MINUTE ITEM
This Calendar Item No. 48 was approved as Minute Item No. 48 by the California State Lands Commission by a vote of 3 to 0 at its 1-30-02 meeting.

CALENDAR ITEM
48

A 80

S 37

PRC 8378

01/30/02
W 25717
B. Dugal
K. Walker

THE CERTIFICATION OF AN ENVIRONMENTAL IMPACT REPORT, AND THE ISSUANCE OF A GENERAL LEASE - RIGHT OF WAY USE

APPLICANT:
North Baja Pipeline, LLC
1400 SW 5th Avenue
Portland, Oregon 97201

AREA, LAND TYPE, AND LOCATION:
A parcel of State school land in Section 16, T12S, R20E, SBM, near State Highway 78, Imperial County.

AUTHORIZED USE:
Construction, use and maintenance of a 30-inch diameter steel pipeline that will be used to transport natural gas and the temporary use of a construction work area.

LEASE TERM:
20 years, beginning February 1, 2002.

CONSIDERATION:
$655 per year; with the State reserving the right to fix a different rent periodically during the lease term, as provided in the lease, and $500 for the area that will be used temporarily during the construction phase.

SPECIFIC LEASE PROVISIONS:
Insurance:
Combined single limit coverage of no less than $10,000,000.
Bond:
$10,000.

OTHER PERTINENT INFORMATION:

1. Applicant has or will have the right to use the lands adjoining the lease premises.

2. The Applicant for the proposed project is North Baja Pipeline Company, LLC, a limited liability company that was organized under the laws of the State of Delaware. The Applicant is one of many subsidiaries of PG&E Corporation, which also owns the bankrupt California utility Pacific Gas and Electric Company. The Applicant is not impacted by the bankruptcy of Pacific Gas and Electric Company.

3. The Applicant proposes to construct and operate a new natural gas pipeline system that will consist of the following: approximately 79.8 miles of steel pipe (11.5 miles of 36-inch-diameter pipe and 68.3 miles of 30-inch-diameter pipe), one new natural gas compressor station, two gas meter stations, and other related facilities. The pipeline system will transport up to 500 MMcfd of natural gas from an interconnect with an existing El Paso Natural Gas Company pipeline in Ehrenberg, Arizona and proceed through Riverside and Imperial counties, California, to an interconnection at the border between the United States and Mexico with a new pipeline, Gasoducto Bajanorte, currently under construction by Sempra Energy Mexico (Sempra is the San Diego-based parent company of San Diego Gas & Electric and Southern California Gas.).

   The natural gas would then be transported westward on the Gasoducto Bajanorte pipeline to an interconnection with the existing Transportadora de Gas Natural de Baja California (TGN) pipeline in Baja California, Mexico. The TGN pipeline extends from Rosarito, Mexico to an interconnection with San Diego Gas and Electric Company (SDG&E) facilities at the San Diego/Tijuana border.

   The purpose of the Project is to supply natural gas to four power plants in Mexico, one existing (Presidente Juarez) and three under construction (La Rosita, EBC and TDM), and a new SDG&E power plant at Otey Mesa, South San Diego County. Three of the five units within the new Mexican power plants will supply electricity to California.

4. Based on the review of the pipeline route information supplied by the Applicant, the proposed project will cross one parcel of State school land located in Section 16, T12S R20E, in Imperial County. Subsequently, on

November 14, 2000, the Applicant submitted an application to the California State Lands Commission (Commission) for the proposed project.

5. The staffs of the Federal Energy Regulatory Commission (FERC) and the Commission, federal and state lead agencies for the proposed project, have jointly caused to be prepared, a Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR). The FEIS/EIR was prepared pursuant to the provisions of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

6. The pipeline will be constructed, and tested, to meet or exceed, in the case of the 18th Avenue portion of the Project in Blythe, U.S. Department of Transportation (DOT) construction and safety standards outlined in Title 49 Code of Federal Regulations (CFR) Part 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*. 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. While the primary focus of the federal standards is prevention of accidents, the Applicant has prepared an emergency response plan that would be coordinated and tested, through drills and exercises, with local fire/police departments and emergency management agencies.

7. Once constructed, the pipeline system will be operated and maintained in accordance with all applicable Federal and state regulations. The Applicant will also monitor and control the pipeline system 24 hours per day by a remote dispatch center located in Portland, Oregon. Four locally based, full-time staff would be assigned to operate and maintain the pipeline system. The Applicant will also retain a locally based contractor to assist in routine maintenance services and respond to emergency situations.

8. The Applicant is not currently engaged in any natural gas transportation operations, but upon commencement of operations proposed for this pipeline project, it would become a natural gas company under the Natural Gas Act and would be subject to the jurisdiction of the FERC. The Applicant is not regulated by the California Public Utilities Commission.

9. The proposed pipeline will cross under an existing 161 kV transmission line. The U.S. Bureau of Reclamation (Bureau) is the Commission's Lessee under a General Permit – Public Agency Use, Permit No. PRC 551.9. The Applicant has entered into an agreement with the Bureau, or its designee, providing for the Applicant's proposed pipeline project. Pursuant to the proposed lease conditions, the Applicant will be required to maintain the written consent from the Bureau, or its designee, throughout the lease term. It is not anticipated that the construction or operation of the pipeline project will conflict with the Bureau's, or its designee's, operations.

ENVIRONMENTAL PROCESS

On December 12, 2000, the FERC and the Commission issued a joint Notice of Intent/Notice of Preparation (NOI/NOP) for the Proposed Project. The NOI/NOP was sent to 747 interested parties, including Federal, state, and local agencies; elected officials; environmental and public interest groups; Native American tribes; affected landowners; local libraries, newspapers, and television stations; other interested parties; and the intervenors in this proceeding before the FERC. Two public scoping meetings were held to provide an opportunity for the general public to learn about the proposed project and to participate in the environmental analysis by providing verbal comments on the issues to be included in the draft EIS/EIR. The first meeting was held in El Centro, California on January 10, 2001; the second meeting was in Blythe, California on January 11, 2001. Public meetings were also held in August 2001 in these two cities in order to receive comments on the Draft EIS/EIR which was released in July 2001 and circulated for public review and comment for 90 days until the close of the comment period on October 25, 2001. Issues raised during the scoping and public comment period on the draft EIS/EIR included project need, alternatives, permits and regulations, pipeline reliability and operational safety, and air quality, etc. These and other concerns were addressed in the FEIS/EIR that was released January 2002.

ENVIRONMENTAL ISSUES

1. **Air Quality**

The County of Imperial and the State Air Resources Board (ARB) position may be characterized by a statement from ARB's comments, "We believe that the air pollution emissions and regional air quality impacts of the power facilities associated with the Pipeline Project have not been fully addressed in the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR)."

While ARB acknowledges that the new plants in Mexico propose some emission controls and mitigation measures, it maintains that, "...both direct and indirect environmental impacts associated with the Pipeline Project should be fully addressed, and that technologies that preserve and protect the region's air quality *(including offsets)* should be used."*(elaboration added)*

This issue and its potential health (respiratory illnesses, e.g., asthma and immune system impairment) and environmental (acid rain and degradation of vegetation) impacts are discussed more extensively in the FEIS/EIR at pages 5-112 through 5-117. In sum: 1) indirectly, the Project could result in a cumulative impact on the region's air quality (Imperial County is non-attainment for PM_{10} and O_3) by providing natural gas to new, modified or expanded power plants in the Project area; 2) despite similar ambient air quality standards between the federal and Mexican governments, the existing air quality in southern California is such that additional control and mitigation requirements would apply to these power plants if they were built in Southern California; and 3) the Mexican power plants and associated transmission lines are subject to the sovereign jurisdiction of another nation and there is no jurisdictional basis for the FERC, or the Commission, to approve, mitigate or reject such facilities.

2. **Public Health and Safety**

The only residences and businesses identified adjacent to the proposed pipeline route are along 18th Avenue near the city of Blythe, Riverside County. This portion of the County is a rural residential area with scattered houses, farm buildings and businesses. Spread out along the nine miles of 18th Avenue are a total of 25 residences and businesses. Staff has received a "poster" signed by 23 residents of 18th Avenue in opposition to the pipeline route. The Project proposes a thicker pipeline wall in this area than is required by DOT (determined by the population

density in proximity to a pipeline) and, at the request of staff, three automatic shut off valves will be installed on either side of the populated areas along 18th Avenue. These valves would isolate the pipeline in the event of a significant loss in pressure and would enable the pipeline to control the gas much quicker than the DOT code requires if an incident were to occur.

3. **Native American**
Twenty-seven (27) Native American groups were contacted during the preparation of the FEIS/EIR. These include representatives of the Quechan, Kumeyaay, Colorado River, Chemehuevi, Yavapai, Cahuilla, Hualapai, and Hopi Tribes. The FEIS/EIR also addresses concerns raised by Alfredo A. Figueroa, Elder Historian of the Colorado River, representing the group Cradle of Aztlan and Malinalli, Coordinator for the Indigenous Coalition to Protect Our Sacred Sites. In addition, the California Native American Heritage Commission attended each scoping meeting prior to the preparation of the DEIS/EIR and did not submit comments on the document.

The document concludes that the proposed pipeline route would not impact the sites identified by Native Americans.

ENVIRONMENTAL FINDINGS

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15025), the staff has prepared an EIR identified as CSLC EIR No. 703, State Clearinghouse No. SCH 2001011020. Such EIR was prepared and circulated for public review pursuant to the provisions of the CEQA. A Mitigation Monitoring Program has been prepared in conformance with the provisions of the CEQA (Public Resources Code section 21081.6).

2. Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15091) are contained in Exhibit C, attached hereto.

SIGNIFICANT LANDS:

This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370, et seq. Based upon the staff's consultation with the persons nominating

such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

Federal Energy Regulatory Commission

APPROVALS REQUIRED:

Federal Agencies

International Boundary and Water Commission
Department of the Army Corps of Engineers
Department of the Interior, Bureau of Land Management
Fish and Wildlife Service
Department of Transportation
Department of Treasury, Bureau of Alcohol, Tobacco and Firearms
Environmental Protection Agency

State of California Agencies

Department of Fish and Game
Department of Transportation
Regional Water Quality Control Board
Mojave Desert Air Quality Management District

Local Agencies

Imperial County – Public Works and Sheriff's Department
Riverside County – Board of Supervisors and Transportation Department
Palo Verde Irrigation District

EXHIBITS:

A. Site Map
B. Legal Description
C. CEQA Findings
D. Mitigation Monitoring Program

PERMIT STREAMLINING ACT DEADLINE:

June 30, 2002

RECOMMENDED ACTION:
IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

CERTIFY THAT AN EIR NO. 703, STATE CLEARINGHOUSE NO. 2001011020, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA, THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN AND THAT THE EIR REFLECTS THE COMMISSION'S INDEPENDENT JUDGMENT AND ANALYSIS.

ADOPT THE FINDINGS, MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15091, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO.

SIGNIFICANT LANDS INVENTORY FINDING:

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

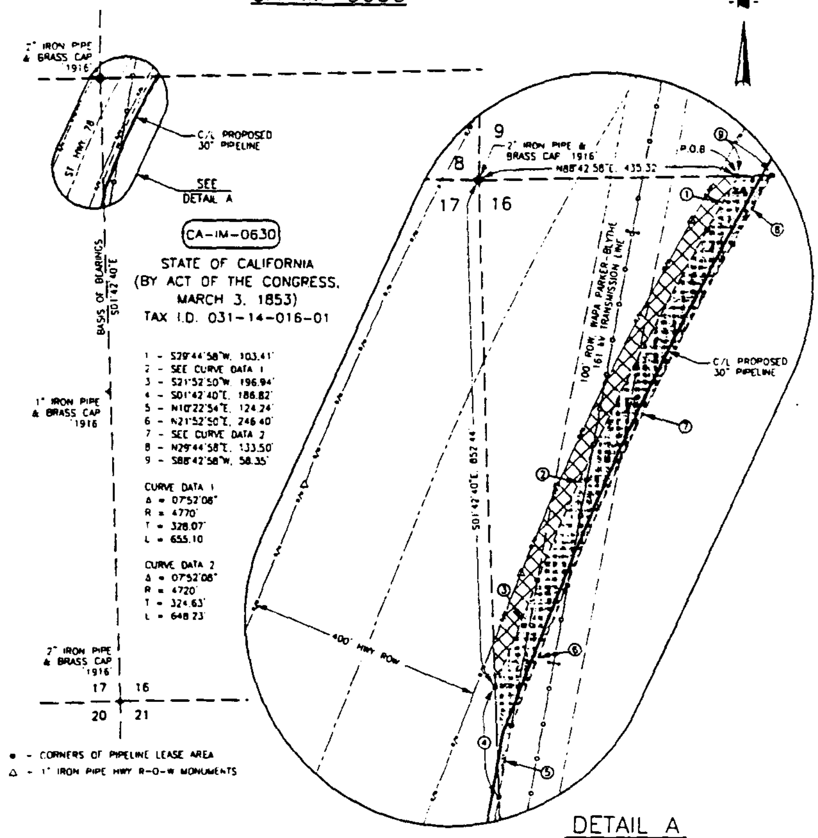
AUTHORIZATION:

AUTHORIZE ISSUANCE TO NORTH BAJA PIPELINE, LLC, OF A GENERAL LEASE - RIGHT OF WAY USE, BEGINNING FEBRUARY 1, 2002, FOR A TERM OF 20 YEARS, FOR THE CONSTRUCTION, USE, AND MAINTENANCE OF A 30-INCH DIAMETER STEEL PIPELINE THAT WILL BE USED TO TRANSPORT NATURAL GAS AND THE TEMPORARY USE OF A CONSTRUCTION WORK AREA ON THE LANDS SHOWN ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; ANNUAL RENT IN THE AMOUNT OF $655, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM, AS PROVIDED IN THE LEASE; AND $500 FOR THE AREA THAT WILL BE USED TEMPORARILY DURING THE CONSTRUCTION PHASE OF THE PROJECT; LIABILITY INSURANCE FOR COMBINED SINGLE LIMIT COVERAGE OF NO LESS THAN $10,000,000, SURETY IN THE AMOUNT OF $10,000.

NO SCALE

SITE MAP

IMPERIAL COUNTY, CALIFORNIA
SECTION 16, T-12-S, R-20-E
SAN BERNARDINO BASE AND MERIDIAN
CA-IM-0630



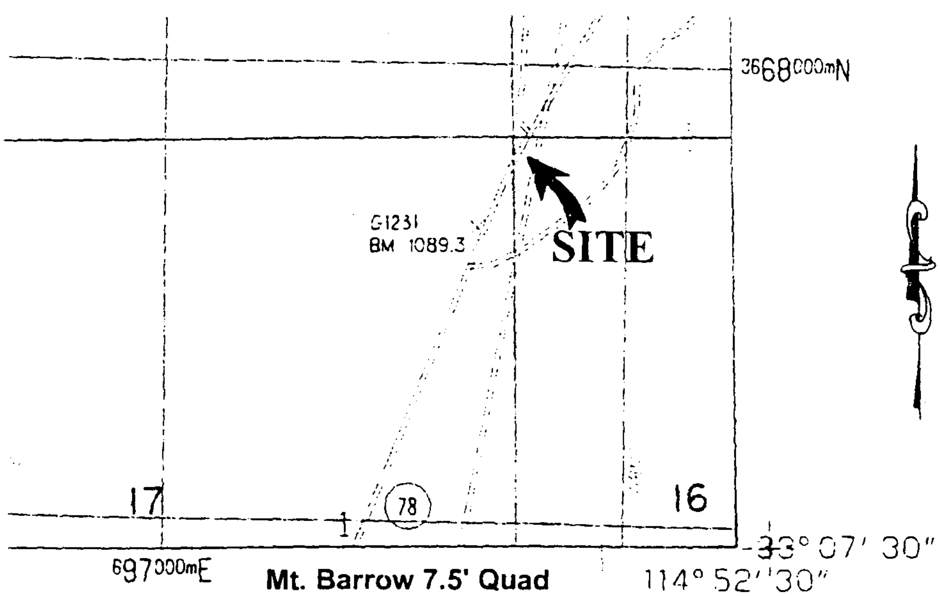
DETAIL A
(1" = 200')

BEARINGS BASED ON THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 16, T-12-S, R-20-E, SAN BERNARDINO BASE AND MERIDIAN, AS SHOWN ON CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 11, RIGHT-OF-WAY MAP # LO-76704.

TOTAL LENGTH OF PIPE CROSSING:	1092 FT.	
PIPELINE LEASE AREA WIDTH:	50 FT.	
PIPELINE LEASE AREA:	1.19 AC.	
TEMP. CONSTRUCTION AREA WIDTH:	30 FT.	
TEMPORARY CONSTRUCTION AREA:	0.63 AC.	

NO SCALE

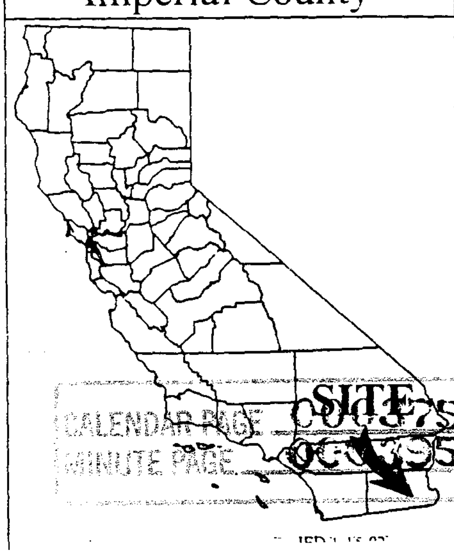
LOCATION MAP



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by Lessee or other parties, and is not intended to be, nor shall it be construed as a waiver or limitation of any state interest in the subject or any other property.

EXHIBIT A
W25717

APN 031-14-016-01
North Baja Pipeline
Natural Gas Pipeline
Imperial County



W25717

EXHIBIT B

PIPELINE LEASE AREA:

That portion of Section 16, Township 12 South, Range 20 East, San Bernardino Base and Meridian, in Imperial County, State of California; according to the U.S. Government Survey approved, February 13, 1919, and owned by the State of California by Act of Congress, March 3, 1853, Tax I.D. 031-14-016-01; described by metes and bounds as follows:

Commencing at the northwest corner of said Section 16; thence N88°42'58"E, along the north line of said section a distance of 435.32 feet to the POINT OF BEGINNING;

Thence S29°44'58"W, 103.41 feet to the beginning of a tangent curve concave to the southeast having a radius of 4770 feet; thence southwesterly 655.10 feet along said curve through a central angle of 7°52'08";
Thence S21°52'50"W, 196.94 feet to the west line of said section;
Thence S01°42'40"E, 186.82 feet along said section line;
Thence N10°22'54"E, 124.24 feet;
Thence N21°52'50"E, 246.40 feet to the beginning of a tangent curve concave to the southeast having a radius of 4720 feet; thence northeasterly 648.23 feet along said curve through an angle of 7°52'08";
Thence N29°44'58"E, 133.50 feet to the north line of said Section 16;
Thence S88°42'58"W, 58.35 feet along said north section line and the north line of this parcel, to the POINT OF BEGINNING.

Containing 1.19 acres of land, more or less.

END OF DESCRIPTION

EXHIBIT C
North Baja Pipeline Project

INTRODUCTION

The findings made by the California State Lands Commission (CSLC), pursuant to Section 15901, Title 14, California Administrative Code, on the proposed North Baja Pipeline Project are presented below. All significant adverse impacts of the Project identified in the Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) are included herein and organized according to the resource affected.

For each significant impact, *i.e.,* Class I or II, a finding has been made as to one or more of the following, as appropriate:

A. Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

B. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

C. Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR/EIS.

A narrative of the facts supporting them follows the findings.

Whenever Finding B occurs, agencies with jurisdiction have been specified. It is these agencies, within their respective spheres of influence, that would have the ultimate responsibility to adopt, implement, and enforce the mitigation discussed within each type of impact that could result from Project implementation. However, under California statutory legislation (AB3180, Cortese) the CEQA Lead Agency has the responsibility to ensure that mitigation measures contained in an EIR are effectively implemented.

Whenever Finding C is made, the CSLC has determined that sufficient mitigation is not practicable to reduce the impact to a level of insignificance and there will be, even after implementation of all feasible mitigation measures, an unavoidable significant adverse impact due to the Project. These impacts are specifically identified in the supporting discussions. The Statement of Overriding Considerations applies to all such unavoidable impacts as required by Sections 15902 and 15903, Title 14, California Administrative Code. In the case of this Project, there were no C-level Findings.

For discussion of impacts, significance was classified according to the following definitions:

- Class I – A significant adverse impact that cannot be mitigated to insignificant.
- Class II – A significant, adverse impact that can be mitigated to insignificant.

- Class III – Adverse but insignificant impact.
- Class IV – Beneficial impact.

Class III and Class IV impacts require neither mitigation nor findings.

CEQA FINDING NO. 1-1

GEOLOGIC RESOURCES: Natural Topography

Impact: Disturbances to the natural topography along the right-of-way and at aboveground facilities could occur due to trenching and grading activities.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Bureau of Land Management (BLM), Federal Energy Regulatory Commission (FERC))

FACTS SUPPORTING THE FINDING:

Effects from construction could include disturbances to the natural topography along the right-of-way and at aboveground facilities due to trenching and grading activities. Grading would occur over portions of the construction right-of-way to provide a level and safe work surface.

As mitigation, North Baja Pipeline, LLC (NBP) shall restore topographic contours and drainage conditions to ensure that the original overland flow and recharge patterns are restored after completion of construction.

Restoring topographic contours and drainage conditions after construction would blend the pipeline route into the existing topography, resulting in a more natural appearance, reducing new erosion by retaining prior drainage features and facilitating re-vegetation as the area would mimic its former conditions.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 1-2

GEOLOGIC RESOURCES: Mineral Resources

Impact: The proposed pipeline right-of-way could adversely impact future

mineral resource production on private and public lands. Potential impacts include diminished mineral land value, loss of mineral land access, and loss of revenues generated by future mineral production.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, Bureau of Reclamation (BOR), FERC)

FACTS SUPPORTING THE FINDING:

The BOR operates a rock quarry between the Cibola National Wildlife Refuge (NWR) and State Route (SR) 78. The proposed pipeline route would cross the northern portion of the parcel on which the quarry lies from mileposts (MPs) 29.2 to 29.6. According to the BOR, the quarry is used intermittently to supply material for erosion control and has been idle for the past 2 years. Because of its close proximity to SR 78 and unsuitable material to the north and south of present quarrying activity, future expansion would be vertically and/or eastward and would not be affected by the pipeline. Therefore, the project would not affect quarry integrity or operation. With the exception of the BOR quarry, construction of the pipeline and associated aboveground facilities would not cross any active mineral resource operations.

Because much of the pipeline would be constructed adjacent to existing utility rights-of-way, future development or expansion of mineral resource mining operations for the most part have already been precluded. Additionally, due to the linear nature of pipeline projects and the relatively small amount of land required for operation, lands precluded from future mineral development would not constitute a significant impact or loss of mineral resources or availability to society.

As mitigation, NBP shall address any encumbrances resulting from pipeline construction and operation to owners/operators of mining operations during pipeline easement negotiations. In addition, NBP shall adopt the Cibola Variation that would avoid the BOR quarry.

NBP's easement negotiations with owners/operators of mining operations would compensate owners/operators for any encumbrances resulting from pipeline construction and operation. Adoption of the Cibola Variation will avoid any impacts on the BOR quarry as the area would be avoided in its entirety.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 1-3

GEOLOGIC RESOURCES: Seismicity

Impact: Seismicity (which includes active faults, ground shaking, and soil

liquefaction) is the primary geologic hazard that could affect the proposed project facilities.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC, U.S. Department of Transportation (DOT))

FACTS SUPPORTING THE FINDING:

No active faults or fault zones would be crossed by the proposed pipeline facilities; therefore, damage to the pipeline from a surface fault rupture is unlikely. However, seismic ground shaking would be a potential hazard to the pipeline facilities. Several faults in the vicinity of the project area have the potential of generating earthquakes that could cause strong ground motions. The primary geologic hazard in the project area is moderate ground shaking from earthquakes and resulting soil liquefaction originating on distant faults. A major earthquake of magnitude 7.0 or greater originating on the San Andreas or Imperial Faults would be the critical seismic event that may affect the project area within the design life of the proposed facilities. Damage to buried pipelines is most often caused by the differential movements of geologic material as opposed to shaking itself. Aboveground structures would more likely be damaged by ground shaking. Potentially hazardous ground failures caused by ground shaking along the pipeline route primarily include soil liquefaction, lateral spreading, and ground settlement.

Severe ground vibrations in cohesionless saturated sand and silt deposits can cause temporary increases in pore water pressure, which can cause soils to lose strength. For liquefaction to occur, a relatively shallow water table (see the groundwater resources background discussion in CEQA Finding No. 3-1), susceptible soils, and rapid strong ground motions must all be present. Soil liquefaction can affect a pipeline by causing lateral spreading, loss of bearing strength, flow failures, subsidence, and flotation. Given the ductility of modern pipelines, little impact is likely to result from loss of bearing strength or flotation.

Lateral spreading, which involves the horizontal movement of competent surficial soils due to the liquefaction of an underlying deposit, is a potential hazard to pipeline integrity. Lateral spreads normally develop on very gentle slopes and involve displacements ranging from 3 to 6 feet. Flow failures are a greater potential hazard associated with liquefaction. They generally occur in saturated loose sands with ground slopes ranging between 10 and 20 degrees and can involve large amounts of material that could bend and weaken a pipeline along slopes. Subsidence can cause a pipeline to lose support and be at risk from overburden pressure.
NBP shall construct and test the project facilities to meet DOT construction and safety standards outlined in Title 49 Code of Federal Regulations (CFR) Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. The project facilities shall be designed by a qualified engineering professional. The minimum seismic design shall meet or exceed the latest edition of the Uniform Building Code or International Building Code and incorporate current seismological engineering standards. The engineering design drawings

for the entire project in California shall be certified by a California-registered civil/structural engineer.

A Liquefaction Hazard Evaluation and Mitigation Study prepared in a manner consistent with California Division of Mines and Geology Special Publication 117, Guidelines for Evaluation and Mitigation of Seismic Hazards in California, Chapter 6, Analysis and Mitigation of Liquefaction Hazards indicated a potential for liquefaction hazards at the Ehrenberg Compressor Station site, the Arizona side of the Colorado River crossing, and the western portion of the 18th Avenue alignment. To mitigate these potential liquefaction hazards, NBP shall incorporate the recommendations of the Liquefaction Hazard Evaluation and Mitigation Study into the project design. For the Ehrenberg Compressor Station site, this includes implementation of underlying ground improvements by densification of liquefiable soil using compaction grouting or stone columns. At the Colorado River, liquefiable soils shall be avoided by the use of the horizontal directional drill crossing method. The pipeline shall be designed using the Guidelines for the Design of Buried Steel Pipe (American Lifelines Alliance, 2001) or other similar recognized industry standards for seismic-resistant design in liquefaction-prone areas.

NBP's proper design of the project facilities and incorporation of the recommendations of the Liquefaction Hazard Evaluation and Mitigation Study would minimize the potential for damage resulting from seismic hazards by utilizing proven soil preparation techniques, strengthening potentially affected structures and avoiding soils subject to liquefaction..

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 1-4

GEOLOGIC RESOURCES: Landslide and/or Slope Stability Hazard

Impact: The potential for landslide and/or slope instability hazards could exist in areas where the pipeline route crosses steep terrain.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

With the exceptions of the Palo Verde Valley escarpment (MPs 11.7 to 11.9) and the Palo Verde Mountains foothills area (MPs 28.5 to 31.6) the proposed pipeline route crosses relatively flat terrain where hazards associated with slope stability are generally not a concern.

NBP shall create a stable and/or level right-of-way work area during the grading operation and implement restoration practices in its Construction Mitigation and Restoration Plan (CM&R Plan) (see CEQA Finding Nos. 2-1 and 5-1). In areas of steep terrain, NBP shall install trench breakers at intervals determined by an engineer or similar qualified professional.

This mitigation would prevent the flow of water along the backfill surrounding the pipeline, reduce the potential for soil movement along the trench, and aid in stabilizing slope stability hazards. To further reduce the potential for impacts from slope stability hazards, three variations were evaluated between MPs 28.6 and 31.9 that would be east of the proposed route and avoid much of the steep terrain associated with the Palo Verde Mountain foothills. One of the variations, the Cibola Variation, shall be adopted in this area to avoid potential instability hazards altogether.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 1-5

GEOLOGIC RESOURCES: Blasting During Construction

Impact: Blasting for trench excavation is anticipated in the Palo Verde Mountains between MPs 28.5 and 31.6 and potentially in other areas where bedrock is close to the surface. Temporary effects of blasting could include hazards posed by uncontrolled fly-rock, and nuisances caused by noise, increased dust, and venting of gases following blasts.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM; FERC; DOT, U.S. Department of Labor, Occupational Safety and Health Administration (OSHA))

FACTS SUPPORTING THE FINDING:

Because unconsolidated to poorly consolidated alluvial deposits underlie most areas that would be crossed by the proposed facilities, blasting to excavate the pipeline trench is not anticipated to be widespread. However, the proposed pipeline route would cross areas of exposed bedrock between MPs 28.5 and 31.6, specifically in areas where intrusive volcanic rocks and sedimentary rocks of the Bouse Formation are present. Blasting and/or an excavator with various hydraulic hammering attachments would likely be needed to remove rock from the trench in some locations within this milepost range. Blasting may also be necessary near the crossings of SR 78 as well as other areas where bedrock is close to the surface. If blasting is not controlled properly, it can cause damage to structures, existing pipelines, wells, and springs. Temporary effects of blasting could include hazards posed by uncontrolled fly-rock, and nuisances caused by noise, increased dust, and venting of gases following blasts.

None of the areas where blasting is anticipated are located near structures, residences, existing pipelines, wells, or springs.

As mitigation, NBP shall conduct all blasting in strict compliance with its construction specification for blasting. This specification contains procedures for complying with applicable Federal, state, and local safety and environmental regulations, codes, and standards for the use, storage, and transport of explosives. In addition, NBP shall adopt the Cibola Variation that would avoid much of the steep terrain associated with the Palo Verde Mountain foothills where blasting would be required.

Adoption of the Cibola Variation would avoid the majority of the area where blasting would be required, thus reducing a majority of the potential blasting activities necessary during construction. Proper blasting procedures would avoid uncontrolled fly-rock, and nuisances caused by noise, increased dust, and venting of gases following blasts as well as damage to existing structures, existing pipelines, wells and springs in those areas where blasting is required.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 1-6

GEOLOGIC RESOURCES: Paleontological Resources

Impact: 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.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Direct physical modifications of paleontological resources could occur during project construction by activities such as grading or trenching. Indirect impact on fossil beds could result from erosion caused by slope regrading, vegetation clearing, and unauthorized collection. Avoidance of significant fossil localities is the most effective mitigation method. If avoidance is not possible, scientific excavation to recover fossil materials would reduce the impact to an acceptable level.

No known paleontological sites are crossed by the proposed pipeline route; however, potentially important paleontological stratigraphic units are crossed. Based on a literature and museum

archival review and field survey, a paleontological sensitivity of low or moderate for the various formations crossed was assigned. As mitigation, NBP shall follow its Paleontological Resource Mitigation Plan (PRM Plan). The PRM Plan includes a summary of the literature and museum archival review, field survey, 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 PRM Plan, NBP shall have a paleontological monitor onsite during construction activities. This monitor shall spot monitor formations with moderate paleontological sensitivity and spot check other formations under the direction of the project paleontologist. Additional measures of the plan include:

- training of construction personnel regarding the possibility that fossil resources may be encountered during construction and instruction to contact the Environmental Inspector (EI) and the project paleontologist if fossils are discovered;

- 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;

- salvage of significant fossils as determined necessary by the project paleontologist; and

- protocol for curation and repository storage of fossils.

NBP's paleontological monitor shall prepare daily reports. Quarterly reports prepared by the project paleontologist shall be submitted to the FERC, the CSLC, and the BLM. Upon completion of construction, a final paleontological report shall be prepared.

Adherence to the provisions of the PRM Plan would ensure protection and preservation of sensitive paleontological resources by requiring the presence of personnel with appropriate expertise, authorizing such personnel to cease pipeline construction activities and specifying accepted procedures of resource protection or preservation.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-1

SOIL RESOURCES: Soil Disturbance

Impact: 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.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM; California Department of Fish and Game

(CDFG); FERC; U.S. Fish and Wildlife Service (FWS); U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS))

FACTS SUPPORTING THE FINDING:

Pipeline construction activities such as clearing, grading, trench excavation, backfilling, and the movement of construction equipment along the right-of-way may impact soil resources. Clearing removes protective vegetative cover and exposes the soil to the effects of wind, rain, and runoff, which increases the potential for soil erosion and sedimentation of sensitive areas. Grading, spoil storage, and equipment traffic can compact soil, reducing porosity and percolation rates and increasing runoff potential. Construction activities can also affect soil fertility and facilitate the dispersal and establishment of weeds.

Erosion is a continuing, natural process that can be accelerated by human activities. Clearing, grading, and the movement of equipment on the right-of-way can accelerate the erosion process and, without adequate protection, result in discharges of sediment to wetlands and waterbodies and lower soil fertility. Factors that influence the rate of erosion include soil texture and structure, the length and percent of slope, vegetative cover, and rainfall or wind intensity. The most erosion-prone soils are generally bare or sparsely vegetated, noncohesive, fine textured, and situated on moderate to steep slopes. Soils more resistant to erosion include those that are well vegetated, well structured with high percolation rates, and located on flat to nearly level terrain.

Construction equipment operating and traveling on the construction right-of-way, especially during wet periods and on poorly drained soils, can compact the soil. Soil compaction can also result from the storage of heavy spoil piles on certain types of soil for extended periods of time. Soil compaction destroys soil structure, reduces pore space and the moisture holding capacity of the soil, and increases runoff potential. If unmitigated, compaction results in soils with a reduced revegetation potential and an increased erosion hazard. The degree of compaction depends on the moisture content and texture of the soil. Wet soils with fine clay textures are the most susceptible to compaction.
In addition to erosion and compaction, construction activities such as grading, trenching, and backfilling can cause mixing of soil horizons. Mixing of topsoil with subsoil, particularly in agricultural lands, dilutes the superior chemical and physical properties of the topsoil and lowers soil fertility and the ability of disturbed areas to revegetate successfully. Trenching of stony or shallow-depth-to-bedrock soils can also bring stones or rock fragments to the surface, which could interfere with agricultural practices and hinder restoration of the right-of-way.

Construction can also facilitate the establishment of noxious weeds where none or few existed. The clearing of existing perennial vegetation provides an opportunity for weed species to invade the right-of-way, and the movement of equipment along the right-of-way could transport weed seed and plant parts from one location to another. The seriousness of these effects would depend on the prevalence of weeds in the area of the pipeline route, the type of weed and its method of reproduction and dispersal, and the weed's effect on current or future land use.

As mitigation, NBP shall implement its CM&R Plan that was developed in consultation with the BLM, the FWS, and the CDFG. The mitigation measures in the CM&R Plan include but are not limited to:

- restricting the construction right-of-way width to 80 feet and further reducing the width of the right-of-way in areas with high concentrations of native trees (see CEQA Finding No. 5-2);

- preservation of the seed bank by implementing topsoil segregation in non-agricultural areas and redistributing material over the right-of-way during cleanup;

- preservation and redistribution of cut vegetation over the right-of-way;

- restricting grading and crushing or cutting of vegetation where possible, leaving rootstock and minimizing soil disturbance;

- 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;

- segregation of 1 to 2 feet of topsoil in agricultural areas;

- maintaining water flow in crop irrigation systems, unless shutoff is coordinated with affected parties;

- testing for and alleviating compacted soils in agricultural and residential areas;

- 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

- coordination with the BLM to identify specific locations where visual blocking would be employed to discourage use of the pipeline right-of-way by unauthorized vehicles (see CEQA Finding No. 8-8).

Before construction, NBP shall implement Condition 12 (section 7.6 of the Final EIR/EIS) and file with the FERC and the CSLC a revised CM&R Plan that incorporates provisions for testing for and alleviating compaction in desert habitats and additional requirements of other jurisdictional agencies that are received after the issuance of the Final EIR/EIS.

NBP shall employ full time EIs to ensure compliance with the CM&R Plan during construction and restoration. At least two EIs shall be assigned to each construction spread. The EI shall have peer status with other activity inspectors and shall have the authority to stop and order corrective actions for activities that violate the environmental conditions of the FERC Certificate and other authorizations.

In addition, monitors from the CSLC and the FERC, as well as a separate third-party environmental contractor under the direction of both agencies would conduct field inspections during construction to ensure compliance with the CM&R Plan. Other Federal and state agencies (*e.g.*, the BLM and the CDFG) would conduct oversight inspection and monitoring to the extent determined necessary by the individual agency.

The provisions of the CM&R Plan, including the additional requirement to add provisions for testing for and alleviating compaction in desert habitats as well as additional requirements of

other jurisdictional agencies and implementation of related mitigation measures (Finding 1-1), attempts to return affected soil resources to pre-construction status or better.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-2

SOIL RESOURCES: Soil Contamination

Impact: Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could have an impact on soils.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC, NRCS)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1.

As mitigation, NBP shall implement its Spill Prevention, Containment, and Control Plan for Hazardous Materials and Hazardous Wastes (SPCC Plan). The SPCC Plan includes preventive and mitigative measures that would be used to minimize the potential impact of a hazardous waste spill during construction. The SPCC Plan specifies preventive measures such as regular inspection of storage areas for leaks, replacement of deteriorating containers, and construction of containment systems. The SPCC Plan also identifies emergency response procedures, equipment, and cleanup measures in the event of a spill.
The most effective protection of soil resources from contamination is prevention, e.g., training of construction personnel in the proper methods of handling and using potentially hazardous materials on site, and in the type of incidents that could lead to such contamination. The second level of protection consists of the knowledge of and means to contain, clean up materials and restore the site to its former condition in the event of an incident involving hazardous material. The implementation of the SPCC Plan ensures that each of the above circumstances occurs.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-3

SOIL RESOURCES: Fugitive Dust

Impact: Construction of the project could result in fugitive dust, which is a visible indication of soil loss through wind erosion.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS, Mojave Desert Air Quality Management District (AQMD), NRCS)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1.

As mitigation, NBP shall implement its Dust Control Plan. In accordance with the Dust Control Plan, NBP's contractors shall implement dust control if dust stays in the air more than 5 minutes or reaches 20 feet in height in areas of active construction within 1,000 feet of highways, residences, and other occupied areas.

Dust control would be achieved primarily through application of water-based additives. For agricultural and residential areas, dust would be controlled by the application of water or mechanical covering (for piles). Dust control for construction activities and wind erosion would be achieved in desert habitats by the application of water-based organic polymers or wood derivative compounds.

The intent of the application of the various control measures specified in the Dust Control Plan is to control the release of soil particles into the atmosphere and avoid a PM_{10} violation. The Plan is also designed to address varying specific site conditions, such as the presence of sensitive resources, e.g., desert tortoises and population concentrations.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-4

SOIL RESOURCES: Soils with Shallow Depths to Bedrock, and High Water and Wind Erosion Potential

Impact: Construction of the pipeline could impact about 51.3 acres of soils with shallow depths to bedrock (including some areas where blasting would be required), 29.1 acres of soils with high water erosion potential, and 124.1 acres of soils with high wind erosion potential.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC, NRCS)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1.

As mitigation, NBP shall implement its CM&R Plan (see CEQA Finding Nos. 2-1 and 5-1). In areas where blasting is required, NBP shall follow its construction specification for blasting (see CEQA Finding No. 1-5).

The provisions of the CM&R Plan and implementation of proper blasting procedures are designed to implement procedures deemed effective in the control of both high water erosion and wind erosion at pipeline locations with soils designated to be susceptible to either or both.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-5

SOIL RESOURCES: Irrigation Systems

Impact: Construction activities could impact irrigation systems within the Palo Verde Valley.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (FERC, CDFG, FWS, NRCS, Palo Verde Irrigation District (PVID))

FACTS SUPPORTING THE FINDING:

With the exception of Rannells Drain, irrigation drains and canals would not be affected by construction of the pipeline because they would be crossed either by boring underneath the culverts along 18th Avenue or by installing the pipeline between the drain culvert and the road.

NBP would cross Rannells Drain using an open-cut crossing technique. NBP shall restore the banks and bed of the drain to its original configuration and stabilize the banks of the drain with erosion control fabric. Construction and restoration at Rannells Drain shall be done in accordance with NBP's CM&R Plan (see CEQA Finding Nos. 2-1 and 3-10).

The restoration and strengthening of the Rannells Drain to its former configuration following pipeline installation will enhance its existing function(s).

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-6

SOIL RESOURCES: Prime Farmland and Farmland of Statewide Importance

Impact: Construction of the pipeline could impact about 54.9 acres of soil identified as prime farmland or farmland of statewide importance.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (FERC, NRCS, PVID)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1.

As mitigation, NBP shall segregate topsoil in active farmlands before installation of the pipeline and reapply topsoil over the surface of the right-of-way during restoration as outlined in its CM&R Plan (see CEQA Finding No. 2-1). Construction of the proposed pipeline would not result in the permanent conversion of prime farmland to non-agricultural uses.

The CM&R Plan is designed to ensure protection of prime farmland and farmland of statewide importance by maintaining its viability and usage during and following pipeline construction to avoid its conversion to non-agricultural uses.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 2-7

SOIL RESOURCES: Crop Productivity

Impact: Construction could reduce crop productivity in the Palo Verde Valley.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant

environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (FERC, NRCS, PVID)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1.

As mitigation, NBP shall develop and implement a crop monitoring program in accordance with its CM&R Plan (see CEQA Finding No. 2-1). The program shall evaluate crop productivity and success for a period of at least 2 years following construction. NBP shall prepare activity reports during this period documenting any problems identified by the company or landowner and describing corrective actions taken to remedy these problems, and file these reports with the FERC and the CSLC on a quarterly basis, as stipulated in the CM&R Plan. If after 2 years it is determined that cropland crossed by the pipeline has not been restored successfully, NBP shall implement additional restoration measures as designed by a professional agronomist.

The CM&R Plan is designed to ensure that crop productivity in the Palo Verde Valley is maintained at a level no less than that recorded prior to pipeline construction to protect the economic viability of affected agricultural lands with application, as necessary, of appropriate scientific expertise and practices.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-1

WATER RESOURCES: Shallow Aquifers

Impact: Shallow aquifers underlying construction areas could experience changes in overland flow and recharge caused by clearing and grading of the construction right-of-way.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM; California Regional Water Quality Control Board, Colorado River Basin, Region 7 (CRWQCB); FERC; Riverside County Department of Health; U.S. Environmental Protection Agency (EPA))

FACTS SUPPORTING THE FINDING:

No EPA-designated sole source aquifers, known municipal/public water supply sources, wellhead protection areas, or springs would be crossed by the proposed project. Groundwater in the project area is primarily derived from unconsolidated to poorly consolidated alluvial sediments consisting of gravel, silt, sand, and clay associated with a complex system of basin-fill deposits. Many desert basins are characterized by broad alluvial fans and plains sloping to playas, creating closed drainage basins that are usually dry. The majority of the groundwater underlying the proposed pipeline route is used for irrigation, especially between MPs 0.0 and 11.6. Other local uses of groundwater in the project area include industrial and commercial processes and municipal and domestic water supplies. Small amounts of groundwater may also be found in the underlying bedrock, where it collects in fractures or weathered areas, but this groundwater is not considered a primary source.

The Colorado River Aquifer underlies the majority of the project facilities, including all of La Paz County, Arizona and Riverside County, California, and the northern portion of Imperial County, California. The proposed pipeline route in the southern portion of Imperial County crosses a watershed described as the Amos Ogilby Hydrologic Unit. Groundwater recharge is attributable to the Colorado River floodplain alluvial deposits. Groundwater within these deposits is hydraulically connected to the river and is legally considered surface water. Other minor sources of groundwater recharge include groundwater inflow from adjacent areas, infiltration of precipitation that falls to the ground surface, infiltration from irrigation ditches and canals, and local runoff from surrounding mountains.

Depth to groundwater throughout the project area varies depending on the proximity of the area to the Colorado River or surface drainage from irrigated properties. Groundwater levels ranging from 9 to 23 feet below the surface have been recorded in the vicinity of the proposed pipeline route in the Palo Verde Valley (approximately MPs 0.0 to 12.0), which is close to the Colorado River. Further south along the proposed pipeline route, depth to groundwater tends to increase. Groundwater levels have been recorded at depths greater than 130 feet beneath the Palo Verde Mesa (approximately MPs 12.7 to 20.5), and depths of more than 400 feet below the land surface have been recorded near the Cargo Muchacho Mountains (approximately MP 66.8) and surrounding areas. Even further south along the proposed pipeline route, depths to groundwater gradually decrease and have been recorded as shallow as approximately 35 feet below the ground surface in the vicinity of the All American Canal near MP 79.8.

For the majority of the project, groundwater levels are generally well below the land surface that would be affected by construction activities. However, shallow aquifers underlying construction areas (*e.g.*, the Palo Verde Valley and portions of the route near the Cibola NWR) could experience minor impact from changes in overland flow and recharge caused by clearing and grading of the construction right-of-way.

As mitigation, NBP shall recontour and restore the ground surface to ensure that the original overland flow and recharge patterns are restored after completion of construction.

Restoration of the original overland flow and recharge patterns would allow shallow aquifers to be protected and recharged as they were prior to construction. See also Finding 1-1.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-2

WATER RESOURCES: Compaction

Impact: Compaction of near-surface soils caused by heavy construction vehicles could affect groundwater by reducing the soil's ability to absorb water.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CRWQCB, FERC; Riverside County Department of Health, EPA)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1 and the groundwater resources background discussion in CEQA Finding No. 3-1.

As mitigation, NBP shall implement the provisions for soil compaction mitigation described in its CM&R Plan (see CEQA Finding No. 2-1). This includes testing topsoil and subsoil at regular intervals in agricultural and residential areas for compaction and plowing severely compacted agricultural areas. Although the soils data do not identify a high potential for soil compaction in the desert areas crossed by the project, before construction, NBP shall implement Condition 12 (section 7.6 of the Final EIR/EIS) and file with the FERC and the CSLC a revised CM&R Plan that incorporates provisions for testing for and alleviating compaction in desert habitats.

Prevention, reduction and alleviation of ground compaction will retain the ability of surface water to percolate through the soil and recharge groundwater resources.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-3

WATER RESOURCES: Blasting Near Groundwater Wells

Impact: Blasting near groundwater wells during construction could cause temporary changes in water level and turbidity and damage the water wells.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CRWQCB, DOT, EPA, FERC, OSHA, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding No. 3-1.

No water wells have been identified within 0.5 mile of anticipated blasting locations. All blasting shall be conducted in strict compliance with NBP's construction specification for blasting (see CEQA Finding No. 1-5). NBP's use of proper blasting techniques, which would be designed to fracture bedrock only to the point necessary for removal, would limit the effects of the blast to a local area above the aquifer in the proximity of the trenchline.

Although it is anticipated that proper blasting procedures would ensure protection of groundwater wells, additional measures could be employed, see Finding 3-3, should unanticipated circumstances occur.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-4

WATER RESOURCES: Groundwater Contamination

Impact: 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.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding No. 3-1.

As mitigation, NBP shall implement its SPCC Plan. The SPCC Plan includes preventive and mitigative measures that shall be used to minimize the potential impact of a hazardous waste spill during construction. The SPCC Plan specifies preventive measures such as regular inspection of storage areas for leaks, replacement of deteriorating containers, and construction of containment systems. The SPCC Plan also restricts refueling or other liquids transfer areas to at least 100 feet away from all waterbodies, restricts refueling within 200 feet of away from any water supply well (400 feet for municipal wells), and provides additional precautions when specified setbacks cannot be maintained. Additionally, NBP's SPCC Plan identifies emergency response procedures, equipment, and cleanup measures in the event of a spill.

The most effective protection of groundwater resources from contamination is prevention, e.g., training of construction personnel in the proper methods of handling and using potentially hazardous materials on site, of incidents that could lead to such contamination. The second level of protection consists of the knowledge of and means to contain, clean up materials and restore the site to its former condition in the event of an incident involving hazardous material. The implementation of the SPCC Plan ensures that each of the above circumstances occurs.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-5

WATER RESOURCES: Trench Dewatering

Impact: Trench dewatering during pipeline construction could affect groundwater resources.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding No. 3-1.

Dewatering of the pipeline trench may be required for short periods of time during construction in areas where there is a high water table. The potential effect on users of the aquifer would depend on the rate and duration of pumping and the location of the activity.

As mitigation, NBP shall complete trench dewatering activities within a particular location as soon as possible.

Rapid completion of dewatering activities, i.e., completion of an affected pipeline segment as soon as possible to reduce the amount of water drawn from an affected aquifer could minimize the effects of trench dewatering on groundwater resources.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-6

WATER RESOURCES: Water Table Elevations

Impact: Water table elevations could be affected by construction activities and the alteration of the natural soil strata could result in new migration pathways for groundwater, particularly in wetlands.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the soil resources background discussion in CEQA Finding No. 2-1 and the groundwater resources background discussion in CEQA Finding No. 3-1.

Changes in water table elevations are generally temporary and reestablish quickly after the trench is backfilled. As mitigation, NBP shall construct trench breakers between the upland/wetland interface and follow other restoration procedures identified in its CM&R Plan (see CEQA Finding No. 2-1).

The instillation of trench breakers would prevent the flow of water between any potential interface between the pipeline construction activities and a water source thereby minimizing potential impacts to groundwater pathways.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-7

WATER RESOURCES: Public and Private Wells

Impact: Construction activities could impact public and private wells located

within 150 feet of the proposed work area.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding No. 3-1.

During initial review, one water well was identified within 150 feet of the construction work area. Before construction, NBP shall conduct a field survey to verify the location of this well and any other wells or springs that are identified within 150 feet of the construction work area. With the landowner's permission, NBP shall 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, NBP shall conduct post-construction water well tests.

If it is determined that construction activities have impaired a well's water quality or yield, NBP shall 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, NBP shall arrange for a new well to be drilled or compensate the landowner.

The establishment of water quality and rate of flow in potentially affected wells prior to construction and the re-testing of such wells over an appropriate period of time following construction will allow monitors to ensure that well quality remains at a level prior to construction. The establishment of a well of equal or greater quality if the pipelines installation or presence adversely affects an existing well will guarantee sufficient water supplies.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-8

WATER RESOURCES: Groundwater Levels Along 18th Avenue

Impact: Significant amounts of groundwater may be encountered during construction along 18th Avenue that may result in minor fluctuations in local groundwater levels.

Finding: a) Changes or alterations have been required in, or incorporated

into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding No. 3-1.

To control the influx of groundwater into bore pits at road and canal crossings, the use of well points in addition to standard sump pump dewatering may be necessary. The water from these dewatering operations shall be discharged to lined straw bale retaining pits to contain sediments and/or otherwise filtered and discharged into field drains or canals. NBP shall obtain the necessary permits to perform these operations. Groundwater levels would quickly reestablish after activities have been completed.

Discharging groundwater from the trench into proper structures to filter out the sediments would ensure protection of groundwater resources. The completion of construction as soon as possible in such areas would also reduce any potential fluctuation of groundwater levels to a minimum.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-9

WATER RESOURCES: Contaminated Groundwater

Impact: Contaminated groundwater could be encountered during construction near a former waste disposal site at MP 5.7 and a landfill at MP 26.4.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding No. 3-1.

Because the proposed pipeline route does not cross the sites at MPs 5.7 and 26.4, the depth to groundwater in the vicinity of the landfill, and the type of debris stockpiled at the former disposal site, impact on groundwater associated with past and present disposal activities is unlikely. In the event contaminated groundwater is encountered as evidenced by refuse and/or other debris in the trench, discoloration, odor, or other signs at these locations or other location along the pipeline route, NBP shall inspect the area prior to any further construction activity. Field observations shall be conducted to determine the extent of contamination, appropriate disposal/treatment options, and the need for sampling. Appropriate agencies, including the CRWQCB and the Riverside County Department of Health shall be contacted and any necessary permits are obtained.

The third party monitors reporting to the CSLC and FERC will ensure that the appropriate agencies are contacted, that appropriate measures are taken, and that construction will not proceed further if any of the above described conditions are present at the specified or other locations.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-10

WATER RESOURCES: Waterbodies

Impact: 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 such as fuels and lubricants.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BOR, CDFG, CRWQCB, FERC, PVID, U.S. Army Corps of Engineers (COE))

FACTS SUPPORTING THE FINDING:

Pipeline construction and hydrostatic testing could affect surface waters. Clearing and grading of streambanks, in-stream trenching, trench dewatering, and backfilling could affect waterbodies through modification of aquatic habitat, increased sedimentation, increased turbidity, decreased dissolved oxygen concentrations, stream warming, or introduction of chemical contamination such as fuel and lubricants.

The greatest potential impact on surface waters would result from suspension of sediments caused by in-stream construction or by erosion of cleared streambanks and rights-of-way. The extent of the impact would depend on sediment loads, stream velocity, turbulence, streambank composition, and sediment particle size.

Clearing and grading of streambanks would expose large amounts of soil to erosional forces and, in waterbodies supporting fish, reduce fish cover along the cleared sections of the stream. The use of heavy equipment for construction could cause compaction of surface soils, which could result in increased runoff into waterbodies. This increased runoff could erode streambanks, resulting in increased turbidity and sedimentation rates in the receiving waterbodies.

In-stream construction could cause the dislodging and transport of channel bed sediments and the alteration of stream contours. Changes in bottom contours can alter stream dynamics and increase downstream erosion or deposition, depending on circumstances. Increases in turbidity and sedimentation resulting from trenching, backfilling, and in-stream movement of construction equipment could affect light penetration and photosynthetic oxygen production, and could release chemical and nutrient pollutants from sediments. These effects tend to reduce the amount of dissolved oxygen in the water column, which could adversely affect the in-stream aquatic biota and the habitat value of the waterbody. In general, impact on the in-stream aquatic biota and the habitat value of the waterbody is limited to the construction period.

The proposed pipeline would cross 1 perennial waterbody (the Colorado River), 579 dry desert washes, and 31 manmade irrigation canals and drains (including the All American Canal).

The Colorado River (MP 0.2) and the All American Canal (MP 79.8) are greater than 100 feet wide at the proposed crossing locations. NBP shall cross both waterbodies using the directional drill method. Unlike a conventional open-cut crossing, directional drilling would not alter or remove streambed or streambank habitat, cause in-stream sedimentation, or interfere with fish movement.

The dry washes do not support fisheries, provide critical aquatic habitat, or provide migratory passage for aquatic organisms. Additionally, none of the dry washes that would be affected have designated recreation/high quality visual resource values. NBP proposes to cross these dry washes with typical cross-country construction methods, unless other methods are required by the CDFG's Streambed Alteration Agreement (SAA) (see CEQA Finding No. 3-14). Impact on dry washes would be limited to temporary alteration of beds and banks, loss of wildlife habitat, and possibly increased sediment load during initial storm events following construction.

Construction across the canals and drains would be completed in accordance with the PVID permit conditions and site-specific agreements with private landowners. The irrigation canals and drains crossed by the project are constrained within culverts under 18th Avenue. NBP plans to cross these canals and drains either by boring underneath the culverts or by installing the pipeline between the drain culvert and the road. Boring beneath these culverts or installing the pipeline between the drain culverts and the road would avoid disturbance to the bed or banks of the waterbodies. Erosion control devices shall be installed in accordance with NBP's CM&R Plan to protect these waters from sedimentation resulting from adjacent construction activities. Thus, no impact on canals and drains would be expected. Only Rannells Drain would be crossed using the open-cut method.

NBP shall implement the mitigation measures in its CM&R Plan related to protection of surface waters, which include:

- locating all extra work areas at least 50 feet away from waterbody boundaries, where topographic conditions permit;
- limiting clearing of vegetation between extra work areas and the edge of the waterbody to the certificated construction right-of-way;
- maintaining adequate flow rates to protect aquatic life and prevent the interruption of existing downstream uses;
- restricting storage and refueling activities near surface waters;
- restricting spoil placement and control near surface waters;
- limiting use of equipment operating in the waterbody to that needed to construct the crossing;
- timing restrictions on in-stream work;
- requiring temporary erosion and sediment control;
- restricting trench dewatering;
- requiring bank stabilization and recontouring after construction; and
- limiting use of herbicides or pesticides for right-of-way maintenance in or within 100 feet of a waterbody except as specified by the appropriate land management or state agency.

In accordance with the CM&R Plan, actual in-stream trenching within Rannells Drain shall be completed within 48 hours.

The above mitigation addresses a variety of potential adverse imparts to water bodies – sedimentation (bullets 1, 2, 5, 8, 9 and 10), contamination (bullets 4 and 11) and in stream resource protection (bullets 3 and 7).

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-11

WATER RESOURCES: Contamination

Impact: 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 a degradation in water quality. Acute chronic toxic effects on aquatic organisms could result from such a spill.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the water resources background discussion in CEQA Finding No. 3-10.

As mitigation, NBP shall implement its SPCC Plan. The SPCC Plan includes preventive and mitigative measures that shall be used to minimize the potential impact of a hazardous waste spill during construction. The SPCC Plan specifies preventive measures such as regular inspection of storage areas for leaks, replacement of deteriorating containers, and construction of containment systems. The SPCC Plan also restricts refueling or other liquids transfer areas to at least 100 feet away from all waterbodies, restricts refueling within 200 feet of any water supply well (400 feet for municipal wells), and provides additional precautions when specified setbacks cannot be maintained. Additionally, NBP's SPCC Plan identifies emergency response procedures, equipment, and cleanup measures in the event of a spill.

The most effective protection of surface water resources from contamination is prevention, e.g., training of construction personnel in the proper methods of handling and using potentially hazardous materials on site and of the type of incidents that could lead to such contamination. The second level of protection consists of the knowledge of and means to contain, clean up materials and restore the site to its former condition in the event of an incident involving hazardous material. The implementation of the SPCC Plan ensures that each of the above circumstances occurs.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-12

WATER RESOURCES: Inadvertent Release of Drilling Mud

Impact: The primary impact that could occur as a result of directionally drilling the Colorado River and All American Canal is an inadvertent release of drilling mud (frac-out) directly or indirectly into the waterbody.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and

jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BOR, CDFG, COE, CRWQCB, FERC)

FACTS SUPPORTING THE FINDING:

See the water resources background discussion in CEQA Finding No. 3-10.

The Colorado River (MP 0.2) and the All American Canal (MP 79.8) shall be crossed using the horizontal directional drill construction technique. This technique involves drilling a pilot hole under the waterbody and banks, then enlarging that hole through successive reamings until the hole is large enough to accommodate the pipe. Pipe sections long enough to span the entire crossing would be staged and welded along the construction work area and then pulled through the drilled hole. Throughout the process of drilling and enlarging the hole, a slurry made of naturally occurring non-toxic materials, such as bentonite clay and water, is circulated through the drilling tools to lubricate the drill bit, remove drill cuttings, and hold the hole open. This slurry is referred to as drilling mud. 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.

As mitigation, NBP shall implement the measures in its Horizontal Directional Drill Plan (Part IV of the CM&R Plan) that include conducting and monitoring the drilling operations to minimize the potential for inadvertent releases or failure. An agency EI will monitor all drilling operations, and have authority to stop work in case of a mud release. The Horizontal Directional Drill Plan also includes procedures for cleanup of drilling mud releases.

The most effective protection of water resources from contamination is prevention, e.g., training of construction personnel in the proper methods of conducting directional drilling activities and procedures on site and recognizing and controlling incidents that could lead to such contamination. The second level of protection consists of the knowledge of and means to contain, clean up materials and restore the site to its former condition in the event of an incident involving bentonite material. The implementation of the Horizontal Directional Drill Plan ensures that each of the above circumstances occurs.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-13

WATER RESOURCES: Hydrostatic Testing

Impact: 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.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant

environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BOR, CDFG, CRWQB, DOT, EPA, FERC, Imperial Irrigation District (IID))

FACTS SUPPORTING THE FINDING:

See the water resources background discussion in CEQA Finding No. 3-10.

NBP would hydrostatically test the pipeline using water obtained directly from the Colorado River using existing irrigation intake structures or from a well located at the Ehrenberg Compressor Station site. Groundwater associated with the well is hydrologically connected to the Colorado River. NBP owns water rights sufficient to test the entire pipeline, although approval would need to be obtained from the BOR and the IID for the conversion of 32.37 acre/feet of water from agricultural to municipal/industrial use for one-time construction-related purposes. This water could be accounted for as a California consumptive use provided that agreement can be reached between the parties involved (*i.e.*, the BOR, the IID, and NBP). Such an agreement will contain conditions on the timing, duration and extent of testing in order to assure protection of downstream users, potentially affected aquatic habitats. NBP's existing intake facilities are anticipated to be sufficient for hydrostatic testing purposes.

As mitigation, NBP shall conduct all hydrostatic test activities in accordance with the measures in its CM&R Plan, applicable permits (including coordination with the BOR), and DOT pipeline safety regulations set forth in Title 49 CFR Part 192. NBP would limit the fill volume to 1,400 gallons per minute or 10 percent of streamflow, whichever is less. NBP shall filter the water prior to its entering the pipe, and no chemicals shall be added to the test water. After testing, the water shall be discharged from the last test section into the All American Canal. The test water shall be filtered and discharged through an energy dissipation device.

The process outlined above allows the BOR and the IID to determine whether sufficient water exists for the hydrostatic test of the pipeline and the latter provision ensures that water of adequate quality is discharged into an established water conveyance facility, the All American Canal.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 3-14

WATER RESOURCES: Dry Wash Crossings

Impact: Construction could impact the streambed and associated wildlife and vegetation habitats of the Colorado River and 579 dry washes crossed by the proposed pipeline route.

Finding: a) Changes or alterations have been required in, or incorporated

into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the water resources background discussion in CEQA Finding No. 3-10.

NBP shall obtain a Streambed Alteration Agreement (SAA) from the CDFG and follow its CM&R Plan developed in consultation with the CDFG (see CEQA Finding Nos. 2-1 and 3-10).

In accordance with its SAA, NBP may be required to provide offsite, compensatory mitigation for disturbances to wildlife habitats located between the banks of dry desert washes. Prior to implementation of CDFG-required mitigation measures, NBP shall consult with the CDFG regarding compensatory mitigation requirements for habitat losses.

The above procedures would facilitate the development of site relevant procedures and restoration methodologies by the CDFG as warranted at each specific dry wash location. See Finding 1-1 also.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 4-1

WETLAND RESOURCES: Wetland Disturbance

Impact: Construction clearing activities and disturbance of wetland vegetation could affect wetland functions, such as capacity to buffer flood flows, control erosion, and provide wildlife habitat. Other impacts could include alteration of wetland vegetation, temporary changes to wetland hydrology and water quality, temporary lowering of the water table, increased turbidity during trenching and restoration activities, mixing of topsoil and subsoil, and compaction and furrowing of soils.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, CRWQB , COE, FERC, FWS)

FACTS SUPPORTING THE FINDING:

The primary impact of pipeline construction and right-of-way maintenance activities on wetlands would be the short-term alteration of wetland vegetation. These effects would be greatest during and immediately following construction. Construction clearing activities and disturbance of wetland vegetation could affect wetland functions, such as capacity to buffer flood flows, control erosion, and provide wildlife habitat. Because wetlands would be restored to preconstruction contours and wetland hydrology preserved, impacts on flood water storage would only be evident during construction. Primarily due to the availability of water, herbaceous vegetation is expected to regenerate quickly in both emergent and scrub-shrub wetlands, thereby rapidly restoring the ability of the wetlands to control erosion. Vegetation regeneration would also increase the quality of wildlife habitat within wetlands, although regeneration of scrub-shrub vegetation would occur more slowly than herbaceous vegetation.

Other types of impacts associated with construction of the pipeline could include temporary changes to wetland hydrology and water quality, temporary lowering of the water table, and increased turbidity during trenching and restoration activities. During construction, failure to segregate topsoil over the trenchline in nonsaturated wetlands could also result in the mixing of the topsoil with the subsoil, which could lower biological recruitment of native wetland vegetation after restoration. In addition, inadvertent compaction and furrowing of soils during construction could result from the temporary stockpiling of soil and the movement of heavy machinery, which could in turn alter the natural hydrologic patterns of the wetlands, inhibit seed germination, or increase the potential for siltation. Construction of the project, however, would result in "no net loss" of wetlands because none of the wetlands would be permanently drained or filled.

NBP shall implement the mitigation measures in its CM&R Plan related to protection of wetland resources, which include:

- prohibiting storage of hazardous materials, chemicals, fuels, and lubricating oils within a wetland or within 100 feet of a wetland boundary;
- 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;
- requiring segregation of the uppermost 1 foot of wetland topsoil from the underlying subsoil in areas disturbed by trenching;
- limiting the operation of construction equipment within wetlands to that equipment essential for clearing, excavation, pipe installation, backfilling, and restoration activities;
- requiring all nonessential equipment to traverse around wetlands using upland access roads to the maximum extent practicable;
- requiring installation of temporary erosion controls across the construction right-of-way on any slopes leading into wetlands immediately after the initial disturbance of soils on the right-of-way and regular inspection and maintenance of temporary erosion controls after installation;
- minimizing duration of construction-related disturbance within wetlands; and

- consulting with the appropriate land management or state agency and developing plans for active revegetation of wetlands affected by construction.

Additionally, NBP shall comply with the conditions of its Section 404 permit and obtain appropriate state-issued Section 401 water quality certifications or waivers.

The above measures address both provention of or limitations to wetland disturbances (bullets 1, 4, 5, 6, 7) and restoration following any disturbances (bullets 2, 3, and 8).

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 5-1

VEGETATION RESOURCES: Vegetation Removal

Impact: 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 could have longer-term impacts than in agricultural areas where vegetation reestablishes quickly.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS, NRCS)

FACTS SUPPORTING THE FINDING:

No unique, rare, or special concern vegetation types would be affected by the proposed project. About 573.2 acres of Sonoran creosote bush scrub, 96.9 acres of desert wash woodland, 56.3 acres of agriculture, 3.9 acres of non-wetland tamarisk, and 3.5 acres of wetland would be disturbed. Of the vegetation that would be disturbed, the most sensitive is the desert wash woodland. Desert wash species growing in microphyll woodland, such as ironwood, blue palo verde, and smoke tree, provide structural diversity, cover, and forage for many more wildlife species than the Sonoran creosote bush scrub habitat.

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 degree of impact would depend on the type of vegetation affected, the ease with which the vegetation would regenerate after construction, and the frequency of vegetation maintenance by the pipeline company during operation. Existing vegetation would be disturbed along the extent of the right-of-way except for the 9.1 miles where the pipeline would be installed within 18th Avenue and the 0.8 mile where the pipeline would be installed by directional drilling.

As mitigation, NBP shall implement the restoration practices in its CM&R Plan (see CEQA Finding No. 2-1 and additional discussion below).

Woody vegetation shall be cut off at the ground and removed to the edge of the right-of-way. Where grading is required, rootstock shall be removed with the topsoil. On flat terrain where grading is unnecessary, herbaceous vegetation and woody root material shall be left in place but would be driven over by equipment or covered with spoil for extended periods.

NBP proposes to allow natural revegetation of the construction right-of-way after construction because active revegetation efforts such as seeding and active planting generally fail in the desert due to the arid environment. To aid in the natural revegetation process, NBP shall strip and segregate topsoil where grading would occur to conserve the existing seedbank. NBP shall not grade the area where the topsoil would be stored. This area is estimated to be about 41 acres or 6 percent of the right-of-way. During restoration, the topsoil shall be respread evenly across the surface of the right-of-way. In areas where grading is not required, vegetation shall be cut or crushed thereby lessening soil disturbance and leaving the underground roots of woody plants intact. Vegetation that must be cut shall be stored at the edge of the right-of-way and respread over the right-of-way during or after final grading to provide a mulch to trap seeds, shade seedlings, and conserve water for the revegetation of the right-of-way. In areas where topsoil is removed, this material shall be spread with the topsoil. Lastly, during final restoration, NBP shall imprint disturbed soils with equipment (*e.g.*, sheepsfoot) that would create indentations to catch seeds and water, aiding in the natural revegetation of the construction right-of-way.

NBP shall supplement natural revegetation of the construction right-of-way by salvaging larger species of cactus (primarily Opuntia), ocotillo, and other woody vegetation. Immediately prior to ground-disturbing activities, NBP's restoration specialists shall remove large species of cactus and ocotillo from the right-of-way. NBP shall store and then replant these cactus and ocotillo after pipeline installation. Species selected for salvage and sites for replanting cactus and ocotillo shall be selected in consultation with the BLM to assist in off-highway vehicle (OHV) control (in accordance with the CM&R Plan). Other less common species of cactus such as foxtail cactus, hedgehog cactus, nipple cactus, and barrel cactus, along with woody species from creosote bush and desert wash woodland areas, shall be salvaged, stored, and replanted for use in the test plots proposed for an experimental seeding program.

NBP shall implement an experimental seeding program to add to the knowledge base. The proposed seeding program, which shall also include transplanting salvaged desert vegetation, shall establish four study sites, two within desert wash woodland and two within Sonoran creosote bush scrub communities. Each study site shall be divided into three test plots. One test plot shall be on the disturbed right-of-way and receive supplemental seeding, the second plot shall be on the disturbed right-of-way and receive no seeding, and the third plot shall be a control plot located on undisturbed land receiving no seeding. Two different seed mixes have been developed using species appropriate to the two vegetation community sites in which they shall be planted. Each seed mix shall be applied at two different rates. Data shall be collected on all the test plots for a period of 5 years. This program would provide data to assess the effectiveness of natural revegetation versus supplemental seeding and plant salvage.

NBP shall also annually monitor areas of desert vegetation disturbed by construction for 5 years after construction is completed. Results of the monitoring and the experimental seeding and plant salvage program shall be provided in full annual reports for the first, second, and fifth year after construction. Data from annual surveys shall be provided for the third and fourth years.

The fifth-year report shall provide an overall summary of the success of mainline restoration and the experimental seeding and salvage programs. NBP shall submit the annual reports, the data collected, and the fifth year summary report to the FERC, the CSLC, the BLM, and the CDFG. If after 5 years it is determined that restoration is not successful, NBP shall implement Condition 13 (section 7.6 of the Final EIR/EIS) and consult with the FERC, the CSLC, the BLM, and the CDFG to develop additional restoration measures.

Desert vegetation is slow growing and long lived and its restoration has not been as successful as other types of vegetation. The measures required are deigned to limit the extent of damage to such vegetation to allow it to reestablish itself, but also provide for seeding and planting of indigenous vegetation where removal is unavoidable. Measures based on the performance of prior mitigation on similar projects in the desert are also provided, e.g., a requirement of renewed re-vegetation efforts in disturbed areas if, after 5 years, initial mitigation has not been fully effective in reducing the identified impacts to a level of insignificant.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 5-2

VEGETATION RESOURCES: Desert Wash Woodlands

Impact: Construction could reduce wildlife habitat and diversity by removing desert wash woodlands.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the vegetation resources background discussion in CEQA Finding No. 5-1.

NBP shall minimize tree clearing in 15 areas of native trees along the proposed route by reducing the width of the construction right-of-way from 80 feet to 50 feet in accordance with its CM&R Plan. 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, MP25.9 (850 feet), MP 34.6 (860 feet), MP 51.1 (1,800 feet), MP 51.7 (1,100 feet), and MP 64.5 (500 feet). Reducing the construction right-of-way width in these locations would preserve 6.9 acres of the total 96.9 acres of desert wash woodland that would be affected by the project.

Trees that cannot be avoided shall be subjected to one of several treatments (prune, limb, or remove) based on proximity to the pipeline centerline. Pruning or limbing trees rather than

removing them would preserve many trees within the right-of-way. These trees and their treatment shall be marked in advance of construction by an appropriate biologist or arborist.

Impacts on desert wash woodland shall be offset by NBP's entering into an agreement with the BLM and the CDFG to either fund the purchase of or acquire and deed a total of 2,589 acres of land. In addition to the funding or purchase and deeding of the 2,589 acres of land, NBP shall pay the CDFG a one-time payment of $295 per acre for the management and enhancement of wildlife habitat on these lands (see CEQA Finding No. 7-4).

The extreme sensitivity of this type of vegetation is recognized by avoidance to the maximum extent, by reducing the footprint of the project to reduce the number of trees to be impacted and finally, by retaining as much of the bulk of individual trees that remain affected. In addition, other areas of comparable resources are set aside in public ownership to guarantee their preservation as an offset to recognized impacts.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 5-3

VEGETATION RESOURCES: Invasion and Establishment of Exotic Nuisance Species

Impact: Removal of existing vegetation and the disturbances of soils during construction could create optimal conditions for the invasion and establishment of exotic-nuisance species.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS, NRCS)

FACTS SUPPORTING THE FINDING:

See the vegetation resources background discussion in CEQA Finding No. 5-1.

The removal of existing vegetation and the disturbance of soils during construction could create optimal conditions for the invasion and establishment of exotic-nuisance species. Construction equipment traveling from invasive weed-infested areas into weed-free areas could also facilitate the dispersal of invasive weed seed and propagules and result in the establishment of noxious weeds in weed-free areas. The potential severity of the noxious weed impact would depend on the species, prevalence in the area prior to construction, and the intensity of the construction-induced dispersal.

During botanical surveys conducted in March and April 2001, four exotic-nuisance species were identified in significant numbers along the proposed pipeline route. These four species were: African mustard, Australian saltbush, fountain grass, and tamarisk.

As mitigation, NBP shall implement its CM&R Plan (see CEQA Finding Nos. 2-1 and 5-1) that includes measures that would minimize the spread of noxious weeds from non-native to native plant communities. These measures include:

- In accordance with Executive Order 13112, the construction area within lands administered by the BLM shall be surveyed by a qualified noxious weed authority that shall identify all noxious weeds present and provide a list to the authorized office. A determination shall be made by the authorized officer of any noxious weeds that require flagging for treatment prior to construction. Treatment shall be according to instruction of the authorized officer. Any use of herbicides in California shall be handled by properly licensed county agricultural agents.

- Prior to construction, populations of plants listed as invasive exotics by the California Exotic Plant Pest Council in its most recent invasive plant List A (List A-1 and A-2) and Red Alert list, as well as any other species listed on the BLM National List of Invasive Weed Species of Concern already existing in native desert habitat where construction is planned, shall be identified on the ground and on maps through a preconstruction survey. This would establish a baseline from which to locate equipment washdown stations as well as to evaluate post-construction monitoring surveys.

- Disposal of soil and plant materials from non-native areas shall not be allowed in native areas. That is, no disposal or transfer of excess spoils or plant materials from non-native areas shall be allowed into native cover type areas.

- All construction equipment shall be washed prior to entering the construction area to prevent the spread of invasive weeds from other areas. Clearing and grading equipment shall be washed down with high-pressure water prior to moving from infested areas to non-infested areas. Construction personnel shall be educated on weed identification and the importance of controlling and preventing the spread of invasive non-native species infestations. Gravel and/or fill material to be placed in relatively weed-free areas shall come from weed-free sources. Certified weed-free hay bales shall be used. Post-construction monitoring and treatment of invasive weeds shall be implemented in accordance with the CM&R Plan.

- Tamarisk trees shall be removed from all portions of the right-of-way in native areas. In non-native areas, tamarisk trees shall be removed as necessary as part of clearing operations. To prevent dispersal of tamarisk propagules, debris shall either be burned onsite under an appropriate burning permit or hauled offsite. All loads hauled offsite shall be properly covered to prevent the spread of propagules by wind.

Additionally, NBP shall conduct surveys for non-native plant species after construction is complete. The results of these surveys shall be compared to the preconstruction surveys to determine locations of weed infestations attributable to the project. NBP shall conduct these surveys and implement control measures (*e.g.*, herbicide application, pulling by hand) twice a year for 2 years after construction is complete. NBP shall also implement weed control measures annually as part of routine maintenance and operation of the pipeline. NBP shall

include the results of its weed control program with the reports of its general desert vegetation monitoring (see CEQA Finding No. 5-1).

Exotic nuisance vegetation species are established in the proposed right of way. Suh species compete with and often exclude indigenous species. This mitigation is designed to eliminate nuisance species as they are encountered, to prevent their re-establishment in areas of soil disturbance and to control or eliminate them should re-growth occur. Procedures to prevent nuisance species from invading clean areas will also be observed and are based on known propagation processes, e.g., seed versus propagules.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-1

WILDLIFE AND AQUATIC RESOURCES: Wildlife Disturbance

Impact: Construction and operation of the pipeline could directly impact wildlife through disturbance, displacement, mortality, and alterations of available habitats.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

Clearing the construction right-of-way would result in the temporary and/or long-term loss of wildlife habitat and the displacement of wildlife from these areas based on habitat type. Depending on the season, construction could disrupt the courting or nesting of birds and breeding of other wildlife on or adjacent to the right-of-way. Smaller, less mobile, wildlife, such as small mammals and reptiles, could be crushed by construction equipment or entrapped in trenches. Other wildlife, such as birds and larger mammals, would leave the project area as construction activities approach. These animals may relocate into similar habitats nearby; however, the lack of adequate territorial space could force these animals into suboptimal habitat and could lower reproductive success and survival. Increased densities of animals in these habitats due to relocation of displaced individuals could also reduce reproductive success of animals not displaced by construction. Some wildlife would return to the newly disturbed areas and adjacent, undisturbed habitats soon after completion of construction.

The primary impact of the project on wildlife habitat would be the cutting, clearing, and/or removal of existing vegetation within the construction work area. The degree of impact would depend on the type of habitat affected and the rate at which the vegetation would regenerate after construction (see CEQA Finding Nos. 5-1 and 5-2).

NBP shall implement conservation measures for special status species that shall also serve to avoid, minimize, or compensate for impacts on general wildlife and their habitats (see CEQA Finding Nos. 7-1 to 7-11). NBP shall also 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 (see CEQA Finding Nos. 2-1, 5-1, and 5-2). Impacts on desert wash woodland shall be offset by NBP's entering into an agreement with the BLM and the CDFG to either fund the purchase of or acquire and deed a total of 2,589 acres of land. In addition to the funding or purchase and deeding of the 2,589 acres of land, NBP shall pay the CDFG a one-time payment of $295 per acre for the management and enhancement of wildlife habitat on these lands (see CEQA Finding No. 7-4).

The above measures seek to minimize disturbance to wildlife habitat and compensate for habitat losses by ensuring that other areas of comparable resources are set aside in public ownership to guarantee their preservation and function as undisturbed wildlife habitat.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-2

WILDLIFE AND AQUATIC RESOURCES: Level of Human-Wildlife Interaction

Impact: An indirect impact of the project could be the increased level of human-wildlife interaction by creating a new right-of-way that could add to the existing matrix of open desert, jeep trails, dry washes, and cleared rights-of-way currently attracting OHV users.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the wildlife resources background discussion in CEQA Finding No. 6-1.

NBP shall work with the BLM to identify areas where blocking the right-of-way from OHV use would be appropriate and practical (see CEQA Finding No. 8-8), and to develop blocking strategies that would be implemented by NBP.
The desert environment is sensitive to disturbance and slow in its recovery. The pipeline right of way may provide additional means for OHV to access and subsequently damage additional areas. This measure is designed to block unauthorized access and, in doing so, prevent additional disturbances to habitat and wildlife.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-3

WILDLIFE AND AQUATIC RESOURCES: Migratory Birds

Impact: 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.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the wildlife resources background discussion in CEQA Finding No. 6-1.

Twenty-four migratory bird species with the potential to occur in the project area are designated as special status species. Mitigation measures described for special status species (see CEQA Finding Nos. 7-1 to 7-11) and NBP's proposal to complete vegetation clearing activities prior to the onset of the breeding season would minimize impact on migratory birds. Mitigation measures described for vegetation communities (see CEQA Finding Nos. 5-1 and 5-2) would reduce the duration of impacts on migratory birds.

Although vegetation (habitat) will be either removed or trimmed during project construction, nest or species mortality is prevented by the above measure, thus eliminating a double impact to migratory birds.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-4

WILDLIFE AND AQUATIC RESOURCES: Managed and Sensitive Biological Resource Areas

Impact: Construction-related activities could directly and indirectly impact wildlife in managed and sensitive biological resource areas such as the Cibola National NWR, Milpitas Wash Special Management Area (SMA), and two landscape-scale conservation sites identified by The Nature Conservancy.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the wildlife resources background discussion in CEQA Finding No. 6-1.

One of the landscape-scale conservation sites includes the Colorado River and adjacent riparian areas, which shall be avoided by the directional drill. The other conservation site includes the Chocolate Mountains, which would generally be crossed by the proposed route between MPs 27.0 and 34.0. NBP's adherence to mitigation measures to protect wildlife and special status plants (see CEQA Finding Nos. 7-1 to 7-11) shall mitigate impact on wildlife in the Chocolate Mountains. In addition, NBP shall adopt the Cibola Variation to reduce the amount of the Milpitas Wash SMA crossed by the pipeline.

The most effective mitigation is avoidance of the potential impact. The Cibola re-route avoids the Cibola National Wildlife Refuge in its entirety. Avoidance of sensitive areas at the Colorado River is achieved by directionally drilling under the area. In the absence of avoidance, minimization of impacts and restoration activities are specified as noted above.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-5

WILDLIFE AND AQUATIC RESOURCES: Hydrostatic Testing

Impact: Water withdrawal associated with hydrostatic testing activities could entrain fish eggs and juvenile fish.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the hydrostatic test water background discussion in CEQA Finding No. 3-13.

NBP shall cover the water intake with an adequately sized mesh screen to reduce the potential for fish and fish egg entrainment. Additionally, NBP shall work with the CDFG as part of the SAA to develop specifications for the size of the water intake opening.

These provisions would better protect fish eggs and juvenile fish during water withdrawals required to provide water for hydrostatic testing activities by reducing the possibility that they would be drawn into the water intake.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-6

WILDLIFE AND AQUATIC RESOURCES: Waterbody Contamination

Impact: 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.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, CRWQCB, EPA, FERC, Riverside County Department of Health)

FACTS SUPPORTING THE FINDING:

See the water resources background discussion in CEQA Finding No. 3-1.

NBP shall adhere to the CM&R Plan and the SPCC Plan, which would prevent a large spill from occurring near surface waters. Hazardous materials shall be stored, and vehicles refueled, at least 100 feet from surface waters. Should a small spill occur, the containment measures in the SPCC Plan would decrease the response time for control and cleanup of the spill.

The most effective protection of water resources from contamination is prevention, e.g., training of construction personnel in the proper methods of handling and using potentially hazardous materials on site, and in the type of incidents that could lead to such contamination. The second level of protection consists of the knowledge of and means to contain, clean up materials and restore the site to its former condition in the event of an incident involving hazardous material. The implementation of the CM&R and SPCC Plans ensure that each of the above circumstances occurs.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 6-7

WILDLIFE AND AQUATIC RESOURCES: Rannells Drain

Impact: The proposed open-cut crossing of Rannells Drain could temporarily increase the sediment load in the drain.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (FERC, PVID)

FACTS SUPPORTING THE FINDING:

See background discussion of Rannells Drain in CEQA Finding Nos. 2-5, 3-1, and 3-10.

As mitigation, NBP shall use sediment curtains downstream of the trench during construction to trap sediments and prevent the transport of sediment downstream. The sediment collected by the curtains shall be removed the next time the drain is dredged for agricultural purposes.

The use of sediment curtains and removal of trapped sediments would ensure that the project will not contribute an increased sediment load to the Rannells Drain and cause it to be dredged sooner than necessary.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-1

SPECIAL STATUS SPECIES: Bald Eagle, Mountain Plover, Southwestern Willow Flycatcher, Yuma Clapper Rail, Desert Tortoise, Razorback Sucker, Peirson's Milkvetch, Arizona Bell's Vireo, Black Rail, Elf Owl, Gila Woodpecker, Gilded Flicker, Western Yellow-billed Cuckoo, California Leaf-nosed Bat, Cave Myotis, Pale Big-eared Bat, Pallid Bat, Western Mastiff, Nelson's Bighorn Sheep, Black-tailed Gnatcatcher, Cliff Swallow, Burrowing Owl, LeConte's Thrasher, Crissal Thrasher, Great Egret, Sonoran Yellow Warbler, Vermillion Flycatcher, Couch's Spadefoot Toad, Colorado Desert Fringe-toed Lizard, Flat-tailed Horned Lizard, Mojave Fringe-toed Lizard, Desert Unicorn-Plant, Fairyduster, and Spiny Abrojo

Impact: Special status species in the pipeline right-of-way could be lost when the

right-of-way is cleared, and special status animals could be affected by the temporary loss of habitat during construction. Construction of aboveground facilities would result in a permanent loss of habitat. Special status species could also be affected where blasting is required.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Arizona Department of Game and Fish (ADGF), BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

In general, the impacts of the project on special status species would be the same as described for vegetation, wildlife, and aquatic resources (see CEQA Finding Nos. 5-1 and 6-1). However, the magnitude and duration of these impacts could be greater for special status species, because their distribution and relative abundance usually are more limited.

With assistance from NBP, the FERC and CSLC staff informally consulted with the FWS, the CDFG, the ADGF, and the BLM to assess impacts on special status species. Biologists conducted a field-based habitat evaluation to determine the potential for the occurrence of these special status species or their habitats in the project area during July, August, and September 2000. More focused habitat evaluations and species-specific surveys were conducted in early 2001 to further assess the potential for the project to impact special status species. The design and methodology of the special status species surveys were based on established protocols and/or were developed in consultation with biologists from the FWS, the BLM, and the CDFG. Based on the survey results, 34 special status species (listed in the heading above) are known or likely to occur in the project area and could potentially be affected by the project.

As mitigation, NBP shall implement the following general minimization and conservation measures to reduce the impact of the project on special status species:

- NBP shall develop and implement an environmental training program prior to the start of work. All employees and contractors working in the field shall be required to complete an environmental training session before beginning work on the right-of-way. The program shall 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 shall be placed on the specific aspects of compliance applicable to the particular audience's activities on the project.

- Employees and contractors shall 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.

- NBP shall 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 shall be in compliance with the relevant provisions of NBP's CM&R Plan. NBP shall also hire and designate at least one qualified biologist who shall be responsible for identification of habitat and individuals of special status species and for implementation of all measures calling for a qualified biologist's intervention. The biologist shall, 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.

- An authorized biologist shall conduct a preconstruction survey of each project component located within areas identified during NBP's surveys as listed species habitat no more than 7 days prior to the onset of activities.

- Project personnel shall exercise caution when commuting to the construction area to minimize any chance for the inadvertent injury or mortality of species encountered on major roads leading to and from the construction area. NBP's contractors and employees shall report all such incidents directly to the EI.

- Existing routes of travel and approved access roads shall be used to and from construction areas. Cross-country travel by vehicles and equipment shall be prohibited. Except on county or state-maintained roads, vehicle and equipment speeds shall not exceed 25 miles per hour within potential habitat of a listed species.

- Qualified biologists shall monitor all work where prior NBP surveys have documented the occurrence of one or more listed species. In conjunction with NBP's EIs, the biologist shall have the authority to halt all non-emergency actions that might result in harm to a listed species, and shall assist in the overall implementation of protection measures for listed species during project activities.

- All trash and food items generated by construction and maintenance activities shall be promptly contained and regularly removed from the project site to reduce the attractiveness of the area to common ravens and other desert predators.

- Firearms and domestic pets shall be prohibited from work sites.

- Employees and contractors shall look under vehicles and equipment for the presence of special status species prior to movement. If a special status species is observed, no vehicles or equipment shall be moved until the animal has left voluntarily or is removed by a biologist authorized to do so.

- Pipeline construction activities between dusk and dawn shall be limited to emergencies only (*i.e.*, issues involving human health and safety) with the exception of the directional drill operations at the Colorado River and the All American Canal.

- Open pipeline trenches, auger holes, or other excavations that could entrap wildlife shall be inspected by an authorized biologist a minimum of three times per day, and

immediately prior to backfilling. In habitats supporting special status species, pipe segments shall be capped or taped closed each night. Such pipe segments shall be inspected regularly before sealing. For open trenches, earthen escape ramps shall be maintained at 1-mile intervals. Other excavations that remain open overnight shall be covered or ramped to prevent entrapment of wildlife.

- 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, NBP shall not proceed with project activity in that location until specific consultation with the FERC, the FWS, the BLM, and/or other appropriate agency is completed.

- All encounters with listed species shall be reported to the biologist, who shall record the following information:

    a. species;
    b. location (narrative and maps) and dates of observations;
    c. general condition and health, including injuries and state of healing;
    d. diagnostic markings, including identification numbers or markers; and
    e. locations moved from and to.

- Upon locating a dead or injured listed species, NBP shall notify the FWS and appropriate state wildlife agency. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and shall include: location of the carcass, a photograph, cause of death (if known), and other pertinent information.

- The pipeline construction right-of-way shall be limited to 80 feet in width (except where noted below), with the exception of authorized extra workspace areas. The construction right-of-way shall be clearly staked and flagged in advance of construction. The construction area includes approved work areas for the pipeline, compressor and meter stations, the facilities at Rannells Trap, access roads, and staging and pipe storage areas.

- Where desert wash woodland tree densities equal or exceed 20 percent crown cover within the non-construction or "passing lane" portion of the construction right-of-way, NBP shall narrow the construction corridor to 50 feet. Areas of this narrower construction width shall be identified in the field, staked, and flagged in advance of construction.

- At the conclusion of work, all trenches and holes shall be completely filled, surfaces cleaned and smoothed, and each site recontoured to match the original profiles as closely as possible.

- All stakes, flagging, and fencing used to delineate and protect any environmental or cultural feature in the construction area shall be removed no later than 30 days after construction and restoration are complete.

- With the exception of fenced facilities, all materials and equipment shall be removed from the area upon completion of work.

- Upon completion of project activities, NBP shall submit a standardized report to the FERC for distribution to other agencies, including the FWS. The report shall 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 shall also make recommendations for modifying the stipulations in order to enhance the protection of species in the future. The final report shall provide the actual acreage disturbed by project activities by habitat type.

In addition to these general measures, NBP shall follow additional species-specific mitigation measures for several special status species (see CEQA Finding Nos. 7-2 to 7-10).

The majority of the above measures are designed to avoid impacts to Special Status Species or in the alternative minimize potential impacts to habitat and restore habitat to previous levels and use following the completion of construction. Each of these provisions is conducted with or evaluated in conjunction and cooperation with the specific agencies charged with the protection and preservation of the designated species. The ability to stop construction until encountered issues are resolved is also provided.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-2

SPECIAL STATUS SPECIES: Southwestern Willow Flycatcher

Impact: Noise from construction of the pipeline and the Ehrenberg Compressor Station could indirectly affect southwestern willow flycatchers if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by southwestern willow flycatchers.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (ADGF, BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

Potential habitat for the southwestern willow flycatcher is present within riparian areas adjacent to the proposed pipeline route at the Colorado River crossing (MPs 0.0 to 3.0), near the Ehrenberg Compressor Station site (MP 0.0), near Stallard Road (MP 24.0), and the Davis Lake area (MPs 31.0 and 33.0). Surveys of these areas between May 22 and July 30, 2001 did not identify southwestern willow flycatchers. The use of the directional drill crossing method during installation of the pipeline would avoid any direct disturbances to the southwestern willow flycatcher or its habitat along the Colorado River. If birds are present during the breeding season (April through mid September), the noise from construction of the pipeline or the

Ehrenberg Compressor Station could indirectly affect southwestern willow flycatchers. Birds disturbed by construction of the project would most likely be displaced into adjacent habitats, potentially disrupting breeding activities (and annual production) for one season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by southwestern willow flycatchers.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall minimize the potential for impacts on the southwestern willow flycatcher by implementing the following measures:

All southwestern willow flycatcher native habitat shall be avoided by the following adopted construction methods:

- NBP has moved the originally planned compressor station location away from the Colorado River so that all construction and operation shall be more than 1,000 feet from potential habitat. In addition, the directional drill rig shall be located on the west side of the river more than 1,000 feet from the potential habitat on the east side.

- The remaining construction site within 1,000 feet of potential native habitat is the exit site for the directional drill, an area that would experience active construction for several weeks. All work at this site during the period of April 1 to September 15 shall limit noise, dust, nighttime lighting, and human presence as described below.

- Dust, nighttime lighting, and human presence shall be limited at the Colorado River crossing and the compressor station within 1,000 feet of potential habitat as follows:

    a. When nighttime operations are required for the pullback of the pipe through the bored hole under the river, all work shall be conducted behind abatement walls that would control noise and light emissions. These abatement walls shall be installed prior to construction regardless of the time of start of construction.

    b. No night lighting used within 1,000 feet of potential habitat during the breeding season shall be directly visible at the edge of the habitat.

    c. Noise levels of construction shall be controlled. Noise levels shall be measured at the edge of potential habitat and results provided to the FWS to verify baseline conditions and conditions during construction activities. Noise levels shall be kept at or below a day-night sound level (L_{dn}) of 60 decibels of the A-weighted scale (dBA). If the current ambient noise level exceeds an L_{dn} of 60 dBA, noise levels generated from construction activities shall not exceed existing conditions.

    d. There shall be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response and to monitor the location of the directional drill.

    e. Dust shall be strictly controlled by watering construction areas within 1,000 feet of potential habitat as discussed in NBP's Dust Control Plan.

- Construction or installation work performed within 1,000 feet of potential habitat for the southwestern willow flycatcher at the Colorado River crossing during the period of April 1 to September 15 shall be monitored daily by a qualified biologist. NBP shall provide monthly monitoring reports of construction activities and their impacts on biological resources to the BLM, the CDFG, and the FWS.

For work that is done in monotypic tamarisk stands, NBP shall implement several additional conservation measures for the protection of the southwestern willow flycatcher. These measures include:

- complete vegetation clearing in the area of direct impact prior to May 15;
- if pipeline installation or post-installation activities in tamarisk areas are not complete by May 15, limit activities to daylight hours (dawn to dusk);
- restore preconstruction contours and finish grading within 10 days of backfilling the trench;
- minimize noise levels by installing spark arresters in addition to standard mufflers in large equipment, by insuring standard mufflers on light vehicles are in good operating condition and fully functional, and erecting barriers of plywood or similar material around the stationary equipment such as air compressors;
- minimize duration of construction;
- permit no construction-related pedestrian access to tamarisk habitat during project-related activities outside the construction right-of-way and approved work areas;
- control dust by watering the work area within 1,000 feet of potential habitat; and
- institute an experimental revegetation plan in tamarisk areas in consultation with the FWS to test the success of native species revegetation in sodic soils in the presence of abundant tamarisk propagules.

The above measures are designed to eliminate or reduce the impacts of the project on the life cycle of the southwestern willow flycatcher by avoidance, e.g., relocation of a planned compressor station or minimization, e.g., restriction of dust, nighttime lighting, and activity within 1,000 feet of potential habitat. Monitoring of project activities by a qualified biologist during the specie's critical breeding season on a daily basis provides the ability to make necessary adjustments on an ongoing basis.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-3

SPECIAL STATUS SPECIES: Yuma Clapper Rail

Impact: The open-cut crossing of Rannells Drain would directly affect about 0.04 acre of potential Yuma clapper rail habitat. Noise from construction of

the pipeline and the Ehrenberg Compressor Station could indirectly affect Yuma clapper rails if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by the Yuma clapper rail.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

Potential habitat for the Yuma clapper rail is present in some areas of wetland vegetation along the proposed pipeline route (MPs 0.0 to 12.0 and MPs 31.0 to 33.0) including the Colorado River crossing (MPs 0.0 to 3.0) and near the Ehrenberg Compressor Station site (MP 0.0). The use of the directional drill crossing method during installation of the pipeline would avoid any direct disturbances to the Yuma clapper rail or its habitat along the Colorado River. The open-cut crossing of Rannells Drain (MP 11.4) would directly affect about 0.04 acre of potential Yuma clapper rail habitat. If birds are present during the breeding season (February through August), the noise from construction of the pipeline or the Ehrenberg Compressor Station could indirectly affect Yuma clapper rails. Birds disturbed by construction of the project would most likely be displaced into adjacent habitats, potentially disrupting breeding activities (and annual production) for one season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by the Yuma clapper rail.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall minimize the potential for impacts on the Yuma clapper rail by implementing the following measures:

- In the area of the proposed open-cut crossing of Rannells Drain, NBP has arranged for the PVID to complete the clearing of the vegetation from the agricultural drain both in the area of direct impact from the trenching operation and in the area of potential indirect impact on both sides of the proposed crossing. This work shall be completed prior to February 1, 2002 to avoid interference during the breeding season.

- Construction or installation work performed within 1,000 feet of potential habitat for the Yuma clapper rail during the period of February 1 to August 30 shall be monitored daily by a qualified biologist. NBP shall provide monthly monitoring reports of construction activities and their impacts on biological resources to the BLM, the CDFG, and the FWS.

All Yuma clapper rail habitat would be avoided by adopted construction methods, except for Rannells Drain (MP 11.4). In addition, although there is no evidence that construction of this nature may have an adverse indirect impact on rails, the mitigation measures proposed for the southwestern willow flycatcher at the Colorado River crossing (*e.g.*, moving the compressor

station further from potential habitat and the abatement walls to be installed prior to construction) would also protect the Yuma clapper rail from any adverse impact.

The above measures are designed to eliminate or reduce the impacts of the project on the life cycle of the Yuma clapper rail by avoidance, e.g., relocation of a planned compressor station or minimization, e.g., monitoring activity within 1,000 feet of potential habitat. Monitoring of project activities by a qualified biologist during the specie's critical breeding season on a daily basis provides the ability to make necessary adjustments on an ongoing basis.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-4

SPECIAL STATUS SPECIES: Desert Tortoise

Impact: The project is likely to adversely affect the desert tortoise and its habitat.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the vegetation resources background discussion (CEQA Finding No. 5-1) and the wildlife resources background discussion (CEQA Finding No. 6-1).

In addition to the effects of construction on potential habitat, construction-related impacts on the desert tortoise could include direct mortality or injury as a result of being crushed by vehicles, movement of soil, and entrapment in burrows or open trenches. During surveys of the proposed pipeline route, desert tortoises and desert tortoise sign (*e.g.*, scat, tracks, burrows) were observed at many locations along the pipeline route.

To compensate for desert tortoise habitat affected during construction, NBP shall implement the following measures:

- Impacts on desert tortoise habitat shall be offset by NBP's entering into an agreement with the BLM and the CDFG to either fund the purchase of or acquire and deed a total of 2,589 acres of land.

- In addition to the funding or purchase and deeding of the 2,589 acres of land, NBP shall pay the CDFG a one-time payment of $295 per acre for the management and enhancement of wildlife habitat on these lands.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall minimize the potential for impacts on the desert tortoise by implementing the following measures:

- NBP shall 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 prior to the initiation of clearance surveys. Project activities shall not begin until an authorized biologist has been approved. While other biologists may be employed as monitors, only those approved by the FWS shall be permitted to handle tortoises.

- The FWS shall provide the names of all authorized biologists to the BLM for its records.

- All persons authorized by the FWS to handle desert tortoises shall follow the guidelines established in the Guidelines for Handling Desert Tortoises During Construction Projects (Desert Tortoise Council 1994, revised 1999).

- A clearance survey for the desert tortoise shall be conducted by an authorized biologist within 24 hours prior to ground disturbance.

- Burrows outside of the limits of the construction right-of-way shall be flagged so that the biological monitor would be able to more easily locate them during construction.

- All desert tortoise burrows or pallets in the construction area shall be excavated by a qualified biologist. All desert tortoise handling and burrow excavation shall be in accordance with handling procedures developed by the FWS and shall be conducted by qualified desert tortoise biologists.

- Desert tortoises that are found above ground and need to be moved from harm's way shall be placed by the authorized biologist in the shade of a shrub. All desert tortoises removed from burrows shall be placed in an unoccupied burrow of approximately the same size as the one from which it was removed.

- If an existing burrow is unavailable, the authorized biologist shall construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods shall be monitored for at least 2 days after placement in the new burrows to ensure their safety. The authorized biologist shall be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.

- Should a tortoise wander into the construction area during construction, adjacent activities shall be halted until the tortoise has been moved out of the construction work area out of harm's way.

- If a tortoise is located in the construction work area and is not moving, adjacent activities shall be halted until an authorized biologist is able to move it out of harm's way.

- All pipeline marker signs within desert tortoise habitat shall be fitted with "bird-be-gone" or similar bird repellent devices.

- Only approved access roads shall be used. Only approved areas shall 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, shall be surveyed for tortoises by a qualified biologist(s) prior to modification or construction of the route or construction or use of a new work area.

- Trench segments or other excavations shall be provided with tortoise escape ramps at 1-mile intervals. All excavations shall be inspected for tortoises three times daily and prior to backfilling.

- Any time a vehicle is parked, the ground around and under the vehicle shall be inspected for desert tortoises before the vehicle is moved. If a desert tortoise is observed, it shall be left to move on its own. If this does not occur within 15 minutes, an authorized biologist shall remove and relocate the tortoise. 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 shall 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.

- All construction-related activities in desert tortoise habitat shall be conducted from dawn until dusk.

- Biological monitors shall be present to watch for desert tortoises during application of water-based additives (*e.g.*, organic polymers, lignin compounds, and conifer resin compounds) to control fugitive dust in work areas with extensive traffic and topsoil piles.

In addition, NBP shall adopt the Eastside Alternative to further reduce impacts on the desert tortoise and its habitat.

The above measures seek to minimize physical disturbance to (If a tortoise is located in the construction work area and is not moving, adjacent activities shall be halted until an authorize biologist is able to move it out of harms way.) and mortality (Only approved access roads shall be used.) of the desert tortoise and its habitat and compensate for habitat losses by ensuring that other areas of comparable resources are set aside in public ownership to guarantee their preservation and function as undisturbed wildlife habitat. The adoption of the Eastside Alternative would reduce the effect of the project on the desert tortoise and its habitat by affecting Class II rather than Class I habitat.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-5

SPECIAL STATUS SPECIES: Razorback Sucker

Impact: 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.

Finding: a) Changes or alterations have been required in, or incorporated

into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

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. Additionally, NBP may withdraw water from the Colorado River for hydrostatic testing of the pipeline.

NBP shall install the pipeline under the Colorado River using the directional drill method (see the water resources background discussion in CEQA Finding No. 3-10). Unlike a conventional open-cut crossing, directional drilling would not alter or remove streambed or streambank habitat, cause in-stream sedimentation, or interfere with fish movement. This method would avoid effects on the razorback sucker during crossing of the Colorado River.

See the hydrostatic test water background discussion in CEQA Finding No. 3-13. In accordance with its CM&R Plan, NBP shall screen intake piping to prevent fish entrainment during hydrostatic test water withdrawal. Additionally, NBP shall work with the CDFG as part of the SAA to develop specifications for the size of the water intake opening (see CEQA Finding No. 6-5).

The use of the directional drill method would avoid disturbance to the bed of the Colorado River and thus not affect the species or its habitat and adherence to the provisions for screening and sizing intake piping would minimize the entrainment of the razorback sucker (see Finding 6-5 also).

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-6

SPECIAL STATUS SPECIES: Nelson's Bighorn Sheep

Impact: The proposed pipeline route would cross corridors (MPs 34.0 to 38.0 and MPs 49.0 to 52.0) that can sometimes be used by Nelson's bighorn sheep moving between areas of potential habitat. Movements of bighorn sheep through these corridors could be temporarily disrupted during construction of the proposed project.

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and

jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Nelson's bighorn sheep in the general vicinity of the project tend to occupy habitats found within the Palo Verde, Chocolate, and Cargo Muchacho Mountains, which are areas avoided by the proposed pipeline route. The proposed pipeline route does, however, cross corridors (MPs 34.0 to 38.0 and MPs 49.0 to 52.0) that can sometimes be used by bighorn sheep moving between areas of potential habitat. Movements of bighorn sheep through these corridors could be temporarily disrupted during construction.

As mitigation, NBP shall adopt the Eastside Alternative, which would avoid the majority of the wildlife corridor between MPs 34.0 and 38.0. NBP shall mitigate potential impact on sheep using the second corridor by installing trench plugs at MPs 50.0 and 51.0 that would allow access across the open trench. Therefore, the movement of sheep would not be disrupted.

Adoption of the Eastside Alternative and use of trench plugs that would allow access across the open trench would minimize the effect of the project on Nelson's bighorn sheep by avoiding a major migratory corridor and providing access across the pipeline trench during pipeline installation.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-7

SPECIAL STATUS SPECIES: Burrowing Owl

Impact: Pipeline construction could directly affect about 25.1 acres of potential owl habitat. Noise from construction of the pipeline and the Ehrenberg Compressor Station could indirectly affect burrowing owls if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by burrowing owls.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

Favorable burrowing owl habitat includes areas with low growing vegetation and small mammal burrows or culverts. These characteristics are relatively abundant throughout much of the project area. Potential habitat for the burrowing owl is present in or adjacent to areas that would be disturbed by pipeline construction from MPs 0.0 to 12.0, MPs 22.0 to 26.0, MPs 31.0 to 33.0, and MPs 79.0 to 79.8 and near the Ehrenberg Compressor Station site (MP 0.0). Pipeline construction would directly affect about 25.1 acres of potential owl habitat. During 2001 surveys, biologists identified two active burrows in irrigation canals adjacent to agricultural fields at MP 10.5 and two active burrows near Interstate 8 (I-8) at MP 75.3.

If burrowing owls are present during the breeding season (February 1 to August 31), the noise from construction of the pipeline or construction and operation of the Ehrenberg Compressor Station could indirectly affect burrowing owls. Birds disturbed by construction of the project would most likely be displaced into adjacent habitats, potentially disrupting breeding activities (and annual production) for one season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by burrowing owls.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall minimize the potential for impacts on the burrowing owl by implementing the following mitigation measures:

- Direct impacts on burrowing owl habitat shall be avoided by constructing in the road pavement along 18th Avenue or boring/drilling beneath habitat areas to the maximum extent feasible.

- Preconstruction surveys during the breeding season shall be conducted by biologists who would visually check all potential habitat within 250 feet of both sides of the proposed construction work area.

- Preconstruction surveys during the wintering season shall be conducted by visually checking all potential habitat in areas where there would be some ground disturbance, including vehicle access or trenching. Qualified biologists shall conduct preconstruction surveys for burrowing owls within 2 weeks of construction activities.

- CDFG guidelines require that one-way doors be installed at least 48 hours before construction at all active burrows within the construction work area so that the burrows are not occupied during construction activities. The one-way doors shall be installed at that time to ensure that the owls can get out of the burrows but cannot get back in. CDFG guidelines also require the installation of two artificial burrows for each occupied burrow that is removed. Artificial burrows shall be constructed prior to installation of one-way doors. One-way doors shall not be installed at burrows with eggs or newly hatched young.

- If any active burrows are damaged by construction activities, compensation shall be paid at the equivalency rate of 6.5 acres of foraging habitat for burrowing owls for each active burrow damaged.

In addition, NBP shall implement Condition 14 (section 7.6 of the Final EIR/EIS) and adhere to the following additional conservation measures to minimize or avoid effects on burrowing owls:

- Unoccupied burrows discovered within the construction right-of-way during preconstruction surveys shall be collapsed or excavated prior to construction activities to prevent occupancy by owls.

- Artificial burrows, installed to minimize the effect of burrow loss, shall be placed within the home range of individual owls affected prior to burrow excavation or installation of one-way doors.

- During the breeding season, NBP shall conduct preconstruction surveys as soon as possible and conduct at least one survey within 1 week of construction.

- If active burrows (*i.e.,* eggs or young owls present) are discovered within the construction work area, NBP shall curtail construction activities within a 200- foot buffer area until after the young have fledged.

The conservation measures described above would minimize the effect of the project on the burrowing owl by avoiding species mortality, restricting access to potentially affected burrows and providing alternative burrows as specified, and provision of alternate habitat should an active burrow be damaged during the project..

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-8

SPECIAL STATUS SPECIES: LeConte's Thrasher and Crissal Thrasher

Impact: Construction could directly affect about 662.3 acres of potential LeConte's thrasher habitat and about 11.2 acres of potential Crissal thrasher habitat. Noise from construction of the pipeline could indirectly affect LeConte's thrasher and Crissal thrasher if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by Crissal thrashers.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

LeConte's thrasher and Crissal thrasher occupy habitat (*e.g.*, creosote scrub, desert riparian, desert wash woodlands) that is abundant throughout much of the project area. Potential habitat for these two species is present in or adjacent to areas that would be disturbed by pipeline

construction (LeConte's thrasher: MPs 12.0 to 79.8; Crissal thrasher: MPs 0.0 to 3.0, MPs 24.0 to 29.0, and MPs 31.0 to 33.0). Potential habitat for Crissal thrasher is also present near the Ehrenberg Compressor Station site (MP 0.0). Construction would directly affect about 662.3 acres of potential LeConte's thrasher habitat and about 11.2 acres of potential Crissal thrasher habitat. Because the habitat for these species would recover slowly after construction, these impacts would result in a long-term reduction in available habitats. If birds are present during the breeding season (early February to June), the noise from construction could indirectly affect these birds. Birds disturbed by construction of the project would most likely be displaced into adjacent habitats, potentially disrupting breeding activities (and annual production) for one season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by Crissal thrashers.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall minimize the potential for impacts on the LeConte's thrasher and Crissal thrasher by implementing the following measures:

- Impacts on microphyll woodland habitat shall be offset by NBP's entering into an agreement with the BLM and the CDFG to either fund the purchase of or acquire and deed a total of 2,589 acres of land (see CEQA Finding No. 7-4).

- In addition to the funding or purchase and deeding of the 2,589 acres of land, NBP shall pay the CDFG a one-time payment of $295 per acre for the management and enhancement of wildlife habitat on these lands (see CEQA Finding No. 7-4).

The measures that are proposed for the southwestern willow flycatcher at the Colorado River crossing would also protect the Crissal thrasher from adverse impact. See Finding 7-2. The project will also compensate for habitat impacts or losses by ensuring that other areas of comparable resources are set aside in public ownership to guarantee their preservation and function as undisturbed wildlife habitat.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-9

SPECIAL STATUS SPECIES: Couch's Spadefoot Toad

Impact: Construction of the proposed pipeline project in areas of occupied habitat could result in mortality or injury to individual Couch's spadefoot toads due to entrapment in open trenches or as a result of being crushed by vehicles and displaced soil. Construction disturbances to rain pools or temporary overflow areas could disrupt breeding activities of Couch's spadefoot toad for one season.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and

jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, FERC)

FACTS SUPPORTING THE FINDING:

The Couch's spadefoot toad historically occupied habitat in the general vicinity of the proposed pipeline route. Based on the sensitive nature of this species and on request from the CDFG, specific locations of known occurrences are not provided in this document. Construction of the proposed pipeline project in areas of occupied habitat could result in mortality or injury to individual Couch's spadefoot toads due to entrapment in open trenches or as result of being crushed by vehicles and displaced soil. Construction disturbances to rain pools or temporary overflow areas could disrupt breeding activities (and annual production) for one season, potentially significantly affecting local populations of Couch's spadefoot toad.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall implement the following conservation measures:

- If there are local thunderstorms that provide substantial moisture under warm conditions (temperatures over 90 degrees Fahrenheit) in July, August, or September of 2002, and if construction has not already been completed in that area, NBP shall examine potential Couch's spadefoot toad habitat for persistent pools. The CDFG would notify NBP if appropriate conditions prevail and NBP shall coordinate with the CDFG to complete the surveys.

- Qualified biologists shall monitor temporary pools for persistence and would examine them daily for eggs, tadpoles, or toadlets.

- Construction activities shall 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 may resume in the area.

- If any Couch's spadefoot toads are found, the CDFG shall be immediately notified. A report on the findings shall be submitted to the CDFG within 30 days of completion of construction activities within the area.

In addition, NBP shall adopt the Eastside Alternative to avoid the one known occurrence of occupied habitat for this species along the proposed route.

Adoption of the Eastside Alternative and adherence to the conservation measures described above would minimize the effect of the project on the Couch's spadefoot toad by avoiding a known population and by reducing contact with or disturbance of the species during pipeline construction.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-10

SPECIAL STATUS SPECIES: Colorado Desert Fringe-toed Lizard, Flat-tailed Horned Lizard, and Mojave Fringe-toed Lizard

Impact: Construction of the pipeline through habitat occupied by the Colorado Desert fringe-toed lizard (CFTL), flat-tailed horned lizard (FTHL), and Mojave fringe-toed lizard (MFTL) could result in direct mortality or injury of individual lizards as a result of being crushed by vehicles, movement of soil, and entrapment in open trenches. The noise and activity of construction could also indirectly impact lizards by pushing them into similar adjacent habitat further away from the construction right-of-way.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

Based on a preliminary habitat evaluation, about 8.8 miles (92.7 acres) of the proposed pipeline route (MPs 71.0 to 79.8) was identified as potential habitat for the CFTL and the FTHL. A more refined habitat evaluation conducted during 2001 indicated that this 8.8-mile-long portion of the proposed pipeline route includes 0.4 mile of favorable habitat, 4.1 miles of transitional habitat, and 4.3 miles of unfavorable habitat. The proposed pipeline route is over 4 miles to the east of the nearest established FTHL management area (East Mesa Management Area). The MFTL potentially occurs in areas of suitable habitat crossed by the proposed pipeline route on the Palo Verde Mesa between MPs 11.6 and 22.0 (101.8 acres).

Construction of the pipeline through habitat occupied by the CFTL, FTHL, and MFTL could result in direct mortality or injury of individual lizards as a result of being crushed by vehicles, movement of soil, and entrapment in open trenches. The noise and activity of construction could also indirectly impact lizards by pushing them into similar adjacent habitat further away from the construction right-of-way. It is expected that these lizards would likely return to the habitat in the immediate vicinity of the right-of-way after construction is completed.

In addition to NBP's general conservation measures (see CEQA Finding No. 7-1), NBP shall implement the following mitigation measures to minimize potential adverse impacts on the CFTL/FTHL/MFTL:

- Qualified biologists shall conduct preconstruction surveys to identify all potential habitat along the construction area. Within 7 days before construction begins, biologists shall identify habitat areas subject to direct construction-related ground disturbance.

- Biologists shall conduct a final clearance survey 1 to 2 days prior to construction activities, excavate potential burrows, and relocate the lizards to nearby suitable habitat. The management strategy guidelines for relocation of FTHL described in the Flat-tailed Horned Lizard Rangewide Management Strategy (Foreman, 1997) shall be used for all three species.

- A field contact representative shall initiate a worker education program and shall have the authority to ensure compliance with protective measures for these lizards.

- A biological monitor shall be present in each area of active construction within CFTL/FTHL/MFTL habitat throughout the work day from initial clearing through habitat restoration. The biological monitors shall have sufficient education, field experience, and training with these lizards to understand their biology and behavior. The monitors shall ensure that all activities are in compliance with the management strategy guidelines for relocation of FTHL described in the Flat-tailed Horned Lizard Rangewide Management Strategy (Foreman, 1997). The biological monitors shall have the authority and responsibility to halt activities that are in violation of the management strategy guidelines. The monitors shall:

    a. examine the construction area periodically (at least hourly when surface temperatures exceed 86 degrees Fahrenheit) for the presence of CFTL/FTHL/MFTL. In addition, all hazardous sites (open pipes, trenches, holes, or deep excavations) shall be inspected for the presence of lizards prior to backfilling;

    b. work with the construction supervisor to take steps, as necessary, to avoid disturbance to CFTL/FTHL/MFTL and their habitat. If avoiding disturbance is not possible or if lizards are found trapped in an excavation, the biological monitor shall capture by hand and relocate the affected lizard;

    c. place relocated lizards in the shade of a large shrub a short distance from the construction right-of-way and in the direction of undisturbed habitat. If the surface temperature in the sun is less than 86 degrees Fahrenheit, or greater than 122 degrees Fahrenheit, the biological monitor authorized to handle the lizard shall hold the lizard for later release; and

    d. hold initially captured CFTL/FTHL/MFTL in a cloth bag, cooler, or other appropriate clean, dry container from which the lizard cannot escape. Lizards shall be held at temperatures between 77 and 95 degrees Fahrenheit and shall not be exposed to direct sunlight. Release shall occur as soon as possible after capture and during daylight hours when surface temperatures range from 90 to 104 degrees Fahrenheit.

In addition to the conservation measures above, NBP shall minimize the potential for impacts on the FTHL by implementing the following measures:

- Impacts on FTHL habitat shall be offset by NBP's entering into an agreement with the BLM and the CDFG to either fund the purchase of or acquire and deed a total of 2,589 acres of land (see CEQA Finding No. 7-4).

- In addition to the funding or purchase and deeding of the 2,589 acres of land, NBP shall pay the CDFG a one-time payment of $295 per acre for the management and enhancement of wildlife habitat on these lands (see CEQA Finding No. 7-4).

The conservation measures described above would minimize the effect of the project on the CFTL, FTHL, and MFTL by compensating for habitat losses by ensuring that other areas of comparable resources are set aside in public ownership to guarantee their preservation and function as undisturbed wildlife habitat and by requiring physical intervention by biological monitors if it is determined that either species is in physical danger.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 7-11

SPECIAL STATUS SPECIES: Compliance with the Endangered Species Act and California Endangered Species Act

Impact: Potential adverse effects on Federal and state-listed endangered and threatened species and compliance with the Endangered Species Act and California Endangered Species Act.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, CDFG, FERC, FWS)

FACTS SUPPORTING THE FINDING:

To ensure that potential impacts on special status species are avoided or mitigated to less than significant levels, as well as to comply with the Endangered Species Act and the California Endangered Species Act, NBP shall implement Condition 15 (section 7.6 of the Final EIR/EIS) and not begin construction activities until:

- the FERC completes formal consultation with the FWS;
- the CDFG makes a consistency determination on the Biological Opinion pursuant to Section 2080.1 of the California Fish and Game Code;
- NBP obtains an incidental take permit under Section 2081 of the California Fish and Game Code, or receives concurrence from the CDFG that an incidental take permit is not required; and
- NBP has received written notification from the Director of the FERC's Office of Energy Projects that construction or use of mitigation may begin.

These measures would prohibit the start of the project until responsible agencies determine that its potential impacts on special status species are sufficiently mitigated and that the project is in compliance with the Endangered Species Act and the California Endangered Species Act.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-1

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Construction and Permanent Rights-of-Way

Impact: Land use impacts associated with the new pipeline could 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 of the pipeline.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Following construction, all land used for temporary construction right-of-way and temporary extra workspace areas shall 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 restriction would be placed on the temporary right-of-way or extra workspaces.

Existing land uses, to the extent that such uses do not conflict with access to or use of the pipeline would be retained following pipeline construction.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-2

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Residences and Businesses

Impact: Twenty-five residences and businesses could be impacted by

construction and operation of the pipeline, all of which are located along 18th Avenue. These include 18 residences and 2 businesses located within 100 feet of the construction work area. The two businesses and three of the residences would be located within 50 feet of the construction work area.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (California Department of Transportation (Caltrans), County of Riverside Transportation Department, FERC)

FACTS SUPPORTING THE FINDING:

Temporary impact during construction in residential areas could include: inconvenience caused by noise and dust generated by construction equipment traffic, and by trenching of roads or driveways; increased localized traffic; ground disturbance of lawns; removal of trees, landscape shrubs, or other vegetative screening between residences and adjacent rights-of-way; and potential damage to existing septic systems or wells.

Pipeline construction near residential areas would be confined to the paved roadway or adjacent road shoulder of 18th Avenue. NBP shall follow its site-specific residential construction mitigation plans to minimize disruption and to maintain access to the 25 residences and businesses along 18th Avenue. In addition, NBP shall implement the following measures to minimize construction impacts on residences:

- minimize the amount of trench left open at the end of the workday and cover or cordon off the trench during non-work hours;
- install safety fencing for a minimum of 100 feet on both sides of residences that are within 100 feet of the construction work area;
- secure and patrol construction areas during non-work hours to minimize safety issues associated with open trenches;
- maintain an emergency ingress and egress near all residences and businesses through the construction process;
- maintain one lane of restricted traffic movement through the construction area for access to residences and for emergency vehicles;
- minimize noise by maintaining equipment in good operating condition;
- suppress dust with the use of water trucks and regular spraying; and

- temporarily relocate residents to a local motel or other lodging during construction near their homes at NBP's expense.

NBP shall implement Condition 9 (section 7.6 of the Final EIR/EIS) and file weekly status reports with the FERC and the CSLC during construction that include a description of landowner/resident complaints and how these complaints were addressed or resolved.

See CEQA Finding Nos. 8-5 and 12-1 for additional discussion of traffic management along 18th Avenue and public safety, respectively.

The intent of the above measures is to maintain, to the maximum extent, the status quo in the area of the affected businesses and residences, e.g., maintaining access, and providing a safe environment, e.g., safety fencing and patrols of open trench, during construction.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-3

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Transportation System

Impact: The existing transportation system within the project area could be temporarily affected by the in-migration of construction workers. The delivery of construction equipment and materials could also temporarily congest existing transportation networks at specific locations.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (FERC)

FACTS SUPPORTING THE FINDING:

The number and frequency of construction vehicles would be low on any particular roadway at any one time because construction would move sequentially along several miles of the proposed pipeline route. Because construction work is generally scheduled to take advantage of all daylight hours (*e.g.*, begin before the morning rush hour and end after the evening rush hour), the increase in vehicles traveling to and from the construction right-of-way would occur primarily during off-peak hours.

To minimize disruption to traffic, construction equipment and materials shall be located at contractor yards with existing, adequate roadway access to the pipeline construction areas. Construction workers shall be encouraged to park at the contractor yards to reduce potential

conflicts with permanent residents and carpool to work sites to reduce the number of additional vehicles on existing roads.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-4

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Traffic Flow

Impact: Construction activities could impact traffic flow and disrupt traffic in the project area.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, County of Riverside Transportation Department, FERC)

FACTS SUPPORTING THE FINDING:

Construction across paved and unpaved roads, highways, and railroads shall be in accordance with requirements of applicable road and railroad crossing permits and approvals. These features would either be bored or open cut. The use of the boring crossing method would avoid disrupting traffic. Where open-cut road crossings are conducted, NBP shall make provisions to detour or control traffic during construction. No roads shall be closed unless adequate detours are provided.

These provisions would ensure that construction activities would not impact traffic flow or disrupt traffic in the project area by either maintaining the use of existing routes or by providing equivalent routes in the event an existing roadway needs to be temporarily closed due to pipeline construction.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-5

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Traffic Management Along 18th Avenue

Impact: Construction in the paved segment of 18th Avenue could inconvenience residents and business owners.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, County of Riverside Transportation Department, FERC)

FACTS SUPPORTING THE FINDING:

See background discussion of residences and business along 18th Avenue in CEQA Finding No. 8-2.

NBP shall close off 0.5- to 1-mile-long sections of 18th Avenue at a time, reroute traffic around these areas (while maintaining access for residents), and complete construction of the pipeline before moving onto the next section of road. All construction activities shall be confined to the width of 18th Avenue that is estimated to be about 60 feet, including the paved roadway and road shoulders. No more than 1 mile of work area shall be active at any one time, unless otherwise specified by Riverside County. NBP shall implement its Traffic Management Plan for 18th Avenue that was prepared in consultation with the County of Riverside Transportation Department. The plan includes the following mitigation measures to minimize traffic-related impacts associated with construction in 18th Avenue:

- construction measures shall comply with the Caltrans Traffic Manual;
- the pipeline shall be installed with a minimum of 36 inches of cover and with a minimum of 12 inches of separation from other utilities or obstructions. A minimum of 2 feet shall be maintained under canals and 5 feet over drains;
- active work areas shall be limited to 1 mile in length;
- intersections shall be bored or trenched and steel plated until the pipeline is installed;
- NBP shall 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 shall be notified by hand-distributed flyers 2 weeks before construction. The flyers shall include the dates of construction, the work hours, traffic

detours, and contact numbers for NBP and the contractor. Emergency response agencies shall also be notified of the work schedule;

- the Underground Service Alert shall be notified at least 48 hours before beginning work;
- flag persons shall be provided to route traffic around construction equipment and obstructions;
- work shall be scheduled during daylight hours unless alternative schedules are authorized;
- access shall be maintained to all residences or businesses except during actual trenching operations. Steel plates shall be available to maintain access to driveways during periods when the trench is open;
- fencing shall be installed at the edge of the work area on both sides of each residence; and
- non-local traffic shall be detoured around construction activities as much as practical.

See Finding 8-2.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-6

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Colorado River

Impact: Construction activities could disrupt recreational uses at the Colorado River.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BOR, COE, FERC)

FACTS SUPPORTING THE FINDING:

See the water resources background discussion in CEQA Finding No. 3-10.

The Colorado River shall be directionally drilled, which would not limit the use of the river for recreational purposes. Use of an unpaved access road to the river would be disrupted but not closed during construction of the Ehrenberg Compressor Station.

The directional drill of the Colorado River would ensure that recreational uses at the Colorado River would not be disrupted by avoiding direct impacts to the bed of the River. See Finding 3-10 also.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-7

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: OHV Use

Impact: The new permanent pipeline right-of-way could increase accessibility for OHV use into previously restricted, inaccessible, or environmentally sensitive areas.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such

other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the wildlife resources background discussion in CEQA Finding No. 6-1. Also see CEQA Finding No. 6-2.

NBP has stated that it has no plans to maintain an improved permanent right-of-way for operation and maintenance. However, NBP would have to maintain access to all portions of the permanent right-of-way by four-wheel drive vehicles in order to conduct emergency and periodic maintenance. NBP shall install blocking measures at intersecting road crossings. These measures include:

- installation of berms along the side of roads (but not crossing existing trails) where the pipeline parallels the road;
- strategic placement of berms installed for erosion control purposes to reduce visibility and mimic local topography;
- redistribution and strategic placement of rocks across the pipeline where large rock is available and where such work would minimize visual evidence of the route;
- backblading or raking (by bulldozer or hand) the right-of-way to create a natural looking appearance and minimize the traces of the intersection of the pipeline with an existing OHV route or dirt road;

- salvaging and replanting ocotillo and large cactus where they are available, with the understanding that even if they did not survive, the dead specimens could still assist in disguising the right-of-way;

- salvaging and replanting other desert species, including creosote shrubs and desert wash woodland species, with the understanding that they would be unlikely to survive but could still assist in disguising the right-of-way; and/or

- redistribution of woody material removed during construction across the right-of-way to both disguise the right-of-way and to serve as vertical mulch.

Specific locations for the installation of these blocking measures shall be identified by NBP and the BLM during a joint survey of the pipeline route prior to construction.

The purpose of these provisions is to ensure that the new permanent pipeline right-of-way would not provide new accessibility for recreational OHV use into previously restricted, inaccessible, or environmentally sensitive areas.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 8-8

LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES: Visual Impact

Impact: Implementation of the project may result in permanent visual impacts.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

There are two types of potential impact on visual resources associated with construction and operation of the project facilities: that resulting from alteration of terrain and vegetation patterns due to facility construction or right-of-way maintenance, and that resulting from the presence of the new aboveground facilities.

During construction, the cleared and graded right-of-way, as well as construction equipment operating on the right-of-way, would be visible from any surrounding residences and local roads. Because the terrain over much of the project area is relatively flat, views of the construction activity may extend for some distance. Following construction, the primary visual impact would

be the right-of-way, which due to the arid climate and slow regeneration of native vegetation could be noticeable for many years.

Construction-related impacts would result from the presence of construction workers and equipment in rural areas and surface disturbances from clearing and grading operations. The presence of construction workers/equipment would be a temporary, minor impact on visual resources. The visual impact of the right-of-way following construction depends on the visual contrast in form, line, color, and texture created between the proposed project and the existing landscape.

The BLM uses a Visual Resource Management (VRM) system to identify and manage scenic values on public lands. The VRM system includes a visual resource inventory, which classifies resources on BLM land in one of four categories: class I, II, III, or IV, with class I having the highest visual sensitivity and class IV being the least sensitive. Within the project area, the BLM land in Imperial County has been categorized into VRM classes. BLM land along the proposed route in Riverside County has not been classified. Accordingly, interim VRM classes have been established by the BLM for the area crossed by the pipeline route in Riverside County. Of the 48.2 miles of BLM-managed lands crossed by the proposed pipeline route, none is class I, 21.8 miles are VRM class II, 18.9 miles are VRM class III, and 7.5 miles are VRM class IV.

The landscape along the proposed North Baja pipeline route is characterized by flat agricultural and rural residential areas, playa/alluvial fan landscapes (*i.e.*, flat terrain, creosote scrub vegetation, desert washes), and mountain foothills. Restoration of the pipeline right-of-way would reduce impacts on most visual resources to less than significant levels (see CEQA Finding No. 5-1). Specific areas along the pipeline route are discussed below.

In the agricultural areas of the Palo Verde Valley (MPs 0.0 to 11.7), the terrain is flat and agricultural operations and the planting of crops would resume following construction. Construction activity would be a temporary visual intrusion to residents along 18th Avenue. The Colorado River shall be directionally drilled, and setbacks from the river would protect existing vegetation, so views from the river and adjacent areas should not be affected. Lands within this route segment do not have a VRM classification.

In the desert landscape environment between MPs 11.7 to 29.7 and MPs 31.5 to 79.8, a low degree of visual impact would occur initially and would be further reduced over time. Visibility resulting from contrast in soil color and vegetative pattern between the right-of-way and adjacent areas would be partially offset by limited viewing afforded by areas with flat to low relief and views that include existing manmade features. Adjacent features along most of the length of these segments include paved and desert wash roads, levees, canals, electric distribution, and high voltage electric lines. BLM lands along these two route segments include 20.6 miles in VRM class II, 18.9 miles in class III, and 7.5 miles in class IV. The degree of contrast with the characteristic landscape resulting from the proposed pipeline would be consistent with the visual management objectives of these classes. The scenic quality in these classes ranges from good to fair with no areas rated as high. Moderate sensitivity ratings predominate. Changes in form, line, color, and texture would be reduced between MPs 12.1 to 22.3, MPs 39.0 to 51.7, MPs 55.0 to 61.0, and MPs 66.8 to 74.6 because the proposed pipeline route would be adjacent to other linear facilities, including an existing electric transmission line and Ogilby Road. Visual impact along these two route segments would not be significant.

Between MPs 29.7 and 31.5, the proposed pipeline route crosses the foothills of the Palo Verde Mountains. The mountains form a distinctive backdrop with numerous rock outcroppings.

Blasting would likely be required to install the pipeline in this area. The scars from the blasting would be visible. Additionally, NBP may have to install the pipeline by spanning across areas of steep terrain rather than installing the pipe below ground. These aerial crossings would also be visible. Lands in this route segment are VRM class II with scenic quality rated as good and sensitivity rated as high. As mitigation, NBP shall adopt the Cibola Variation, which would avoid the Palo Verde Mountains where blasting and aerial crossings would be required.

The aboveground facilities would have a permanent impact on visual resources. The Ehrenberg Compressor Station site is not located on BLM land and is not in an area with a VRM classification. During construction of the Ehrenberg Compressor Station, the presence of construction workers and equipment in the project area would be a minor visual disruption. Residents on the west side of the Colorado River would have a partial view of the facility. The station also would be minimally visible from Interstate 10 (I-10) located approximately 1 mile north. However, visual impact on these residents and travelers would be low due to distance and intervening vegetation. Recreationists accessing the boat ramp from the dirt road bordering the south end of the site would have an unobstructed view of the compressor station site, which is currently agricultural land, but the new facility would be seen in the context of several nearby industrial and commercial uses that include the El Paso Natural Gas Company meter station, I-10, a motel, and a rest stop.

The majority of the facilities located at the Rannells Trap would be located below ground, which would limit the visibility of this facility and minimize effects to the surrounding visual landscape. The pig receiver and launcher traps would be the only aboveground structures at this site. The receiver trap would extend approximately 3 to 4 feet above the surface and the launcher would extend approximately 6 to 8 feet above the surface. The facility would be located in open land (desert) adjacent to an agricultural field approximately 0.8 mile west of the end of the unpaved portion of 18th Avenue and 1.3 miles west of the end of the paved portion of the road at the intersection of Keim Boulevard. The facility would only be seen by travelers along the unpaved portion of the road with limited viewing from the intersection of 18th Avenue and Keim Boulevard. After construction, the facility would be fenced. To minimize visibility, NBP shall paint the aboveground structures to blend with the surrounding landscape. The Rannells Trap is not located on BLM land and is not in an area with a VRM classification.

The Ogilby Meter Station would be located in the open desert in an area with a class II VRM designation. The presence of construction crews and equipment would be a minor visual disruption. The structure itself would be visible to travelers using I-8. However, it would be seen in the context of existing landscape features, which include other manmade structures such as I-8 and high voltage electric lines. To minimize visibility, NBP shall paint the meter station building to blend with the surrounding landscape. The degree of contrast with the existing landscape would not attract attention and would be consistent with VRM class II objectives.

The four mainline valves (MLV) that are not at other aboveground facility sites would have a minor and less than significant effect on the surrounding visual landscape. Most of the facilities associated with the MLVs would be below ground. The only aboveground facilities would include a valve steam operator, which would be 5 feet in height, and a 6- to 8-foot-high blowdown stack. After construction, each facility would be fenced. To minimize visibility, NBP shall paint the aboveground structures to blend with the surrounding landscape. One of these MLVs would be on an industrial site and would be seen in the context of other commercial facilities. The other three MLVs would primarily be seen from roadways where road alignment and driving speed limit views and viewing time. Two MLVs would be on land managed by the

BLM that has a VRM classification of III. The degree of contrast with the existing landscape at these two MLV sites would not attract attention and would be consistent with VRM class III objectives.

The project would not have a significant effect on a scenic vista nor substantially damage scenic resources within a state scenic highway since none exist in the project area. Small flood lights would be used at the Ehrenberg Compressor Station and Ogilby Meter Station sites. Due to the presence of other man made sources of light in the area, the use of these small floodlights would not create an additional source of substantial light or glare that would adversely affect day or nighttime views in the area.

Restoration of the right-of-way and the provisions described above would minimize permanent visual impacts by either restoration of an area to its prior condition or, e.g.,by using color to blend required new structures into their surroundings.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 9-1

SOCIOECONOMIC RESOURCES: Public Services

Impact: 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.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (FERC)

FACTS SUPPORTING THE FINDING:

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. NBP shall, however, work with local firefighters and other emergency responders to coordinate activities for effective emergency response that are not in conflict with local needs.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 10-1

CULTURAL RESOURCES: Protection of Cultural Resources

Impact: Potential adverse effects on historic properties may occur.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, BOR, Arizona and California State Historic Preservation Offices (SHPOs), FERC)

FACTS SUPPORTING THE FINDING:

Identification-level cultural resources surveys were conducted along the entire proposed route, aboveground facility sites, access roads, extra workspaces, contractor yards, and the majority of the alternatives.

Of the 128 identified cultural resources along the proposed route, 22 would not be affected because although they are within the survey corridor, they are located outside the proposed construction work area. The remaining 106 cultural resources are located within the proposed construction work area. Fifteen of the cultural resources identified within the construction work area were evaluated as non-significant on the basis of surface information. Most of these are isolated artifacts, but a few are small lithic scatters. Disturbed segments of historic roads were also found to lack qualities that might make them significant.

The remaining 91 resources within NBP's proposed corridor and ancillary facilities were evaluated for their eligibility for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). Of the 91 resources that were evaluated, 41 sites are not eligible, 4 are potentially eligible, and 46 are eligible for listing on the NRHP. Sites that are eligible for listing on the NRHP are also eligible for listing on the CRHR. No sites have been identified as eligible for listing on the CRHR that are not also NRHP-eligible.

With the adoption of the Eastside Alternative and the Cibola Variation, 116 sites are within the construction work area. Seventy-one sites were determined to be not eligible based on initial surveys and evaluations. Two sites were determined to be potentially eligible based on evaluations, but would be avoided during construction because they are outside the construction work area. No further treatment or consideration would be accorded these sites before construction and related project activities.

NBP has prepared an historic properties treatment plan for the remaining 43 sites that were determined to be eligible for listing on the NRHP and CRHR indicating how impact would be reduced or mitigated. Four sites would be avoided during construction, 1 site falls outside the construction work area, but would be monitored during construction to ensure that undocumented portions of the sites would not be affected, and data recoveries would be completed at 15 sites in accordance with a Memorandum of Agreement developed by the

consulting parties. Monitoring is recommended at 22 sites. No further work is recommended at the remaining eligible site, the Bradshaw Trail, due to previous disturbance at the crossing location of the pipeline route.

Concurrence from the California SHPO on the historic properties treatment plan has not been received and some survey still remains to be completed; therefore, NBP shall implement Condition 16 (section 7.6 of the Final EIR/EIS) and defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads until:

- NBP prepares and files with the FERC and the CSLC, and submits to the Arizona and California SHPOs, the BLM, and the BOR, as appropriate, any outstanding cultural resources reports, testing and evaluation reports, and necessary treatment plans;

- NBP files with the FERC and the CSLC the comments of the SHPOs, the BLM, and the BOR, as appropriate, on all cultural resources reports and plans submitted for review;

- the Executive Officer of the CLSC reviews and approves all cultural resources reports and plans on the California portion of the project and notifies NBP in writing that construction may proceed; and

- the Director of the FERC's Office of Energy Projects reviews and approves all cultural resources reports and plans, and notifies NBP in writing that construction may proceed.

Additionally, NBP shall implement Condition 20 (section 7.6 of the Final EIR/EIS) and ensure that a qualified monitor is present during clearing, grading, and trenching activities on the portion of the Cibola Variation that has not been surveyed. If cultural resources are found during these activities (or any other project activities at the compressor station or along the pipeline route), NBP shall implement its Discovery Plan. In accordance with the Discovery Plan, NBP shall:

- halt work within 50 feet of the find;

- erect fencing along the 50-foot buffer to prevent entry into the area;

- the archaeological monitor will make a preliminary assessment of the find;

- if the archaeological monitor determines that the discovery is not a potential historic property (*e.g.*, consists of an isolated find or is of recent cultural origin), the monitor will notify the EI who will authorize resumption of construction activities in the area and document the situation and resolution in the daily inspection report;

- if the archaeological monitor determines that the discovery represents a new cultural resource or is a previously undocumented feature within a known cultural resource, the applicable agencies, Native American representatives, and company personnel will be notified;

- the find will be evaluated by qualified archaeologists and a report will be prepared that describes the find and provides treatment recommendations if the cultural resource is determined to be eligible for listing;

- the report will be submitted to the FERC, the CSLC, the applicable SHPO, and the BLM and the BOR (if applicable);

- upon receipt of agency concurrence with the report, the recommended treatment will be implemented; and

- construction activities in that area will not be resumed until notice to proceed is received from the applicable agencies.

The requirements described above and the provisions of the Discovery Plan are designed to protect cultural resources by the early identification of such resources, avoidance, segregation of such resources from construction activities, and preservation, among other alternatives, in the event unknown resources are discovered after construction begins .

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 11-1

AIR QUALITY AND NOISE RESOURCES: Local Ambient Air Quality

Impact: During construction, a temporary, short-term reduction of local ambient air quality due to fugitive dust and emissions generated by construction equipment may occur. This short-term impact would occur only in the immediate vicinity of the pipeline right-of-way and the compressor station site. Fugitive dust emissions would be generated from grading and excavation activities, wind erosion of temporary spoil piles, material handling, and equipment traveling on paved and unpaved roads.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Arizona Department of Environmental Quality (ADEQ), FERC, Imperial County Air Pollution Control District, Mojave Desert AQMD)

FACTS SUPPORTING THE FINDING:

During construction temporary increases of carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), sulfur dioxide (SO_2), and particulate matter less than 10 microns in diameter (PM_{10}) due to fugitive dust and tailpipe emissions generated by construction equipment may occur.

The Ehrenberg Compressor Station and a short length of pipeline (0.1 mile) would be built in Arizona. The agency responsible for regulating air quality in Arizona is the ADEQ. NBP shall obtain a permit from the ADEQ prior to commencing construction of the compressor station.

The majority of pipeline construction would occur primarily in Riverside and Imperial Counties, California. The agencies responsible for regulating air quality activities in these counties are the Mojave Desert AQMD and the Imperial County Air Pollution Control District. Permits are not required for emissions from any of the pipeline construction activities; however, there are applicable requirements that apply to construction emissions that shall be followed.

As mitigation, NBP shall implement its Dust Control Plan, which shall be approved by the Mojave Desert AQMD. In accordance with the Dust Control Plan, NBP's contractors shall implement dust control if dust stays in the air more than 5 minutes or reaches 20 feet in height in areas of active construction within 1,000 feet of highways, residences, and other occupied areas. Dust control would be achieved primarily through application of water-based additives. For agricultural and residential areas, dust would be controlled by the application of water or mechanical covering (for piles). Dust control for construction activities and wind erosion would be achieved in desert habitats by the application of water-based organic polymers or wood derivative compounds.

Once the construction phase is completed, the fugitive dust and emissions would subside, thus the length of time any one area would be exposed to dust and emissions from construction activities would be limited. These emissions would not result in a violation of Federal or state ambient air quality standards.

and the purpose of the above provisions is to ensure that Federal or state ambient air quality standards are not violated during construction of the project. See Finding 2-3 also.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 11-2

AIR QUALITY AND NOISE RESOURCES: Increased Noise During Construction

Impact: Individuals in the immediate vicinity of the construction activities could experience an increase in noise.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Arizona Department of Community Development, FERC, Riverside County)

FACTS SUPPORTING THE FINDING:

Most of the pipeline right-of-way is in rural or undeveloped areas. Pipeline construction would proceed at rates ranging from several hundred feet to 1 mile per day. NBP shall operate construction equipment on an as-needed basis when constructing in any given area. Although individuals in the immediate vicinity of the construction activities would experience an increase in noise, this effect would be temporary and local. NBP shall limit construction activities to daylight hours except at the directional drill crossings of the Colorado River and the All American Canal. Directional drilling may require 24-hour-a-day operations, but the duration of the drilling activities would be limited to a few weeks. No long-term noise effects would result.

Project-related noise would not exceed state or local standards and adherence to the provisions described above, specifically limiting operations to the daylight hours, would minimize the effect of noise to individuals in the vicinity of the construction activities.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

CEQA FINDING NO. 12-1

SAFETY AND RELIABILITY: Public Safety

Impact: The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas.

Finding:

a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR/EIS.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (DOT, FERC)

FACTS SUPPORTING THE FINDING:

The pipeline and aboveground facilities associated with the North Baja Pipeline Project shall be designed, constructed, operated, and maintained in accordance with or to exceed the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192 and other applicable Federal and state regulations. 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.

The standards in the Federal regulations become more stringent as the human population density increases. Part 192 defines area classifications, based on population density in the vicinity of the pipeline, that correspond to minimum safety requirements. The class location unit is an area that extends 220 yards on either side of the centerline of any continuous 1-mile length of pipeline. The four area classifications are defined as follows:

- Class 1 - location with 10 or fewer buildings per mile intended for human occupancy;
- Class 2 - location with more than 10 but less than 46 buildings per mile intended for human occupancy;
- Class 3 - location with 46 or more buildings per mile intended for human occupancy or where the pipeline lies within 100 yards of any building or small well-defined outside area occupied by 20 or more people during normal use; and
- Class 4 - location where buildings with four or more stories aboveground are prevalent per mile.

Class locations representing more populated areas require higher safety factors in pipeline design, testing, and operation. Pipelines constructed on land in Class 1 locations shall be installed with a minimum depth of cover of 30 inches in normal soil and 18 inches in consolidated rock. All pipelines installed in navigable rivers, streams, and harbors shall have a minimum cover of 48 inches in soil or 24 inches in consolidated rock. Class 2, 3, and 4 locations, as well as drainage ditches of public roads and railroad crossings, require a minimum cover of 36 inches in normal soil and 24 inches in consolidated rock.

Class locations also specify the maximum spacing allowed for sectionalizing block valves (also referred to as MLVs. Part 192 regulations require at least one sectionalizing block valve every 20.0 miles in Class 1 locations, every 15.0 miles in Class 2 locations, every 8.0 miles in Class 3 locations, and every 5.0 miles in Class 4 locations. Pipe wall thickness and pipeline design pressures, hydrostatic test pressures, maximum allowable operating pressure (MAOP), inspection and testing of welds, and frequency of pipeline patrols and leak surveys must also conform to higher standards in more populated areas.

Approximately 85 percent of the project would be located within a Class 1 area (MPs 11.7 to 79.8). NBP shall comply with Class 1 requirements in this area. The remaining 15 percent of the proposed pipeline route between MPs 0.0 and 11.7 along 18th Avenue is in a Class 2 area. In this area, however, NBP shall exceed DOT requirements by using thicker-walled pipe that meets Class 3 requirements and has a higher MAOP. NBP shall install automatic MLVs at a closer interval than required by the DOT in this area. As stated above, Part 192 regulations require at least one sectionalizing block valve every 15 miles in Class 2 locations. NBP shall install MLVs at MPs 0.0, 5.7, and 11.7. These MLVs shall be automatically actuated with remote review, and would isolate the pipeline in the event of a significant loss in pressure By the use of remote actuators and closer interval MLVs, NBP would be able to control the gas much quicker than the DOT code requires if an incident were to occur. In addition, NBP has agreed to use such automatic valves for the rest of the mainline as well.

The Ehrenberg Compressor Station shall have a pressure safety (relief) valve installed to prevent the pipeline and/or other components from overpressure/failure if the compressor safety shutdown system fails. This would protect the pipeline from a catastrophic failure due to overpressure. The design of these devices shall comply with the requirements of Title 49 CFR Part 192.169. Discharge conditions of the compressor station shall be less than the MAOP of 1,150 pounds per square inch gauge and the pipeline itself shall be protected by the compressor station shut down system. Pressure monitoring stations shall be installed at each MLV that would alert the gas control operator of low and/or falling pressure over time (in excess of a predetermined normal rate). Should the gas control operator see that pressures are

abnormal at a certain location, the operator can close the remote actuated MLVs upstream and downstream of the location and, if necessary, shut down the compressor station.

The pipeline shall be designed to be piggable, allowing for the future use of smart pigs for internal integrity inspection. In addition, NBP shall run a gauging plate, and if warranted, a caliper tool to determine if there are any dents in the pipeline as a result of construction. Dents that exceed those allowable by code shall be removed before placing the pipeline into service.

The spacing for the internal inspection tool (pig) launchers and receivers is approximately 12 miles for the 36-inch-diameter pipe segment and approximately 64 miles for the 30-inch-diameter pipe segment. Inspection tools with battery life and data gathering capabilities sufficient to cover these lengths while recording complete inspection data shall be used.

Within the first 3 months of placing the pipeline into operation, NBP shall conduct an internal inspection of the pipeline. This inspection shall use an in-line magnetic flux leakage inspection tool (*i.e.*, smart pig). The record of this inspection shall serve as an initial set of data that shall be compared to future internal inspections so that changes in pipe condition, primarily pipe wall thickness loss, can be readily determined and corrected.

It is anticipated that new regulations will go into effect within a year of NBP's in-service date that will include the requirements for future internal inspections and the intervals at which they are to be conducted. NBP shall conduct inspections at the intervals required by these new regulations, or at 10-year intervals, whichever is less. NBP shall use the latest generation of instrumented internal inspection devices.

The pipeline system shall be inspected by air and on the ground to observe right-of-way conditions and identify indications of leaks, evidence of pipeline damage, evidence of encroachment (*i.e.*, landowners building permanent structures on the permanent right-of-way), or damage to erosion controls resulting from erosion or washouts.

The DOT regulations require pipeline patrols to be conducted at least annually; however, NBP shall exceed the regulations by conducting its on-the-ground pipeline patrols at least quarterly. The air patrols shall be conducted at least monthly. Any erosion or unstable conditions shall be repaired. On the ground leak surveys with leak detector equipment shall be conducted at least twice per year.

NBP shall install a cathodic protection system to prevent or minimize corrosion of the buried pipeline and aboveground facilities. NBP shall design an impressed current system using deep-well anodes placed within the permanent right-of-way in areas where they would provide the required negative-induced potential to resist external corrosion. The anode system shall involve 10- to 12-inch-wide groundbeds 300 to 500 feet deep at three locations. Aboveground facilities shall be painted with a suitable anti-corrosion coating. Although internal corrosion is not expected to be a factor, the pipe shall be internally coated. NBP shall monitor the condition of the pipe coating and the effectiveness of the cathodic protection system. The DOT regulations require cathodic protection system rectifier readings on a bi-monthly basis. NBP shall exceed these regulations by conducting monthly readings. Repairs to the pipe, the pipe coating, or the cathodic protection system shall be made as appropriate.

Wherever the pipeline crosses fence lines, roadways, waterbodies, and other public access locations, pipeline markers shall be placed and maintained to alert those contemplating working in the vicinity of the buried pipeline. The markers shall identify NBP as the operator and display

telephone numbers for emergencies or general inquiries. NBP shall participate in a communication service in each state (One-Call system) to prevent damage to underground utilities, including staking and marking the pipeline for third-party construction and landowner requests.

Additional aspects of NBP's operation and maintenance plan shall include:

- employee qualification to operate and maintain the pipeline system in accordance with the Title 49 CFR, Part 192 Operator Qualification Rule;
- gathering data necessary for reporting incidents;
- annual pipe-to-soil potential surveys and bi-monthly rectifier inspections to maintain skill levels and review safety procedures in case of a pipeline emergency;
- annual testing and inspection of pressure limiting devices and emergency shutdown systems at the compressor station;
- gas detection at the compressor station;
- responding to, investigating, and correcting the cause of unintended closure of valves or shutdowns, changes in pressure or flow rate outside the normal operating limits, loss of communications, changes in the operation of safety devices, or any other malfunctions of a component, deviation from normal operations, or personnel error that may result in a hazard;
- notification of the responsible operating personnel when notice of an abnormal operation is received, and review of the effectiveness of the operating personnel's response;
- follow-up checks after an abnormal operations incident has ended to confirm the integrity of the remainder of the system;
- preparation of safety-related conditions reports and notification of the DOT when appropriate;
- procedures related to providing regular surveillance of facilities and to take appropriate action as a result of changes in class location, equipment failures, leakage history, corrosion, substantial changes in cathodic protection requirements, or other unusual operating maintenance conditions;
- procedures for analyzing accidents or failures;
- procedures related to a Damage Protection Program; and
- procedures related to a Public Education Program.

NBP shall also develop an emergency response plan, which would be coordinated and tested (through drills and exercises) with local fire/police departments and emergency management agencies. This plan would also be reviewed by the DOT Office of Pipeline Safety and is subject to DOT rules and regulations. Key elements of the plan shall include procedures for:

- receiving, identifying, and classifying emergency events, gas leakage, fires, explosions, and natural disasters;

- establishing and maintaining communications with local fire, police, and public officials, and coordinating emergency response;

- making personnel, equipment, tools, and materials available at the scene of an emergency;

- protecting people first and then property, and making them safe from actual or potential hazards; and

- emergency shutdown of the system and safe restoration of service.

NBP shall conduct a semi-annual review of its emergency response plan, rather than the annual review required by DOT regulations. Additionally, NBP shall conduct annual meetings with government emergency response organizations, property owners, utilities, contractors, and other interested parties to inform them of the pipeline location and procedures to be followed in reporting and responding to a pipeline emergency.

Before placing the pipeline system in service in California, NBP shall implement Condition 18 (section 7.6 of the Final EIR/EIS) and submit to the CSLC copies of the final operation and maintenance plan and emergency response plan. The final plans shall address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing and calibration of the cathodic protection system, leak monitoring, and emergency response plans and procedures.

In addition, within 120 days of the completion of work in California, NBP shall implement Condition 19 (section 7.6 of the Final EIR/EIS) and provide the following documents to the CSLC:

- a set of "as built" construction plans, certified by a California-registered civil/structural engineer, showing all design changes or other amendments to the construction as originally approved;

- certified copies of all completed pipeline integrity test results (hydrostatic tests, gauging runs, etc.) including copies of any failed test results with an explanation of the reason for failure; and

- a post-construction written narrative report confirming completion of the project with discussion of any significant field changes or other modifications to the approved design or execution plan, and providing details of any extraordinary occurrences such as spill incidents and accidents involving serious injury or loss of life, and a summary of a quality control and weld inspection program including all failed and repaired welds.

The purpose of the above provisions is to reduce, to the maximum extent feasible, risks to the public inherent in the construction and operation of a natural gas pipeline.

SUMMARY: Class II impact, this impact is found to be less than significant following mitigation.

EXHIBIT D

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 SUMMARY OF THE STAFF'S ENVIRONMENTAL ANALYSIS

Review of the information provided by NBP and further developed from data requests; field investigations; scoping; literature research; alternatives analysis; and contacts with Federal, Tribal, state, and local agencies, and individual members of the public indicates that the proposed project would result in limited adverse environmental impact. We have concluded that if the project is constructed as modified and in accordance with NBP's proposed mitigation and our recommendations, it would be an environmentally acceptable action. Although many factors were considered in the determination, the principal reasons are:

- about 83 percent of the environmentally preferable project would be in or adjacent to various existing rights-of-way and/or within a designated utility corridor;
- NBP would implement its CM&R Plan to protect natural resources during construction, restoration, and operation of the project;
- use of the directional drill method would avoid disturbances to the bed and banks of the Colorado River and the All American Canal, the only major waterbodies crossed by the project;
- the appropriate consultations with the FWS, the SHPOs, the BLM, the BOR, Native Americans, and the ACHP, if required, and any appropriate compliance actions resulting from these consultations, would be completed before NBP would be allowed to begin construction in any given area; and
- an environmental inspection and mitigation monitoring program would ensure compliance with all mitigation measures that become conditions of certification.

In addition, we developed specific mitigation measures that we believe would further reduce the environmental impact that would otherwise result from construction of the project. We are recommending that our mitigation measures be attached as conditions to any authorization issued by the FERC or the CSLC. These recommendations are presented in section 7.6.

Table 7.1-1, at the end of section 7.0, presents a summary of the potential environmental impacts from the project as well as the mitigation that would be applied to reduce any impact to a less than significant level. Additionally, the table lists the agency(ies) responsible for monitoring each of the mitigation requirements. Table 7.1-1 forms the basis for the detailed mitigation monitoring program that would be implemented during construction and operation of the North Baja Pipeline Project.

7.2 ALTERNATIVES CONSIDERED

We considered the No Action or Postponed Action Alternative. We concluded that while the No Action or Postponed Action Alternative would eliminate the environmental impacts identified in this EIS/EIR, NBP's proposed service area would be denied access to the 500 MMcfd of natural gas NBP proposes to transport. Consequently, the new and existing power plants would need to use more polluting fuels or obtain natural gas from other sources. We determined that the use of an alternative source of natural gas would require the construction of new facilities that would have their own set of specific impacts.

We evaluated alternatives involving the use of other existing pipeline systems. No system alternative was found to be both environmentally superior to the proposed facilities and able to meet the project's objectives.

We evaluated 13 route alternatives (sections 3.3 and 6.1) in comparison with the corresponding segment of NBP's proposed route. One of these alternatives would follow an alignment similar to El Paso's existing Yuma Lateral from Quartzsite to Yuma, Arizona (Yuma Lateral Alternative). Four of these alternatives would avoid 18th Avenue (Devers, 16th Avenue, Center Section, and West Canal Alternatives). Three alternatives would place segments of the pipeline in a designated utility corridor (Palo Verde Mountains, Powerline North, and Powerline South Alternatives). The Eastside Alternative would stay on the east side of SR 78 for a longer distance before crossing to the west side of the highway. The four border alternatives would change the route near the southern terminus. We have determined that the Eastside Alternative with the incorporation of a minor variation to reduce visual impact (Visual Variation) is the environmentally superior route alternative to the corresponding segment of the proposed route.

We evaluated five route variations (sections 3.4 and 6.2) in comparison with the corresponding segment of NBP's proposed route. Three of these route variations would avoid the steep terrain in the Palo Verde Mountains foothills and reduce the crossing of the Milpitas Wash SMA but would cross the Cibola NWR (Cibola, Saddle, and Connector Variations). The Railroad and I-8 Variations would maximize use of existing rights-of-way and increase distance from the Imperial Sand Dunes. We have determined that the Cibola Variation is the environmentally superior route variation alternative to the corresponding segment of the proposed route.

We evaluated one alternative site for the Ehrenberg Compressor Station and one alternative site for the Ogilby Meter Station. We determined that neither alternative site offers a clear environmental advantage over the respective proposed site.

7.3 ENVIRONMENTALLY PREFERABLE PROJECT

We have determined that NBP's proposed route with the incorporation of the Eastside Alternative (including the Visual Variation) and the Cibola Variation is the environmentally preferable project. The environmentally preferable project would increase the length of the route that requires a CDCA Plan amendment by 0.4 mile for a total of 20.2 miles; the length of the route requiring a Yuma District Plan amendment would be reduced by 1 mile for a total of 2.3 miles.

7.4 SIGNIFICANT UNAVOIDABLE IMPACTS

Effects on all resources were evaluated to determine any significant impact that would remain so after mitigation. As shown in table 7.1-1, all environmental impacts would be reduced to less than significant levels by proposed or recommended mitigation. The North Baja Pipeline Project would not result in significant unavoidable impacts.

7.5 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 pipeline itself (the compressor station would be natural-gas powered). Theoretically, the pipeline components could be reclaimed at the end of the pipeline's 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 (resulting from increased erosion of disturbed areas), crop production (lost or reduced for a portion of one season), land use (aboveground facilities would replace agricultural and open lands for the life of the project), and wildlife habitat (lost during construction). The loss of cultural resources also would be an irretrievable loss, if allowed to occur.

As discussed in section 5.12, the proposed project has been designed to meet or exceed all safety requirements, and the potential for irreversible damage during operation is slight.

The proposed project would transport significant volumes of natural gas to customers in southern California and Mexico and would result in an overall net reduction in air pollutant emissions in the region. Additionally, its operation would be consistent with Federal policies encouraging competitive natural gas transportation services. For these reasons, we believe that the limited irreversible and irretrievable resource commitments are acceptable.

7.6 FERC AND CSLC STAFF'S RECOMMENDED MITIGATION

If the FERC and the CSLC approve the North Baja Pipeline Project, we recommend that the following measures be included as specific conditions of the Certificate/permit to further mitigate the environmental impact associated with the construction and operation of the project:

1. North Baja Pipeline, LLC (NBP) shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the environmental impact statement/environmental impact report (EIS/EIR), unless modified by this Order. NBP must:

    a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the FERC (Secretary) and the California State Lands Commission (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 the Office of Energy Projects (OEP) and, for the lands under the CSLC's jurisdiction, 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 this 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,** NBP shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (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. NBP shall adopt the Eastside Alternative (including the Visual Variation) and the Cibola Variation.

5. The authorized facility locations shall be as shown in the EIS/EIR, as supplemented by filed alignment sheets and shall include the Eastside Alternative (with the Visual Variation) and the Cibola Variation. **As soon as they are available, and before the start of construction**, NBP 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 this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

   NBP's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to this Order must be consistent with these authorized facilities and locations. NBP's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

6. NBP 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 will 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 route variations recommended herein 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.

7. NBP shall file with the CSLC for the review and approval of the Executive Officer, a set of final engineering design drawings as issued for construction for the entire project in California, 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 directional drilling 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.

8. **Within 60 days of the acceptance of this Certificate and before construction** begins, NBP 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 NBP will implement the mitigation measures required by this Order and the CSLC mitigation monitoring program. NBP must file revisions to the plan as schedules change. The plan shall identify:

   a. how NBP 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 a description of how NBP 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 material;
   d. the training and instructions NBP 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 staff to participate in the training session(s);
   e. the company personnel (if known) and specific portion of NBP's organization having responsibility for compliance;
   f. the procedures (including use of contract penalties) NBP 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.

9. NBP shall file updated status reports with the Secretary and the CSLC on a **weekly** basis **until** all construction-related activities, including restoration, are complete. On request, these status reports will also be provided to other Federal and state agencies with permitting responsibilities. 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) 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. a description of any 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 this Order and the CSLC mitigation monitoring program, and the measures taken to satisfy their concerns; and

f. copies of any correspondence received by NBP from other Federal, state, or local permitting agencies concerning instances of noncompliance, and NBP's response.

10. NBP must receive written authorization from the Director of OEP **before commencing service from the project**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way is proceeding satisfactorily.

11. **Within 30 days of placing the certificated facilities in service**, NBP 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 NBP 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.

12. NBP shall file with the FERC and the CSLC **before construction** a revised Construction Mitigation and Restoration Plan that incorporates provisions for testing for and alleviating compaction in desert habitats and additional requirements of other jurisdictional agencies that are received after the issuance of the final EIS/EIR.

13. If after 5 years it is determined that restoration is not successful, NBP shall consult with the FERC, the CSLC, the Bureau of Land Management (BLM), and the California Department of Fish and Game (CDFG) to develop additional restoration measures.

14. NBP shall implement the following additional conservation measures to minimize or avoid effects on burrowing owls:

a. Unoccupied burrows discovered within the construction right-of-way during preconstruction surveys shall be collapsed or excavated prior to construction activities to prevent occupancy by owls.
b. Artificial burrows, installed to minimize the effect of burrow loss, shall be placed within the home range of individual owls affected prior to burrow excavation or installation of one-way doors.
c. During the breeding season, NBP shall conduct preconstruction surveys as soon as possible and conduct at least one survey within 1 week of construction.
d. If active burrows (*i.e.*, eggs or young owls present) are discovered within the construction work area, NBP shall curtail construction activities within a 200-foot buffer area until after the young have fledged.

15. NBP shall not begin construction activities **until**:

a. the FERC completes formal consultation with the U.S. Fish and Wildlife Service;
b. the CDFG makes a consistency determination on the Biological Opinion pursuant to Section 2080.1 of the California Fish and Game Code;
c. NBP obtains an incidental take permit under Section 2081 of the California Fish and Game Code, or receives concurrence from the CDFG that an incidental take permit is not required; and

d. NBP has received written notification from the Director of OEP that construction or use of mitigation may begin.

16. NBP shall defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads **until**:

a. NBP prepares and files with the FERC and the CSLC, and submits to the Arizona and California State Historic Preservation Offices (SHPOs), the BLM, and the Bureau of Reclamation (BOR), as appropriate, any outstanding cultural resources reports, testing and evaluation reports, and necessary treatment plans;
b. NBP files with the FERC and the CSLC the comments of the SHPOs, the BLM, and the BOR, as appropriate, on all cultural resources reports and plans submitted for review;
c. the Executive Officer of the CSLC reviews and approves all cultural resources reports and plans on the California portion of the project and notifies NBP in writing that construction may proceed; and
d. the Director of OEP reviews and approves all cultural resources reports and plans, and notifies NBP in writing that construction may proceed.

All material filed with the FERC and the CSLC 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."**

17. NBP shall conduct a noise survey to verify that the noise from the Ehrenberg Compressor Station operated at full load does not exceed a day-night sound level (L_{dn}) of 55 decibels of the A-weighted scale (dBA) at any noise-sensitive areas (NSA), and file the results of the noise survey with the FERC and the CSLC **no later than 60 days** after placing the compressor station in service. If the noise attributable to the operation of the compressor station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, NBP shall file a report on what changes are needed and shall install additional noise controls to meet that level **within 1 year of the in-service date**. NBP shall confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the FERC and the CSLC no later than 60 days after it installs the additional noise controls.

18. **Before placing the pipeline system in service in California**, NBP shall submit to the CSLC copies of the final operation and maintenance plan and emergency response plan. The final plans shall address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing and calibration of the cathodic protection system, leak monitoring, and emergency response plans and procedures.

19. NBP shall provide the following documents to the CSLC **within 120 days of the completion of work in California**:

a. a set of "as built" construction plans, certified by a California-registered civil/structural engineer, showing all design changes or other amendments to the construction as originally approved;
b. certified copies of all completed pipeline integrity test results (hydrostatic tests, gauging runs, etc.) including copies of any failed test results with an explanation of the reason for failure; and
c. a post-construction written narrative report confirming completion of the project with discussion of any significant field changes or other modifications to the approved design or

execution plan, and providing details of any extraordinary occurrences such as spill incidents and accidents involving serious injury or loss of life, and a summary of a quality control and weld inspection program including all failed and repaired welds.

20. NBP shall ensure that a qualified monitor is present during clearing, grading, and trenching activities on the portion of the Cibola Variation that has not been surveyed.

TABLE 7.1-1

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
GEOLOGY					
NBP1	Disturbances to the natural topography along the right-of-way and at aboveground facilities could occur due to trenching and grading activities (section 5.1.1).	Significant (CEQA Class 2)	After completion of construction, North Baja Pipeline, LLC (NBP) would restore topographic contours and drainage conditions as closely as practicable to their preconstruction condition.	Less than significant (CEQA Class 3)	Federal Energy Regulatory Commission (FERC), California State Lands Commission (CSLC), and Bureau of Land Management (BLM) monitors would verify contours are restored to preconstruction grade.
NBP2	The proposed pipeline right-of-way could adversely impact future mineral resource production on private and public lands. Potential impacts include diminished mineral land value, loss of mineral land access, and loss of revenues generated by future mineral production (section 5.1.1).	Significant (CEQA Class 2)	With the exception of the quarry operated by the Bureau of Reclamation (BOR), construction of the pipeline and associated aboveground facilities would not cross any active mineral resource operations. Because much of the pipeline would be constructed adjacent to existing utility rights-of-way, future development or expansion of mineral resource mining operations for the most part have already been precluded. Additionally, due to the linear nature of pipeline projects and the relatively small amount of land required for operation, lands precluded from future mineral development would not constitute a significant impact or loss of mineral resources or availability to society. NBP would address any encumbrances resulting from pipeline construction and operation to owners/operators of mining operations during pipeline easement negotiations. In addition, adoption of the recommended Cibola Variation would avoid the BOR quarry.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP3	Seismicity (which includes active faults, ground shaking, and soil liquefaction) is the primary geologic hazard that could affect the proposed project facilities. (sections 5.1.1 and 5.1.2).	Significant (CEQA Class 2)	NBP 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, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*. The project facilities would be designed by a qualified engineering professional. The minimum seismic design would meet or exceed the latest edition of the Uniform Building Code or International Building Code and incorporate current seismological engineering standards. The engineering design drawings for the entire project in California would be certified by a California-registered civil/structural engineer. NBP has also prepared a Liquefaction Hazard Evaluation and Mitigation Study in a manner consistent with California Division of Mines and Geology Special Publication 117, *Guidelines for Evaluation and Mitigation of Seismic Hazards in California, Chapter 6, Analysis and Mitigation of Liquefaction Hazards*. NBP's Liquefaction Hazard Evaluation and Mitigation Study indicated a potential for liquefaction hazards at the Ehrenberg Compressor Station site, the Arizona side of the Colorado River crossing, and the western portion of the 18th Avenue alignment. To mitigate these potential liquefaction hazards, NBP has incorporated the recommendations of the Liquefaction Hazard Evaluation and Mitigation Study into the project design. For the Ehrenberg Compressor Station site, this includes implementation of underlying ground improvements by densification of liquefiable soil using compaction grouting or stone columns. At the Colorado River, liquefiable soils would be avoided by the use of the horizontal directional drill crossing method. The pipeline would be designed using the Guidelines for the Design of Buried Steel Pipe (American Lifelines Alliance, 2001) or other similar recognized industry standards for seismic-resistant design in liquefaction-prone areas.	Less than significant (CEQA Class 3)	NBP certified compliance with DOT construction and safety standards in its application to the FERC. FERC, CSLC, and BLM monitors would verify proposed mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP4	The potential for landslide and/or slope instability hazards could exist in areas where the pipeline route crosses steep terrain (section 5.1.1).	Significant (CEQA Class 2)	NBP 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&R Plan) (see NBP7/ARM1). In areas of steep terrain, NBP would install trench breakers at intervals determined by an engineer or similar qualified professional. This mitigation would prevent the flow of water along the backfill surrounding the pipeline, reduce the potential for soil movement along the trench, and aid in stabilizing slope stability hazards. To further reduce the potential for impacts from slope stability hazards, three variations were evaluated between mileposts (MP) 28.6 and 31.9 that would be east of the proposed route and avoid much of the steep terrain associated with the Palo Verde Mountain foothills. One of the variations, the Cibola Variation, is recommended as the environmentally preferable route in this area.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify plan and mitigation are followed.
NBP5	Blasting for trench excavation is anticipated in the Palo Verde Mountains between MP 29.7 and 31.5 and potentially in other areas where bedrock is close to the surface. Temporary effects of blasting could include hazards posed by uncontrolled fly-rock, and nuisances caused by noise, increased dust, and venting of gases following blasts (section 5.1.2).	Significant (CEQA Class 2)	All blasting would be conducted in strict compliance with NBP's construction specification for blasting. This specification contains procedures for complying with applicable Federal, state, and local safety and environmental regulations, codes, and standards for the use, storage, and transport of explosives. With adoption of the environmentally preferable Cibola Variation, construction through the Palo Verde Mountains would be avoided.	Less than significant (CEQA Class 3)	NBP certified compliance with blasting specification requirements in its application to the FERC. FERC, CSLC, and BLM monitors would verify blasting specification is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP6	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 (section 5.1.3).	Significant (CEQA Class 2)	No known paleontological sites are crossed by the proposed pipeline route; however, potentially important paleontological stratigraphic units are crossed. Based on a literature and museum archival review and field survey, a paleontological sensitivity of low or moderate for the various formations crossed was assigned. To address potential impacts on paleontological resources resulting from pipeline construction, NBP developed a Paleontological Resource Mitigation Plan (PRM Plan). The PRM Plan includes a summary of the literature and museum archival review, field survey, 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 PRM Plan, NBP would have a paleontological monitor onsite during construction activities. This monitor would spot monitor formations with moderate paleontological sensitivity and spot check other formations under the direction of the project palaeontologist. Additional measures of the plan include: • training of construction personnel regarding the possibility that fossil resources may be encountered during construction and instruction to contact the EI and the project paleontologist if fossils are discovered; • 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; • salvage of significant fossils as determined necessary by the project paleontologist; and • protocol for curation and repository storage of fossils. NBP's paleontological monitor would prepare daily reports. Quarterly reports prepared by the project paleontologist would be submitted to the FERC, the CSLC, and the BLM. Upon completion of construction, a final paleontological report would be prepared.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation and plan are followed. The FERC, CSLC, and BLM are responsible for reviewing quarterly reports.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
SOILS					
NBP7 ARM1	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 (section 5.2.1).	Significant (CEQA Class 2)	NBP would mitigate impacts on soils by implementing its CM&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). Before construction, NBP would file with the FERC and the CSLC a revised CM&R Plan that incorporates provisions for testing for and alleviating compaction in desert habitats and additional requirements of other jurisdictional agencies that are received after the issuance of the final environmental impact statement/environmental impact report (EIS/EIR).	Less than significant (CEQA Class 3)	The FERC responsible for reviewing and providing written approval of the revised CM&R Plan. FERC, CSLC, and BLM monitors would verify CM&R Plan is followed. Other responsible agencies would monitor portions of construction to verify CM&R Plan is followed.
NBP8	Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could also have an impact on soils (section 5.2.1).	Significant (CEQA Class 2)	NBP would mitigate impacts on soils by implementing its Spill Prevention, Containment, and Control Plan for Hazardous Materials and Hazardous Wastes (SPCC Plan).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify SPCC Plan is followed. Other responsible agencies would monitor portions of construction to verify SPCC Plan is followed.
NBP9	Construction of the project could result in fugitive dust, which is a visible indication of soil loss through wind erosion (see section 5.2.1).	Significant (CEQA Class 2)	NBP would mitigate impacts associated with fugitive dust by implementing its Dust Control Plan.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify Dust Control Plan is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP10	Construction of the pipeline could impact about 51.3 acres of soils with shallow depths to bedrock (including some areas where blasting would be required), 29.1 acres of soils with high water erosion potential, and 124.1 acres of soils with high wind erosion potential (section 5.2.2).	Significant (CEQA Class 2)	NBP would mitigate impact on these soils by implementing its CM&R Plan (see NBP7/ARM1). In areas where blasting is required, NBP would follow its construction specification for blasting (see NBP5).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan and construction specifications for blasting are followed.
NBP11	Construction activities could impact irrigation systems within the Palo Verde Valley (section 5.2.2).	Significant (CEQA Class 2)	With the exception of Rannells Drain, irrigation drains and canals would not be affected by construction of the pipeline because they would be crossed either by boring underneath the culverts along 18th Avenue or by installing the pipeline between the drain culvert and the road. NBP would cross Rannells Drain using an open-cut crossing technique. NBP would restore the banks and bed of the drain to its original configuration and stabilize the banks of the drain with erosion control fabric. Construction and restoration at Rannells Drain would be done in accordance with Part III of NBP's CM&R Plan (see NBP7/ARM1).	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify Part III of the CM&R Plan is followed.
NBP12	Construction of the pipeline could impact about 54.9 acres of soil identified as prime farmland or farmland of statewide importance (section 5.2.2).	Significant (CEQA Class 2)	NBP 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 NBP7/ARM1).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP13	Construction could reduce crop productivity in the Palo Verde Valley (section 5.2.2).	Significant (CEQA Class 2)	NBP would develop and implement a crop monitoring program in accordance with Part II of its CM&R Plan (see NBP7/ARM1). The program would evaluate crop productivity and success for a period of at least 2 years following construction. NBP would prepare activity reports during this period documenting any problems identified by the company or landowner and describing corrective actions taken to remedy these problems, and file these reports with the FERC and the CSLC on a quarterly basis, as stipulated in the CM&R Plan. If after 2 years it is determined that cropland crossed by the pipeline has not been restored successfully, NBP would implement additional restoration measures as designed by a professional agronomist (see the CM&R Plan).	Less than significant (CEQA Class 3)	The FERC and CSLC are responsible for reviewing quarterly activity reports documenting restoration problems and corrective actions taken and monitoring the right-of-way for at least 2 years following construction. FERC and CSLC monitors would verify Part II of the CM&R Plan is followed.
NBP14	Construction of the Ehrenberg Compressor Station would result in the permanent loss of 12.4 acres of soil identified as prime farmland (section 5.2.2).	Less than significant (CEQA Class 3)	No mitigation is proposed. This loss would equal less than 0.1 percent of the agricultural lands in the Palo Verde Valley.	Less than significant (CEQA Class 3)	No monitoring required.
WATER RESOURCES					
NBP15	Shallow aquifers underlying construction areas could experience changes in overland flow and recharge caused by clearing and grading of the construction right-of-way (see section 5.3.1.1).	Significant (CEQA Class 2)	After completion of construction, NBP would recontour and restore the ground surface to ensure that the original overland flow and recharge patterns are restored.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify that original overland flow and recharge patterns are restored.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP16	Compaction of near-surface soils caused by heavy construction vehicles could affect groundwater by reducing the soil's ability to absorb water (section 5.3.1.1).	Significant (CEQA Class 2)	NBP would comply with its soil compaction mitigation described in Part II of its CM&R Plan (see NBP7/ARM1). 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 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan is followed.
NBP17	Blasting near groundwater wells during construction could cause temporary changes in water level and turbidity and damage the water wells (section 5.3.1.1).	Significant (CEQA Class 2)	No water wells have been identified within 0.5 mile of anticipated blasting locations. All blasting would be conducted in strict compliance with NBP's construction specification for blasting (see NBP5). NBP'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 3)	FERC, CSLC, and BLM monitors would verify blasting specification is followed.
NBP18	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 (section 5.3.1.1).	Significant (CEQA Class 2)	NBP 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 3)	FERC, CSLC, and BLM monitors would verify SPCC Plan is followed.
NBP19	Trench dewatering during pipeline construction could affect groundwater resources (section 5.3.1.1).	Significant (CEQA Class 2)	NBP would dewater trenches in such a manner that no heavily silt-laden water flows into any waterbody as described in its CM&R Plan (see NBP7/ARM1).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP20	Water table elevations could be affected by construction activities and the alteration of the natural soil strata could result in new migration pathways for groundwater, particularly in wetlands (section 5.3.1.1).	Significant (CEQA Class 2)	Changes in water table elevations are generally temporary and reestablish quickly after the trench is backfilled. NBP would construct trench breakers between the upland/wetland interface and follow other restoration procedures identified in its CM&R Plan (see NBP7/ARM1).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan is followed.
NBP21	Construction activities could impact public and private wells located within 150 feet of the proposed work area (section 5.3.1.2).	Significant (CEQA Class 2)	During initial review, one water well was identified within 150 feet of the construction work area. Before construction, NBP would conduct a field survey to verify the location of this well and any other wells or springs that are identified within 150 feet of the construction work area. With the landowner's permission, NBP 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, NBP would conduct post-construction water well tests. If it is determined that construction activities have impaired a well water quality or yield, NBP 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, NBP would arrange for a new well to be drilled or compensate the landowner.	Less than significant (CEQA Class 3)	NBP certified compliance with the mitigation requirements in its application to the FERC. FERC and CSLC monitors would verify mitigation is followed.
NBP22	Significant amounts of groundwater may be encountered during construction along 18th Avenue that may result in minor fluctuations in local groundwater levels (see section 5.3.1.2).	Significant (CEQA Class 2)	To control the influx of groundwater into bore pits at road and canal crossings, the use of well points in addition to standard sump pump dewatering may be necessary. The water from these dewatering operations would be discharged to lined straw bale retaining pits to contain sediments and/or otherwise filtered and discharged into field drains or canals. NBP would obtain the necessary permits to perform these operations.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP23	Contaminated groundwater could be encountered during construction near a former waste disposal site at MP 5.7 and a landfill at MP 26.4 (see section 5.3.1.2).	Significant (CEQA Class 2)	Because the proposed pipeline route does not cross these two sites, the depth to groundwater in the vicinity of the landfill, and the type of debris stockpiled at the former disposal site, impact on groundwater associated with past and present disposal activities is unlikely. In the event contaminated groundwater is encountered as evidenced by refuse and/or other debris in the trench, discoloration, odor, or other signs at these locations or other location along the pipeline route, the area would be inspected prior to any further construction activity. Field observations would be conducted to determine the extent of contamination, appropriate disposal/treatment options, and the need for sampling. Appropriate agencies, including the California Regional Water Quality Control Board, Colorado River Basin, Region 7, and the Riverside County Department of Health would be contacted.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP24	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 such as fuels and lubricants (section 5.3.2.1).	Significant (CEQA Class 2)	NBP would install the pipeline across all of the flowing waterbodies crossed by the project using the directional drill or bore method or install the pipeline between drain culverts and 18th Avenue, with one exception (Rannells Drain). Construction and restoration at Rannells Drain would be done in accordance with Part III of NBP's CM&R Plan (see NBP7/ARM1).	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify Part III of the CM&R Plan is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP25	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 a degradation in water quality. Acute chronic toxic effects on aquatic organisms could result from such a spill (section 5.3.2.1).	Significant (CEQA Class 2)	NBP 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 3)	FERC, CSLC, and BLM monitors would verify SPCC Plan is followed.
NBP26	The primary impact that could occur as a result of directionally drilling the Colorado River and All American 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 (section 5.3.2.2).	Significant (CEQA Class 2)	NBP developed a Horizontal Directional Drill Plan (Part IV of the CM&R Plan) that describes how drilling operations would be conducted and monitored to minimize the potential for inadvertent releases or failure. It also includes procedures for cleanup of drilling mud releases and for sealing the hole if a drill cannot be completed. NBP has also submitted site-specific directional drill plans for the Colorado River and the All American Canal that show the drill entry and exit workspaces, the pipe fabrication and stringout areas, and the drill profiles.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify Part IV of the CM&R Plan and the site-specific directional drill plans are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP27	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 (section 5.3.2.3).	Significant (CEQA Class 2)	NBP would conduct all hydrostatic test activities in accordance with the measures in its CM&R Plan, applicable permits (including coordination with the BOR), and DOT pipeline safety regulations set forth in Title 49 CFR Part 192. NBP would limit the fill volume to 1,400 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. After testing, the water would be discharged from the last test section into the All American Canal. The test water would be filtered and discharged through an energy dissipation device at a rate of 6,000 to 10,000 gallons per minute utilizing foam dewatering pigs moving through the pipeline at a rate of 2 to 3 miles per hour.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan, permits, and mitigation measures are followed. NBP certified compliance with the DOT Minimum Federal Safety Standard in its application to the FERC.
NBP28	Construction could impact the streambed and associated wildlife and vegetation habitats of the Colorado River and 579 dry washes crossed by the proposed pipeline route (section 5.3.2.4).	Significant (CEQA Class 2)	NBP would obtain a Streambed Alteration Agreement from the CDFG and follow its CM&R Plan developed in consultation with the CDFG (see NBP7/ARM1). NBP may be required to provide offsite, compensatory mitigation for disturbances to wildlife habitats located between the banks of dry desert washes. Prior to implementation of CDFG-required mitigation measures, NBP would consult with the CDFG regarding compensatory mitigation requirements for habitat losses.	Less than significant (CEQA Class 3)	The FERC is responsible for reviewing and providing written approval of CDFG-required mitigation requirements. FERC, CSLC, and BLM monitors would verify mitigation requirements are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
WETLANDS					
NBP29	Construction could disturb a total of 3.5 acres of wetland area. Construction clearing activities and disturbance of wetland vegetation could affect wetland functions, such as capacity to buffer flood flows, control erosion, and provide wildlife habitat. Other impacts could include alteration of wetland vegetation, temporary changes to wetland hydrology and water quality, temporary lowering of the water table, increased turbidity during trenching and restoration activities, mixing of topsoil and subsoil, and compaction and furrowing of soils. A 10-foot-wide maintained corridor would result in the permanent conversion of 0.4 acre of scrub-shrub wetland to emergent wetland (section 5.4.1).	Significant (CEQA Class 2)	NBP would adhere to its CM&R Plan (see NBP7/ARM1), comply with the COE's Section 404 permit conditions, and obtain appropriate state-issued Section 401 water quality certifications or waivers. Wetlands would be restored to preconstruction contours. Construction of the project would result in "no net loss" of wetland because no wetlands would be permanently drained or filled. NBP states that it does not plan to actively maintain the permanent right-of-way. However, NBP has the right to maintain a 10-foot-wide strip centered over the pipeline if necessary for periodic corrosion/leak surveys.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan and conditions of permits are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
VEGETATION					
NBP30 ARM2	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 could have longer-term impacts than in agricultural areas where vegetation reestablishes quickly (section 5.5.1).	Significant (CEQA Class 2)	NBP proposes to allow natural revegetation of the construction right-of-way after construction because active revegetation efforts such as seeding and active planting generally fail in the desert due to the arid environment. To aid in the natural revegetation process, NBP would strip and segregate topsoil where grading would occur to conserve the existing seedbank. NBP would not grade the area where the topsoil would be stored. This area is estimated to be about 41 acres or 6 percent of the right-of-way. During restoration, the topsoil would be respread evenly across the surface of the right-of-way. In areas where grading is not required, vegetation would be cut or crushed thereby lessening soil disturbance and leaving the underground roots of woody plants intact. Vegetation that must be cut would be stored at the edge of the right-of-way and respread over the right-of-way during or after final grading to provide a mulch to trap seeds, shade seedlings, and conserve water for the revegetation of the right-of-way. In areas where topsoil is removed, this material would be spread with the topsoil. Lastly, during final restoration, NBP would imprint disturbed soils with equipment (*e.g.*, sheepsfoot) that would create indentations to catch seeds and water, aiding in the natural revegetation of the construction right-of-way. NBP would supplement natural revegetation of the construction right-of-way by salvaging larger species of cactus (primarily *Opuntia*), ocotillo, and other woody vegetation. Immediately prior to ground-disturbing activities, NBP would remove select cactus and ocotillo from the right-of-way. NBP would store and then replant these cactus and ocotillo after pipeline installation. Sites for replanting cactus and ocotillo would be selected to assist in off-highway vehicle (OHV) control (in accordance with the CM&R Plan). Other less common species of cactus such as foxtail cactus, hedgehog cactus, nipple cactus, and barrel cactus, along with woody species from creosote bush and desert wash woodland areas, would be salvaged, stored, and replanted for use in the test plots proposed for an experimental seeding program.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan and additional mitigation measures are followed. The FERC, CSLC, BLM, and CDFG are responsible for monitoring and reviewing annual reports documenting results of desert vegetation monitoring and the experimental seeding and plant salvage program for at least 5 years following construction.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP30 ARM 2 (cont'd)			NBP would implement an experimental seeding program to add to the knowledge base. The proposed seeding program, which would also include transplanting salvaged desert vegetation, would establish four study sites, two within desert wash woodland and two within Sonoran creosote bush scrub communities. Each study site would be divided into three test plots. One test plot would be on the disturbed right-of-way and receive supplemental seeding, the second plot would be on the disturbed right-of-way and receive no seeding, and the third plot would be a control plot located on undisturbed land receiving no seeding. Two different seed mixes have been developed using species appropriate to the two vegetation community sites in which they would be planted. Each seed mix would be applied at two different rates. Data would be collected on all the test plots for a period of 5 years. This program would provide data to assess the effectiveness of natural revegetation versus supplemental seeding and plant salvage. A detailed description of the seeding program is provided in attachment A of the CM&R Plan. NBP would also annually monitor areas of desert vegetation disturbed by construction for 5 years after construction is completed. Results of the monitoring and the experimental seeding and plant salvage program would be provided in full annual reports for the first, second, and fifth year after construction. Data from annual surveys would be provided for the third and fourth years. The fifth-year report would provide an overall summary of the success of mainline restoration and the experimental seeding and salvage programs. NBP would submit the annual reports, the data collected, and the fifth year summary report to the FERC, the CSLC, the BLM, and the CDFG. If after 5 years it is determined that restoration is not successful, NBP would consult with the FERC, the CSLC, the BLM, and the CDFG to develop additional restoration measures.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP31	Construction could reduce wildlife habitat and diversity by removing desert wash woodlands (section 5.5.2).	Significant (CEQA Class 2)	NBP would minimize tree clearing in 15 areas of native trees along the proposed route by reducing the width of the construction right-of-way from 80 feet to 50 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, MP25.9 (850 feet), MP 34.6 (860 feet), MP 51.1 (1,800 feet), MP 51.7 (1,100 feet), and MP 64.5 (500 feet).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
NBP32	Open-cut trenching through Rannells Drain (MP 11.4) could have an impact on vegetation growing in and on the banks of the drain (section 5.5.2).	Significant (CEQA Class 2)	The vegetation in Rannells Drain is routinely removed during drain maintenance by the Palo Verde Irrigation District (PVID). NBP would work with the PVID to complete the clearing of the vegetation from the drain prior to beginning the crossing to reduce potential impacts on the Yuma clapper rail (see NBP45). 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 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP33	The Ehrenberg Compressor Station and associated facilities would permanently convert 12.4 acres of agricultural fields to an industrial/commercial use. The Rannells Trap and Ogilby Meter Station would permanently convert 1.2 acres of Sonoran desert bush scrub to an industrial/commercial use.	Less than significant (CEQA Class 3)	No mitigation proposed. The permanent conversion of 12.4 acres of agricultural fields and 1.2 acres of Sonoran desert bush scrub would represent less than a 1 percent change in each respective vegetation type in the project area.	Less than significant (CEQA Class 3)	No monitoring required.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP34	Removal of existing vegetation and the disturbances of soils during construction could create optimal conditions for the invasion and establishment of exotic-nuisance species (section 5.5.2).	Significant (CEQA Class 2)	NBP developed a CM&R Plan that includes measures that would minimize the spread of noxious weeds from non-native to native plant communities (see NBP7/ARM1). NBP proposes the following mitigation measures to minimize the spread of noxious weeds from non-native to native plant communities: • In accordance with Executive Order 13112, the construction area within lands administered by the BLM would be surveyed by a qualified noxious weed authority that would identify all noxious weeds present and provide a list to the authorized office. A determination would be made by the authorized officer of any noxious weeds that require flagging for treatment prior to construction. Treatment would be according to instruction of the authorized officer. Any use of herbicides in California would be handled by properly licensed county agricultural agents. • Prior to construction, populations of plants listed as invasive exotics by the California Exotic Plant Pest Council in its most recent invasive plant *List A* (ListA-1 and A-2) and *Red Alert* list, as well as any other species listed on the *BLM National List of Invasive Weed Species of Concern* already existing in native desert habitat where construction is planned, would be identified on the ground and on maps through a preconstruction survey. This would establish a baseline from which to locate equipment washdown stations as well as to evaluate post-construction monitoring surveys. • Disposal of soil and plant materials from non-native areas would not be allowed in native areas. That is, no disposal or transfer of excess spoils or plant materials from non-native areas would be allowed into native cover type areas.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify CM&R Plan and additional mitigation measures are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP34 (cont'd)			• All construction equipment would be washed prior to entering the construction area to prevent the spread of invasive weeds from other areas. Clearing and grading equipment would be washed down with high-pressure water prior to moving from infested areas to non-infested areas. Construction personnel would be educated on weed identification and the importance of controlling and preventing the spread of invasive non-native species infestations. Gravel and/or fill material to be placed in relatively weed-free areas would come from weed-free sources. Certified weed-free hay bales would be used. Post-construction monitoring and treatment of invasive weeds would be implemented in accordance with the CM&R Plan. • Tamarisk trees would be removed from all portions of the right-of-way in native areas. In non-native areas, tamarisk trees would be removed as necessary as part of clearing operations. To prevent dispersal of tamarisk propagules, debris would either be burned onsite under an appropriate burning permit or hauled offsite. All loads hauled offsite would be properly covered to prevent the spread of propagules by wind (see the CM&R Plan). Additionally, NBP proposes to conduct surveys for non-native plant species after construction is complete. The results of these surveys would be compared to the preconstruction surveys to determine locations of weed infestations attributable to the project. NBP would conduct these surveys and implement control measures (*e.g.*, herbicide application, pulling by hand) twice a year for 2 years after construction is complete. NBP would also implement weed control measures annually as part of routine maintenance and operation of the pipeline. NBP would include the results of its weed control program with the reports of its general desert vegetation monitoring (see NBP30).		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
WILDLIFE AND AQUATIC RESOURCES					
NBP35	Construction and operation of the pipeline could directly impact wildlife through disturbance, displacement, mortality, and alterations of available habitats (section 5.6.1.1).	Significant (CEQA Class 2)	NBP 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 (see NBP43). NBP would also 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 (see NBP7/ARM1).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation measures and the CM&R Plan are followed.
NBP36	Construction of the Ehrenberg Compressor Station, Rannells Trap, and the Ogilby Meter Station would permanently replace existing wildlife habitats (section 5.6.1.1).	Less than significant (CEQA Class 3)	No mitigation is proposed.	Less than significant (CEQA Class 3)	No monitoring required.
NBP37	An indirect impact of the project could be the increased level of human-wildlife interaction by creating a new right-of-way that could add to the existing matrix of open desert, jeep trails, dry washes, and cleared rights-of-way currently attracting OHV users (section 5.6.1.1).	Significant (CEQA Class 2)	Impact would be somewhat lessened because about 63 percent of the proposed pipeline route is in or adjacent to existing rights-of-way. In addition, NBP has stated that it has no plans to maintain an improved permanent right-of-way for operation and maintenance of the pipeline facilities. NBP would work with the BLM to identify areas where blocking the right-of-way from OHV use would be appropriate and practical (see NBP63).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
NBP38	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 (section 5.6.1.2).	Significant (CEQA Class 2)	This impact would be greatly reduced or avoided by NBP's completion of vegetation clearing activities prior to mid-March as proposed. Additionally, preconstruction activities occurring prior to vegetation clearing would deter some individuals from selecting nesting sites within the proposed right-of-way. Mitigation measures described for vegetation communities (see NBP30 and NBP31) would also reduce the duration of impacts on these species.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP39	Construction-related activities could directly and indirectly impact wildlife in managed and sensitive biological resource areas such as the Cibola National Wildlife Refuge (NWR), Milpitas Wash Special Management Area (SMA), and two landscape-scale conservation sites identified by The Nature Conservancy (section 5.6.1.2).	Significant (CEQA Class 2)	One of the landscape-scale conservation sites includes the Colorado River and adjacent riparian areas, which would be avoided by the directional drill. NBP proposes a number of conservation measures to protect wildlife and special status plants (see NBP43 to 52 and ARM4) that would mitigate impact on wildlife in these managed and sensitive biological resource areas. In addition, adoption of the environmentally preferable Cibola Variation would reduce the amount of the Milpitas Wash SMA crossed by the pipeline.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
NBP40	Water withdrawal associated with hydrostatic testing activities could entrain fish eggs and juvenile fish (section 5.6.2.1).	Significant (CEQA Class 2)	NBP would cover the water intake with an adequately sized mesh screen to reduce the potential for fish and fish egg entrainment.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP41	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 (section 5.6.2.1).	Significant (CEQA Class 2)	NBP's adherence to the CM&R Plan (NBP7/ARM1) and the SPCC Plan would prevent a large spill from occurring near surface waters. Hazardous materials must be stored, and vehicles refueled, at least 100 feet from surface waters. Should a small 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 3)	FERC, CSLC, and BLM monitors would verify CM&R and SPCC Plans are followed.
NBP42	The proposed open-cut crossing of Rannells Drain could temporarily increase the sediment load in the drain (section 5.6.2.2)	Significant (CEQA Class 2)	NBP proposes to use sediment curtains downstream of the trench during construction to trap sediments and prevent the transport of sediment downstream. The sediment collected by the curtains would be removed the next time the drain is dredged for agricultural purposes.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
SPECIAL STATUS SPECIES					
NBP43	Special status plants in the pipeline right-of-way could be lost when the right-of-way is cleared, and special status animals could be affected by the temporary loss of habitat during construction. Construction of aboveground facilities would result in a permanent loss of habitat. Special status species could also be affected where blasting is required (section 5.7.1).	Significant (CEQA Class 2)	NBP would implement the following general minimization and conservation measures to reduce the impact of the project on special status species: • NBP would develop and implement an environmental training program prior to 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. • 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. • NBP would hire and designate at least two environmental inspectors (EI) 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 NBP's CM&R Plan. NBP would also hire and designate at least one qualified biologist who would be responsible for identification of habitat and individuals of special status species and for implementation of all measures calling for a qualified 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.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP43 (cont'd)			• An authorized biologist would conduct a preconstruction survey of each project component located within areas identified during NBP's surveys as listed species habitat no more than 7 days prior to the onset of activities. • 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 major roads leading to and from the construction area. NBP's contractors and employees would report all such incidents directly to the EI. • 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. • Qualified biologists would monitor all work where prior NBP surveys have documented the occurrence of one or more listed species. In conjunction with NBP's EIs, the biologist 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. • All trash and food items generated by construction and maintenance activities would be promptly contained and regularly removed from the project site to reduce the attractiveness of the area to common ravens and other desert predators. • Firearms and domestic pets would be prohibited from work sites. • Employees and contractors would look under vehicles and equipment for the presence of special status species prior to 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 a biologist authorized to do so.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP43 (cont'd)			• 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 directional drill operations at the Colorado River and the All American Canal. • 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 prior to backfilling. In habitats supporting special status species, pipe segments would be capped or taped closed each night. Such pipe segments would be inspected regularly before sealing. For open trenches, earthen escape ramps would be maintained at 1-mile intervals. Other excavations that remain open overnight would be covered or ramped to prevent entrapment of wildlife. • 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, NBP would not proceed with project activity in that location until specific consultation with the FERC, the FWS, the BLM, and/or other appropriate agency is completed. • All encounters with listed species would be reported to the biologist, who would record the following information: a. species; b. location (narrative and maps) and dates of observations; c. general condition and health, including injuries and state of healing; d. diagnostic markings, including identification numbers or markers; and e. locations moved from and to. • Upon locating a dead or injured listed species, NBP would notify the FWS and appropriate state wildlife agency. 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.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP43 (cont'd)			• The pipeline construction right-of-way would be limited to 80 feet in width (except where noted below), with the exception of authorized extra workspace areas. The construction right-of-way would be clearly staked and flagged in advance of construction. The construction area includes approved work areas for the pipeline, compressor and meter stations, the facilities at Rannells Trap, access roads, and staging and pipe storage areas. • Where desert wash woodland tree densities equal or exceed 20 percent crown cover within the non-construction or "passing lane" portion of the construction right-of-way, NBP would narrow the construction corridor to 50 feet. Areas of this narrower construction width would be identified in the field, staked, and flagged in advance of construction. • 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. • 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. • With the exception of fenced facilities, all materials and equipment would be removed from the area upon completion of work. • Upon completion of project activities, NBP would submit a standardized 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 make recommendations for modifying the stipulations in order to enhance the protection of species in the future. The final report would provide the actual acreage disturbed by project activities by habitat type.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP44	Noise from construction of the pipeline and the Ehrenberg Compressor Station could indirectly affect southwestern willow flycatchers if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by southwestern willow flycatchers (section 5.7.2.1).	Significant (CEQA Class 2)	In addition to NBP's general conservation measures (see NBP43), NBP would minimize the potential for impacts on the southwestern willow flycatcher by implementing the following measures: • All southwestern willow flycatcher native habitat would be avoided by adopted construction methods. • NBP has moved the originally planned compressor station location away from the Colorado River so that all construction and operation would be more than 1,000 feet from potential habitat. In addition, the directional drill rig would be located on the west side of the river more than 1,000 feet from the potential habitat on the east side. • The remaining construction site within 1,000 feet of potential native habitat is the exit site for the directional drill, an area that would experience active construction for several weeks. All work at this site during the period of April 1 to September 15 would limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. • Dust, nighttime lighting, and human presence would be limited at the Colorado River crossing and the compressor station within 1,000 feet of potential habitat as follows: a. When nighttime operations are required for the pullback of the pipe through the bored hole under the river, all work would be conducted behind abatement walls that would control noise and light emissions. These abatement walls would be installed prior to construction regardless of the time of start of construction. b. No night lighting used within 1,000 feet of potential habitat during the breeding season would be directly visible at the edge of the habitat.	Less than significant (CEQA Class 3)	FERC monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP44 (cont'd)			c. Noise levels of construction would be controlled. Noise levels would be measured at the edge of potential habitat and results provided to the FWS to verify baseline conditions and conditions during construction activities. Noise levels would be kept at or below a day-night equivalent sound level (L_{dn}) of 60 decibels of the A-weighted scale (dBA). If the current ambient noise level exceeds an L_{dn} of 60 dBA, noise levels generated from construction activities would not exceed existing conditions. d. There would be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response and to monitor the location of the directional drill (see Part IV of CM&R Plan). e. Dust would be strictly controlled by watering construction areas within 1,000 feet of potential habitat as discussed in NBP's Dust Control Plan. • Construction or installation work performed within 1,000 feet of potential habitat for the southwestern willow flycatcher at the Colorado River crossing during the period of April 1 to September 15 would be monitored daily by a qualified biologist. NBP would provide monthly monitoring reports of construction activities and their impacts on biological resources to the BLM, the CDFG, and the FWS. NBP has agreed to several conservation measures for the protection of the southwestern willow flycatcher for work that is done in monotypic tamarisk stands. Accordingly, NBP would: • complete vegetation clearing in the area of direct impact prior to May 15 and endeavor to install the pipeline in these areas prior to May 15; • limit activities to daylight hours (dawn to dusk), if installation or post-installation activities are not complete by May 15;		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP44 (cont'd)			• restore preconstruction contours and finish grading within 10 days of backfilling the trench; • minimize noise levels by installing spark arresters in addition to standard mufflers in large equipment, by insuring standard mufflers on light vehicles are in good operating condition and fully functional, and erecting barriers of plywood or similar material around the stationary equipment such as air compressors; • minimize duration of construction; • permit no construction-related pedestrian access to tamarisk habitat during project-related activities outside the construction right-of-way and approved work areas; • control dust by watering the work area within 1,000 feet of potential habitat; and • institute an experimental revegetation plan in tamarisk areas in consultation with the FWS to test the success of native species revegetation in sodic soils in the presence of abundant tamarisk propagules.		
NBP45	The open-cut crossing of Rannells Drain would directly affect about 0.04 acre of potential Yuma clapper rail habitat. Noise from construction of the pipeline and the Ehrenberg Compressor Station could indirectly affect Yuma clapper rails if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by the Yuma clapper rail (section 5.7.2.1).	Significant (CEQA Class 2)	In addition to NBP's general conservation measures (see NBP43), NBP would minimize the potential for impacts on the Yuma clapper rail by implementing the following measures: • In the area of the proposed open-cut crossing of Rannells Drain, NBP has arranged for the PVID to complete the clearing of the vegetation from the agricultural drain both in the area of direct impact from the trenching operation and in the area of potential indirect impact on both sides of the proposed crossing. This work would be completed prior to February 1, 2002. • Construction or installation work performed within 1,000 feet of potential habitat for the Yuma clapper rail during the period of February 1 to August 30 would be monitored daily by a qualified biologist. NBP would provide monthly monitoring reports of construction activities and their impacts on biological resources to the BLM, the CDFG, and the FWS.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP45 (cont'd)			All Yuma clapper rail habitat would be avoided by adopted construction methods, except for Rannells Drain (MP 11.4). In addition, although there is no evidence that construction of this nature may have an adverse indirect impact on rails, the mitigation measures proposed for the southwestern willow flycatcher at the Colorado River crossing (*e.g.*, moving the compressor station further from potential habitat and the abatement walls to be installed prior to construction) would also protect the Yuma clapper rail from any adverse impact.		
NBP46	The project is likely to adversely affect the desert tortoise and its habitat (section 5.7.2.1).	Significant (CEQA Class 2)	To compensate for desert tortoise habitat affected during construction, NBP would implement the following measures: • Impacts on desert tortoise habitat would be offset through either an acceptable land acquisition or an assessed financial contribution. Compensation rates would be determined based on the area disturbed in the BLM land categories. • NBP would provide funding to the CDFG to manage acquired lands in addition to an enhancement fee. In addition to NBP's general conservation measures (see NBP43), NBP would minimize the potential for impacts on the desert tortoise by implementing the following measures: • NBP 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 prior to the initiation of clearance surveys. Project activities would not begin until an authorized biologist has been approved. While other biologists may be employed as monitors, only those approved by the FWS would be permitted to handle tortoises. • The FWS would provide the names of all authorized biologists to the BLM for its records.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors and the CDFG would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP46 (cont'd)			• All persons authorized by the FWS to handle desert tortoises would follow the guidelines established in the *Guidelines for Handling Desert Tortoises During Construction Projects* (Desert Tortoise Council 1994, revised 1999). • A clearance survey for the desert tortoise would be conducted by an authorized biologist within 24 hours prior to ground disturbance. • 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. • All desert tortoise burrows or pallets in the construction area would be excavated by a qualified biologist. All desert tortoise handling and burrow excavation would be in accordance with handling procedures developed by the FWS and would be conducted by qualified desert tortoise biologists. • Desert tortoises that are found above ground and need to be moved from harm's way would be placed by the authorized biologist in the shade of a shrub. 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. • If an existing burrow is unavailable, the authorized biologist would construct or direct the construction of a burrow of similar shape, size, 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 survival of the desert tortoise is likely. • Should a tortoise wander into the construction area during construction, adjacent activities would be halted until the tortoise has been moved out of the construction work area out of harm's way.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP46 (cont'd)			• 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. • All pipeline marker signs within desert tortoise habitat would be fitted with "bird-be-gone" or similar bird repellent devices. • 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 a qualified biologist(s) prior to modification or construction of the route or construction or use of a new work area. • Trench segments or other excavations would be provided with tortoise escape ramps. All excavations would be inspected for tortoises three times daily and prior to backfilling. • 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. 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. • All construction-related activities in desert tortoise habitat would be conducted from dawn until dusk. • Biological monitors would be present to watch for desert tortoises during application of water-based additives (*e.g.*, organic polymers, lignin compounds, and conifer resin compounds) to control fugitive dust in work areas with extensive traffic and topsoil piles (see Dust Control Plan).		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP46 (cont'd)			In addition, adoption of the environmentally preferable Eastside Alternative would further reduce impacts on desert tortoise and their habitat.		
NBP47	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 (section 5.7.2.1)	Significant (CEQA Class 2)	NBP would install the pipeline under the Colorado River using the directional drill method. Used successfully, this method would avoid effects on the razorback sucker during crossing of the Colorado River. Pursuant with its CM&R Plan, NBP would screen intake piping to prevent fish entrainment during hydrostatic test water withdrawal.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP48	The proposed pipeline route would cross corridors (MPs 34.0 to 38.0 and MPs 49.0 to 52.0) that can sometimes be used by Nelson's bighorn sheep moving between areas of potential habitat. Movements of bighorn sheep through these corridors could be temporarily disrupted during construction of the proposed project (section 5.7.2.3).	Significant (CEQA Class 2)	The majority of the corridor between MPs 34.0 and 38.0 would be avoided by the adoption of the Eastside Alternative. NBP would mitigate potential impact on sheep using the second corridor by installing trench plugs at MPs 50.0 and 51.0 that would allow access across the open trench. Therefore, the movement of sheep would not be disrupted.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP49 ARM3	Pipeline construction could directly affect about 25.1 acres of potential owl habitat. Noise from construction of the pipeline and the Ehrenberg Compressor Station could indirectly affect burrowing owls if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by burrowing owls (section 5.7.2.1).	Significant (CEQA Class 2)	In addition to NBP's general conservation measures (see NBP43), NBP would minimize the potential for impacts on the burrowing owl by implementing the following mitigation measures: • Direct impacts on burrowing owl habitat would be avoided by constructing in the road pavement along 18th Avenue or boring/drilling beneath habitat areas to the maximum extent feasible. • 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. • Preconstruction surveys during the wintering season would be conducted by visually checking all potential habitat in areas where there would be some ground disturbance, including vehicle access or trenching. Qualified biologists would conduct preconstruction surveys for burrowing owls within 2 weeks of construction activities. • CDFG guidelines require that one-way doors be installed at least 48 hours before construction at all active burrows within the construction work area so that the burrows are not occupied during construction activities. The one-way doors would be installed at that time to ensure that the owls can get out of the burrows but cannot get back in. CDFG guidelines also require the installation of two artificial burrows for each occupied burrow that is removed. Artificial burrows would be constructed prior to installation of one-way doors. One-way doors would not be installed at burrows with eggs or newly hatched young. • If any active burrows are damaged by construction activities, compensation would be paid at the equivalency rate of 6.5 acres of foraging habitat for burrowing owls for each active burrow damaged.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP49 ARM3 (cont'd)			In addition, NBP would implement the following additional conservation measures to minimize or avoid effects on burrowing owls: • Unoccupied burrows discovered within the construction right-of-way during preconstruction surveys shall be collapsed or excavated prior to construction activities to prevent occupancy by owls. • Artificial burrows, installed to minimize the effect of burrow loss, shall be placed within the home range of individual owls affected prior to burrow excavation or installation of one-way doors. • During the breeding season, NBP shall conduct preconstruction surveys as soon as possible and conduct at least one survey within 1 week of construction. • If active burrows (*i.e.*, eggs or young owls present) are discovered within the construction work area, NBP shall curtail construction activities within a 200- foot buffer area until after the young have fledged.		
NBP50	Construction could directly affect about 662.3 acres of potential LeConte's thrasher habitat and about 11.2 acres of potential Crissal thrasher habitat. Noise from construction of the pipeline could indirectly affect LeConte's thrasher and Crissal thrasher if they are present during the breeding season. Noise and activity from the operation of the Ehrenberg Compressor Station could indirectly affect the use of nearby habitats by Crissal thrashers (section 5.7.2.1).	Significant (CEQA Class 2)	In addition to NBP's general conservation measures (see NBP43), NBP would minimize the potential for impacts on the LeConte's thrasher and Crissal thrasher by implementing the following measures: • Impacts on microphyll woodland habitat would be compensated through habitat acquisition at a ratio approved by the FWS, the BLM, and the CDFG for those areas not already covered by desert tortoise habitat compensation (see NBP46). • The measures proposed for the southwestern willow flycatcher at the Colorado River crossing would also protect the Crissal thrasher from any adverse impact (see NBP44).	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP51	Construction of the proposed pipeline project in areas of occupied habitat could result in mortality or injury to individual Couch's spadefoot toads due to entrapment in open trenches or as a result of being crushed by vehicles and displaced soil. Construction disturbances to rain pools or temporary overflow areas could disrupt breeding activities of Couch's spadefoot toad for one season (section 5.7.2.1).	Significant (CEQA Class 2)	In addition to NBP's general conservation measures (see NBP43), NBP would implement the following conservation measures: • If there are local thunderstorms that provide substantial moisture under warm conditions (temperatures over 90 degrees Fahrenheit) in July, August, or September of 2001 and in 2002, and if construction has not already been completed in that area, NBP would examine potential Couch's spadefoot toad habitat for persistent pools. The CDFG would notify NBP if appropriate conditions prevail and NBP would coordinate with the CDFG to complete the surveys. • Qualified biologists would monitor temporary pools for persistence and would examine them daily for eggs, tadpoles, or toadlets. • 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. • 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 construction activities within the area. In addition, adoption of the environmentally preferable Eastside Alternative would avoid the one known occurrence of occupied habitat for this species along the proposed route.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP52	Construction of the pipeline through habitat occupied by the Colorado Desert fringe-toed lizard (CFTL), flat-tailed horned lizard (FTHL), and Mojave fringe-toed lizard (MFTL) could result in direct mortality or injury of individual lizards as a result of being crushed by vehicles, movement of soil, and entrapment in open trenches. The noise and activity of construction could also indirectly impact lizards by pushing them into similar adjacent habitat further away from the construction right-of-way (section 5.7.2.1).	Significant (CEQA Class 2)	In addition to NBP's general conservation measures (see NBP43), NBP proposes to implement the following mitigation measures to minimize potential adverse impacts on the CFTL/FTHL/MFTL: • Qualified biologists would conduct preconstruction surveys to identify all potential habitat along the construction area. Within 7 days before construction begins, biologists would identify habitat areas subject to direct construction-related ground disturbance. • Biologists would conduct a final clearance survey 1 to 2 days prior to construction activities, excavate potential burrows, and relocate the lizards to nearby suitable habitat. The management strategy guidelines for relocation of FTHL described in the *Flat-tailed Horned Lizard Rangewide Management Strategy* (Foreman, 1997) would be used for all three species. • A field contact representative would initiate a worker education program and would have the authority to ensure compliance with protective measures for these lizards. • A biological monitor would be present in each area of active construction within CFTL/FTHL/MFTL habitat throughout the work day from initial clearing through habitat restoration. The biological monitors would have sufficient education, field experience, and training with these lizards to understand their biology and behavior. The monitors would ensure that all activities are in compliance with the management strategy guidelines for relocation of FTHL described in the *Flat-tailed Horned Lizard Rangewide Management Strategy* (Foreman, 1997). The biological monitors would have the authority and responsibility to halt activities that are in violation of the management strategy guidelines. The monitors would:	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP52 (cont'd)			a. examine the construction area periodically (at least hourly when surface temperatures exceed 86 degrees Fahrenheit) for the presence of CFTL/FTHL/MFTL. In addition, all hazardous sites (open pipes, trenches, holes, or deep excavations) would be inspected for the presence of lizards prior to backfilling; b. work with the construction supervisor to take steps, as necessary, to avoid disturbance to CFTL/FTHL/MFTL and their habitat. If avoiding disturbance is not possible or if lizards are found trapped in an excavation, the biological monitor would capture by hand and relocate the affected lizard; c. place relocated lizards in the shade of a large shrub a short distance from the construction right-of-way and in the direction of undisturbed habitat. If the surface temperature in the sun is less than 86 degrees Fahrenheit, or greater than 122 degrees Fahrenheit, the biological monitor authorized to handle the lizard would hold the lizard for later release; and d. hold initially captured CFTL/FTHL/MFTL in a cloth bag, cooler, or other appropriate clean, dry container from which the lizard cannot escape. Lizards would be held at temperatures between 77 and 95 degrees Fahrenheit and would not be exposed to direct sunlight. Release would occur as soon as possible after capture and during daylight hours when surface temperatures range from 90 to 104 degrees Fahrenheit. In addition to the conservation measures NBP committed to above, the BLM indicated that it would require NBP to offset impacts on FTHL habitat through either an acceptable land acquisition or an assessed financial contribution. Compensation rates would be at a 1 to 1 ratio because impacts would occur outside of a designated management area.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
ARM4	Potential adverse effects on Federal and state-listed endangered and threatened species and compliance with the Endangered Species Act and California Endangered Species Act (section 5.7.3).	Significant (CEQA Class 2)	NBP would not begin construction activities until: • the FERC completes formal consultation with the FWS; • the CDFG makes a consistency determination on the BO pursuant to Section 2080.1 of the California Fish and Game Code; • NBP obtains an incidental take permit under Section 2081 of the California Fish and Game Code, or receives concurrence from the CDFG that an incidental take permit is not required; and • NBP has received written notification from the Director of OEP that construction or use of mitigation may begin.	Less than significant (CEQA Class 3)	The FERC is responsible for providing written notification informing NBP that it can begin construction and implementation of special status species mitigation plans. FERC, CSLC, and BLM monitors would verify that FWS reasonable and prudent measures, terms and conditions of the incidental take statement, and conservation recommendations are followed.
LAND USE, TRANSPORTATION, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND VISUAL RESOURCES					
NBP53	Land use impacts associated with the new pipeline could 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 of the pipeline (section 5.8.1.1).	Significant (CEQA Class 2)	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 restriction would be placed on the temporary right-of-way or extra workspaces.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
NBP54	Land used for the aboveground facilities would be permanently converted to a utility use (section 5.8.1.1).	Less than significant (CEQA Class 3)	No mitigation is proposed. The permanent conversion of 12.4 acres of agricultural land and 1.2 acres of open land (desert) would represent less than a 1 percent change in each respective land use in the project area.	Less than significant (CEQA Class 3)	No monitoring required.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP55	Twenty-five residences and businesses could be impacted by construction and operation of the pipeline, all of which are located along 18th Avenue. These include 18 residences and 2 businesses located within 100 feet of the construction work area. The two businesses and three of the residences would be located within 50 feet of the construction work area (section 5.8.2).	Significant (CEQA Class 2)	Pipeline construction near the residential areas would be confined to the paved roadway or adjacent road shoulder of 18th Avenue. NBP has prepared and would follow site-specific residential construction mitigation plans to minimize disruption and to maintain access to the 25 residences and businesses along 18th Avenue. In addition, NBP proposes to implement the following measures to minimize construction impacts on residences: • minimize the amount of trench left open at the end of the workday and cover or cordon off the trench during non-work hours; • install safety fencing for a minimum of 100 feet on both sides of residences that are within 100 feet of the construction work area; • secure and patrol construction areas during non-work hours to minimize safety issues associated with open trenches; • maintain an emergency ingress and egress near all residences and businesses through the construction process; • maintain one lane of restricted traffic movement through the construction area for access to residences and for emergency vehicles; • minimize noise by maintaining equipment in good operating condition; • suppress dust with the use of water trucks and regular spraying; and • temporarily relocate residents to a local motel or other lodging during construction near their homes at NBP's expense. NBP would file weekly status reports during construction that include a description of landowner/resident complaints and how these complaints were addressed or resolved.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would very site-specific construction plans and mitigation are followed. The FERC and CSLC are responsible for reviewing weekly status reports.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP56	The existing transportation system within the project area could be temporarily affected by the in-migration of construction workers. The delivery of construction equipment and materials could also temporarily congest existing transportation networks at specific locations (section 5.8.3.1).	Significant (CEQA Class 2)	The number and frequency of construction vehicles would be low on any particular roadway at any one time because construction would move sequentially along several miles of the proposed pipeline route. Because construction work is generally scheduled to take advantage of all daylight hours (*e.g.*, begin before the morning rush hour and end after the evening rush hour), the increase in vehicles traveling to and from the construction right-of-way would occur primarily during off-peak hours. To minimize disruption to traffic, construction equipment and materials would be located at contractor yards with existing adequate roadway access to the pipeline construction areas. Construction workers would also be encouraged to park at the contractor yards and carpool to work sites.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP57	Construction activities could impact traffic flow and disrupt traffic in the project area (section 5.8.3.1).	Significant (CEQA Class 2)	Construction across paved and unpaved roads, highways, and railroads would be in accordance with requirements of applicable road and railroad crossing permits and approvals. These features would either be bored or open cut. The use of the boring crossing method would avoid disrupting traffic. Where open-cut road crossings are conducted, NBP would make provisions to detour or control traffic during construction. No roads would be closed for more than a short time unless adequate detours are provided.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP58	Construction in the paved segment of 18th Avenue could inconvenience residents and business owners (section 5.8.3.2).	Significant (CEQA Class 2)	NBP would close off 0.5- to 1-mile-long sections of road at a time, reroute traffic around these areas (while maintaining access for residents), and complete construction of the pipeline before moving onto the next section of road. All construction activities would be confined to the width of 18th Avenue that is estimated to be about 60 feet, including the paved roadway and road shoulders. No more than 1 mile of work area would be active at any one time, unless otherwise specified by Riverside County and construction would advance along the road at an estimated 500 feet per day. NBP has also prepared a Traffic Management Plan for 18th Avenue in consultation with the County of Riverside Transportation Department. The plan identifies the following mitigation measures to minimize traffic-related impacts associated with construction in 18th Avenue:	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation and plan are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP58 (cont'd)			• construction measures would comply with the California Department of Transportation Traffic Manual; • the pipeline would be installed with a minimum of 36 inches of cover and with a minimum of 12 inches of separation from other utilities or obstructions. A minimum of 2 feet would be maintained under canals and 5 feet over drains; • active work areas would be limited to 1 mile in length; • intersections would be bored or trenched and steel plated until the pipeline is installed; • NBP 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-distributed flyers 2 weeks before construction. The flyers would include the dates of construction, the work hours, traffic detours, and contact numbers for NBP and the contractor. Emergency response agencies would also be notified of the work schedule; • the Underground Service Alert would be notified at least 48 hours before beginning work; • flag persons would be provided to route traffic around construction equipment and obstructions; • work would be scheduled during daylight hours unless alternative schedules are authorized; • 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; • fencing would be installed at the edge of the work area on both sides of each residence; and • non-local traffic would be detoured around construction activities as much as practical.		

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP59	Construction activities could require plan amendments for crossing portions of designated special management areas such as the California Desert Conservation Area (CDCA) and Milpitas Wash SMA (section 5.8.4).	Significant (CEQA Class 2)	NBP has applied for an amendment to the CDCA Plan and the Yuma District Resource Management Plan (Yuma District Plan), which dictate management within the CDCA and Milpitas Wash SMA, respectively. The plan amendments would avoid conflict with the CDCA Plan and the Yuma District Plan. The amendments would only accommodate the North Baja Pipeline Project and would not create a new corridor or modify existing corridors.	Less than significant (CEQA Class 3)	The BLM is responsible for issuing an amendment to the plans.
NBP60	Construction activities could disrupt recreational uses at the Colorado River (section 5.8.5.2).	Significant (CEQA Class 2)	The Colorado River would be directionally drilled, which would not limit the use of the river for recreational purposes. Use of an unpaved access road to the river would be disrupted but not closed during construction of the Ehrenberg Compressor Station.	Less than significant (CEQA Class 3)	FERC and CSLC monitors would verify mitigation is followed.
NBP61	Use of the Bradshaw Trail could be disrupted for several days during construction (section 5.8.5.2).	Less than significant (CEQA Class 3)	No mitigation proposed during construction. Construction would occur in the summer months when recreational use of the trail is at its lowest. After construction, NBP would restore the trail to its preconstruction condition.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify the trail is returned to its preconstruction condition.
NBP62	Public interest areas located near the project, including the Cibola NWR, Mule Mountain Area of Critical Environmental Concern (ACEC), Pilot Knob ACEC, Palo Verde Wilderness Area, Ehrenberg Sandbowl OHV area, the Imperial Sand Dunes, and an informal camp site near the Ogilby Meter Station, could be indirectly affected by traffic, noise, and dust during pipeline construction (section 5.8.5.2)	Less than significant (CEQA Class 3)	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. The delivery of construction equipment and materials would not prevent access to any of the public interest areas or facilities. No other mitigation is proposed.	Less than significant (CEQA Class 3)	No monitoring required.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP63	The new permanent pipeline right-of-way could increase accessibility for OHV use into previously restricted, inaccessible, or environmentally sensitive areas (section 5.8.5.2).	Significant (CEQA Class 2)	NBP has stated that it has no plans to maintain an improved permanent right-of-way for operation and maintenance. However, NBP would have to maintain access to all portions of the permanent right-of-way by four-wheel drive vehicles in order to conduct emergency and periodic maintenance. NBP has also agreed to install blocking measures at intersecting road crossings. These measures include: • installation of berms along the side of roads (but not crossing existing trails) where the pipeline parallels the road; • strategic placement of berms installed for erosion control purposes to reduce visibility and mimic local topography; • redistribution and strategic placement of rocks across the pipeline where large rock is available and where such work would minimize visual evidence of the route; • backblading or raking (by bulldozer or hand) the right-of-way to create a natural looking appearance and minimize the traces of the intersection of the pipeline with an existing OHV route or dirt road; • salvaging and replanting ocotillo and large cactus where they are available, with the understanding that even if they did not survive, the dead specimens could still assist in disguising the right-of-way; • salvaging and replanting other desert species, including creosote shrubs and desert wash woodland species, with the understanding that they would be unlikely to survive but could still assist in disguising the right-of-way; and/or • redistribution of woody material removed during construction across the right-of-way to both disguise the right-of-way and to serve as vertical mulch. Specific locations for the installation of these blocking measures would be identified by NBP and the BLM during a joint survey of the pipeline route prior to construction.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP64	In the Palo Verde Mountains between MPs 29.7 and 31.5, aerial pipeline crossings and scars created by blasting could have a long-term visual impact (section 5.8.6.2).	Significant (CEQA Class 2)	NBP would chemically treat scars created by blasting where they would have a high visibility to a moderate to high number of viewers and paint the pipeline to match the surrounding landscape at all aerial crossings. With adoption of the environmentally preferable Cibola Variation, construction through the Palo Verde Mountains would be avoided and visual impacts associated with blasting and aerial crossings would be eliminated or greatly minimized.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
NBP65	The aboveground facilities would have a permanent impact on visual resources (section 5.8.6.2).	Significant (CEQA Class 2)	NBP has located aboveground facilities where they would be seen in the context of other manmade structures such as nearby industrial uses and high voltage electric lines or would have a limited number of viewers. Structures that would be located aboveground would be painted to blend with the surroundings. Those aboveground structures located on BLM land are consistent with their respective Visual Resource Management class objectives.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
SOCIOECONOMICS					
NBP66	Construction of the project could temporarily increase the population in the area by about 448 people. About four permanent staff would be added at the Ehrenberg Compressor Station site to handle project operations (section 5.9.2.1).	Less than significant (CEQA Class 3)	No mitigation is proposed. The permanent staff added to the Ehrenberg Compressor Station in La Paz County, Arizona would equal less than a 1 percent permanent increase in the population of La Paz County.	Less than significant (CEQA Class 3)	No monitoring required.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP67	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 (section 5.9.2.3).	Significant (CEQA Class 2)	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. NBP would work with local firefighters and other emergency responders to coordinate activities for effective emergency response.	Less than significant (CEQA Class 3)	NBP certified adherence to this mitigation measure in its application to the FERC.
NBP68	Construction and operation of the pipeline could generate local tax revenue (section 5.9.2.5).	Beneficial impact (CEQA Class 4)	No mitigation is proposed.	Beneficial impact (CEQA Class 4)	No monitoring required.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
CULTURAL RESOURCES					
NBP69 ARM5	Potential adverse effects on historic properties and compliance with the National Historic Preservation Act (section 5.10.2).	Significant (CEQA Class 2)	NBP would defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads until: • NBP prepares and files with the FERC and the CSLC, and submits to the Arizona and California State Historic Preservation Offices (SHPOs), the BLM, and the BOR, as appropriate, any outstanding cultural resources reports, testing and evaluation reports, and necessary treatment plans; • NBP files with the FERC and the CSLC the comments of the SHPOs, the BLM, and the BOR, as appropriate, on all cultural resources reports and plans submitted for review; • the Executive Officer of the CLSC reviews and approves all cultural resources reports and plans on the California portion of the project and notifies NBP in writing that construction may proceed; and • the Director of OEP reviews and approves all cultural resources reports and plans, and notifies NBP in writing that construction may proceed.	Less than significant (CEQA Class 3)	The FERC and CSLC is responsible for providing written notification informing NBP that it can begin construction and implementation of necessary treatment plans. FERC, CSLC, and BLM monitors would verify treatment plans are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
AIR QUALITY AND NOISE					
NBP70	During construction, a temporary, short-term reduction of local ambient air quality due to fugitive dust and emissions generated by construction equipment may occur. This short-term impact would occur only in the immediate vicinity of the pipeline right-of-way and the compressor station site. Fugitive dust emissions would be generated from grading and excavation activities, wind erosion of temporary spoil piles, material handling, and equipment traveling on paved and unpaved roads (section 5.11.1.1).	Significant (CEQA Class 2)	NBP would be required to obtain a permit from the Arizona Department of Environmental Quality prior to commencing construction of the compressor station. NBP would also follow applicable requirements of the Mojave Desert Air Quality Management District and the Imperial County Air Pollution Control District. NBP's contractors would implement dust control if dust stays in the air more than 5 minutes or reaches 20 feet in height in areas of active construction within 1,000 feet of highways, residences, and other occupied areas. Dust control would be achieved primarily through application of water-based additives. For agricultural and residential areas, dust would be controlled by the application of water or mechanical covering (for piles). Dust control for construction activities and wind erosion would be achieved in desert habitats by the application of water-based organic polymers or wood derivative compounds. NBP would also follow its Dust Control Plan.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify requirements, mitigation, and plan are followed.
NBP71	During operation, the emissions from the Ehrenberg Compressor Station and Ogilby Meter Station could include particulate matter less than 10 microns in diameter (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides, carbon monoxide, and volatile organic compounds (section 5.11.1.1).	Significant (CEQA Class 2)	Since all emission units would burn pipeline quality natural gas, the quantity of PM_{10} and SO_2 emissions would be very small. NBP would meet all Federal, state, and local regulations regarding emission limits.	Less than significant (CEQA Class 3)	NBP certified compliance with the regulations in its application to the FERC. FERC, CSLC, and BLM monitors would verify regulations are followed.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP72	Individuals in the immediate vicinity of the construction activities could experience an increase in noise (section 5.11.2.1)	Significant (CEQA Class 2)	Pipeline construction would proceed at rates ranging from several hundred feet to 1 mile per day. NBP would operate construction equipment on an as-needed basis during this period.	Less than significant (CEQA Class 3)	FERC, CSLC, and BLM monitors would verify mitigation is followed.
ARM6	Noise from the Ehrenberg Compressor Station (when operated at full load) could exceed an L_{dn} of 55 dBA at any noise-sensitive area (NSA) (section 5.11.2.2).	Significant (CEQA Class 2)	The amount of silencing required for the equipment and piping is determined by the station's location, size, and proximity to NSAs. Noise reduction measures would include: installing building, engine, and piping insulation; installing acoustic louvers; improving the inlet and exhaust silencers; or using special oil coolers. NBP has committed to installing sufficient noise control measures so that the Ehrenberg Compressor Station would not exceed an L_{dn} of 55 dBA at NSAs. NBP would conduct a noise survey to verify that the noise from the Ehrenberg Compressor Station operated at full load does not exceed an L_{dn} of 55 dBA at any NSAs, and file the results of the noise survey with the FERC and CSLC no later than 60 days after placing the compressor station in service. If the noise attributable to the operation of the compressor station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, NBP would file a report on what changes are needed and would install additional noise controls to meet that level within 1 year of the in-service date. NBP would confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the FERC and CSLC no later than 60 days after it installs the additional noise controls.	Less than significant (CEQA Class 3)	The FERC is responsible for reviewing the results of any noise surveys and any reports on changes or noise control measures needed to meet the L_{dn} of 55 dBA limit.

			the noise survey with the FERC and CSLC no later than 60 days after placing the compressor station in service. If the noise attributable to the operation of the compressor station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, NBP would file a report on what changes are needed and would install additional noise controls to meet that level within 1 year of the in-service date. NBP would confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the FERC and CSLC no later than 60 days after it installs the additional noise controls.		
SAFETY AND RELIABILITY					
NBP73 ARM 7 ARM 8 ARM9	The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas (section 5.12).	Significant (CEQA Class 2)	The pipeline and aboveground facilities associated with the North Baja Pipeline Project would be designed, constructed, operated, and maintained in accordance with or to exceed the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192 and other applicable Federal and state regulations. 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. NBP would conduct initial and periodic inspections with the latest generation of instrumented internal inspection devices. NBP would also implement its operation and maintenance plan and emergency response plan. NBP will install automatic shutdown isolation valves on either side of the populated area along Avenue 18 in Riverside County. NBP will provide to CSLC engineering staff information on the valves, including details as to the number and locations of high and low pressure sensors on the pipeline, a description of how the pressure variation in the pipeline will be monitored and how the automatic shut down system is activated In addition, before placing the pipeline system in service in California, NBP would submit to the CSLC copies of the final operation and maintenance plan and emergency response plan. The final plans shall address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing and calibration of the cathodic protection system, leak monitoring, and emergency response plans and procedures. NBP would also provide the following documents to the CSLC within 120 days of the completion of work in California:	Less than significant (CEQA Class 3)	NBP certified compliance with the DOT Minimum Federal 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. The CSLC engineering staff will verify the placement and operation of the shut down valves.

TABLE 7.1-1 (cont'd)

Mitigation Monitoring Program for the North Baja Pipeline Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Monitoring Responsibility
NBP73 ARM 7 ARM 8 (cont'd)			• a set of "as built" construction plans, certified by a California-registered civil/structural engineer, showing all design changes or other amendments to the construction as originally approved; • certified copies of all completed pipeline integrity test results (hydrostatic tests, gauging runs, etc.) including copies of any failed test results with an explanation of the reason for failure; and • a post-construction written narrative report confirming completion of the project with discussion of any significant field changes or other modifications to the approved design or execution plan, and providing details of any extraordinary occurrences such as spill incidents and accidents involving serious injury or loss of life, and a summary of a quality control and weld inspection program including all failed and repaired welds.		

a/ NBP - North Baja Pipeline, LLC-proposed mitigation.
ARM - agency-recommended mitigation.

b/ California Environmental Quality Act (CEQA) Significance Classifications:
Class 1 - a significant impact that cannot be mitigated to non-significance.
Class 2 - a significant impact, but one that can be mitigated to non-significance with the application of appropriate mitigation measures.
Class 3 - a non-significant impact.
Class 4 - a beneficial impact.