the proposed Project. Furthermore, each of the system alternatives could result in its own set of significant environmental impacts that could be greater than those associated with the proposed Project.

The B-Line deviates from a designated utility corridor on BLM land at five locations in the CDCA. As part of the EIS/EIR for the A-Line, the alternative of following designated utility corridors was considered. Based on the analysis conducted for that project, the route selected for the A-Line, including the deviations from designated utility corridors and the crossing of the Milpitas Wash SMA, was determined to be environmentally preferable to a route that remained within designated utility corridors. The proposed B-Line would be adjacent to the existing A-Line for the entire route. The collocation of facilities is generally preferred by land management agencies, land use planners, and other regulatory agencies and has several inherent engineering and environmental advantages. Perhaps the most important of these advantages is that new land disturbance is minimized. Because of the advantages of collocation, and because the route selected for the A-Line that would be followed for the B-Line was previously determined to be environmentally preferable to a route that remains within a designated utility corridor, alternatives for the B-Line route that would follow designated utility corridors were not considered. One route alternative (22<sup>nd</sup> Avenue Alternative) in comparison with the corresponding

segment of the proposed B-Line was evaluated. The 22<sup>nd</sup> Avenue Alternative would avoid 18<sup>th</sup> Avenue. The 22<sup>nd</sup> Avenue Alternative was eliminated because it would merely transfer impacts from one or more property owners or communities to another without conferring obvious environmental advantages.

Eight route alternatives were evaluated in comparison with the corresponding segment of the proposed IID Lateral. Along the IID Lateral, North Baja proposes to deviate from a designated utility corridor at three locations within the CDCA. Two alternatives (Corridor L and Bonds Corner Alternatives) were evaluated to stay within a designated utility corridor for a longer distance than the proposed route. Four alternatives (CalTrans, ISDRA North, ISDRA Transmission Line, and ISDRA Grays Well Road Alternatives) were identified to avoid potential conflicts of the IID Lateral with existing and planned recreational use in the ISDRA. One alternative (the Modified ISDRA Transmission Line Alternative) was identified to avoid impacts on a cultural resources site. The eighth alternative (Gasoducto Bajanorte Pipeline Route Alternative) would connect directly from the Gasoducto Bajanorte pipeline west of Mexicali to the IID's El Centro Generating Station. The Agency Staffs determined that the Modified ISDRA Transmission Line Alternative is environmentally superior to the corresponding segment of the IID Lateral and are recommending that it be adopted. The remaining IID Lateral alternatives were eliminated because they would not be environmentally preferable to the corresponding segment of the IID Lateral, would be infeasible, or would not meet the Project objectives.

Four route variations (East Mesa Route Variation and Imperial Valley Route Variations A, B, and C) in comparison with the corresponding segment of the proposed IID Lateral were evaluated to avoid potential conflicts with other projects or address scoping comments. These route variations were eliminated because they would not be environmentally preferable to the corresponding segment of the IID Lateral, would be infeasible, or would merely transfer impacts from one or more property owners or communities to another without conferring obvious environmental advantages.

Aboveground facility site alternatives were evaluated. All of the proposed new and modified aboveground facilities are designed to meet the purpose and need of the North Baja Pipeline Expansion Project. The location of these facilities is dictated by the location of the existing and proposed pipelines and, in most cases, the proposed facilities would be collocated with existing and/or other proposed facilities. No significant impacts have been identified at any of the new or modified facilities; therefore, the alternative that would result in the creation of new industrial sites would not be environmentally preferable to the proposed Project and thus was eliminated from further consideration.

### **5.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

The State CEQA Guidelines (section 15126.6(d)) require that an EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. An analysis of the No Project Alternative in comparison with the proposed Project is included in the major resource topics in Section 4. Based on the analysis in this EIS/EIR, the No Project Alternative would eliminate the environmental impacts associated with the proposed Project and, therefore, is the environmentally superior alternative. However, as discussed above, under the No Project Alternative North Baja would not be able to provide transportation for LNG-source natural gas from the Mexican pipeline system into the United States to meet the growing demand for natural gas in California and other southwestern U.S. markets.

Section 15126.6(e)(2) of the State CEQA Guidelines provides, in part, "If the environmentally superior alternative is the "No Project Alternative," the EIR shall also identify an environmentally superior alternative among the other alternatives." The Agency Staffs have determined that the proposed Project with the incorporation of the Modified ISDRA Transmission Line Alternative is the

environmentally superior alternative. The incorporation of the Modified ISDRA Transmission Line does not affect the length of the Project that would require a BLM plan amendment.

#### **5.4 SIGNIFICANT UNAVOIDABLE IMPACTS/STATEMENT OF OVERRIDING CONSIDERATIONS**

Effects on all resources were evaluated to determine any significant impact that would remain so after mitigation. As shown in Table 5.1-1, most environmental impacts would be reduced to less than significant levels by North Baja's proposed and/or the Agency Staffs' recommended mitigation. The Agency Staffs have determined that the Project is likely to adversely affect the Federal and California-listed threatened desert tortoise and its designated critical habitat and the federally listed threatened and California-listed endangered Peirson's milk-vetch. The Agency Staffs also believe that impacts on the flat-tailed horned lizard, which is a California-listed special concern species, and its habitat would be considered significant. As such, impacts on these three species would be considered significant. Approval of the Project would be subject to a Statement of Overriding Considerations under the CEQA due to these significant unavoidable impacts that could remain after all available or feasible mitigation is applied. In the BO issued on April 20, 2007, the FWS concluded that the proposed action is not likely to jeopardize the continued existence of the desert tortoise and its critical habitat or the continued existence of the Peirson's milk-vetch. The CDFG has not yet issued its conclusions regarding the impact of the Project on the desert tortoise, the Peirson's milk-vetch, and the flat-tailed horned lizard.

#### **5.5 IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES; SHORT- AND LONG-TERM USES OF THE ENVIRONMENT**

The major nonrenewable resources that would be consumed by the proposed Project are fossil fuels used to power construction vehicles and, over the life of the Project, the pipelines. Theoretically, the pipeline components could be reclaimed at the end of the pipelines' operational life. However, there would be a number of irretrievable resources committed to the proposal if the necessary authorizations are granted. The primary resources irretrievably lost would include:

- soils (water and wind erosion could occur in disturbed areas);
- crop production (lost or reduced for one season);
- special status species (mortalities could occur during construction, additionally, the Agency Staffs have determined that the Project is likely to adversely affect the desert tortoise and its designated habitat and the Peirson's milk-vetch, and significantly impact the flat-tailed horned lizard and its habitat);
- wildlife habitat (construction activities would result in the long-term loss of native desert habitats);
- land use (aboveground facilities and permanent access roads would replace native desert vegetation and urban/ruderal vegetation communities for the life of the Project); and
- visual resources (the presence of aboveground facilities would permanently affect viewsheds).

The Agency Staffs have concluded that overall the proposed Project would result in limited unmitigated adverse environmental impacts. While the losses described above would occur, the majority would be minimized and compensated for by North Baja's mitigation plans and the Agency Staffs'

mitigation measures. For these reasons, the irreversible and irretrievable resource commitments are considered acceptable.

## 5.6 FERC AND CSLC STAFFS' RECOMMENDED MITIGATION

If the FERC and the CSLC approve the North Baja Pipeline Expansion Project, the FERC and CSLC staffs recommend that the following measures be included as specific conditions of their respective Commission's authorizations, as appropriate, to further mitigate the environmental impact associated with the construction and operation of the Project:

1. North Baja shall follow the construction procedures and mitigation measures described in its applications, supplemental filings (including responses to staff data requests), and as identified in the EIS/EIR, unless modified by the FERC Order. North Baja must:
  - a. file a request for any modification to these procedures, measures, or conditions with the Secretary and the CSLC;
  - b. justify each modification relative to site-specific conditions;
  - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
  - d. receive approval in writing from the Director of OEP and, for the lands under the CSLC's jurisdiction as the CEQA Lead Agency, the Executive Officer of the CSLC **before using that modification.**
2. The Director of OEP has delegation authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the Project. This authority shall allow:
  - a. the modification of conditions of the FERC Order; and
  - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from Project construction and operation.
3. **Prior to any construction**, North Baja shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, EIs, and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EIS/EIR, as supplemented by filed alignment sheets, and shall include the Modified ISDRA Transmission Line Alternative. **As soon as they are available, and before the start of construction**, North Baja shall file with the Secretary revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the FERC Order. All requests for modifications of environmental conditions of the FERC Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

North Baja's exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to the FERC Order must be consistent with these authorized facilities and locations. North Baja's right of eminent domain granted under NGA section 7(h)

does not authorize it to increase the size of its natural gas pipelines to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. North Baja shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

This requirement does not apply to extra workspace allowed by North Baja's authorized CM&R Plan or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. recommendations by State regulatory authorities; and
- d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

6. **At least 60 days before the start of construction of Phase I and at least 120 days before the start of construction of Phase I-A and Phase II (unless otherwise agreed to by the CSLC),** North Baja shall file with the CSLC for the review and approval of the Executive Officer:

- a. a set of final engineering design drawings as issued for construction, certified by a California-registered civil/structural engineer. In addition to the pipeline alignments and profiles, the drawings shall provide information such as tie-in details, pipeline grade and material specifications, wall thickness, weight and corrosion coating, minimum bend radius (wherever applicable, such as HDD installations), normal and maximum operating pressure, hydrostatic test information, cathodic protection and test stations, and location and details of the nearest upstream pipeline flow emergency shutdown equipment, etc.;
- b. a set of detailed design calculations certified by a California-registered civil/structural engineer;
- c. for applicable portions of the segments, detailed HDD installation stress calculations and procedures;
- d. certified copies of any site-specific seismic hazard evaluation reports/studies and geotechnical reports;
- e. a set of construction specifications;
- f. detailed hydrotest procedures; and
- g. construction contractor's work execution plan and the contractor's site-specific blasting plan.

7. **Within 60 days of acceptance of the Certificate and before construction**, North Baja shall file an initial Implementation Plan with the Secretary and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC describing how North Baja will implement the mitigation measures required by the FERC Order and the CSLC MMP. North Baja must file revisions to the plan as schedules change. The plan shall identify:
  - a. how North Baja will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
  - b. the number of EIs assigned per spread and how North Baja will ensure that sufficient personnel are available to implement the environmental mitigation;
  - c. company personnel, including EIs and contractors, who will receive copies of the appropriate materials;
  - d. what training and instructions North Baja will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP and CSLC staffs to participate in the training session(s);
  - e. the company personnel (if known) and specific portion of North Baja's organization having responsibility for compliance;
  - f. the procedures (including use of contract penalties) North Baja will follow if noncompliance occurs; and
  - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
    - i. the completion of all required surveys and reports;
    - ii. the mitigation training of onsite personnel;
    - iii. the start of construction; and
    - iv. the start and completion of restoration.
8. North Baja shall file updated status reports with the Secretary and the CSLC on a **biweekly** basis **until** all construction-related activities, including restoration, are complete. These status reports shall also be provided to other Federal and State agencies with permitting responsibilities upon request. Status reports shall include:
  - a. the current construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
  - b. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) or the third-party compliance monitors during the reporting period (both for the conditions imposed by the FERC and any environmental conditions/permit requirements imposed by other Federal, State, or local agencies);
  - c. corrective actions implemented in response to all instances of noncompliance, and their cost;
  - d. the effectiveness of all corrective actions implemented;
  - e. a description of any landowner/resident complaints that may relate to compliance with the requirements of the FERC Order and the CSLC mitigation monitoring program, and the measures taken to satisfy their concerns; and
  - f. copies of any correspondence received by North Baja from other Federal, State, or local permitting agencies concerning instances of noncompliance, and North Baja's response.

9. North Baja must receive written authorization from the Director of OEP **before commencing service for each component of the Project**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way are proceeding satisfactorily.
10. **Within 30 days of placing the certificated facilities in service**, North Baja shall file an affirmative statement with the Secretary, certified by a senior company official:
  - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
  - b. identifying which of the Certificate conditions North Baja has complied with or will comply with. This statement shall also identify any areas along the right-of-way where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
11. North Baja shall adopt the Modified ISDRA Transmission Line Alternative between MPs 5.6 and 8.2 of the IID Lateral. *(Page 3-22)*
12. North Baja shall prepare a revised HDD Plan that specifies the corrective action and cleanup procedures that would be followed in the event a frac-out occurs in the water during an HDD operation. North Baja shall file the revised plan with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC **before commencement of any HDD operation**. *(Page 4-56)*
13. North Baja shall, in consultation with the FWS, the BLM, and the CDFG, develop Preclearing Plans to protect migratory bird species during construction. These plans shall include specific details of the preclearing methods to be implemented, the specific locations where preclearing would occur, and the dates preclearing would be initiated and completed for each phase of construction. North Baja shall file these plans with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC **before initiation of Phase I-A and Phase II construction activities**. *(Page 4-87)*
14. North Baja shall restrict stringing trucks to a 10-mile-per-hour speed limit on the right-of-way between MPs 48.0 and 68.0 of the B-Line. *(Page 4-101)*
15. North Baja shall implement the following measures at the Colorado River during activities associated with the HDD:
  - a. all individuals working within or adjacent to southwestern willow flycatcher habitat shall complete southwestern willow flycatcher training **before working within the construction right-of-way in those areas**; and
  - b. dust shall be strictly controlled by watering construction areas within 1,000 feet of potential habitat at the Colorado River. *(Page 4-102)*
16. North Baja shall implement the following measures to minimize impact on the Yuma clapper rail unless North Baja provides documentation from the FWS and the CDFG that such measures are not necessary or if site-specific surveys fail to identify individuals at the Alamo River or Rannells Drain:
  - a. ensure vegetation at the proposed crossing location of Rannells Drain, extending 150 feet on either side of the proposed construction work area, is cleared **before February 1, 2009**;

- b. ensure vegetation at the proposed crossing location of the Alamo River is cleared **before February 1, 2009**; and
  - c. initiate all construction activities at Rannells Drain and the Alamo River **between the hours of 8:30 AM and 3:30 PM** to avoid periods of peak Yuma clapper rail vocalizations. *(Page 4-103)*
17. North Baja shall not begin Phase I-A or Phase II construction activities **until**:
- a. the CDFG makes a consistency determination on the FWS' BO pursuant to section 2080.1 of the California Fish and Game Code or issues an Incidental Take Permit that covers both federally and State-listed species that may be affected;
  - b. North Baja obtains an Incidental Take Permit under section 2081 of the California Fish and Game Code for all State-listed species that may be affected, or receives concurrence from the CDFG that an Incidental Take Permit is not required; and
  - c. North Baja has received written notification from the Executive Officer of the CSLC that construction or use of conservation measures may begin. *(Page 4-126)*
18. For those portions of the Project facilities where construction would occur more than 1 year from the date of issuance of the FERC and CSLC approvals for the Project, North Baja shall consult with the FWS, the BLM, and the CDFG to update the species list and to verify that previous consultations and determinations of effect are still current. Documentation of these consultations, and the need for additional surveys and survey reports (if required), and FWS, BLM, and CDFG comments on the surveys and survey reports and their conclusions (as applicable), shall be filed with the FERC and the CSLC **before construction begins on those facilities**. *(Page 4-126)*
19. North Baja shall revise its OHV Plan to include:
- a. the agency or agencies responsible for enforcement of the OHV Plan;
  - b. the frequency of monitoring that would be conducted to ensure that the implemented OHV blocking measures are functioning properly;
  - c. the methodology for reassessing the implemented OHV blocking measures in the future; and
  - d. enforcement measures.
- North Baja shall file the revised OHV Plan with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC **before construction of Phase I-A and Phase II**. *(Page 4-151)*
20. North Baja shall prepare a Traffic Management Plan for Arrowhead Boulevard in consultation with the County of Riverside Transportation Department to detail the specific measures that would be used to control traffic during construction of the Arrowhead Extension. North Baja shall file the plan with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC **before construction**. *(Page 4-177)*
21. North Baja shall defer implementation of any treatment plans/mitigation measures (including archaeological data recovery), construction of facilities, and use of all staging, storage, or temporary work areas and new or to-be-improved access roads on each respective Project phase **until North Baja files with the FERC and the CSLC, as applicable, the materials listed in items a. through g., and the steps listed in items h. through j. below have been completed**:
- a. any FWS, Cibola NWR comments on the Overview and Survey Report;

- b. any BOR comments on the Evaluation Plan;
- c. any comments from the BOR and Native American tribes on the draft Evaluation Report;
- d. the revised Evaluation Report;
- e. the California SHPO's comments on Addendum Reports 2 and 3, the revised Evaluation Report, and the revised Historic Properties Treatment Plan;
- f. all additional cultural resources survey reports for denied access areas and any additional areas requiring survey, evaluation reports, and any necessary treatment plans as well as documentation that these reports and plans were submitted to the SHPO(s); the BLM; the BOR; the FWS, Cibola NWR; and Native American tribes, as applicable;
- g. any comments of the SHPO(s); the BLM; the BOR; the FWS, Cibola NWR; and Native American tribes, as applicable, on all additional cultural resources reports and plans;
- h. the CSLC reviews and approves all cultural resources reports and plans prepared for the California portion of the Project and notifies North Baja in writing that construction may proceed;
- i. the ACHP is afforded an opportunity to comment, if historic properties would be adversely affected; and
- j. the Director of OEP reviews and approves all applicable cultural resources reports and plans and notifies North Baja in writing that treatment plans/mitigation measures may be implemented or construction may proceed.

All material filed with the FERC containing **location, character, and ownership information** about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "**CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE.**" (*Page 4-191*)

22. North Baja shall prepare a revised Project-wide Dust Control Plan that specifies the following:
- a. the sources of water that would be used for dust control;
  - b. the anticipated quantities of water that would be required;
  - c. the measures that would be implemented to prevent fish and fish egg entrainment during dust control water withdrawals;
  - d. the precautions that would be taken to minimize fugitive dust emissions from construction activities;
  - e. the measures that would be taken to limit visible density (opacity) of emissions to less than or equal to 20 percent;
  - f. how visual density would be measured to determine that it is less than or equal to 20 percent;
  - g. how compliance with the 20 percent visual density requirement would be documented;
  - h. the individuals with authority to determine if/when water needs to be reapplied for dust control;
  - i. the speed limit that would be required on unpaved roads and unpaved haul and access roads; and
  - j. the individuals with authority to stop work if the contractor does not comply with dust control measures.

The revised Project-wide Dust Control Plan shall be filed with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC **before construction.** (*Pages 4-60 and 4-203*)

23. North Baja shall prepare an Imperial County-specific Dust Control Plan that includes the measures of the revised Project-wide Dust Control Plan and meets the requirements of the

ICAPCD's Regulation VIII. The Imperial County-specific Dust Control Plan shall be filed with the CSLC for the review and written approval of the Executive Officer of the CSLC **before construction of the Imperial County portions of Phase I-A and Phase II.** *(Page 4-204)*

24. **Before placing the pipeline system into service in California**, North Baja shall submit to the CSLC for approval an Operation and Maintenance Plan. This plan shall address internal and external maintenance inspections of the completed facility, including but not limited to details of integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection system, and leak monitoring. The Operation and Maintenance Plan shall also specify that North Baja would, unless expressly prohibited by DOT regulations, conduct an internal inspection with a high-resolution instrument on a periodic basis, at a minimum of one inspection every 10 years, or sooner if the evidence suggests that significant corrosion or defects exist or if any new Federal or State regulations require more frequent or comparable inspections. **Within 3 months following any new Federal or State regulations**, North Baja shall update the Operation and Maintenance Plan and submit a revised copy to the CSLC. In addition, the Operation and Maintenance Plan shall include procedures for implementing operational mitigation measures recommended (if any) by the site-specific seismic hazard evaluation reports for the Project. *(Page 4-217)*

TABLE 5.1-1

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b,c</sup>	Mitigation Measure <sup>b,d</sup>	Significance After Mitigation <sup>b,c</sup>	Monitoring Responsibility
<b>ALTERNATIVES</b>					
NBP1 ARM1	Construction of a portion of the Imperial Irrigation District (IID) Lateral could affect Site CA-IMP-8314. The Quechan Indian Tribe, the Kwaaymii Laguna Band of Indians, and the Bureau of Reclamation (BOR) requested that North Baja Pipeline, LLC (North Baja) avoid this cultural resources site.	Significant (California Environmental Quality Act [CEQA] Class II)	The Modified Imperial Sand Dunes Recreation Area (ISDRA) Transmission Line Alternative avoids Site CA-IMP-8314. The alternative also avoids an area closed by the Bureau of Land Management (BLM) to protect the Peirson's milk-vetch and does not affect any other sensitive biological resources. The Modified ISDRA Transmission Line Alternative would be located entirely on BLM-managed lands and the BLM finds the alternative route acceptable. Therefore, North Baja would adopt the Modified ISDRA Transmission Line Alternative between mileposts (MPs) 5.6 and 8.2 of the IID Lateral.  Although the Modified ISDRA Transmission Line Alternative would avoid Site CA-IMP-8314, a portion of another cultural resources site (the Plank Road) was identified during surveys along the alternative alignment. North Baja would avoid impacts on this portion of the Plank Road by installing exclusion fencing and monitoring during construction.	Less than significant (CEQA Class III)	Federal Energy Regulatory Commission (FERC), California State Lands Commission (CSLC), and BLM
<b>GEOLOGY</b>					
NBP2	Disturbances to the natural topography along the right-of-way and at aboveground facilities could occur due to trenching and grading activities.	Significant (CEQA Class II)	After completion of construction, North Baja would restore topographic contours and drainage conditions as closely as practicable to their preconstruction condition.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP3	Blasting may be necessary along the B-Line near MP 29.5. Cultural resources features nearby may be affected. Temporary effects of blasting on cultural resources features could include hazards posed by uncontrolled fly-rock.	Significant (CEQA Class II)	North Baja would use blasting mats to keep fly-rock from leaving the construction work area and potentially impacting cultural resources. All blasting activities would be conducted in strict compliance with North Baja's Blasting Specifications. To avoid injury to personnel and damage to structures or other features like existing pipelines, North Baja's Blasting Specifications stipulates that the blasting contractor must prepare site-specific blasting plans and procedures for review and approval by North Baja. All blasting activities would be conducted under the supervision of a California Licensed Blasting Technician. Blasting procedures would be in accordance with Federal, State, and local regulations regarding use, storage, and transport of explosives; safety; and environmental protection.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

## Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b,c</sup>	Mitigation Measure <sup>b,d</sup>	Significance After Mitigation <sup>b,c</sup>	Monitoring Responsibility
NBP4	Pipeline projects have the potential to affect the production of mineral resources by restricting mineral production activities in the immediate vicinity of the pipeline right-of-way or precluding future expansion.	Less than significant (CEQA Class III)	The pipelines would not cross any active mineral resources operations. North Baja would notify the BOR before construction of the B-Line in the vicinity of the quarry the BOR operates between the Cibola National Wildlife Refuge (NWR) and State Route (SR) 78. However, because of the proximity of the BOR quarry to SR 78 and the presence of unsuitable material to the north and south of current quarrying activities, future expansion would not be affected by the pipeline.	Less than significant (CEQA Class III)	No monitoring required.
NBP5	Seismicity (which includes active faults, ground shaking, and soil liquefaction) is the primary geologic hazard that could affect the North Baja Pipeline Expansion Project (Project or proposed Project) facilities.	Significant (CEQA Class II)	<p>North Baja would construct and test the pipeline facilities to meet U.S. Department of Transportation (DOT) construction and safety standards outlined in Title 49 Code of Federal Regulations (CFR) Part 192, <i>Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards</i>. The pipelines and associated aboveground facilities would be designed using the <i>Guidelines for the Design of Buried Steel Pipe</i> (American Lifelines Alliance 2001), <i>Guidelines for the Seismic Design and Assessment of Natural Gas and Liquid Hydrocarbon Pipelines</i> (Pipeline Research Council International, Inc. 2004), applicable building codes, and/or other similar recognized seismological engineering standards. The engineering design drawings for the entire Project in California would be certified by a California-registered civil/structural engineer, and would comply with the latest edition of the California Building Code.</p> <p>North Baja has also prepared a Liquefaction Hazard Evaluation and Mitigation Study in a manner consistent with California Division of Mines and Geology Special Publication 117, <i>Guidelines for Evaluation and Mitigation of Seismic Hazards in California</i>, Chapter 6, Analysis and Mitigation of Liquefaction Hazards. North Baja's Liquefaction Hazard Evaluation and Mitigation Study indicated a potential for liquefaction hazards at the Colorado River crossing, and along the B-Line and IID Lateral. To mitigate these potential liquefaction hazards, North Baja has incorporated the recommendations of the Liquefaction Hazard Evaluation and Mitigation Study into the Project design. At the Colorado River, liquefiable soils would be avoided by the use of the horizontal directional drill (HDD) crossing method. The pipelines and associated facilities would be designed using the standards listed above and/or other similar recognized industry standards for seismic-resistant design in liquefaction-prone areas.</p>	Less than significant (CEQA Class III)	North Baja certified compliance with these construction and safety standards in its application to the FERC.

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP5 cont'd			<p>North Baja has committed to perform a site-specific seismic evaluation as part of its detailed design phase for the Project. This evaluation would determine the engineering/design solutions that are appropriate to mitigate against the hazard of seismic displacements along the Imperial Fault. The seismic evaluation would determine recommended design fault displacements for the pipeline design specifications. North Baja would develop a computer model to determine the soil-pipe interaction with the proposed applied displacement. The model would evaluate various combinations of pipe wall thickness and pipe grade to determine which pattern yields the best performance under displacement conditions. The design may also incorporate additional mitigation methods if necessary.</p> <p>North Baja would provide a copy of the final design for the Imperial Fault crossing, as well as any related geotechnical information, to the CSLC and the FERC before construction of the IID Lateral. The final design would also address any measures necessary to mitigate for liquefaction hazards.</p>		
NBP6	The potential for landslide and/or slope instability hazards could exist in areas where the pipeline route crosses steep terrain.	Significant (CEQA Class II)	<p>With the exception of the Palo Verde Mesa that would be crossed by the B-Line between MPs 11.6 and 11.8, neither the B-Line, the Arrowhead Extension, nor the IID Lateral cross steep terrain that was identified as having a high potential for landslides or slumping. North Baja would reduce the potential hazard by creating a stable and/or level right-of-way work area during the grading operation and implementing restoration practices in its Construction Mitigation and Restoration Plan (CM&amp;R Plan). To prevent a potential instability of the B-Line at the Palo Verde Mesa, the pipeline and the grade immediately to each side of the pipeline would be laid back to no more than 30 percent gradient for the estimated 60-foot-high lower terrace slope. North Baja anticipates minor cuts would be needed to accommodate this grade transition. In other areas of steep terrain, North Baja would:</p> <ul style="list-style-type: none"> <li>• restore damaged slope breakers on the existing permanent easement where the B-Line parallels the existing A-Line;</li> <li>• install slope breakers to control surface water on the new construction right-of-way;</li> <li>• install trench breakers to control groundwater flow in the pipe trench;</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP6 cont'd			<ul style="list-style-type: none"> <li>• route discharge of surface water away from the slope breakers, and divert or collect surface water coming onto the construction right-of-way to pipes in an outflow below the slope;</li> <li>• adhere strictly to erosion control and revegetation measures required by Federal, State, and local authorities;</li> <li>• bury the pipeline in a deeper trench than normal or place armor above it in areas of potential debris flow hazards; and</li> <li>• monitor geotechnical conditions for signs of mass wasting, and respond appropriately to any indications of instability.</li> </ul>		
NBP7	The IID Lateral would cross the Algodones Sand Dunes, which could expose the pipelines to damage or bury the pipelines as the dunes laterally migrate.	Significant (CEQA Class II)	The California Department of Transportation (CalTrans) has stabilized a segment of the dunes and actively manages the area to keep Interstate 8 open to vehicle traffic. The IID Lateral would be just south of the CalTrans-managed area and is, therefore, somewhat protected from sand dune migration. North Baja would bury the IID Lateral 6 feet deep between MPs 2.7 and 5.7, which includes the area most susceptible to blowing/shifting sands and pipeline exposure. If sand depth were to increase slightly over the pipeline, this would increase its protection from the elements and from vandalism.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP8	Paleontological resources could be affected by construction of the pipeline and associated aboveground facilities as well as by the resulting increased public access to these resources. Without mitigation, ground disturbance during construction could cause adverse impacts on paleontological resources.	Significant (CEQA Class II)	<p>To address potential impacts on paleontological resources resulting from pipeline construction, North Baja developed a Paleontological Resource Mitigation and Monitoring (PRMM) Plan. The PRMM Plan includes a summary of the literature and museum archival review, field survey results, and assessment of potential impacts on paleontological resources; Project-wide and site-specific mitigation and monitoring measures; and curation and reporting procedures. In accordance with the PRMM Plan, North Baja would have a paleontological monitor onsite between MPs 27.0 and 29.1 of the A-Line. Between MPs 27.6 and 46.0 of the IID Lateral, North Baja would conduct spot monitoring. If excavation between these mileposts unearths coarse beach intervals or thicker sand/gravel lenses, continuous monitoring would be conducted. Additional measures of the plan include:</p> <ul style="list-style-type: none"> <li>• availability of a qualified Project paleontologist to be called to the Project area to respond to construction-related issues;</li> <li>• training of construction personnel and Environmental Inspectors (EIs) regarding the possibility that fossil resources may be encountered during construction;</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP8 cont'd			<ul style="list-style-type: none"> <li>• granting of authority for the EI to temporarily halt construction to allow for assessment by the Project paleontologist and implementation of mitigation procedures if warranted;</li> <li>• salvage of significant fossils as determined necessary by the Project paleontologist; and</li> <li>• protocol for curation and repository storage of fossils.</li> </ul> <p>Following construction, North Baja's Project paleontologist would prepare a final paleontological report. The final report would be distributed to the FERC, the CSLC, the BLM, the BOR, the Cibola NWR, and other interested parties.</p>		
<b>SOILS</b>					
NBP9 ARM2 ARM3	Construction of the pipeline and aboveground facilities could expose soils to erosional forces, compact soils, affect soil fertility, cause mixing of soil horizons, and facilitate the dispersal and establishment of weeds.	Significant (CEQA Class II)	<p>North Baja would mitigate impacts on soils by implementing its CM&amp;R Plan developed in consultation with the BLM, the U.S. Fish and Wildlife Service (FWS), and the California Department of Fish and Game (CDFG), and its Project-wide Dust Control Plan.</p> <p>Fugitive dust generated by construction activities would be minimized by the implementation of North Baja's Project-wide Dust Control Plan. The Project-wide Dust Control Plan includes control measures identified as best management practices by some of the regulating agencies. The measures that would be implemented include:</p> <ul style="list-style-type: none"> <li>• take every reasonable precaution to minimize fugitive dust emissions from construction activities;</li> <li>• take every reasonable measure to limit visible density (opacity) of emissions to less than or equal to 20 percent;</li> <li>• apply water one or more times per day to all affected unpaved roads, and unpaved haul and access roads;</li> <li>• reduce vehicle speeds on all unpaved roads, and unpaved haul and access roads;</li> <li>• clean up track-out and/or carry-out areas at paved road access points at a minimum of once every 48 hours;</li> <li>• if bulk transfer operations are required, spray handling and transfer points with water at least 15 minutes before use;</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP9 cont'd ARM2 cont'd ARM3 cont'd			<ul style="list-style-type: none"> <li>• cover all haul truck loads, or maintain at least 6 inches of freeboard space in each cargo compartment. Ensure that all haul truck cargo compartments are constructed and maintained to minimize spillage and loss of materials, and clean or wash each cargo compartment at the delivery site after removal of the bulk materials;</li> <li>• apply water to active construction areas to limit visible density (opacity) of emissions to less than or equal to 20 percent;</li> <li>• apply water to open and/or unvegetated areas to limit visible density (opacity) of emissions to less than or equal to 20 percent; and</li> <li>• for temporary surfaces during periods of inactivity, restrict vehicular access by means of either fencing or signage, and apply water to comply with the stabilized surface requirements.</li> </ul> <p>Some of the measures clearly specify the performance requirement; however, some of the measures are vague and open to interpretation and, consequently, would be difficult to enforce during construction. Therefore, before construction, North Baja would prepare a revised Project-wide Dust Control Plan that specifies the following:</p> <ul style="list-style-type: none"> <li>• the precautions that would be taken to minimize fugitive dust emissions from construction activities;</li> <li>• the measures that would be taken to limit visible density (opacity) of emissions to less than or equal to 20 percent;</li> <li>• how visual density would be measured to determine that it is less than or equal to 20 percent;</li> <li>• how compliance with the 20 percent visual density requirement would be documented;</li> <li>• the individuals with authority to determine if/when water needs to be reapplied for dust control;</li> <li>• the speed limit that would be required on unpaved roads and unpaved haul and access roads; and</li> <li>• the individuals with authority to stop work if the contractor does not comply with dust control measures.</li> </ul>		

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP9 cont'd ARM2 cont'd ARM3 cont'd			The Imperial County Air Pollution Control District (ICAPCD) noted that North Baja's Project-wide Dust Control Plan does not meet the Best Available Control Measures of the ICAPCD's Regulation VIII with regard to clean up of track-out areas. The ICAPCD also noted that additional track-out control devices and further dust control measures must be utilized if construction vehicle trips per day exceed the thresholds established in Regulation VIII. The ICAPCD asked that traffic at unpaved to paved intersections be quantified in the Dust Control Plan and the Dust Control Plan modified accordingly. Therefore, before construction of the Imperial County portions of Phase I-A and Phase II, North Baja would prepare an Imperial County-specific Dust Control Plan that includes the measures of the revised Project-wide Dust Control Plan and meets the requirements of the ICAPCD's Regulation VIII. See also the mitigation measures listed in NBP13.		
NBP10	Construction of the Project could result in fugitive dust, which is a visible indication of soil loss through wind erosion.	Significant (CEQA Class II)	North Baja would mitigate impacts associated with fugitive dust by implementing its Project-wide and Imperial County-specific Dust Control Plans. See the mitigation measures listed in NBP9, ARM2, and ARM3.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP11	Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could have an impact on soils.	Significant (CEQA Class II)	North Baja would mitigate impacts on soils by implementing its Spill Prevention, Containment, and Control Plan for Hazardous Materials and Wastes (SPCC Plan).	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP12	Construction of the pipeline would impact areas with shallow depths to bedrock near MP 29.5 where blasting would likely be required and could result in bringing excess rock to the soil surface.	Significant (CEQA Class II)	North Baja would conduct blasting in compliance with its Blasting Specifications. North Baja would implement its CM&R Plan, which requires that excess rock be removed from the upper 12 inches of soil in cropland, hayfields, pastures, residential areas, and other areas at the landowner's request. Excess rock would not be windrowed along the right-of-way unless approval was obtained from the landowner or land management agency.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP13	Construction would impact soils with high water and wind erosion potential.	Significant (CEQA Class II)	North Baja would mitigate soil erosion impacts by implementing the measures in its CM&R Plan and Project-wide and Imperial County-specific Dust Control Plans, which include: <ul style="list-style-type: none"> <li>restricting the construction right-of-way width for the B-Line to 105 feet and further reducing the width of the right-of-way in areas with high concentrations of native trees;</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP13 cont'd			<ul style="list-style-type: none"> <li>• restricting the construction right-of-way width for the IID Lateral to 80 feet where parallel to existing powerlines and to 60 feet where the lateral would be installed between a powerline and a road or within or abutting the traveled portion of county roads;</li> <li>• preserving the native seed bank by segregating topsoil to a depth of 2 to 8 inches in non-agricultural areas where grading would be conducted and redistributing material over the right-of-way during cleanup;</li> <li>• preserving and redistributing cut vegetation over the right-of-way;</li> <li>• restricting grading and crushing or cutting of vegetation where possible, leaving rootstock and minimizing soil disturbance;</li> <li>• imprinting areas with a sheepsfoot or similar device to provide indentations to catch water/seed and anchor native plant material that has been respread over the right-of-way, thereby aiding in natural revegetation and erosion control;</li> <li>• segregating and redistributing topsoil to its actual depth up to 2 feet in agricultural areas;</li> <li>• maintaining water flow in crop irrigation systems, unless shutoff is coordinated with affected parties;</li> <li>• testing for and alleviating compacted soils in agricultural and residential areas;</li> <li>• implementing procedures to prevent or minimize the spread of noxious weeds or other undesirable species by limiting disposal of plant materials to suitable areas and cleaning of clearing and grading equipment before entering native species areas; and</li> <li>• placing intact salvaged plant materials or rock at specific locations where visual blocking would be employed to discourage use of the pipeline right-of-way by unauthorized vehicles.</li> </ul> <p>See also the mitigation measures listed in NBP9, ARM2, and ARM3.</p>		
NBP14	The IID Lateral would cross the ISDRA between MPs 0.0 and 7.0, which consist of loose wind-blown sand and may result in pipeline exposure.	Significant (CEQA Class II)	North Baja would cross portions of the ISDRA in association with the HDDs of the two All-American Canal crossings. North Baja would bury the IID Lateral 6 feet deep between MPs 2.7 and 5.7, which includes the area most susceptible to blowing/shifting sands and pipeline exposure.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP15	Construction of the pipeline could disrupt irrigation flow (e.g., Rannells Drain).	Significant (CEQA Class II)	North Baja would cross the majority of irrigation drains and canals by boring underneath the culverts along 18th Avenue or by installing the pipeline between the drain culvert and the road. North Baja would also contact landowners in the Palo Verde and Imperial Valleys regarding the location of other irrigation systems and would maintain water flow in these systems or coordinate disruption of irrigation flow or any shutoff times with the affected landowners. North Baja would restore the banks and bed of Rannells Drain and two unnamed canals along the Arrowhead Extension (open-cut crossings) to their original configurations. Because of the steepness of the banks at the Rannells Drain crossing, erosion control fabric would be used for bank stabilization purposes upon completion of pipeline construction at this crossing.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP16	Construction of the proposed pipelines could temporarily impact about 71.7 acres of soil identified as prime farmland and 41.6 acres of farmland of Statewide importance.	Significant (CEQA Class II)	North Baja would mitigate impacts on soils in active farmlands by segregating topsoil before installation of the pipeline and reapplying topsoil over the surface of the right-of-way during restoration as outlined in its CM&R Plan. See also the mitigation measures listed in NBP9 and NBP13.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
<b>WATER RESOURCES</b>					
NBP17	Shallow aquifers underlying construction areas could experience changes in overland flow and recharge caused by clearing and grading of the construction right-of-way.	Significant (CEQA Class II)	In accordance with North Baja's CM&R Plan, vegetation would be cleared only where necessary. After completion of construction, North Baja would recontour and restore the ground surface and allow vegetation to regenerate to provide restoration of preconstruction overland flow and recharge patterns.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP18	Compaction of near-surface soils and soil mixing as a result of heavy construction vehicles could affect groundwater by reducing the soil's ability to absorb water.	Significant (CEQA Class II)	North Baja would comply with its soil compaction mitigation described in its CM&R Plan. This includes testing topsoil and subsoil at regular intervals in agricultural and residential areas for compaction and plowing severely compacted agricultural areas.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP19	Refueling of vehicles and storage of fuel, oil, and other fluids during the construction phase of the Project could create a potential long-term contamination hazard to groundwater resources. Spills or leaks of hazardous liquids could contaminate groundwater and affect users of the aquifer.	Significant (CEQA Class II)	North Baja would comply with its SPCC Plan. This includes avoiding or minimizing potential impacts by restricting the location of refueling activities and storage facilities and by requiring immediate cleanup in the event of a spill or leak. Additionally, the SPCC Plan identifies emergency response procedures, equipment, and cleanup measures in the event of a spill.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP20	Trench dewatering during pipeline construction could affect groundwater resources and alter the natural soil strata such that new groundwater migration pathways could be created away from surface waterbodies.	Significant (CEQA Class II)	North Baja would dewater trenches in such a manner that no heavily silt-laden water flows into any waterbody as described in its CM&R Plan. Additionally, North Baja's CM&R Plan requires the use of trench breakers or installation of trench plugs at the edges of waterbodies to avoid altering the flow of groundwater to local springs or wetland areas.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP21	Substantial amounts of groundwater may be encountered in the vicinity of the Colorado River and near canal crossings along the B-Line, Arrowhead Extension, and IID Lateral that may result in minor fluctuations in local groundwater levels.	Significant (CEQA Class II)	If necessary, North Baja would use well points in addition to standard sump pump dewatering. The water from these dewatering operations would be discharged to dewatering structures and/or otherwise filtered and discharged into field drains or canals. Minor fluctuations in local groundwater levels may occur, but would be temporary and minor.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP22	Unanticipated, pre-existing contaminated groundwater could be encountered during construction.	Significant (CEQA Class II)	In the event evidence of contaminated groundwater or contaminated soils is encountered, additional observations for the presence of a chemical sheen, free product, and chemical odor would be made and recorded before any further construction activity. Field observations would be conducted to determine the nature of the contamination, appropriate disposal/treatment options, and the need for sampling. If contaminated groundwater and/or soils are encountered, North Baja would stop work and consult with the appropriate agencies, including the California Regional Water Quality Control Board, Colorado River Basin Region (CRWQCB) and the Riverside and Imperial Counties Departments of Health on a plan to proceed. The plan would include provisions for characterizing the contaminants, appropriate health and safety measures for workers, and proper discharge of the groundwater.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP22 cont'd			North Baja would notify the appropriate agencies of any discoveries of pre-existing contamination and would perform evaluations on the amount and composition of the contamination. Once the evaluations are completed, North Baja would coordinate with the appropriate agencies to determine appropriate actions and disposal of affected materials.		
NBP23	Construction activities could impact public and private wells located within 150 feet of the proposed construction work area. These potential impacts could include: localized decreases in groundwater recharge rates, changes to overland water flow, contamination due to hazardous materials spills, decreased well yields, decreased water quality (such as an increase in turbidity or odor in the water), interference with well mechanics, or complete disruption of the well.	Significant (CEQA Class II)	Ten water wells were identified within 150 feet of the construction work area. Before construction, North Baja would conduct a field survey to verify the location of these wells as well as any other wells that are identified within 150 feet of the construction work area. With the landowner's permission, North Baja would test these water wells before construction to determine baseline flow conditions as a means of determining any potential construction-related impacts. Where impacts are reported by landowners, North Baja would conduct post-construction water well tests. If it is determined that construction activities have impaired a well water quality or yield, North Baja would either provide bottled water for drinking and arrange for an alternate source of water (such as water truck) for other household uses, temporarily relocate the landowner until the water supply is restored, or compensate the landowner for losses. If water quality or yield is permanently impaired as a result of construction activities, North Baja would arrange for a new well to be drilled or compensate the landowner.	Less than significant (CEQA Class III)	FERC and CSLC
NBP24	Blasting near groundwater wells during construction could cause temporary changes in water level and turbidity and damage the water wells.	Significant (CEQA Class II)	No water wells have been identified within 0.5 mile of anticipated blasting locations (i.e., MP 29.5). North Baja would conduct blasting in compliance with its Blasting Specifications. North Baja's use of proper blasting techniques, which would fracture bedrock only to the point necessary for removal, would limit the effect of the blast to a local area above the aquifer in the proximity of the trenchline.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP25	Construction activities could affect waterbodies through modification of aquatic habitat, increased sedimentation, increased turbidity, decreased dissolved oxygen concentrations, stream warming, or introduction of chemical contamination from fuels or lubricants.	Significant (CEQA Class II)	North Baja would install the pipeline across all of the flowing waterbodies crossed by the Project using the HDD or bore method or install the pipeline between drain culverts and 18 <sup>th</sup> Avenue, with three exceptions (Rannells Drain and two unnamed canals crossed by the Arrowhead Extension at MPs 0.5 and 1.5). The IID Lateral would cross the Alamo River (MP 32.3), which would be crossed by installing the pipeline in the road shoulder over the culverts that carry the water under Hunt Road.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP25 cont'd			<p>Construction and restoration at Rannells Drain would be done in accordance with the CM&amp;R Plan. North Baja would use sediment booms downstream of the trenching, which would contain sedimentation to the localized area. In accordance with the CM&amp;R Plan, North Baja would attempt to complete actual in-stream trenching within 48 hours.</p> <p>North Baja would obtain waterbody crossing permits from the U.S. Army Corps of Engineers (COE) under section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act. North Baja would also obtain a section 401 Water Quality Certification from the CRWQCB. In addition, North Baja would obtain a Streambed Alteration Agreement (SAA) (section 1600 seq. of the California Fish and Game Code) from the CDFG. North Baja would implement the measures and best management practices in CM&amp;R Plan. All construction activities at waterbody crossings would be in accordance with Federal, State, and local permit requirements.</p>		
NBP26	Spoil placed in floodplains during pipeline construction could cause an increase in flood levels or could be washed downstream or be deleterious to aquatic life.	Significant (CEQA Class II)	North Baja states that it would manage spoil piles in accordance with the provisions of the CDFG's SAA. For the A-Line, these provisions required that materials placed in seasonally dry portions of a stream that could be washed downstream or could be deleterious to aquatic life must be removed before inundation by high flows. Dry washes are also regulated by the CRWQCB, which may impose additional stipulations regarding spoil pile management such as requiring North Baja to leave gaps in the spoil piles in dry washes so the washes remain open during construction. North Baja would prepare and submit an updated CM&R Plan to the Agency Staffs before construction if necessary to incorporate any additional requirements of Federal, State, and local permits.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary
NBP27	Refueling of vehicles and storage of fuel, oil, or other hazardous materials near surface waters could create a potential for contamination if a spill were to occur. Immediate downstream users of the water could experience degradation in water quality. Acute chronic toxic effects on aquatic organisms could result from such a spill.	Significant (CEQA Class II)	North Baja would comply with its SPCC Plan. This includes avoiding or minimizing potential impacts by restricting the location of refueling activities and storage facilities and by requiring immediate cleanup in the event of a spill or leak. Additionally, the SPCC Plan identifies emergency response procedures, equipment, and cleanup measures in the event of a spill.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP28 ARM4	The primary impact that could occur as a result of the HDD method at the Colorado River, All-American Canal, and East Highline Canal is an inadvertent release of drilling mud (frac-out) directly or indirectly into the waterbody. Drilling mud could leak through previously unidentified fractures in the material underlying the riverbed, in the area of the mud pits or tanks, or along the path of the drill due to unfavorable ground conditions.	Significant (CEQA Class II)	<p>North Baja has prepared site-specific HDD crossing plans for the Colorado River, All-American Canal, and East Highline Canal that show the drill entry and exit workspaces, the pipe fabrication and stringout areas, and the drill profiles. In addition, North Baja has developed an HDD Plan that describes how drilling operations would be conducted and monitored to minimize the potential for inadvertent releases or failure. The HDD Plan describes the agency notification procedures and the corrective action and cleanup procedures that would be followed in the event of a frac-out to land and the abandonment procedures that would be followed if it is necessary to abandon the drill hole.</p> <p>Before commencement of any HDD operation, North Baja would file with the FERC and the CSLC a revised HDD Plan that specifies the corrective action and cleanup procedures that would be followed in the event a frac-out occurs in the water during an HDD operation.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP29	Construction could impact the streambed and associated wildlife and vegetation habitats of the waterbodies and dry washes crossed by the proposed pipeline routes.	Significant (CEQA Class II)	North Baja would implement the mitigation measures listed in NBP25 and NBP26.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP30	The withdrawal of water from streams or rivers to use for hydrostatic testing could reduce the amount of water available for downstream uses and adversely affect aquatic habitats. The discharge of hydrostatic test water could increase erosion and downstream sedimentation and lead to the deterioration of receiving water quality.	Significant (CEQA Class II)	<p>North Baja would conduct all hydrostatic test activities in accordance with the measures in its CM&amp;R Plan, applicable permits (including coordination with the BOR), and DOT pipeline safety regulations set forth in Title 49 CFR Part 192. North Baja would limit the fill volume to 1,500 gallons per minute or 10 percent of streamflow, whichever is less. The water would be filtered prior to entering the pipe, and no chemicals would be added to the test water.</p> <p>North Baja would hydrostatically test the B-Line and piping associated with the Ehrenberg Compressor Station and Blythe Meter Station with water obtained from an existing irrigation canal located adjacent to the Ehrenberg Compressor Station, an existing well on the compressor station site, or the All-American Canal. After testing, the water would be discharged into lined irrigation canals or the All-American Canal.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP30 cont'd			<p>The Arrowhead Extension and piping within the Blythe-Arrowhead Meter Station would be tested with water obtained from the Palo Verde Irrigation District (PVID), local wells, or a commercial water source. After testing, the water would be discharged into the C-05 Canal.</p> <p>North Baja would hydrostatically test the IID Lateral with water obtained from the All-American Canal. After testing, the water would be discharged back into the All-American Canal or into other IID irrigation facilities. North Baja would discharge hydrostatic test water in accordance with the requirements of its National Pollutant Discharge Elimination System permit. The discharge rate would be regulated, and water would be discharged through energy dissipation devices and sediment barriers, as necessary, to prevent erosion or excessive flow.</p>		
ARM5	The withdrawal of water from streams or rivers to control dust could impact aquatic resources.	Significant (CEQA Class II)	Before construction, North Baja would file with the FERC and the CSLC a revised Project-wide Dust Control Plan that specifies the sources of water that would be used for dust control, the anticipated quantities of water that would be required, and measures that would be implemented to prevent fish and fish egg entrainment during dust control water withdrawals.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
<b>WETLANDS</b>					
NBP31	<p>The primary impact of the Project on wetlands would be the temporary and permanent alteration of wetland vegetation. Other impacts could include temporary changes in wetland hydrology and water quality, mixing of topsoil and subsoil, and compaction and rutting of soils. A 10-foot-wide maintained corridor would result in the permanent conversion of 3.0 acres of scrub-shrub wetland to emergent wetland.</p>	Significant (CEQA Class II)	<p>North Baja would adhere to its CM&amp;R Plan, and comply with the COE's section 404 and the CRWQCB's section 401 Water Quality Certification permit conditions. Wetlands would be restored to preconstruction contours. Construction of the Project would result in "no net loss" of wetlands because no wetlands would be permanently drained or filled. North Baja states that it does not plan to actively maintain the permanent right-of-way. However, North Baja has the right to maintain a 10-foot-wide strip centered over the pipelines if necessary for periodic corrosion/leak surveys.</p> <p>Some of the mitigation measures pertaining to wetland crossings include:</p> <ul style="list-style-type: none"> <li>• prohibiting storage of hazardous materials, chemicals, fuels, and lubricating oils within a wetland or within 100 feet of a wetland boundary;</li> <li>• requiring that native vegetation on the right-of-way within wetlands be cut at ground level, leaving existing root systems in place to promote regrowth;</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP31 cont'd			<ul style="list-style-type: none"> <li>• requiring segregation of the uppermost 1 foot of wetland topsoil from the underlying subsoil in areas disturbed by trenching;</li> <li>• limiting the operation of construction equipment within wetlands to that equipment essential for clearing, excavation, pipe installation, backfilling, and restoration activities;</li> <li>• requiring all nonessential equipment to traverse around wetlands using upland access roads where wetland soils are prone to rutting and/or cannot be appropriately stabilized; and</li> <li>• minimizing duration of construction-related disturbance within wetlands.</li> </ul>		
<b>VEGETATION</b>					
NBP32	<p>The primary impact of the Project on vegetation would be the cutting, clearing, and/or removal of existing vegetation within the construction work area. The removal of desert vegetation would have longer-term impacts than in agricultural areas where vegetation reestablishes quickly.</p>	<p>Significant (CEQA Class II)</p>	<p>North Baja would work over its existing pipeline to construct the B-Line, thereby minimizing the area of new disturbance and the impacts on vegetation. About 75 percent of the vegetation disturbance associated with the B-Line would be within North Baja's existing, previously disturbed right-of-way.</p> <p>North Baja would implement its CM&amp;R Plan to reduce impacts on vegetation within the construction and permanent rights-of-way and improve revegetation potential.</p> <p>Some of the measures that would be implemented include:</p> <ul style="list-style-type: none"> <li>• Segregate topsoil in all agricultural areas and in native habitats where grading is required. This measure would preserve the superior chemical and biological qualities of the topsoil and, in nonagricultural habitats, would preserve the native seed bank contained in the soil.</li> <li>• Crush or skim vegetation within the construction right-of-way in areas where grading is not required, which would result in less soil disturbance. The remaining root crowns would aid in soil stabilization, help retain organic matter in the soil, aid in moisture retention, and have the potential to resprout following construction.</li> <li>• Preserve native vegetation removed during clearing operations. The cut vegetation would be windrowed along the right-of-way during construction and then respread over the disturbed areas as part of restoration activities. This measure would be considered "vertical mulch" and would aid in seedling recruitment by trapping seeds, providing shade, and improving water infiltration. Additionally, this cut vegetation would add to the organic matter in the topsoil layer as it decomposes.</li> </ul>	<p>Less than significant (CEQA Class III)</p>	<p>FERC, CSLC, BLM, and CDFG</p>

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP32 cont'd			<ul style="list-style-type: none"> <li>• Replant desert wash woodland species at specified locations along the right-of-way providing a visual barrier to the right-of-way to deter off-highway vehicle (OHV) traffic on the right-of-way. Although this vegetation would not be expected to survive, it would provide many of the benefits of vertical mulch described above in addition to preventing vegetation damage by OHV use on the right-of-way.</li> <li>• Recontour disturbed areas as needed. The contours would be reshaped after backfilling the trench and replacing the topsoil to restore preconstruction contours and natural drainage patterns. This treatment would reduce erosion and the loss of topsoil, which would improve revegetation potential.</li> <li>• Imprint areas of soil disturbance using a "sheep's-foot" roller or other methods. Imprinting would provide micro-catchment areas for seed retention and would improve water infiltration.</li> <li>• Maintain water flow in crop irrigation systems, unless shutoff is coordinated with affected parties.</li> <li>• Test for and alleviate compacted soils in agricultural and residential areas.</li> <li>• Implement procedures to prevent or minimize the spread of noxious weeds or other undesirable species by limiting disposal of plant materials to suitable areas and the cleaning of clearing and grading equipment before beginning work on the Project.</li> <li>• Monitor the revegetation of the right-of-way the year following construction and again during the second growing season. In agricultural areas, crop monitoring would be conducted to determine if additional restoration is required. Additional revegetation efforts would be conducted until revegetation is deemed successful. In non-agricultural lands, revegetation monitoring would be conducted until 2012 and would be considered successful if upon visual survey, the density and cover are similar to adjacent undisturbed lands.</li> </ul>		
NBP33	Construction could reduce wildlife habitat and diversity by removing desert wash woodlands.	Significant (CEQA Class II)	North Baja would minimize tree clearing in 16 areas of native trees along the proposed route by reducing the width of the construction right-of-way from 105 feet to 80 feet. These areas are located at MP 16.9 (345 feet), MP 17.9 (270 feet), MP 20.0 (700 feet), MP 22.3 (480 feet), MP 22.5 (250 feet), MP 22.6 (1,000 feet), MP 22.8 (180 feet), MP 23.3 (340 feet), MP 23.4 (250 feet), MP 23.5 (590 feet), MP 25.8 (850 feet), MP 34.5 (860 feet), MP 45.1 (500 feet), MP 51.1 (1,800 feet), MP 51.7 (1,100 feet), and MP 64.5 (500 feet). North Baja would implement its CM&R Plan to restore desert wash woodland.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

<b>Mitigation Monitoring Program for the North Baja Pipeline Expansion Project</b>					
Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP33 cont'd			North Baja would provide compensatory mitigation for the loss of desert wash woodland vegetation at a 2:1 ratio for the clearing of the 22.0 acres (new disturbance) of desert wash woodland in addition to the 1:1 compensation ratio it proposes to offset impacts on desert tortoise habitat. North Baja would negotiate off-site mitigation requirements with the FWS and the CDFG.		
NBP34	Open-cut trenching through Rannells Drain (MP 11.4) could have an impact on vegetation growing in and on the banks of the drain.	Significant (CEQA Class II)	The vegetation in Rannells Drain is routinely removed during drain maintenance by the PVID. Because vegetation has re-established itself in the past after dredging, vegetation in Rannells Drain is expected to regenerate on its own from existing seed and vegetative propagules within 2 years after construction.	Less than significant (CEQA Class III)	FERC and CSLC
NBP35	Construction of the B-Line (primarily along 18 <sup>th</sup> Avenue) and the IID Lateral (primarily along Hunt Road and East Ross Road) could affect mature landscaping associated with 11 residences.	Significant (CEQA Class II)	North Baja does not propose to remove any trees on residential properties. North Baja would employ mitigation measures such as tree protection fencing to protect existing trees during construction. North Baja would restore landscaping following construction as part of site-specific plans. If mature trees or shrubs need to be removed during construction, landowners would be compensated for the loss of irreplaceable vegetation as part of agreements between North Baja and the landowners.	Less than significant (CEQA Class III)	FERC and CSLC
NBP36	The revegetation of desert areas could take from 5 to 50 years.	Significant (CEQA Class II)	North Baja would implement its CM&R Plan to promote revegetation of disturbed areas. Specific mitigation measures are listed in NBP32.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP37	The Project could impact rangeland health. The removal of desert vegetation and disturbance of soils could affect the ability of the Project area to support vegetation and wildlife communities.	Significant (CEQA Class II)	North Baja would implement its CM&R Plan, which includes measures to control erosion and preserve topsoil and scarce organic matter that would minimize impacts on the revegetation potential of the Project area.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP38	Construction could result in the introduction of contaminants to soils and potentially adversely affect the potential for revegetation.	Significant (CEQA Class II)	North Baja would implement its SPCC Plan, which specifies cleanup procedures to minimize the potential for soil contamination from spills or leaks of fuels, lubricants, and coolants.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP39	The Project would permanently affect 0.2 acre of the creosote bush scrub community at the pig launcher and receiver at the Ogilby Meter Station; 0.2 acre of the urban/ruderal community at the El Centro Meter Station; 0.3 acre of urban/ruderal and 0.8 acre of creosote bush scrub communities for four valves; 0.3 acre of the creosote bush scrub community at the Rannells Trap; 0.8 acre of the agricultural community for the pig launcher, taps, and crossover piping associated with the Arrowhead Extension; and about 0.2 acre of the creosote bush scrub community for the tap to the B-Line and the pig launcher associated with the IID Lateral.	Less than significant (CEQA Class III)	No mitigation is proposed. The permanent conversion of the affected communities would represent less than a 1 percent change in each respective vegetation type in the Project area.	Less than significant (CEQA Class III)	No monitoring required.
NBP40	Removal of existing vegetation and the disturbances of soils during construction could create conditions for the invasion and establishment of exotic-nuisance species.	Significant (CEQA Class II)	North Baja would reduce the potential to spread noxious weeds and soil pests by implementing the measures included in its CM&R Plan. These measures include, but are not limited to: survey by a qualified noxious weed authority; flagging or treatment before construction; identification of populations of plants listed as invasive exotics by the California Invasive Plant Council and the BLM National List of Invasive Weed Species of Concern; not allowing for disposal of soil and plant materials from non-native areas to native areas; washing all construction equipment before beginning work on the Project; cleaning equipment that worked in Arizona before beginning work in California; washing equipment used to clear tamarisk before working elsewhere on the Project; educating construction personnel on weed identification; use of gravel and/or fill material from weed-free sources for relatively weed-free areas; use of certified weed-free hay bales; implementation of post-construction monitoring and treatment of invasive weeds; removal of tamarisk trees from the right-of-way in native areas and, in non-native areas, tamarisk trees would be removed as necessary as part of clearing operations; and burning or hauling offsite of tamarisk debris.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP40 cont'd			<p>In accordance with the CM&amp;R Plan, North Baja would conduct surveys for noxious weeds along the IID Lateral before construction.</p> <p>In areas of weed infestations attributable to the Project, North Baja would implement control measures twice a year for 2 years after construction is complete or until the infestations have been controlled. North Baja would also implement weed control measures annually as part of routine operation and maintenance of the pipeline.</p>		
<b>WILDLIFE AND AQUATIC RESOURCES</b>					
NBP41	Construction and operation of the pipeline could directly impact wildlife through disturbance, displacement, mortality, and alterations of available habitats.	Significant (CEQA Class II)	North Baja would implement conservation measures for special status species that would also serve to avoid, minimize, or compensate for impacts on general wildlife and their habitats. About 99 percent of the right-of-way would be adjacent to existing utility or transportation corridors. Additionally, North Baja would implement measures identified in its CM&R Plan to avoid or minimize impacts on wildlife habitats as well as facilitate the recovery of native vegetation communities.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP42	Construction across wetlands and waterbodies could affect important habitats for a number of resident wildlife species and fishery resources.	Significant (CEQA Class II)	North Baja would cross the Colorado River, which is the only waterbody that supports fishery resources, using the HDD method. The HDD method would also be used at four other waterbody crossings, thus avoiding in-stream impacts. Rannells Drain would be disturbed; however, it is an agricultural drain that is subject to the clearing of vegetation periodically by the PVID. North Baja would implement measures in its CM&R Plan to minimize disturbance to these habitats.	Less than significant (CEQA Class III)	FERC and CSLC
NBP43	Fires inadvertently started by construction activities (e.g., welding), equipment, or personnel could affect wildlife by igniting vegetation along the right-of-way.	Significant (CEQA Class II)	North Baja would implement its Fire Prevention and Suppression Plan to minimize the potential for wildfires. Some of the measures contained in the plan include: requiring the contractor to train all personnel on fire prevention measures, restricting smoking and parking to cleared areas, requiring all combustion engines to be equipped with a spark arrestor, and requiring vehicles and equipment to maintain a supply of fire suppression equipment (e.g., shovels and fire extinguishers). A Fire Guard would be assigned to each construction spread that would be responsible for maintaining contact with local fire control agencies. North Baja would restrict activities on Federal lands during conditions of high fire danger in coordination with the BLM.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP44	Construction of the pig launcher and receiver at the Ogilby Meter Station; various valves; pig launcher, taps, and crossover piping associated with the Arrowhead Extension; and improvements/modifications to three roads would permanently replace existing wildlife habitats.	Less than significant (CEQA Class III)	No mitigation is proposed. The permanent conversion of the affected habitats would represent less than a 1 percent change in each respective habitat type in the Project area.	Less than significant (CEQA Class III)	No monitoring required.
NBP45 ARM6	Some impact on migratory birds could result from habitat loss associated with construction of the Project. Clearing of vegetation could also destroy nests and cause mortality of nestlings and nesting adults.	Significant (CEQA Class II)	<p>Along the B-Line, North Baja would overlap its construction right-of-way over the previously disturbed right-of-way. Additionally, North Baja would reduce the right-of-way width from 105 feet to 80 feet in 16 areas of microphyll woodlands and would preserve individual trees within the construction right-of-way where possible. With the exception of the dunes area, 98 percent of the habitat affected by the IID Lateral would occur within or immediately adjacent to existing disturbed utility and transportation rights-of-way. Construction would occur in the dunes area but the existing vegetation resources in the dunes area are sparse.</p> <p>North Baja would attempt to schedule construction in native habitats outside of the breeding season for migratory birds. If, however, construction activities are necessary during the bird breeding season, in accordance with its CM&amp;R Plan, North Baja would remove vegetation that could provide nesting substrate from the right-of-way before the breeding season, thus eliminating the possibility that birds could nest on the right-of-way. Qualified biologists would conduct preconstruction surveys to confirm the absence of nesting birds before construction begins.</p> <p>North Baja would, in consultation with the FWS, the BLM, and the CDFG, develop Preclearing Plans to protect migratory bird species during construction of Phase I-A and Phase II, which are the only phases of construction that have the potential to occur in native desert habitats during the nesting period for migratory birds. These plans would include specific details of the preclearing methods to be implemented, the specific locations where preclearing would occur, and the dates preclearing would be initiated and completed.</p>	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP45 cont'd ARM6 cont'd			<p>If, in spite of vegetation removal, nesting birds are found on the construction right-of-way, the nest would not be removed until fledging has occurred or unless authorized after consultation with the FWS, the CDFG, and, if the nest is located on Federal lands, the Federal land management agency.</p> <p>North Baja would implement the measures in its CM&amp;R Plan to promote revegetation of disturbed areas by restoring original contours, segregating topsoil where grading is required, and respreading cut vegetation over the restored areas.</p>		
NBP46	<p>Construction-related activities could directly and indirectly impact wildlife in managed and sensitive biological resource areas such as the Cibola NWR, Milpitas Wash Special Management Area (SMA), Wildlife Habitat Management Area (WHMA), and Nature Conservancy sites.</p>	Significant (CEQA Class II)	<p>North Baja proposes a number of conservation measures to protect wildlife and special status plants that are generally consistent with objectives of the management plans addressing activities in the Milpitas Wash SMA and the multi-species WHMA. Construction of the Project would not directly affect sensitive wildlife habitat within the Cibola NWR. Noise associated with construction activities could indirectly impact wildlife and breeding seasons. However, because of the year-round vehicle and boat traffic associated with SR 78 and the Colorado River, wildlife in the area is expected to be somewhat acclimated to noise. The Colorado River and adjacent riparian habitat associated with the Nature Conservancy site would be avoided by the HDD crossing of the river.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP47	<p>The Project would cross a small portion of the Cibola-Trigo Herd Management Area (HMA) and Chocolate-Mules HMA where wild horses and/or burros could be found watering. Construction could affect wild horses or burros if the animals were to fall into the open trench.</p>	Significant (CEQA Class II)	<p>North Baja would install wildlife escape ramps in the excavated trench at 1-mile intervals.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP48	<p>Construction could result in sedimentation and turbidity, which might adversely affect fish eggs and juvenile fish survival, benthic community diversity and health, and spawning habitat.</p>	Significant (CEQA Class II)	<p>The Colorado River, the All-American Canal, and the East Highline Canal would be crossed using the HDD method. Only one flowing waterbody, Rannells Drain, would be crossed using the open-cut crossing method. Two unnamed canals along the Arrowhead Extension would also be crossed using the open-cut crossing method. The open-cut method is the quickest crossing method; therefore, sedimentation and turbidity would be limited to the relatively short period of in-stream work. Rannells Drain does not have a classified fishery and no fisheries habitat would be lost as a result of construction across Rannells Drain.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

<b>Mitigation Monitoring Program for the North Baja Pipeline Expansion Project</b>					
Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP48 cont'd			Nonetheless, North Baja proposes to use sediment booms downstream of the trenching, which would contain sedimentation to the localized area. Sediment potentially released during construction would be removed the next time the PVID dredges the drain for agricultural purposes (expected to occur 1 year after construction).		
NBP49	Construction across waterbodies could cause streambank erosion.	Significant (CEQA Class II)	North Baja would cross several waterbodies using the HDD method, which would avoid disturbance of the streambank vegetation. Retaining the existing bank composition at these waterbodies would prevent the need for bank armoring following construction. Irrigation canals and drains would be crossed at locations where these waterbodies are constrained within culverts, which would avoid any bank disturbance. North Baja would implement the measures in its CM&R Plan to facilitate revegetation of the banks following construction.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP50	A chemical or fuel spill in or near a waterbody could release contaminants, which could affect fish directly or indirectly through changes in food sources or by contaminating the water resources.	Significant (CEQA Class II)	North Baja would adhere to the measures in its CM&R Plan and SPCC Plan to prevent a large spill from occurring near surface waters. Hazardous materials would be stored, and vehicles refueled, at least 100 feet from surface waters. Should a spill occur, the containment measures in the SPCC Plan would decrease the response time for control and cleanup of the spill.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP51	Hydrostatic testing and dust control water withdrawals could cause entrainment of fish, reduced downstream flows, or impaired downstream uses associated with water withdrawals, and erosion, scouring, or a release of chemical additives.	Significant (CEQA Class II)	North Baja would cover the water intake with an adequately sized mesh screen to reduce the potential for fish and fish egg entrainment. Water withdrawals would occur from an existing well or irrigation canals and would not affect current flow levels in the Colorado River or other waterbodies containing fishery resources. No chemicals would be added to the test water, and energy dissipation devices would be employed to minimize channel erosion. See also the mitigation measures listed in NBP30 and ARM5.	Less than significant (CEQA Class III)	FERC and CSLC
NBP52	The proposed open-cut trenching through Rannells Drain would create a temporary increase in sediment load in the drain.	Significant (CEQA Class II)	The PVID has indicated it would be willing to perform maintenance clearing/dredging at the Rannells Drain crossing before construction of the B-Line in 2009, as long as it is done between August 2 and March 14 as agreed with the CDFG.	Less than significant (CEQA Class III)	FERC and CSLC
NBP53	A frac-out could occur during HDD crossings if the drilling head hits a subterranean fracture in the substrate, resulting in an inadvertent release of drilling mud.	Significant (CEQA Class II)	See the mitigation measures listed in NBP28 and ARM4.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
<b>SPECIAL STATUS SPECIES</b>					
NBP54	Construction could remove special status plants living within the construction right-of-way and could disturb, displace, or harm special status animals on and adjacent to construction work areas. Construction could also affect special status plants and wildlife by temporarily altering the habitat along the pipeline right-of-way and permanently altering the habitat at aboveground facility sites.	Significant (CEQA Class II)	<p>North Baja has proposed to implement the following general minimization and conservation measures to reduce the impact of the Project on special status species:</p> <ul style="list-style-type: none"> <li>• North Baja would use its environmental training program, successfully implemented for the A-Line construction, as a basis for a site-specific environmental training program to be implemented before the start of work. All employees and contractors working in the field would be required to complete an environmental training session before beginning work on the right-of-way. The program would include discussions of the biology, distribution, and ecology of special status species within the geographic area of construction; protection afforded such species under applicable Federal and State laws and regulations; all protection measures that must be followed to protect such species during Project activities; penalties for noncompliance; reporting requirements; and the importance of compliance with all protection measures. To ensure proper focus, emphasis would be placed on the specific aspects of compliance applicable to the particular audience's activities on the Project.</li> <li>• Employees and contractors would be informed during one or more training sessions that they are not authorized to handle or otherwise move listed species at any time, including while commuting to work sites or at a work site.</li> <li>• North Baja would hire and designate at least two EIs per construction spread who would be responsible for overseeing Project environmental protection measures, including those for special status species. Environmental inspection procedures would be in compliance with the relevant provisions of North Baja's CM&amp;R Plan. North Baja would also hire and designate at least one authorized biologist who would be responsible for identification of habitat and individuals of special status species and for implementation of all measures requiring an authorized biologist's intervention. The biologist would, if needed, hold the required permits or formal agreements with appropriate Federal and State agencies for the survey or handling of any special status species.</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP54 cont'd			<ul style="list-style-type: none"> <li>• An authorized biologist would conduct species-specific surveys of each Project facility located within areas identified during North Baja's surveys as listed species habitat no more than 7 days before the onset of activities.</li> <li>• Project personnel would exercise caution when commuting to the construction area to minimize any chance for the inadvertent injury or mortality of species encountered on roads leading to and from the construction area. North Baja's contractors and employees would report all such incidents directly to an EI.</li> <li>• Only existing routes of travel and approved access roads would be used to and from construction areas. Cross-country travel by vehicles and equipment would be prohibited. Except on county- or State-maintained roads, vehicle and equipment speeds would not exceed 25 miles per hour within potential habitat of a listed species. On the B-Line, between MPs 48.0 and 68.0 (an area of relatively high tortoise density), North Baja states that it would limit vehicle and equipment speeds to 10 miles per hour except for stringing trucks, which North Baja proposes to allow to travel at 25 miles per hour (see ARM7).</li> <li>• Authorized biologists would monitor all work where prior North Baja surveys have documented the occurrence of one or more listed species and where construction activities can reasonably be expected to adversely affect those species. In conjunction with North Baja's EIs, the biologists would have the authority to halt all non-emergency actions that might result in harm to a listed species, and would assist in the overall implementation of protection measures for listed species during Project activities.</li> <li>• All trash and food items generated by construction and maintenance activities would be promptly placed in a closed container and regularly removed from the Project site to reduce the attractiveness of the area to common ravens and other desert predators.</li> <li>• Firearms and domestic pets would be prohibited from work sites.</li> <li>• In the construction work area and along access roads, employees and contractors would look under vehicles and equipment for the presence of special status species before movement. If a special status species is observed, no vehicles or equipment would be moved until the animal has left voluntarily or is removed by an authorized biologist.</li> </ul>		

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP54 cont'd			<ul style="list-style-type: none"> <li>• Pipeline construction activities between dusk and dawn would be limited to emergencies only (i.e., issues involving human health and safety) with the exception of the HDD operations (including those at the Colorado River, the All-American Canal, Interstate 8, the East Highline Canal) and the open-cut crossing of Rannells Drain.</li> <li>• Open pipeline trenches, auger holes, or other excavations that could entrap wildlife would be inspected by an authorized biologist a minimum of three times per day, and immediately before backfilling. In habitats supporting special status species, pipe segments would either be capped or taped closed each night or raised on supports of sufficient height to prevent the entry and entrapment of special status species. Such pipe segments would be inspected regularly before sealing and before using in the morning. For open trenches, earthen escape ramps would be maintained at 1-mile intervals. Other excavations that remain open overnight would be covered, ramped, or fenced to prevent entrapment of wildlife.</li> <li>• If a listed species is located during construction, and a contingency for avoidance, removal, or transplant has not been approved by the FWS or appropriate agency, North Baja would not proceed with Project activities in that location until specific consultation with the FERC, the FWS, the BLM, and/or other appropriate agency is completed.</li> <li>• All encounters with listed species would be reported to the biologist, who would record the following information:             <ul style="list-style-type: none"> <li>• species;</li> <li>• location (narrative and maps) and dates of observations;</li> <li>• general condition and health, including injuries and state of healing;</li> <li>• diagnostic markings, including identification numbers or markers; and</li> <li>• locations moved from and to.</li> </ul> </li> <li>• Upon locating a dead or injured listed species, North Baja would notify the FWS and the CDFG in California or the AGFD in Arizona. Written notification would be made within 15 days of the date and time of the finding or incident (if known) and would include: location of the carcass, a photograph, cause of death (if known), and other pertinent information.</li> </ul>		

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP54 cont'd			<ul style="list-style-type: none"> <li>• The construction right-of-way would be limited to a width of 105 feet along the B-Line and 100 feet along the Arrowhead Extension (except when in the Arrowhead Boulevard roadway or road shoulder where a 60-foot-wide construction right-of-way would be used), while the construction right-of-way for the IID Lateral would be limited to a width of 60 feet for the majority of its length and 80 feet where it parallels existing utility corridors. The construction right-of-way would be clearly staked and flagged in advance of construction. The construction area includes approved work areas for the pipelines, compressor station, and meter stations; the facilities at Rannells Trap; the taps, crossover piping, and pig launcher associated with the Arrowhead Extension; access roads; the tap to the B-line and pig launcher associated with the IID Lateral; and staging and pipe storage areas.</li> <li>• North Baja would attempt to schedule construction in native habitats outside of the breeding season for migratory birds. If, however, construction activities are necessary in native habitats during the bird breeding season, North Baja would remove vegetation that could provide nesting substrate from the right-of-way before the breeding season, thus eliminating the possibility that birds could nest on the right-of-way. In accordance with the Agency Staffs' recommendation (see ARM6), specific plans relating to preclearing of vegetation would be coordinated with the FWS, the BLM, and the CDFG. Qualified biologists would conduct preconstruction surveys to confirm the absence of nesting birds before construction begins.</li> <li>• If, in spite of vegetation removal, nesting birds are found on the construction right-of-way, the nest would not be removed until fledging has occurred or unless authorized after consultation with the FWS, the CDFG, and, if the nest is located on Federal lands, the Federal land management agency.</li> <li>• At specified locations in areas of high-density microphyll woodland, North Baja would narrow the construction right-of-way width to 80 feet. Areas of this narrower construction width would be identified in the field, staked, and flagged in advance of construction.</li> <li>• At the conclusion of work, all trenches and holes would be completely filled, surfaces cleaned and smoothed, and each site recontoured to match the original profiles as closely as possible.</li> </ul>		

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP54 cont'd			<ul style="list-style-type: none"> <li>• With the exception of fenced facilities, all materials and equipment would be removed from the area upon completion of work. All stakes, flagging, and fencing used to delineate and protect any environmental or cultural feature in the construction area would be removed no later than 30 days after construction and restoration are complete.</li> <li>• Upon completion of Project activities, North Baja would submit a final report to the FERC for distribution to other agencies, including the FWS. The report would document the effectiveness and practicality of the conservation measures, the number of individuals of each species excavated from their burrows or removed from the site, the number of individuals killed or injured, and other pertinent information. The report would also recommend modifications of the Project stipulations in order to enhance the protection of species in the future. In addition, the final report would provide the actual acreage disturbed by Project activities by habitat type.</li> </ul>		
ARM7	North Baja's proposal to allow stringing trucks to travel at 25 miles per hour between MPs 48.0 and 68.0 of the B-Line may not adequately protect special status species.	Significant (CEQA Class II)	To protect special status species, and reduce dust, North Baja would restrict stringing trucks to a 10-mile-per-hour speed limit on the right-of-way between MPs 48.0 and 68.0 of the B-Line.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
ARM8	Southwestern willow flycatchers potentially using habitat along the Colorado River could be disturbed by activities associated with the HDD of that waterbody. Specifically, noise and light associated with HDD equipment and activities could dissuade individuals from using habitat in the vicinity of the HDD and/or could interrupt resting individuals if construction activities occurred at night.	Significant (CEQA Class II)	<p>In order to minimize the potential for construction activities to affect southwestern willow flycatchers at the Colorado River crossing, North Baja would implement the following measures at the Colorado River during activities associated with the HDD:</p> <ul style="list-style-type: none"> <li>• all individuals working within or adjacent to southwestern willow flycatcher habitat would complete southwestern willow flycatcher training before working within the construction right-of-way in those areas; and</li> <li>• dust would be strictly controlled by watering construction areas within 1,000 feet of potential habitat at the Colorado River.</li> </ul>	Less than significant (CEQA Class III)	FERC and CSLC

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
ARM9	North Baja would conduct surveys for the Yuma clapper rail at Rannells Drain. However, North Baja has not proposed conservation measures to avoid impacts on individuals if identified during such surveys, nor has North Baja proposed to conduct surveys for this species at the Alamo River.	Significant (CEQA Class II)	<p>Unless North Baja provides documentation from the FWS and the CDFG that such measures are not necessary or if site-specific surveys fail to identify individuals Yuma clapper rails at the Alamo River or Rannells Drain, in order to avoid impacts on the Yuma clapper rail during construction, North Baja would:</p> <ul style="list-style-type: none"> <li>• ensure vegetation at the proposed crossing location of Rannells Drain, extending 150 feet on either side of the proposed construction work area, is cleared before February 1, 2009;</li> <li>• ensure vegetation at the proposed crossing location of the Alamo River is cleared before February 1, 2009; and</li> <li>• initiate all construction activities at Rannells Drain and the Alamo River between the hours of 8:30 AM and 3:30 PM to avoid periods of peak Yuma clapper rail vocalizations.</li> </ul>	Less than significant (CEQA Class III)	FERC and CSLC
NBP55	Construction and operation could adversely impact the Yuma clapper rail and/or rail habitat (e.g., wetlands, drains).	Significant (CEQA Class II)	Direct impacts on Yuma clapper rail and/or rail habitat along the Colorado River would be avoided through North Baja's proposed HDD crossing of this waterbody and the adjacent habitat. Suitable Yuma clapper rail and/or rail habitat at both Rannells Drain and the Alamo River would be cleared before construction; thus avoiding direct impacts (see ARM9). Impacts on wetland and drain habitat would be temporary because these vegetation communities typically revegetate within 1 year following construction.	Less than significant (CEQA Class III)	FERC and CSLC
NBP56	Construction would temporarily impact desert tortoise critical habitat at work areas, temporary access roads, and along the construction right-of-way.	Significant (CEQA Class II)	<p>North Baja would limit disturbance of previously unaffected areas to the narrowest extent practicable by constructing immediately adjacent to the existing A-Line, as well as portions of Stallard Road, SR 78, and Ogilby Road, which would minimize habitat fragmentation, and using existing access roads to the extent practicable.</p> <p>Further, to compensate for the loss of desert tortoise habitat not previously compensated for during construction of the A-Line, North Baja would implement the following measures:</p> <ul style="list-style-type: none"> <li>• Compensation rates for new impacts on desert tortoise habitat of 1:1 would be calculated and an assessed financial contribution would be paid to the BLM. In accordance with accepted guidelines previously implemented by the FERC, the FWS, and the BLM, areas of new impacts would include only those areas not previously affected by construction of the A-Line.</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP56 cont'd			<ul style="list-style-type: none"> <li>North Baja would provide funding to the CDFG to manage acquired lands in addition to an enhancement fee based on the same compensation rate, which would be based on the CDFG published or calculated rates per acre at the time of issuance of the final Environmental Impact Statement/Environmental Impact Report for the proposed Project.</li> </ul>		
NBP57	Construction-related impacts on the desert tortoise could include direct mortality or injury as a result of being crushed by vehicles, movement of soils, and entrapment in burrows and open trenches.	Significant (CEQA Class I)	<p>North Baja would minimize the potential for impacts on the desert tortoise by implementing the following measures:</p> <ul style="list-style-type: none"> <li>North Baja would submit the names, permit numbers, and relevant tortoise experience resumes of all individuals who might need to handle desert tortoises to the FWS for approval at least 15 days before the initiation of clearance surveys. North Baja would also submit the list to the BLM for its records. Project activities would not begin until an authorized biologist has been approved. Although other biologists may be employed as biological monitors, only those approved by the FWS as authorized biologists would be permitted to handle tortoises.</li> <li>All persons authorized by the FWS to handle desert tortoises would follow the guidelines established in the <i>Guidelines for Handling Desert Tortoises During Construction Projects</i>.</li> <li>A clearance survey for the desert tortoise would be conducted by an authorized biologist within 24 hours before ground disturbance.</li> <li>Burrows outside of the limits of the construction right-of-way would be flagged so that the biological monitor would be able to more easily locate them during construction.</li> <li>All desert tortoise burrows or pallets in the construction area would be excavated by an authorized biologist. All desert tortoise handling and burrow excavation would be in accordance with the handling procedures developed by the FWS and would be conducted by authorized biologists.</li> <li>Desert tortoises that are found above ground and need to be moved from potential harm would be placed in the shade of a shrub by the authorized biologist. All desert tortoises removed from burrows would be placed in an unoccupied burrow of approximately the same size as the one from which it was removed.</li> </ul>	Significant (CEQA Class I)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP57 cont'd			<ul style="list-style-type: none"> <li>• If an existing burrow is unavailable, the authorized biologist would construct or direct the construction of a burrow of similar size, shape, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods would be monitored for at least 2 days after placement in the new burrows to ensure their safety. The authorized biologist would be allowed some judgment and discretion to ensure that the survival of the desert tortoise is likely.</li> <li>• Should a tortoise wander into the construction area during construction, adjacent activities would be halted until the tortoise is moved out of the construction work area and out of harm's way.</li> <li>• North Baja would install exclusion fencing along the right-of-way in areas where tortoise density is sufficiently high to warrant fencing, in the opinion of the authorized biologist in charge of tortoise surveys and in consultation with the FWS and the CDFG, to prevent tortoises from entering the construction work area and getting in harm's way.</li> <li>• A worker bonus program would be implemented that would reward construction staff who spot a tortoise within the construction work area and, without touching or disturbing the animal, notify the authorized biologist for action.</li> <li>• If a tortoise is located in the construction work area and is not moving, adjacent activities would be halted until an authorized biologist is able to move it out of harm's way.</li> <li>• All pipeline marker signs within desert tortoise habitat would be fitted with "bird-be-gone" or similar bird repellent devices.</li> <li>• Only approved access roads would be used. Only approved areas would be used for temporary storage areas, laydown sites, and any other surface-disturbing activities. Any routes of travel that require construction or modification, or any additional work areas, would be surveyed for tortoises by an authorized biologist(s) before modification or construction of the route or construction or use of a new work area.</li> <li>• Trench segments or other excavations would be provided with tortoise escape ramps at 1-mile intervals. All excavations would be inspected for tortoises three times daily and before backfilling.</li> </ul>		

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP57 cont'd			<ul style="list-style-type: none"> <li>Any time a vehicle is parked, the ground around and under the vehicle would be inspected for desert tortoises before the vehicle is moved. If a desert tortoise is observed, it would be left to move on its own. If this does not occur within 15 minutes, an authorized biologist would remove and relocate the tortoise.</li> <li>Within desert tortoise habitat, construction pipe, culverts, or similar structures with a diameter of 3 inches or greater that are stored on the construction site for one or more nights would be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site.</li> <li>All construction-related activities in desert tortoise habitat would be conducted between dawn and dusk.</li> </ul>		
NBP58	Even with North Baja's proposed mitigation and the Agency Staffs' additional recommendations, the proposed Project is likely to adversely affect the desert tortoise and its critical habitat.	Significant (CEQA Class I)	Approval of the Project would be subject to a Statement of Overriding Considerations under the CEQA. As part of the section 7 formal consultation process, the FWS' Biological Opinion (BO) included non-discretionary terms and conditions in order to ensure that the Project would not jeopardize the continued existence of the desert tortoise. North Baja would not be authorized to make any irreversible or irretrievable commitments of resources that would foreclose formulation or implementation of any reasonable or prudent alternatives needed to avoid jeopardizing the continued existence of the species and adverse modification of its critical habitat.	Significant (CEQA Class I)	FERC, CSLC, and BLM
NBP59	The razorback sucker may occur in the Project area and the FWS has designated the portion of the Colorado River crossed by the pipeline route as critical habitat for this species.	Significant (CEQA Class II)	North Baja would install the pipeline under the Colorado River using the HDD method. Used successfully, this method would avoid effects on the razorback sucker during the Colorado River crossing. In the event of a frac-out, North Baja would implement the measures in its HDD Plan. Pursuant with its CM&R Plan, North Baja would screen intake piping to prevent fish entrainment during hydrostatic test water withdrawal. See also the mitigation measures listed in NBP28, NBP30, ARM4, and ARM5.	Less than significant (CEQA Class III)	FERC and CSLC
NBP60	Construction may impact the Peirson's milk-vetch, which was identified along sandy substrate areas of the B-Line and between MPs 0.5 and 7.5 of the IID Lateral. Impacts could include the loss of the current season's seed production.	Significant (CEQA Class I)	North Baja would utilize the same techniques used during construction and restoration of the A-Line for the proposed B-Line. Techniques include topsoil and seedbank conservation measures, topsoil segregation to conserve the existing seedbank, respreading of topsoil upon completion of construction, and imprinting the right-of-way during restoration with equipment (e.g., sheepsfoot roller) to provide micro-catchment areas for seed retention. Along the IID Lateral, North Baja would similarly segregate topsoil but would not use a sheepsfoot roller in the dunes because this equipment is	Significant (CEQA Class I)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP60 cont'd			ineffective in sand. Construction of the IID Lateral through potential Peirson's milk-vetch habitat would be conducted in the summer months after adult plants (if present) have already set seed.		
NBP61	Even with the proposed mitigation, the proposed Project is likely to adversely affect the Peirson's milk-vetch.	Significant (CEQA Class I)	Approval of the Project would be subject to a Statement of Overriding Considerations under the CEQA. As part of the section 7 formal consultation process, the FWS' BO concluded that the Project would not jeopardize the continued existence of the Peirson's milk-vetch.	Significant (CEQA Class I)	FERC, CSLC, and BLM
NBP62	The proposed pipeline route would cross potential Arizona bell's vireo habitat along the proposed B-Line at the Colorado River (MPs 0.0 to 3.0) and the Davis Lake area (MPs 31.0 to 33.0).	Significant (CEQA Class II)	North Baja would use the HDD method to cross the Colorado River and implement its general conservation measures to avoid or minimize potential impact on Arizona bell's vireo habitat. The Project would be at least 1,300 feet from the Davis Lake area, thus avoiding direct impacts.	Less than significant (CEQA Class III)	FERC and CSLC
NBP63	While no California black rail habitat was identified during surveys, areas of suitable habitat could become occupied prior to construction. Disturbance of foraging and nesting habitat (i.e., wetlands and drains) could be affected by construction.	Significant (CEQA Class II)	North Baja would conduct preconstruction surveys for the California black rail if habitat for this species is not cleared before construction. North Baja would implement its general conservation measures. Because habitat for this species is similar to the Yuma clapper rail, suitable habitat for both the Yuma clapper rail and the California black rail at both Rannells Drain and the Alamo River would be cleared before construction, thus avoiding direct impacts (see NBP55 and ARM9). Impacts on wetland and drain habitat would be temporary because these vegetation communities typically revegetate within 1 year following construction.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP64	Surveys (2002) for the Gila woodpecker identified two occupied cavities at MPs 50.7 and 51.7; other suitable habitat may be affected by the Project.	Significant (CEQA Class II)	North Baja would conduct surveys for Gila woodpeckers in areas of suitable nesting habitat before initiation of construction of the B-Line if construction is scheduled to occur during the breeding season. If active Gila woodpecker nest cavities are identified within 100 feet of the right-of-way during preconstruction surveys, North Baja would monitor cavities during construction to determine if nesting individuals are being disturbed by construction activities. If disturbance (e.g., avoidance of the cavity by individuals) is noted and young are present in the cavity, North Baja would cease construction within 200 feet of the nest cavity until the young have fledged.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP65	Marginal habitat for the western yellow-billed cuckoo is present along some areas of the Colorado River near MP 0.2 of the proposed B-Line. Construction could impact this species and its habitat.	Significant (CEQA Class II)	No individual western yellow-billed cuckoos were identified during surveys conducted for this species before construction of the A-Line in June and July 2001. North Baja would implement its general conservation measures to avoid impacts on the western yellow-billed cuckoo and its habitat.	Less than significant (CEQA Class III)	FERC and CSLC
NBP66	The IID Lateral would cross suitable habitat for the Algodones Dune sunflower species in the southern Algodones Dunes within the ISDRA (MPs 0.5 to 7.9). Construction may remove individual plants.	Significant (CEQA Class II)	North Baja would assume the species is present throughout the area of suitable habitat. North Baja would implement its general conservation measures. North Baja would segregate topsoil along the IID Lateral, but would not use a sheepsfoot roller in the area of the dunes because this equipment is ineffective in sand. Construction of the IID Lateral through potential Algodones Dune sunflower habitat would be conducted in the summer months after adult plants (if present) have already set seed, which should allow for the re-establishment in the next growing season after construction is completed.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP67	The IID Lateral would cross suitable habitat for the Wiggins's croton in the southern Algodones Dunes within the ISDRA (MPs 0.5 to 7.9). Construction may remove individual plants.	Significant (CEQA Class II)	North Baja would assume the species is present throughout the area of suitable habitat. North Baja would segregate topsoil along the IID Lateral, but would not use a sheepsfoot roller in the area of the dunes because this equipment is ineffective in sand. Construction of the IID Lateral through potential Wiggins's croton habitat would be conducted in the summer months after adult plants (if present) have already set seed, which should allow for the re-establishment in the next growing season after construction is completed.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP68	Construction may impact the Colorado River cotton rat, which occurs in the marshes of the Colorado River.	Significant (CEQA Class II)	North Baja would cross the Colorado River and associated riparian areas using the HDD method. In the event of a frac-out, North Baja would implement the measures in its HDD Plan to contain the drilling mud and avoid impacting potential habitat for the Colorado River cotton rat. See also the mitigation measures listed in ARM4.	Less than significant (CEQA Class III)	FERC and CSLC
NBP69	The BLM reported that the proposed Project could encounter desert bighorn sheep near the Palo Verde Wilderness Area, which is approximately 1 mile west of the B-Line near MP 31.0. Impacts on desert bighorn sheep are likely to be indirect in nature, resulting from noise-related disturbance during construction.	Significant (CEQA Class II)	North Baja would inform workers that bighorn sheep may occur in the area and would keep all construction activities within the approved construction work area.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP70	The B-Line would cross suitable riparian and desert wash woodland habitat for the brown-crested flycatcher between MPs 22.0 to 23.0, 35.0 to 36.0, 41.0 to 46.0, 50.0 to 53.0, and 59.0 to 66.0. Habitat clearing during the breeding season could result in injury or death, or abandonment of nests.	Significant (CEQA Class II)	North Baja would complete construction of the B-Line after the breeding season. If construction is necessary during the breeding season, North Baja would preclear vegetation along the B-Line. Preconstruction clearing would be conducted in accordance with recommendations from the FWS, the BLM, and the CDFG. See also the mitigation measures listed in NBP45 and ARM6.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP71	Construction could affect burrowing owls, which occur in the irrigated desert agricultural areas. The B-Line would cross suitable burrowing owl habitat from MPs 0.0 to 12.0 (which includes 18 <sup>th</sup> Avenue), and the IID Lateral would cross suitable burrowing owl habitat from MPs 28.0 to 46.0. In addition, North Baja identified one probable burrowing owl burrow and an individual burrowing owl adjacent to a burrow at approximate MP 1.5 of the Arrowhead Extension.	Significant (CEQA Class II)	<p>For owls occupying burrows within 250 feet of the construction work area, North Baja would monitor or passively or actively relocate the species to appropriate and previously installed artificial or available alternate natural burrows. Only biologists approved by the CDFG in advance would handle owls or install one-way doors during relocation activities. The management strategy utilized would be determined on a case-by-case basis. In addition to relocation or monitoring efforts, North Baja would implement the following measures to minimize impacts on the burrowing owl:</p> <ul style="list-style-type: none"> <li>• Direct impacts on burrowing owl habitat would be minimized by constructing in the road pavement or road shoulder in agricultural areas or by boring/drilling beneath habitat areas (e.g., canals and drains).</li> <li>• Preconstruction surveys during the breeding season would be conducted by biologists who would visually check all potential habitat within 250 feet of both sides of the proposed construction work area within 1 week before construction.</li> <li>• Unoccupied burrows discovered within the construction right-of-way during preconstruction surveys would be collapsed or excavated before construction activities to prevent occupancy by burrowing owls.</li> <li>• Artificial burrows, installed to minimize the effect of burrow loss, would be placed within the home range of individual owls that would be affected before burrow excavation or installation of one-way doors.</li> </ul> <p>Also, North Baja would provide compensation at the equivalency rate of 6.5 acres of foraging habitat for burrowing owls for each active burrow damaged.</p>	Less than significant (CEQA Class III)	FERC and CSLC
NBP72	The B-Line would cross potential habitat for the Crissal thrasher, which occurs near the Colorado River and the town of	Significant (CEQA Class II)	North Baja would complete construction of the B-Line after the breeding season. If construction is necessary during the breeding season, North Baja would preclear vegetation along the B-Line. Preconstruction clearing would be conducted in	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP72 cont'd	Blythe (MPs 0.0 to 3.0), the town of Palo Verde (MPs 24.0 to 29.0), and the Davis Lake area (MPs 31.0 to 33.0), along 18 <sup>th</sup> Avenue in Blythe, and in the area of Stallard Road (MP 25.0). Impacts include slow habitat re-establishment, noise, and breeding disruption.		accordance with recommendations from the FWS, the BLM, and the CDFG. See also the mitigation measures listed in NBP45 and ARM6. Further, North Baja would minimize the potential for long-term impacts on the Crissal thrasher by compensating for loss of microphyll woodland habitat through payment of an assessed financial contribution at a ratio approved by the FWS, the BLM, and the CDFG for those areas not already covered by desert tortoise habitat compensation.		
NBP73	The B-Line would cross potential habitat for the Le Conte's thrasher, which occurs from MPs 12.0 to 79.8. The IID Lateral would also cross suitable habitat in the scattered creosote bush scrub habitat between the ISDRA and the Imperial Valley from MPs 8.0 to 28.0. Impacts include slow habitat re-establishment, noise, and breeding disruption.	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat. North Baja would complete construction of the B-Line after the breeding season. If construction is necessary during the breeding season, North Baja would preclear vegetation along the B-Line. Preconstruction clearing would be conducted in accordance with recommendations from the FWS, the BLM, and the CDFG. See also the mitigation measures listed in NBP45 and ARM6. Further, North Baja would minimize the potential for long-term impacts on the Le Conte's thrasher by compensating for loss of microphyll woodland habitat through payment of an assessed financial contribution at a ratio approved by the FWS, the BLM, and the CDFG for those areas not already covered by desert tortoise habitat compensation.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary
NBP74	The B-Line would cross suitable habitat for the summer tanager, which occurs along the lower Colorado River basin (MPs 22.0 to 23.0, 35.0 to 36.0, 41.0 to 46.0, 50.0 to 53.0, and 59.0 to 66.0). Impacts include slow habitat re-establishment, noise, and breeding disruption.	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat. North Baja would complete construction of the B-Line after the breeding season. If construction is necessary during the breeding season, North Baja would preclear vegetation along the B-Line. Preconstruction clearing would be conducted in accordance with recommendations from the FWS, the BLM, and the CDFG. See also the mitigation measures listed in NBP45 and ARM6. Further, North Baja would minimize the potential for long-term impacts on the summer tanager by compensating for loss of microphyll woodland habitat through payment of an assessed financial contribution at a ratio approved by the FWS, the BLM, and the CDFG for those areas not already covered by desert tortoise habitat compensation.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary
NBP75	The B-Line would cross suitable habitat for the vermilion flycatcher, which occurs in the desert riparian areas of the lower Colorado River basin (MPs 0.0 to 12.0, 22.0 to 29.0, 31.0 to 33.0, 35.0 to 53.0, 59.0	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat. North Baja would complete construction of the B-Line after the breeding season. If construction is necessary during the breeding season, North Baja would preclear vegetation along the B-Line. Preconstruction clearing would be conducted in accordance with recommendations from the FWS, the BLM, and the CDFG. See also the	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP75 cont'd	to 66.0, and 79.0 to 79.8). Impacts include slow habitat re-establishment, noise, and breeding disruption.		mitigation measures listed in NBP45 and ARM6. Further, North Baja would minimize the potential for long-term impacts on the vermilion flycatcher by compensating for loss of microphyll woodland habitat through payment of an assessed financial contribution at a ratio approved by the FWS, the BLM, and the CDFG for those areas not already covered by desert tortoise habitat compensation. Additionally, North Baja would use the HDD method to cross the Colorado River, avoiding direct impacts on potential suitable habitat.		
NBP76	The B-Line would cross suitable habitat for the yellow-breasted chat, which occurs along the Colorado River in Blythe (MPs 0.0 to 3.0), the town of Palo Verde (MPs 22.0 to 23.0), and the Davis Lake area (MPs 31.0 to 33.0). Impacts include slow habitat re-establishment, noise, and breeding disruption.	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat. North Baja would complete construction of the B-Line after the breeding season. If construction is necessary during the breeding season, North Baja would preclear vegetation along the B-Line. Preconstruction clearing would be conducted in accordance with recommendations from the FWS, the BLM, and the CDFG. See also the mitigation measures listed in NBP45 and ARM6. Further, North Baja would minimize the potential for long-term impacts on the yellow-breasted chat by compensating for loss of microphyll woodland habitat through payment of an assessed financial contribution at a ratio approved by the FWS, the BLM, and the CDFG for those areas not already covered by desert tortoise habitat compensation.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP77	Construction could affect suitable habitat for the Colorado River toad, which occurs in the Colorado River from Fort Yuma to the Blythe-Ehrenberg area.	Significant (CEQA Class II)	North Baja could cross the Colorado River and associated riparian areas using the HDD method. In the event of a frac-out, North Baja would implement the measures in its HDD Plan to contain the drilling mud and avoid impacting potential habitat for the Colorado River toad. See also the mitigation measures listed in ARM4.	Less than significant (CEQA Class III)	FERC and CSLC
NBP78	The B-Line could affect the spadefoot toad, which is historically known to occur at the Milpitas Wash (MP 35.3), and in the Stallard Road wash area (MP 25.0). Impacts include mortality or breeding disruption.	Significant (CEQA Class II)	To minimize impacts on individuals and populations of the Couch's spadefoot toad, North Baja would implement the following mitigation measures: <ul style="list-style-type: none"> <li>• If local thunderstorms occur in the habitat identified by the CDFG and provide substantial moisture under warm conditions (temperatures over 90 °F) in July, August, or September, and if construction has not already been completed in that area, North Baja biologists would examine potential Couch's spadefoot toad habitat for persistent pools. The CDFG would notify North Baja if appropriate conditions prevail, and North Baja would coordinate with the CDFG to complete the surveys.</li> </ul> Authorized biologists would monitor temporary pools for persistence and would examine them daily for eggs, tadpoles, or toadlets.	Less than significant (CEQA Class III)	FERC, CSLC, BLM, and other agencies as necessary

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP78 cont'd			<ul style="list-style-type: none"> <li>• Construction activities would not be conducted within 150 feet of temporary pools. If water fails to persist within shallow pools for 10 days, or if no Couch's spadefoot toad eggs, tadpoles, or toadlets are found within 10 days, then construction would resume in the area.</li> <li>• If any Couch's spadefoot toads are found, the CDFG would be immediately notified. A report on the findings would be submitted to the CDFG within 30 days of completion of the construction activities within the area.</li> </ul>		
NBP79	<p>The B-Line would cross suitable habitat for the flat-tailed horned lizard, which occurs between MPs 71.0 to 79.8. Also, the IID Lateral would cross potentially suitable habitat between MPs 8.0 to 28.0. Impacts include mortality.</p>	Significant (CEQA Class I)	<p>Approval of the Project would be subject to a Statement of Overriding Considerations under the CEQA. North Baja would implement the following mitigation measures to reduce impacts on flat-tailed horned lizards:</p> <ul style="list-style-type: none"> <li>• Authorized biologists would conduct preconstruction surveys to verify all flat-tailed horned lizard habitat in the construction area. Within 7 days before construction, biologists would identify habitat areas subject to direct construction-related ground disturbance.</li> <li>• Biologists would conduct a final clearance survey 1 to 2 days before construction activities, which would include excavating potential burrows and relocating lizards to nearby suitable habitat. North Baja would implement the management strategy guidelines for relocation of flat-tailed horned lizards described in the <i>Flat-tailed Horned Lizard Range Management Strategy</i>.</li> <li>• A field contact representative would initiate a worker education program and would have the authority to ensure compliance with protective measures for flat-tailed horned lizards.</li> <li>• A biological monitor would be present in each area of active construction within flat-tailed horned lizard habitat throughout the work day from initial clearing through habitat restoration. The biological monitors would have sufficient education, field experience, and training with this species to understand its biology and behavior. The monitors would ensure that all activities are in compliance with the management strategy guidelines for relocation of flat-tailed horned lizards. The biological monitors would also have the authority and responsibility to halt activities that are in violation of the management strategy guidelines.</li> </ul>	Significant (CEQA Class I)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP79 cont'd			<ul style="list-style-type: none"> <li>• In areas of suitable habitat (MPs 75.2 to 79.6 of the B-Line and MPs 8.0 to 28.0 of the IID Lateral), North Baja would restrict the amount of trench open at any one time to 2 miles. Trench walkers would be employed in those areas such that each portion of open trench would be observed every 30 minutes when ground temperatures exceed 85°F (29.5 °C). Each trench walker can cover 2 miles per hour; therefore, the open portion of trench (2 miles) would require two trench walkers during hot weather to provide the desired coverage. Trench walkers would be construction workers with no other duties than to walk along the side of the open trench and look for flat-tailed horned lizards. These workers would receive specialized flat-tailed horned lizard training under the supervision of the BLM biologist and would be directly supervised by a qualified biologist who has also received flat-tailed horned lizard training. Additionally, all hazardous sites, such as open pipes, trenches, holes, or deep excavations would be inspected for the presence of lizards before backfilling.</li> <li>• If lizards are found trapped in an excavation, the authorized biologist would capture by hand and relocate the affected lizard. The management strategy guidelines for relocation of flat-tailed horned lizards described in the <i>Flat-tailed Horned Lizard Range Management Strategy</i> would be used.</li> </ul>		
NBP80	Construction of the B-Line could affect fairyduster plants, which have been identified between MPs 45.1 to 49.8, 53.6 to 57.4, and 65.1 to 66.6. Also, habitat for this species may occur along the IID Lateral. Construction may remove individual plants.	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat along the IID Lateral. North Baja would implement its general conservation measures, including topsoil and seedbank conservation. Post-construction surveys of the A-Line right-of-way have shown that restoration of the pipeline right-of-way allows native plants to re-establish in areas disturbed by construction.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP81	The IID Lateral would cross suitable habitat for the giant Spanish-needle, which is found in the southern Algodones Dunes within the ISDRA (MPs 0.5 to 7.9). Construction may remove individual plants.	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat. North Baja would implement its general conservation measures, including the efforts to minimize the spread of non-native species, to reduce the overall abundance of the species in the area.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP82	The IID Lateral would cross suitable habitat for the sand food, which is found in the southern Algodones Dunes within the ISDRA (MPs 0.5 to 7.9). Construction may remove individual plants.	Significant (CEQA Class II)	North Baja would assume that the species is present throughout the area of suitable habitat. North Baja would implement its general conservation measures, including the efforts to minimize the spread of non-native species, to reduce the overall abundance of the species in the area.	Less than significant (CEQA Class III)	FERC and CSLC

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
ARM10	The Project may affect potential inhabitation of suitable habitats found to be lacking individual special status species during surveys in 2005, and/or new species that are listed under State or Federal law in the future.	Significant (CEQA Class II)	For those areas where construction would occur more than 1 year from the date of issuance of the FERC and CSLC approvals for the Project, North Baja would consult with the FWS, the BLM, and the CDFG to update the species list and to verify that previous consultations and determinations of effect are still current. Documentation of these consultations, and the need for additional surveys and survey reports (if required), and FWS, BLM, and CDFG comments on the surveys and survey reports and their conclusions (as applicable), would be filed with the FERC and the CSLC.	Less than significant (CEQA Class III)	FERC and CSLC
ARM11	Potential adverse effects on Federal and State-listed endangered and threatened species and compliance with the Endangered Species Act and California Endangered Species Act.	Significant (CEQA Class II)	North Baja would not begin Phase I-A or Phase II construction activities until: <ul style="list-style-type: none"> <li>the CDFG makes a consistency determination on the FWS' BO pursuant to section 2080.1 of the California Fish and Game Code or issues an Incidental Take Permit that covers both federally and State-listed species that may be affected;</li> <li>North Baja obtains an Incidental Take Permit under section 2081 of the California Fish and Game Code for all State-listed species that may be affected, or receives concurrence from the CDFG that an Incidental Take Permit is not required; and</li> <li>North Baja has received written notification from Executive Officer of the CSLC that construction or use of conservation measures may begin.</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
<b>LAND USE, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND AESTHETIC RESOURCES</b>					
NBP83	Land use impacts associated with the new pipelines would include disturbance of existing land uses within the construction right-of-way during construction and retention of a new permanent right-of-way for operation.	Significant (CEQA Class II)	Following construction, all land used for temporary construction right-of-way and temporary extra workspace areas would be allowed to revert to prior uses. With the exception of tree crops such as orchards, all forms of agriculture would be permitted within the permanent right-of-way. Construction of aboveground structures would be prohibited on the permanent right-of-way; however, no restrictions would be placed on the temporary right-of-way or extra workspaces. No new permanent right-of-way would be required for the B-Line.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP84	Land used for the aboveground facilities would be permanently converted to a utility use.	Less than significant (CEQA Class III)	No mitigation is proposed. The permanent conversion of the affected land uses would represent less than a 1 percent change in each respective land use in the Project area.	Less than significant (CEQA Class III)	No monitoring required.

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP85	Eighteen residences and 2 businesses are within 100 feet of the B-Line and 19 residences and 4 businesses are within 100 feet of the IID Lateral. Residences or businesses could be affected by construction and operation of the Project.	Significant (CEQA Class II)	<p>North Baja would implement the following general measures to minimize construction-related hazards and maintain access to the residences and businesses that would be affected by the Project:</p> <ul style="list-style-type: none"> <li>• minimize the amount of trench left open at the end of the workday and cordon off the trench during non-work hours;</li> <li>• cover the trench with steel plates where necessary to allow traffic passage and reduce safety hazards;</li> <li>• install safety fencing for a minimum of 100 feet on either side of residences that are within 100 feet of the construction work area;</li> <li>• secure and patrol construction areas during non-work hours to minimize safety issues associated with open trenches;</li> <li>• maintain an emergency ingress and egress near all residences and businesses throughout the construction process;</li> <li>• maintain at least one lane of restricted traffic movement through the construction area for access to residences and for emergency vehicles;</li> <li>• minimize noise by maintaining equipment in good operating condition; and</li> <li>• suppress dust with the use of water trucks and regular spraying.</li> </ul> <p>In addition, North Baja has prepared and would follow Site-specific Residential Construction Mitigation Plans to minimize disruption and to maintain access to the residences and businesses within 100 feet of the construction work area associated with the B-Line and IID Lateral. Dimensioned site plans would show the following items within a minimum of 100 feet of the construction work area:</p> <ul style="list-style-type: none"> <li>• the proposed centerline of the pipeline;</li> <li>• the limits of the construction work area;</li> <li>• the edge of the paved road surface;</li> <li>• each residence/business and associated structures;</li> <li>• existing pipelines and powerlines;</li> </ul>	Less than significant (CEQA Class III)	FERC and CSLC

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP85 cont'd			<ul style="list-style-type: none"> <li>waterbodies, roads, driveways, fences, trees or other landscaping, and private wells; and</li> <li>the location of safety fencing that would be installed during construction.</li> </ul>		
NBP86	Construction activities could conflict with planned developments.	Less than significant (CEQA Class III)	No mitigation is proposed. North Baja would work with the developers and applicable agencies associated with these projects to ensure that the proposed Project does not conflict with the development plans.	Less than significant (CEQA Class III)	No monitoring required.
NBP87	Construction activities could require plan amendments for crossing portions of designated special management areas such as the California Desert Conservation Area (CDCA) and the Milpitas Wash SMA.	Significant (CEQA Class II)	North Baja has submitted an amended Right-of-Way Grant application to the BLM for the crossing of Federal lands. Approval of the application would require an amendment to the CDCA Plan and the Yuma District Resource Management Plan, which dictate management within the CDCA and the Milpitas Wash SMA, respectively. The plan amendments would avoid conflict with the CDCA Plan and the Yuma District Resource Management Plan. The amendments would only accommodate the North Baja Pipeline Expansion Project and would not create a new corridor or modify existing corridors.	Less than significant (CEQA Class III)	The BLM is responsible for issuing an amendment to the plans.
NBP88	Public interest areas directly affected by or located near the Project, including the Milpitas Wash SMA, ISDRA, Cibola NWR, Mule Mountain Area of Critical Environmental Concern (ACEC), Pilot Knob ACEC, Plank Road ACEC, East Mesa ACEC, Lake Cahuilla ACEC, Palo Verde Wilderness Area, and the Ehrenberg Sandbowl Off-Highway Vehicle area would be affected by temporary removal of vegetation and indirectly affected by traffic, noise, and dust during pipeline construction.	Significant (CEQA Class II)	<p>In general, North Baja would minimize construction-related impacts on these areas by:</p> <ul style="list-style-type: none"> <li>installing the B-Line entirely within the existing right-of-way maintained for the A-Line;</li> <li>installing the IID Lateral almost entirely within or adjacent to existing road and transmission line rights-of-way;</li> <li>timing construction to avoid peak usage periods, when practical; and</li> <li>ensuring effective post-construction reclamation of the right-of-way to preconstruction conditions.</li> </ul> <p>Construction-induced effects such as traffic, noise, and dust may affect the quality of some users' recreational experiences, but any effects would be temporary in nature and would occur in the summer months when recreational use is at its lowest.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP89	Construction could restrict use and access to designated OHV use areas. Conversely, the pipeline rights-of-way could increase accessibility for OHV use into previously inaccessible, environmentally sensitive areas.	Significant (CEQA Class II)	<ul style="list-style-type: none"> <li>Where the proposed pipelines would be in areas of authorized OHV use, the pipeline rights-of-way would not be restricted for OHV use. To reduce the potential for interference between pipeline construction activities and authorized OHV use, as well as unauthorized OHV use of the pipeline rights-of-way after construction, North Baja developed an Off-Highway Vehicle Management Plan (OHV Plan) that addresses the initial siting, construction, and</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP89 cont'd			<p>operation of the proposed facilities. Some of the measures of the plan include:</p> <ul style="list-style-type: none"> <li>• Berms would be placed across the right-of-way where it intersects an existing OHV road. Berm slopes would not exceed 30 percent.</li> <li>• Berms would be placed across the right-of-way as part of erosion control and strategically placed to reduce visibility and mimic local topography.</li> <li>• Rock redistribution and strategic placement, without making it into a challenging obstacle course, would occur across the right-of-way where large rock is available and such work would "erase" the visual cues of "road."</li> <li>• The right-of-way would be backbladed or raked by bulldozer or by hand, to erase the traces of the intersection of the right-of-way with an existing OHV route or dirt road.</li> <li>• Ocotillo and large cacti would be salvaged and replanted where they are available with the understanding that survival criteria would not be applied because even dead specimens provide convincing visual clues of "no road."</li> <li>• Other desert species, including creosote bush scrub and desert wash woodland species (e.g., palo verde, ironwood, smoke tree, etc.) would also be salvaged and replanted with the understanding that they would be unlikely to survive but could still provide value as a visual block.</li> <li>• Woody material removed during construction would be redistributed across the right-of-way to both disguise the right-of-way and serve as "vertical mulch."</li> </ul> <p>An assessment and detailed description of where these blocking measures would be implemented is presented in North Baja's OHV Plan.</p> <p>In addition, North Baja has agreed to place additional signs and/or vegetative barriers at access points along the right-of-way if requested by the Yuma District of the BLM. North Baja would also replace fencing on the Cibola NWR that was originally installed after construction of the A-Line but subsequently destroyed by OHV users and would maintain that fencing for 2 years.</p>		
ARM12	North Baja's OHV Plan did not address enforcement and future monitoring of the proposed OHV blocking measures.	Significant (CEQA Class II)	<p>Before Phase I-A and Phase II construction activities, North Baja would revise its OHV Plan to include:</p> <ul style="list-style-type: none"> <li>• the agency or agencies responsible for enforcement of the OHV Plan;</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
ARM12 cont'd			<ul style="list-style-type: none"> <li>the frequency of monitoring that would be conducted to ensure that the implemented OHV blocking measures are functioning properly;</li> <li>the methodology for reassessing the implemented OHV blocking measures in the future; and</li> <li>enforcement measures.</li> </ul>		
NBP90	Construction activities could disrupt recreational uses at the Colorado River.	Less than significant (CEQA Class III)	The Colorado River would be crossed using the HDD method, which would minimize impacts on the river and would not limit the use of the river for recreational purposes. However, access to the river may be restricted during welding of the pipe and the pullback for the HDD crossing. No mitigation is proposed during construction because the period of limited public access would be short term.	Less than significant (CEQA Class III)	No monitoring required.
NBP91	Use of the Bradshaw Trail could be disrupted for several days during construction.	Less than significant (CEQA Class III)	No mitigation is proposed during construction. Construction would occur in the summer months when recreational use of the trail is at its lowest and be completed within a few days.	Less than significant (CEQA Class III)	No monitoring required.
NBP92	Construction-related activities could impact wildlife in the multi-species WHMA that would be crossed by the B-Line between MPs 35.2 and 50.0.	Significant (CEQA Class II)	North Baja would limit construction activities to between July 1 and December 1 if Crissal thrashers are present, implement special mitigation measures to avoid disturbance of Couch's spadefoot toad habitat (see NBP78), and compensate for disturbance of desert dry wash woodland and desert chenopod scrub communities.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP93	Construction activities could encounter unidentified hazardous waste sites.	Significant (CEQA Class II)	North Baja would notify the appropriate agencies and adhere to the measures included in its SPCC Plan to avoid or minimize the potential impact of hazardous material spills during construction. North Baja would implement the mitigation measures listed in NBP22.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP94	Installation of new aboveground facilities would impact visual resources.	Significant (CEQA Class II)	North Baja would paint the new or additional facilities to blend with the surrounding landscape. Security lighting at the aboveground facilities would be low sodium vapor light that would be angled toward the interior of the station.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
<b>SOCIOECONOMICS</b>					
NBP95	Construction of the Project could temporarily increase the population in the area by about 300 to 400 people.	Less than significant (CEQA Class III)	No mitigation is proposed during construction. This negligible short-term increase in population would not significantly affect housing availability or increase the demand for public services in excess of existing and projected capabilities.	Less than significant (CEQA Class III)	No monitoring required.
NBP96	Construction-related demands on local agencies could include increased enforcement activities associated with issuing permits for vehicle load and width limits, local police assistance during construction at road crossings to facilitate traffic flow, and emergency medical services to treat injuries resulting from construction activities.	Significant (CEQA Class II)	Local communities have adequate infrastructure and community services to meet the needs of the out-of-area workers that would be required for the Project. North Baja would develop an Emergency Response Plan to establish and maintain communications with local fire, police, and public officials and would make personnel, equipment, tools, and materials available at the scene of an emergency.	Less than significant (CEQA Class III)	North Baja certified compliance with this mitigation measure in its application to the FERC.
NBP97	Construction and operation of the pipeline could generate local tax revenue.	Beneficial impact (CEQA Class IV)	No mitigation is proposed.	Beneficial impact (CEQA Class IV)	No monitoring required.
<b>TRANSPORTATION AND TRAFFIC</b>					
NBP98	Construction across roads and highways would result in short-term impacts on public transportation while construction activities pass through the Project area.	Significant (CEQA Class II)	Construction across paved and unpaved roads, highways, and railroads would be in accordance with requirements of applicable permits and approvals. These features would either be bored or open cut. The use of the bore crossing method would avoid disrupting traffic. No work would occur within the road or railroad rights-of-way unless expressly permitted by the applicable agency. At open-cut road crossings, North Baja would not close any roads unless adequate detours are provided. If a detour is required, traffic would be rerouted to another nearby road. If no reasonable detour is feasible, North Baja would leave at least one lane of traffic open. Where Project construction crosses roads necessary for access to private residences and no alternative entrance exists, North Baja would implement measures (e.g., plating over the open portion of the trench) to maintain passage for landowners and emergency vehicles. Most open-cut crossings would be completed and the road resurfaced in 1 or 2 days.	Less than significant (CEQA Class III)	FERC and CSLC
NBP99	Construction of the Project would result in temporary increases in traffic levels due to the commuting of the construction workforce to the Project area as well as the	Less than significant (CEQA Class III)	No mitigation during construction is proposed. The roadways in the Project area have a level of service of A (roadway has little or no delay or congestion) or B (roadway has slight congestion or delay). Because pipeline construction work is generally scheduled to take advantage of all daylight hours, workers would commute to and from the contractor yards and	Less than significant (CEQA Class III)	No monitoring required.

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP99 cont'd	movement of construction vehicles and delivery of equipment and materials to the construction work area.		construction right-of-way during off-peak traffic hours. Construction workers would typically meet at the contractor yards and share rides to the construction right-of-way, thereby reducing overall traffic. In addition, work would be spread along the length of the construction spread, which would reduce the impact on traffic at any one location. Overall, the number and frequency of construction vehicle trips would be low on any particular roadway at any one time because construction would move sequentially along the Project right-of-way.		
NBP100	Construction in the paved segment of 18 <sup>th</sup> Avenue could inconvenience residents and business owners.	Significant (CEQA Class II)	<p>North Baja would implement its Traffic Management Plan for 18<sup>th</sup> Avenue, which identifies the following mitigation measures to minimize traffic-related impacts:</p> <ul style="list-style-type: none"> <li>• the pipeline would be installed with a minimum of 36 inches of cover and 12 inches of separation from other utilities or obstructions. A minimum of 2 feet would be maintained under canals and 5 feet over drains;</li> <li>• intersections would be bored or trenched (trenched intersections would be steel plated if construction does not occur on consecutive days);</li> <li>• North Baja would contact each owner and/or tenant of the properties abutting the road to explain the construction process and identify any special conditions or concerns that need to be incorporated into the construction plans. In addition, these adjacent residents and businesses would be notified by hand-delivered flyers 2 weeks before construction. The flyers would include the dates of construction, work hours, traffic detours, and contact numbers for North Baja and the contractor. Emergency response agencies would also be notified of the work schedule;</li> <li>• the Underground Service Alert would be notified at least 48 hours before beginning work;</li> <li>• flag persons would be provided to route traffic around construction equipment and obstructions;</li> <li>• work would be scheduled during daylight hours unless alternative schedules are authorized;</li> <li>• access would be maintained to all residences or businesses except during actual trenching operations. Steel plates would be available to maintain access to driveways during periods when the trench is open;</li> </ul>	Less than significant (CEQA Class III)	FERC and CSLC

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP100 cont'd			<ul style="list-style-type: none"> <li>• non-local traffic would be detoured around construction activities;</li> <li>• one lane of restricted traffic movement would be maintained through the construction area. This would allow residences, businesses, and emergency vehicles reasonable access during the construction activities;</li> <li>• during non-work times, the work area would be secured and patrolled to minimize safety hazards associated with open trenches, heavy equipment, and other construction operations; and</li> <li>• open trenches would be covered or cordoned off during non-working hours.</li> </ul> <p>The non-local traffic that would be detoured around construction activities would be directed to a road parallel and typically only 1 block north or south of 18<sup>th</sup> Avenue.</p>		
NBP101 ARM13	Traffic along Arrowhead Boulevard could be affected during construction of the Arrowhead Extension.	Significant (CEQA Class II)	North Baja would use the same construction methods between MPs 0.0 and 1.0 of the Arrowhead Alternative as those described for portions of the proposed B-Line within 18th Avenue (see NBP100). North Baja would also prepare a Traffic Management Plan for Arrowhead Boulevard in consultation with the County of Riverside Transportation Department detailing the specific measures that would be used to control traffic during construction of the Arrowhead Extension.	Less than significant (CEQA Class III)	FERC and CSLC
NBP102	Construction would affect several Imperial County roadways (e.g., Evan Hewes Highway, Hunt Road, and East Ross Road).	Significant (CEQA Class II)	North Baja would implement its Traffic Management Plan for Imperial County Roads. The plan identifies the same mitigation measures as for 18 <sup>th</sup> Avenue (see NBP100). In addition, North Baja would install the pipeline in sections and have a specialized crew designated for construction to minimize road closures or periods of restricted access along Imperial County roadways. North Baja would close off 0.5- to 1.0-mile-long sections of road and reroute traffic around the area through the use of signs and detours (while maintaining access for residents and emergency vehicles). No more than 2 miles of work area would be active at any one time and construction would advance along the roadway at an estimated 0.5 mile per day. In general, construction impacts at any given location would last no more than 2 to 3 weeks.	Less than significant (CEQA Class III)	FERC and CSLC

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
<b>CULTURAL RESOURCES</b>					
NBP103 ARM14	Potential adverse effects on historic properties and compliance with the National Historic Preservation Act.	Significant (CEQA Class II)	<p>North Baja would complete cultural resources surveys for all areas of the proposed Project. To ensure that the FERC's responsibilities under the National Historic Preservation Act and its implementing regulations and the CSLC's responsibilities under the CEQA are met, North Baja would defer implementation of any treatment plans/mitigation measures (including archaeological data recovery), construction of facilities, and use of all staging, storage, or temporary work areas and new or to-be-improved access roads on each respective Project phase until North Baja files with the FERC and the CSLC, as applicable, the materials listed in bullets 1 through 6, and the steps listed in bullets 7 through 9 below have been completed:</p> <ul style="list-style-type: none"> <li>• any FWS, Cibola NWR comments on the Overview and Survey Report;</li> <li>• any BOR comments on the Evaluation Plan;</li> <li>• any comments from the BOR and Native American tribes on the draft Evaluation Report;</li> <li>• the revised Evaluation Report;</li> <li>• the California State Historic Preservation Office's (SHPO) comments on Addendum Reports 2 and 3, the revised Evaluation Report, and the revised Historic Properties Treatment Plan;</li> <li>• all additional cultural resources survey reports for denied access areas and any additional areas requiring survey, evaluation reports, and any necessary treatment plans as well as documentation that these reports and plans were submitted to the SHPO(s); the BLM; the BOR; the FWS, Cibola NWR; and Native American tribes, as applicable;</li> <li>• any comments of the SHPO(s); the BLM; the BOR; the FWS, Cibola NWR; and Native American tribes, as applicable, on all additional cultural resources survey reports and plans;</li> <li>• the CSLC reviews and approves all cultural resources reports and plans prepared for the California portion of the Project and notifies North Baja in writing that construction may proceed;</li> <li>• the Advisory Council on Historic Preservation is afforded an opportunity to comment, if historic properties would be adversely affected; and</li> <li>• the Director of the Office of Energy Projects reviews and approves all applicable cultural resources reports and plans and notifies North Baja in writing that treatment plans/mitigation measures may be implemented or construction may proceed.</li> </ul>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Expansion Project

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
<b>AIR QUALITY</b>					
NBP104	The construction activities that would generate emissions include land clearing, ground excavation, and cut and fill operations. The intermittent and short-term emissions generated by these activities would include dust from soil disruption and combustion emissions from the construction equipment. These emissions could result in minor, temporary impacts on air quality in the vicinity of pipeline installation.	Significant (CEQA Class II)	<p>Construction equipment would be operated on an as-needed basis during daylight hours only and the emissions from gasoline and diesel engines would be minimized because the engines must be built to meet the standards for mobile sources established by the U.S. Environmental Protection Agency mobile source emission regulations including those in Title 40 CFR Part 85. Most of the construction equipment would be powered by diesel engines and would be equipped with typical control equipment (e.g., catalytic converters), and Project-related vehicles and construction equipment would be required to use the new low sulfur diesel fuel as soon as it is commercially available. In addition, North Baja would implement the following measures to minimize impacts on air resources.</p> <ul style="list-style-type: none"> <li>• minimize idling time for diesel equipment whenever possible;</li> <li>• ensure that diesel-powered construction equipment is properly tuned and maintained, and shut off when not in direct use;</li> <li>• prohibit engine tampering to increase horsepower;</li> <li>• use California Air Resources Board-certified low sulfur diesel fuel (less than 15 parts per million); and</li> <li>• reduce construction-related trips as feasible for workers and equipment, including trucks.</li> </ul> <p>See also the mitigation measures listed in NBP9, ARM2, and ARM3.</p>	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP105	Construction of the Project would generate emissions of non-regulated greenhouse gas (GHG). Carbon dioxide would be formed as a primary product of combustion of the diesel and gas engines used to power construction equipment and vehicles.	Less than significant (CEQA III)	None of the proposed facilities would result in increased air emissions of criteria pollutants during operation; however, emissions of GHG could occur. Direct releases of methane could occur as a result of pipeline repair or maintenance operations. These releases would be infrequent over the lifetime of the Project and would likely involve only an isolated section of pipeline resulting in a negligible increase in GHG emissions.	Less than significant (CEQA III)	No monitoring required.

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
<b>NOISE</b>					
NBP106	Individuals in the immediate vicinity of the construction activities could experience an increase in noise.	Significant (CEQA Class II)	Noise associated with construction activities would be both temporary and intermittent. Pipeline construction would proceed at rates averaging about 1 mile per day, and equipment would be operated on an as-needed basis during day light. Nighttime construction noise would be limited to HDDs at the Colorado River, All-American Canal, and the East Highline Canal crossings; hydrostatic testing activities; and bores under major highways or railroads. The duration of activities would be generally less than several days at road or railroad crossings, 24 hours for hydrostatic testing, and up to 2 weeks at the HDD crossings. A majority of the activities would occur away from population centers. North Baja would comply with the noise elements included in the Riverside County and Imperial County General Plans.	Less than significant (CEQA Class III)	FERC, CSLC, and BLM
NBP107	Blowdown events at Blythe, Ogilby, and El Centro Meter Stations, and the Ehrenberg Compressor Station valves could result in a significant noise impact.	Significant (CEQA Class II)	Blowdowns would occur only on rare occasions. In residential areas, North Baja would install silencers to reduce noise levels. In the event of a blowdown, nearby residences would be notified in advance if possible and North Baja would provide traffic control along public roadways near the blowdown location as needed.	Less than significant (CEQA Class III)	North Baja certified compliance with this mitigation measure in its application to the FERC.
<b>RELIABILITY AND SAFETY</b>					
NBP108	The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas.	Significant (CEQA Class II)	The pipeline and aboveground facilities associated with the North Baja Pipeline Expansion Project would be designed, constructed, operated, and maintained to meet or exceed the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192 and other applicable Federal and State regulations including the California Public Utilities Commission, General Order 112-e. These regulations, which are intended to protect the public and to prevent natural gas facility accidents and failures, include specifications for material selection and qualification; odorization of gas; minimum design requirements; and protection of the pipeline from internal, external, and atmospheric corrosion. To address seismic hazards, the facilities would be designed to meet or exceed the latest edition of the Uniform Building Code or International Building Code and to incorporate current seismological engineering standards, including the <i>Guidelines for the Design of Buried Steel Pipe</i> (American Lifelines Alliance 2001) and <i>Guidelines for the Seismic Design and Assessment of Natural Gas and Liquid Hydrocarbon Pipelines</i> (Pipeline Research Council International, Inc. 2004). The engineering design drawings for the entire Project in California would be certified by a California-registered	Less than significant (CEQA Class III)	North Baja certified compliance with these construction and safety standards in its application to the FERC.  The western region of the Office of Pipeline Safety and the Arizona Corporation Commission would verify the standards are met.

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP108 cont'd			<p>civil/structural engineer, and would comply with the latest edition of the California Building Code.</p> <p>North Baja would prepare and implement an Operation and Maintenance Plan in accordance with the requirements in Title 49 CFR Part 192. Within the first 6 months of placing the pipeline into operation, North Baja would conduct an internal inspection of the pipeline. Following the initial test, internal inspections with a high resolution instrument would be conducted on a periodic basis, at a minimum of one inspection every 10 years, or sooner if the evidence suggests that significant corrosion or defects exist or if any new Federal or State regulations require more frequent or comparable inspections. The existing pipeline system is monitored and controlled 24 hours a day for pressure drops in the pipeline that could indicate a leak or other operating problem through a Supervisory Control and Data Acquisition system, which is a computer system for gathering and analyzing real-time systems. The system is programmed to take appropriate immediate action when alarm conditions are present. In addition, a crew that conducts on-site operations and maintenance is located at the Ehrenberg Compressor Station, and is on call 24 hours a day. When completed, the B-Line, Arrowhead Extension, and IID Lateral would be operated in conjunction with the existing system and subject to the same operation and maintenance procedures.</p> <p>North Baja would x-ray all girth welds over 6 inches in diameter where possible to ensure pipeline structural integrity and compliance with the applicable DOT regulations. Where x-ray inspection is impossible or impractical, other means of non-destructive inspection would be conducted. Those welds that do not meet established specifications would be repaired or replaced. Once the welds are approved, the welded joints would be coated with a protective coating and the entire pipeline would be visually inspected for any faults, scratches, or other coating defects. Any damage would be repaired before the pipeline is installed.</p> <p>After construction, North Baja would clearly mark the pipeline at line-of-sight intervals, roads, railroads, and other key points to alert the public to the presence of the pipeline. The markers would provide contact information for North Baja in the event of</p>		

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

Mitigation Number <sup>a</sup>	Impact <sup>b</sup>	Significance Before Mitigation <sup>b, c</sup>	Mitigation Measure <sup>b, d</sup>	Significance After Mitigation <sup>b, c</sup>	Monitoring Responsibility
NBP108 cont'd			<p>an emergency. In accordance with the DOT regulations in effect since 1982, North Baja would participate in all communication and notification "One-Call" services to prevent outside damage to the pipeline. These services provide preconstruction information to contractors or other maintenance workers on the underground location of pipes, cables, and culverts.</p> <p>While the primary focus of these standards is prevention of accidents, North Baja would prepare an Emergency Response Plan that would be coordinated and tested (through drills and exercises) with local fire/police departments and emergency management agencies.</p>		
ARM15	The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas.	Significant (CEQA Class II)	To ensure that North Baja's operation and maintenance commitments are documented in a comprehensive plan and to assist the CSLC in reviewing the Project for consistency with the CSLC's action on the amended lease across California's Sovereign and School Lands, North Baja would submit to the CSLC for approval an Operation and Maintenance Plan before placing the pipeline system into service in California. This plan would address internal and external maintenance inspections of the completed facility, including but not limited to details of integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection system, and leak monitoring. The Operation and Maintenance Plan would also specify that North Baja would, unless expressly prohibited by DOT regulations, conduct an internal inspection with a high-resolution instrument on a periodic basis, at a minimum of one inspection every 10 years, or sooner if the evidence suggests that significant corrosion or defects exist or if any new Federal or State regulations require more frequent or comparable inspections. Within 3 months following any new Federal or State regulations, North Baja would update the Operation and Maintenance Plan and submit a revised copy to the CSLC. In addition, the Operation and Maintenance Plan would include procedures for implementing operational mitigation measures recommended (if any) by the site-specific seismic hazard evaluation reports for the Project.	Less than significant (CEQA Class III)	CSLC
NBP109	The Project may affect high consequence areas (HCAs), which include two potential locations along the B-Line (MPs 27.0 and 75.0), and two potential locations along the IID Lateral (MPs 0.0 to 7.0 and MP 9.0).	Significant (CEQA Class II)	Per the Pipeline Safety Improvement Act of 2002, North Baja would develop an integrity management program that applies to all HCAs to minimize the potential for an accident. In locations designated as HCAs, the pipeline would be inspected every 7 years.	Less than significant (CEQA Class III)	North Baja certified compliance with these construction and safety standards in its application to the FERC.

TABLE 5.1-1 (cont'd)

**Mitigation Monitoring Program for the North Baja Pipeline Expansion Project**

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<b>ENVIRONMENTAL JUSTICE</b>					
NBP110	The Project could result in a disproportionately high and adverse effect or impact on a minority or low-income portion of the population.	Less than significant (CEQA Class III)	<p>No mitigation is proposed. U.S. Bureau of Census data show that minority and low-income populations are present along the proposed pipeline routes, and there is a potential for disproportionate adverse impacts on these populations. However, North Baja would mitigate these impacts through its Project-specific plans and obtaining Federal, State, and local permits, and applying them to all areas along the proposed pipeline routes regardless of the presence or absence of minority or low-income populations.</p> <p>In addition, per a recent Final Federal Rule, North Baja would include in its public awareness plans, measures to prepare and distribute a comprehensive program that includes activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations. The program would be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area. North Baja conducted open houses and public scoping meetings in the Project area in July and September of 2005 to inform the public about the Project and provide an opportunity for the public to ask questions and express concerns. These public input opportunities were announced in the local newspapers in English and Spanish, and Spanish translators were present.</p>	Less than significant (CEQA Class III)	North Baja certified compliance with this mitigation measure in its application to the FERC.

<sup>a</sup> NBP = Mitigation proposed by North Baja Pipeline, LLC.  
ARM = Mitigation recommended by the Agency Staffs.

<sup>b</sup> The No Project Alternative would eliminate the impacts of the proposed Project; therefore, no mitigation measures would be required and there would be no significance classifications.

<sup>c</sup> California Environmental Quality Act (CEQA) Significance Classifications:  
 Class I = A significant adverse impact that remains significant after mitigation.  
 Class II = A significant adverse impact that can be eliminated or reduced below an issue's significance criteria.  
 Class III = An adverse impact that does not meet or exceed an issue's significance criteria.  
 Class IV = A beneficial impact.

<sup>d</sup> Any mitigation measures included in the CDFG's BO that are more stringent than the mitigation measures proposed by North Baja and recommended by the Agency Staffs would supersede the measures listed in this table.