

**-ATTACHMENT B
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM**

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Land Use						
LU-2	Project construction could substantially disrupt or displace existing land uses or land use activities.	Implement Mitigation Measures M-TR-3 (Traffic Control Plan), M-NO-1 (Administrative and Source Controls), M-AQ-1a (BAAQMD Basic Construction Measures), and M-AQ-1b (BAAQMD Additional Construction Measures for NOx Reduction).	-	-	-	-
C-LU	Project construction would result in a cumulatively considerable contribution to cumulative impacts on existing land uses.	Implement Mitigation Measures M-TR-3 (Traffic Control Plan), M-NO-1 (Administrative and Source Controls), M-AQ-1a (BAAQMD Basic Construction Measures), M-AQ-1b (BAAQMD Additional Construction Measures for NOx Reduction), and M-C-TR (Combined Sunol Valley Traffic Control Plan).	-	-	-	-
Aesthetics						
AE-1	Project construction could result in substantial	Mitigation Measure M-AE-1: Site Maintenance The SFPUC shall require the contractor to ensure that construction-related activity is as clean and inconspicuous as practical by storing construction	1) SFPUC EMB 2) CM Team	1) SFPUC BEM 2) SFPUC BEM	1) Ensure that contract documents include site maintenance requirements. 2) Monitor to ensure that the	1) Design 2) Construction

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	adverse effects on scenic vistas and temporarily degrade the visual character of the site and its surroundings.	materials and equipment at the proposed construction staging areas or in areas that are generally away from public view, and by removing construction debris promptly at regular intervals. This measure does not apply to temporary spoils placement in quarry Pit F6, at the SMP-30 aggregate processing facility, or alongside pipeline trenches.			contractor implements site maintenance requirements. Report noncompliance and ensure corrective action if necessary.	
AE-3	Implementation of the proposed project could result in long-term adverse effects on scenic vistas and scenic resources, and degradation of the visual character of the site and its surroundings.	Implement Mitigation Measure M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation).	-	-	-	-
C-AE	Implementation of the proposed project could result in a	Implement Mitigation Measures M-AE-1 (Site Maintenance) and M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	cumulatively considerable contribution related to cumulative impacts on scenic vistas, scenic resources, and visual character.	Mitigation).				
Cultural and Paleontological Resources						
CP-1	Project construction could cause a substantial adverse change in the significance of a historical resource.	Implement Mitigation Measure M-UT-1h (Measures to Protect Alameda Siphons Nos. 1, 2, and 3).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Cultural and Paleontological Resources (cont.)						
CP-2	Project construction could cause a substantial adverse change in the significance of a historical or unique archaeological resource.	<p>Mitigation Measure M-CP-2a: Site Protection Measures for Prehistoric Archaeological Site SA-1</p> <p>All archaeological work performed under this mitigation measure shall be subject to review by the Environmental Review Officer (ERO) or designee. To protect prehistoric archaeological site SA-1, the SFPUC shall place exclusionary signage on the existing locked gate(s) and install orange-barrier construction fencing between archaeological site SA-1 and the construction work areas. Construction personnel shall be informed that, due to the sensitive nature of the area, it is off-limits to all equipment, staging, and other activities. The exclusionary signage and fencing required by this measure shall be maintained throughout project-related construction activities.</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team 3) CM Team 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure that contract documents include the specified site protection requirements. 2) Ensure that all personnel attend environmental training prior to beginning work, receive the ALERT sheet, and sign training sign-in sheet. 3) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1) Design 2) Preconstruction/Construction 3) Preconstruction/Construction
		<p>Mitigation Measure M-CP-2b: Accidental Discovery of Archaeological Resources.</p> <p>To avoid any potential adverse effects on accidentally discovered buried cultural resources, as defined in CEQA Guidelines Section 15064.5(a)(c), the SFPUC shall distribute the San Francisco Planning</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team 3) CM Team (qualified archaeologi 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM/ERO 3) SFPUC BEM 4) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure that the contract documents include measures related to archaeological discoveries. 2) Ensure that all personnel attend environmental training prior to 	<ol style="list-style-type: none"> 1) Design 2) Preconstruction/Construction 3) Construction 4) Postconstruction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Department's archaeological resource "ALERT" sheet to the project prime contractor; to any subcontractors (including firms subcontracted to perform demolition, excavation, grading, foundation, pile driving, etc.); and/or to any utilities firm involved in soil-disturbing activities within the project area. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The SFPUC shall provide the ERO with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) confirming that all field personnel have received copies of the ALERT sheet.</p> <p>If the ERO determines that an archaeological resource may be present within the project area, the SFPUC shall retain the services of a qualified archaeological consultant. The archaeological consultant shall advise the ERO as to whether the discovery is an archaeological resource that retains sufficient integrity and is of potential scientific/historical/cultural significance. If an archaeological resource is present, the consultant shall identify and evaluate the</p>	st) 4) CM Team (qualified archaeologist)		<p>beginning work, receive the ALERT sheet, and sign the training sign-in sheet. Maintain file of signature sheets for submittal to ERO. Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action.</p> <p>3) Evaluate the potential discovery and advise the ERO as to the significance of the discovery. If warranted, proceed with measures that may include the following:</p> <ul style="list-style-type: none"> a. On-site preservation of resource; b. Archaeological monitoring program with prior review/approval of ERO; or c. Archaeological testing program with prior 	

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>archaeological resource. The archaeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the SFPUC.</p> <p>Measures might include: preservation in situ of the archaeological resource; an archaeological monitoring program; or an archaeological evaluation program. If an archaeological monitoring program or archaeological testing program is required, it shall be subject to review by the ERO. The ERO may also require that the SFPUC immediately implement a site security program if the archaeological resource is at risk from vandalism, looting, or other damaging actions.</p>			<p>review/approval of ERO.</p> <p>4) Prepare a Final Archaeological Resources Report. Submit to ERO for review and approval. Submit to others as required once approved by ERO.</p>	
Cultural and Paleontological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
CP-2 (cont.)		<p>For any accidental discovery, the archaeological consultant shall submit an archaeological data recovery report (ADRR) to the ERO which, in addition to the usual contents of the ADRR, shall include an evaluation of the historical significance of any discovered archaeological resource; describe the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken; and present, analyze, and interpret the recovered data. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.</p> <p>Once approved by the ERO, copies of the ADRR shall be distributed as follows: the relevant California Historical Resources Information System Information Center shall receive one copy, and the ERO shall receive one copy of the transmittal letter of the ADRR to the Information Center. The San Francisco Planning Department, Environmental Planning Division shall receive three copies of the ADRR along with copies of any formal site recordation forms (California Department of Parks and Recreation Form 523 series) and/or documentation for nomination to the National Register/California Register. The SFPUC shall receive copies of the ADRR in the number requested. In instances of high public interest or high interpretive value of a resource, the ERO may require a different final report content, format and SFPUC distribution. Presently, above ground technical work performed under this mitigation measure shall be subject to review by the ERO or designee.</p>				
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>		

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
CP-3	Project construction could result in a substantial adverse effect by directly or indirectly destroying a unique paleontological resource or site.	<p>Mitigation Measure M-CP-3: Paleontological Resources Mitigation Program.</p> <p>Prior to the initiation of any site preparation or start of construction, the SFPUC shall retain a qualified professional paleontologist or a California Registered Professional Geologist (California RPG) with appropriate paleontological expertise, as defined by the Society of Vertebrate Paleontology's Conformable Impact Mitigation Guidelines Committee (SVP 1995 Guidelines), to carry out a paleontological resources training program for construction workers and to develop a paleontological mitigation program. The SFPUC shall require the paleontologist to be "on-call" throughout the duration of ground-disturbing activities. At a minimum, the mitigation program shall include:</p> <ul style="list-style-type: none"> <i>Preparation of a Preconstruction Paleontological Assessment Based on Final Project Design.</i> The professional paleontologist shall prepare a preconstruction assessment, including a review of the information presented in this EIR, existing fossil localities in the region, and project geological/geotechnical reports, to determine with greater precision the depth and extent of geologic 	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team (qualified paleontologist) 3) CM Team (qualified paleontologist or California Registered Geologist) 4) CM Team (qualified paleontologist or California Registered Geologist) 5) CM Team (qualified 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM/ERO 4) SFPUC BEM 5) SFPUC BEM/SF Planning 	<ol style="list-style-type: none"> 1) Ensure that contract documents include requirement that contractor implement measures related to paleontological resources including discoveries. 2) Obtain and review resume or other documentation of paleontologist's qualifications. Ensure that all personnel attend environmental training prior to beginning work and sign the training sign-in sheets. 3) Obtain and review resume or other documentation of California RG's or professional paleontologist's qualifications. Perform literature review and field assessment as required and prepare a technical memorandum. Submit report to ERO for review and approval. 4) Obtain and review resume or other documentation of 	<ol style="list-style-type: none"> 1) Design 2) Preconstruction/Construction 3) Preconstruction 4) Preconstruction 5) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		units of high paleontological potential (Pleistocene alluvium and Briones Formation) within the areas to be excavated. The results shall be documented in a report along with recommendations for appropriate and feasible procedures to avoid or minimize damage to any paleontological resources present. Based on the volume and depth of soil excavations and the professional judgment of the paleontologist, he or she shall make recommendations regarding the need, if any, for paleontological monitoring of ground-disturbing activities in geologic units of high paleontological potential. The SFPUC shall review and approve the report in consultation with the ERO.	paleontologist)		California RG's or professional paleontologist's qualifications. Perform avoidance and/or salvage activities as required. 5) File documentation of paleontologist's qualifications (e.g., resume). If monitoring is required in the technical memorandum, document, paleontological monitoring activities in logs. In the event of a discovery, confirm suspension of work, examine fossil, and report as required.	

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Cultural and Paleontological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
CP-3 (cont.)		<ul style="list-style-type: none"> • <i>Paleontological Resources Training.</i> All construction forepersons and field supervisors shall be trained in the recognition of potential fossil materials prior to the initiation of any site preparation or start of construction. Training on paleontological resources shall also be provided to all other construction workers, but may include videotape of the initial training and/or the use of written materials rather than in-person training by the qualified paleontologist. In addition to fossil recognition, the training shall convey procedures to follow if construction crews encounter potential fossil materials in the course of earthwork, excavation, or grading, as described below. • <i>Assessment and Salvage of Potential Fossil Finds.</i> If construction crews discover potential fossils, all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately until the qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the monitor may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The monitor may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. 			Monitor to ensure that the contractor implements measures in contract documents, report noncompliance and ensure corrective action.	
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>SFPUC = San Francisco Public Utilities Commission CMC = California Mitigation Guidelines FOS = San Francisco Engineering Department BEM = (SFPUC) Bureau of Environmental Management</p>	<p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>			
San Antonio Backup Pipeline Project MMRP		<p>and may also include preparation and publication of a report describing the finds. The monitor's recommendations shall be subject to review and approval by the ERO or designee. The SFPUC shall be responsible for ensuring that treatment is</p>			11	

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Cultural and Paleontological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
CP-4	Project construction could result in a substantial adverse effect related to the disturbance of human remains.	<p>Mitigation Measure M-CP-4: Accidental Discovery of Human Remains.</p> <p>The treatment of any human remains and associated or unassociated funerary objects discovered during soil-disturbing activities shall comply with applicable state laws. Such treatment would include immediate notification of the Alameda County coroner and, in the event of the coroner's determination that the human remains are Native American, notification of the NAHC, which would appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The archaeological consultant, SFPUC, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5[d]). The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties could not agree on the reburial method, the SFPUC shall follow Section 5097.98(b) of the PRC, which states that "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance. All archaeological work performed under this mitigation measure shall be subject to review by the ERO or designee.</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team (qualified archaeologist) 3) CM Team 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure that contract documents include measures related to discovery of human remains. 2) If potential human remains are encountered, mobilize an archaeologist to confirm existence of human remains. If human remains are confirmed, perform required coordination and notifications. 3) Monitor to ensure that the contractor implements measures in contract documents including insuring that all potential human remains are reported as required and that contractor suspends work in the vicinity. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1) Design 2) Construction 3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District
SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division
CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
C-CP	Construction of the proposed project could result in a cumulatively considerable contribution related to cumulative impacts on historical, archaeological, or paleontological resources, or human remains.	Implement Mitigation Measures M-UT-1h (Measures to Protect Alameda Siphons Nos. 1, 2, and 3); M-CP-2a (Site Protection Measures for Prehistoric Archaeological Site SA-1); M-CP-2b (Accidental Discovery of Archaeological Resources); M-CP-3 (Paleontological Resources Mitigation Program); and M-CP-4 (Accidental Discovery of Human Remains).	-	-	-	-
Transportation and Circulation						
TR-3	Project construction activities would decrease the safety of public roadways for vehicles, bicyclists, and	Mitigation Measure M-TR-3: Traffic Control Plan. The SFPUC or its contractor(s) shall prepare and implement a traffic control plan prior to mobilization for project construction and shall implement the traffic control plan during project construction. The plan shall conform to the state's <i>Manual of Traffic Controls for Construction and Maintenance Work Areas</i> (Caltrans,	1) SFPUC EMB 2) SFPUC Communications 3) CM Team	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 4) SFPUC BEM	1) Ensure that the contract documents include the requirement to prepare a Traffic Control Plan incorporating all applicable measures included in contract document. 2) Develop and implement a	1) Design 2) Preconstruction 3) Preconstruction/Construction 4) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	pedestrians.	<p>2006), where applicable. Elements of the traffic control plan shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Prior to construction mobilization, the SFPUC and/or its construction contractor shall notify the East Bay Regional Park District Supervisor for the Sunol and Ohlone Regional Wilderness parks of lane or road closures along Calaveras Road that would impede access to the parks. • Advance warning signs shall be installed on Calaveras Road (to the south and north of the access points) advising motorists, bicyclists, and pedestrians of the construction zone ahead in order to minimize hazards associated with construction activities 	4) CM Team		<p>notification program to notify public as required.</p> <p>3) Ensure that contractor submits a Traffic Control Plan and verify that it complies with the requirements. Ensure that the contractor coordinates with Alameda County, Caltrans, and EBMUD for affected roadways and intersections.</p> <p>4) Monitor to ensure that the contractor implements measures in Traffic Control Plan and contract documents. Report noncompliance and ensure corrective action.</p>	
Transportation and Circulation (cont.)						
TR-3 (cont.)		<p>immediately adjacent to Calaveras Road, including the entry and egress of project-related construction vehicles.</p> <ul style="list-style-type: none"> • Pedestrian and bicycle access and circulation shall be maintained during project construction where it is 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>safe to do so.</p> <ul style="list-style-type: none"> • A public information program shall be developed and implemented to advise motorists, bicyclists, and nearby properties of the impending construction activities (e.g., media coverage, direct distribution of flyers to affected properties, email notices, portable message signs, and informational signs). • All equipment and materials shall be stored within the designated work areas as to avoid obstructing traffic. • Hauling of excavated materials shall be limited to weekdays, excluding federal and state holidays, to reduce potential conflicts with recreational bicycling on Calaveras Road. • Adequate driving and bicycling conditions on Calaveras Road shall be maintained throughout the construction period. • The SFPUC and its contractors shall coordinate individual traffic control plans for SFPUC projects in the Sunol Valley. 				
C-	Construction of	Mitigation Measure M-C-TR: Combined Sunol Valley	1) SFPUC	1) SFPUC BEM	1) Ensure that contract documents	1) Design

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
TR	the proposed project would result in a cumulatively considerable contribution to cumulative traffic increases and safety hazards on local and regional roads.	Traffic Control Plan. The SFPUC or its construction contractor(s) shall coordinate and comply with the ongoing Regional Traffic Coordination Plan for the Sunol Valley region; this plan coordinates the project-specific traffic control plans for SFPUC projects developed as part of Mitigation Measure M-TR-3 (Traffic Control Plan) and identifies additional measures to minimize the impacts of construction traffic on Calaveras Road and I-680.	EMB 2) CM Team (traffic coordinator)	2) SFPUC BEM	include the requirement to coordinate and comply with the Regional Traffic Coordination Plan. 2) Monitor to ensure that the contractor implements measures in Regional Traffic Coordination Plan. Report noncompliance and ensure corrective action.	2) Construction
Noise and Vibration						
NO-1	Construction activities would result in substantial temporary increases in ambient noise levels that could interfere with nearby land uses.	Mitigation Measure M-NO-1: Administrative and Source Controls. The SFPUC shall include in construction contract specifications the requirement that the construction contractor conform to the sleep interference threshold of 50 dBA (Leq) between 10 p.m. and 7 a.m. when operating equipment within 1,000 feet of the SFPUC watershed keeper's residence east of Calaveras Road (if it is occupied at the time of construction). Measures to maintain noise levels at or below this performance standard shall include implementation of best available	1) SFPUC EMB 2) SFPUC Communications 3) CM Team	1) SFPUC BEM 2) CM Team 3) SFPUC BEM	1) Ensure that the contract documents include the specified noise control requirements. 2) Designate project liaison responsible for responding to noise complaints. Develop procedures for receiving and responding to questions and complaints. Provide SFPUC watershed keeper's residence with contact information for	1) Design 2) Preconstruction/ Construction 3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, acoustically attenuating shields or shrouds, and enclosures around stationary equipment such compressors or generators) for all equipment used at night. The name and phone number of a designated project liaison shall be provided to the inhabitant(s) of the SFPUC watershed keeper's residence in the event that noise disturbance occurs. This liaison shall take steps to resolve any complaints received, including modifying construction practices as necessary to address the noise complaint.			designated liaison. Maintain records of notice. Ensure public questions and complaints are responded to and corrective actions taken as needed. 3) Monitor to ensure that the contractor implements the specified noise control measures. Report noncompliance and ensure corrective action.	
Noise and Vibration (cont.)						
NO-2	Construction activities would expose people to noise levels in excess of standards established by the Alameda County Noise	Mitigation Measure M-NO-2: Noise Control Plan. The SFPUC shall include in construction contract specifications the requirement that the construction contractor prepare a Noise Control Plan. The contract specifications shall stipulate that before the start of mobilization or construction, the contractor must submit to the SFPUC for review and approval a noise control plan prepared by a qualified noise consultant. For work performed beyond local ordinance time limits (e.g.,	1) SFPUC EMB 2) CM Team 3) CM Team	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM	1) Ensure that contract documents include noise performance standards and the requirement that contractor's qualified noise consultant prepare and implement a noise control plan. 2) Ensure that contractor's qualified noise consultant prepares and submits a noise control plan that	1) Design 2) Preconstruction 3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program															
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule												
			Responsible Party	Reviewing and Approval Party														
	Ordinance.	<p>construction of air gaps and connection to Alameda Siphon No. 3), the noise control plan shall also ensure that noise levels do not exceed the following noise performance standards:</p> <table border="1"> <thead> <tr> <th><u>Period</u></th> <th><u>Maximum Noise Level</u></th> </tr> </thead> <tbody> <tr> <td>Weekdays 7 a.m. to 10 p.m.</td> <td>One-hour Leq of 58 dBA at nearest residence Lmax of 65 dBA at project boundary</td> </tr> <tr> <td>Weekdays 7 a.m. to 8 a.m. and 4 p.m. to 7 p.m.</td> <td>One-hour Leq of 58 dBA at nearest residence Lmax of 65 dBA at project boundary</td> </tr> <tr> <td>Weekdays 7 p.m. to 7 a.m.</td> <td>One-hour Leq of 50 dBA ^a at nearest residence Lmax of 65 dBA at project boundary</td> </tr> <tr> <td colspan="2">In addition to the one-hour Leq of 53 dBA from the Alameda County Construction Ordinance, the more restrictive sleep period limit of 50 dBA is applicable during these hours.</td> </tr> <tr> <td colspan="2">To achieve the above Leq performance standards, the</td> </tr> </tbody> </table>	<u>Period</u>	<u>Maximum Noise Level</u>	Weekdays 7 a.m. to 10 p.m.	One-hour Leq of 58 dBA at nearest residence Lmax of 65 dBA at project boundary	Weekdays 7 a.m. to 8 a.m. and 4 p.m. to 7 p.m.	One-hour Leq of 58 dBA at nearest residence Lmax of 65 dBA at project boundary	Weekdays 7 p.m. to 7 a.m.	One-hour Leq of 50 dBA ^a at nearest residence Lmax of 65 dBA at project boundary	In addition to the one-hour Leq of 53 dBA from the Alameda County Construction Ordinance, the more restrictive sleep period limit of 50 dBA is applicable during these hours.		To achieve the above Leq performance standards, the				<p>complies with noise performance standards.</p> <p>3) Monitor to ensure that the contractor implements noise control plan. Report noncompliance and ensure corrective action.</p>	
<u>Period</u>	<u>Maximum Noise Level</u>																	
Weekdays 7 a.m. to 10 p.m.	One-hour Leq of 58 dBA at nearest residence Lmax of 65 dBA at project boundary																	
Weekdays 7 a.m. to 8 a.m. and 4 p.m. to 7 p.m.	One-hour Leq of 58 dBA at nearest residence Lmax of 65 dBA at project boundary																	
Weekdays 7 p.m. to 7 a.m.	One-hour Leq of 50 dBA ^a at nearest residence Lmax of 65 dBA at project boundary																	
In addition to the one-hour Leq of 53 dBA from the Alameda County Construction Ordinance, the more restrictive sleep period limit of 50 dBA is applicable during these hours.																		
To achieve the above Leq performance standards, the																		

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>contractor shall incorporate noise and source controls listed under Mitigation Measure M-NO-1 (Administrative and Source Controls), as necessary.</p> <p>To achieve the above Lmax standards, the contractor may use administrative controls instead of audible backup alarms, subject to safety priorities and consistent with state and federal worker safety laws. Such administrative controls shall provide backup warning on all vehicles that operate in areas where backward movement would constitute a hazard to employees working in the area on foot, and where the operator's vision is obstructed to the rear of the vehicle (earthmoving equipment) (California Code of Regulations, Title 8, Section 1592). Administrative controls may include designing traffic patterns in the project area to minimize the need for backward movement, or requiring a spotter or flagger in clear view of the operator to direct the backing operation or requiring the operator to dismount and circle the vehicle immediately prior to starting a backup operation.</p>				

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Noise and Vibration (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
NO-2 (cont.)		<p>Alternatively, the SFPUC shall consult with Cal/OSHA to determine whether additional noise reductions may be achieved through Cal/OSHA-approved alternatives to backup alarms without compromising site safety. If Cal/OSHA indicates that such alternatives are a viable option and the SFPUC, in consultation with the contractor, determines that site safety would not be compromised, then the contractor shall apply for a variance from Cal/OSHA and use such alternatives consistent with Cal/OSHA requirements. Such alternatives could include, but are limited to:</p> <ul style="list-style-type: none"> • “Smart” alarms that have an audible range of 77 to 97 (dBA but limit the warning signal to 5 dBA over ambient noise levels) • Radar presence-sensing alarms, which identify objects in the reversing path of a truck • Use of “bbs-tek” broadband backup alarm systems, which use a broadband sound instead of a more noticeable single-frequency sound • Use of strobe lights instead of audible alarms (which are particularly effective at night) <p>The administrative source controls and alternatives identified above shall be approved by Cal/OSHA. Complaints shall be included in the noise control plan. If none of the SFPUC alternatives to backup alarms can be implemented, the use of backup alarms shall be avoided during the evening and nighttime hours to achieve the max performance standard (e.g., by routing trucks and equipment to eliminate the need to back up, or by eliminating truck and heavy equipment use at night).</p>				

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
C-NO	Construction of the proposed project would result in a cumulatively considerable contribution to cumulative noise impacts.	<p>Mitigation Measure M-C-NO: Coordination of Nighttime Construction and Truck Traffic.</p> <p>The SFPUC shall coordinate the nighttime construction activities of the SABPL project with the nighttime construction activities and haul traffic of other SFPUC projects in the Sunol Valley, including the NIT project, Filter Gallery project, and Calaveras Dam Replacement project, to ensure that maximum nighttime noise levels do not cumulatively exceed the 50-dBA sleep interference criterion or the noise performance standards of the Alameda County Noise Ordinance at the Garcia residence or SFPUC watershed keeper's residence (when occupied). Alternatively, to mitigate impacts on the watershed keeper's residence, the SFPUC can elect to temporarily relocate its inhabitants (restrictions on maximum nighttime noise levels above would still apply at the Garcia residence).</p>	1) SFPUC EMB 2) CM Team (traffic coordinator/ noise specialist) 3) CM Team	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM	1) Ensure that contract documents include requirement that contractor coordinate nighttime construction and hauling activities with other SFPUC projects as directed by SFPUC. 2) Review and coordinate individual noise control plans and develop a coordinated noise control plan that includes measures that address noise resulting from multiple projects in the same vicinity. 3) Monitor to ensure that the contractor implements measures in the contract documents. Report noncompliance and ensure corrective action.	1) Design 2) Design 3) Construction
		Implement Mitigation Measure M-NO-1 (Administrative and Source Controls) and M-NO-2 (Noise Control Plan).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Air Quality						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
AQ-1	Emissions generated during project construction activities would violate air quality standards and would contribute substantially to an existing air quality violation.	<p>Mitigation Measure M-AQ-1a: BAAQMD Basic Construction Measures.</p> <p>The SFPUC shall post one or more publicly visible signs with the telephone number and person to contact at the SFPUC with complaints related to excessive dust or vehicle idling. This person shall respond to complaints and, if necessary, take corrective action within 48 hours. The telephone number and person to contact at the BAAQMD's Compliance and Enforcement Division shall also be provided on the sign(s) in the event that the complainant also wishes to contact the applicable air district.</p> <p>In addition, to limit dust, criteria pollutants, and precursor emissions associated with project construction, the following BAAQMD-recommended Basic Construction Measures shall be included in all construction contract specifications for the proposed project:</p> <ul style="list-style-type: none"> All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. Vehicle speeds on unpaved areas shall be limited to 15 miles per hour. 	<ol style="list-style-type: none"> SFPUC EMB SFPUC Communications CM Team 	<ol style="list-style-type: none"> SFPUC BEM CM Team SFPUC BEM 	<ol style="list-style-type: none"> Ensure that the contract documents include specified dust control measures and exhaust control measures, including signage requirements. Designate project liaison responsible for handling complaints related to dust or vehicle idling. Develop procedures for receiving and responding to complaints. Post contact information for the liaison and the BAAQMD Compliance and Enforcement Division on publicly visible signs in the project area. Ensure questions and complaints are responded to and corrective actions taken as needed. Monitor to ensure that the contractor implements measures in contract documents, including the requirement to post signage regarding dust complaints and idling times. Report corrective actions. 	<ol style="list-style-type: none"> Design Preconstruction/ Construction Construction
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Game RWQCB = California Regional Water Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>SFPUC = San Francisco Public Utilities Commission CM Team = (SFPUC) Construction Management Team BEM = (SFPUC) Bureau of Environmental Management</p>	<p>NRLMD = (SFPUC) Natural Resources and Lands Compliance Bureau Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>			
San Antonio Backup Pipeline Project MMRP	<ul style="list-style-type: none"> All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. Idling times for construction equipment (including 			25		

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Mitigation Measure M-AQ-1b: BAAQMD Additional Construction Measures for NOx Reduction.</p> <p>To reduce NOx emissions during construction, the following provisions shall be included in all construction contractor specifications for the proposed project:</p> <ul style="list-style-type: none"> To reduce NOx during construction, 40 percent of the total horsepower-hours from diesel-powered off-road equipment with engines greater than 50 horsepower shall be from equipment that satisfies United States Environmental Protection Agency (USEPA) Tier 3 NOx emission standards. The SFPUC shall demonstrate this to the San Francisco Planning Department by presenting an inventory of all equipment with engines over 50 horsepower that will be used and an estimate of the number of hours each piece of equipment will operate to calculate the total number of horsepower-hours for project construction (equipment horsepower multiplied by the hours of operation). 	<ol style="list-style-type: none"> SFPUC EMB CM Team 	<ol style="list-style-type: none"> SFPUC BEM/SF Planning SFPUC BEM 	<ol style="list-style-type: none"> Ensure that the contract documents include provisions to reduce NOx emissions during construction, including the requirement that the contractor prepare and submit a monthly off-road equipment inventory that demonstrates compliance with measures for NOx reduction. Monitor to ensure that the contractor implements measures in contract documents related to reducing NOx emissions. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Air Quality (cont.)						
AQ-1 (cont.)		<ul style="list-style-type: none"> The inventory shall also identify which equipment meets Tier 3 NOx emissions and demonstrate that they constitute 40 percent of the total horsepower-hours. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-market products, and/or other options as they become available. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and DPM, including all generators meeting Tier 4 standards. All contractors shall use equipment that meets the certification standard for off-road heavy-duty diesel engines for a given model year engine. 				
C-AQ	Construction of the proposed project would result in a cumulatively	Implement Mitigation Measures M-AQ-1a (BAAQMD Basic Construction Measures) and M-AQ-1b (BAAQMD Additional Construction Measures for NOx Reduction).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	considerable contribution to cumulative air quality impacts associated with criteria pollutant emissions and health risks.					
Recreation						
RE-1	The proposed project could temporarily degrade existing recreational uses during construction.	Implement Mitigation Measures M-AQ-1a (BAAQMD Basic Construction Measures); M-AQ-1b (BAAQMD Additional Construction Mitigation Measures for NOX Reduction); and M-TR-3 (Traffic Control Plan).	-	-	-	-
C-RE	Construction of the proposed project could result in a cumulatively considerable	Implement Mitigation Measures M-AQ-1a (BAAQMD Basic Construction Measures); M-AQ-1b (BAAQMD Additional Construction Measures for NOX Reduction); M-TR-3 (Traffic Control Plan); and M-C-TR (Combined Sunol Valley Traffic Control Plan).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	contribution to cumulative impacts on recreational resources and uses.					
Utilities and Service Systems						
UT-1	Project construction could result in a substantial adverse effect related to disruption of utility operations or accidental damage to existing utilities.	<p>Mitigation Measure M-UT-1a: Confirm Utility Line Information.</p> <p>The SFPUC or its contractors shall locate overhead and underground utility lines that may be encountered during excavation work prior to opening an excavation. Information regarding the size, color, and location of existing utilities shall be confirmed before excavation activities commence. These utilities shall be highlighted on all construction drawings.</p>	1) SFPUC EMB	1) SFPUC BEM	1) Coordinate final construction plans and specifications during the design phase and ensure utility lines are identified on all construction drawings. Ensure that the contract documents include the requirement that contractor coordinate and notify utility service providers.	1) Design

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Utilities and Service Systems (cont.)						
UT-1 (cont.)		<p>Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities.</p> <p>While any excavation is open, the SFPUC or its contractors shall protect, support, or remove underground utilities as necessary to safeguard employees. As part of contractor specifications, the contractor(s) shall be required to provide updates on planned excavations for the upcoming week, and to specify when construction will occur near a high-priority utility—specifically the 36-inch-diameter and 22-inch-diameter PG&E gas pipelines as well as any other high-priority utility lines that are identified. At the beginning of each week when this work will take place, SFPUC construction managers shall attend tailgate meetings with contractor staff, as required by the California Occupational Safety and Health Administration, to record all protective and avoidance measures regarding such excavations.</p>	<p>1) SFPUC EMB 2) CM Team 3) CM Team</p>	<p>1) SFPUC BEM 2) SFPUC CMB 3) SFPUC CMB</p>	<p>1) Ensure that contract documents include applicable requirements to safeguard employees from potential accidents. 2) Conduct weekly tailgate meetings with contractor prior to any work near high-priority utility lines, and record all protective and avoidance measures that will be implemented in such excavations. 3) Monitor to ensure that the contractor implements measures in contract documents and the protective and avoidance measures identified at tailgate meetings. Report noncompliance and ensure corrective action.</p>	<p>1) Design 2) Construction 3) Construction</p>
		<p>Mitigation Measure M-UT-1c: Notify Local Fire Departments.</p>	<p>1) SFPUC EMB</p>	<p>1) SFPUC BEM</p>	<p>1) Ensure that contract documents include the requirement that the</p>	<p>1) Design</p>

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		In the event that construction activities result in damage to high-priority utility lines, including leaks or suspected leaks, the SFPUC or its contractors shall immediately notify local fire departments to protect worker and public safety.	2) CM Team	2) SFPUC CMB	contractor notify local fire departments in the event of damage to high-priority utility lines. 2) Obtain report from contractor documenting notification of local fire departments if damage to a gas utility results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety.	2) Construction
		Mitigation Measure M-UT-1d: Emergency Response Plan. Prior to commencing construction activities, the SFPUC shall develop an emergency response plan that outlines procedures to follow in the event of a leak or explosion. The emergency response plan shall identify the names and phone numbers of PG&E staff who would be available 24 hours per day in the event of damage or rupture of the high-pressure PG&E natural gas pipelines. The plan shall also detail emergency response protocols including notification, inspection, and evacuation procedures; any equipment and	1) SFPUC EMB 2) CM Team 3) CM Team	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC CMB	1) Ensure that contract documents include applicable measures including requirement to prepare emergency response plan. 2) Ensure that contractor prepares the emergency response plan and verify compliance with requirements. 3) Monitor to ensure that contractor implements measures in contract documents and emergency response plan. Report non-	1) Design 2) Preconstruction 3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		vendors necessary to respond to an emergency, such as an alarm system; and routine inspection guidelines.			compliance, and ensure corrective action.	
		<p><i>Mitigation Measure M-UT-1e: Ensure Prompt Reconnection of Utilities.</i></p> <p>The SFPUC or its contractors shall promptly notify utility providers to reconnect any disconnected utility lines as soon as it is safe to do so.</p>	<p>1) SFPUC EMB</p> <p>2) CM Team</p>	<p>1) SFPUC BEM</p> <p>2) SFPUC CMB</p>	<p>1) Ensure that applicable measure is in contract documents.</p> <p>2) Monitor to ensure that contractor notifies utility providers as necessary. Report noncompliance and ensure corrective action is taken.</p>	<p>1) Design</p> <p>2) Construction</p>

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Utilities and Service Systems (cont.)						
UT-1 (cont.)		<p>Mitigation Measure M-UT-1f: Coordinate Final Construction Plans with Affected Utilities.</p> <p>The SFPUC or its contractors shall coordinate final construction plans and specifications with affected utilities.</p>	<p>1) SFPUC EMB 2) CM Team</p>	<p>1) SFPUC BEM 2) SFPUC CMB</p>	<p>1) Coordinate final construction plans and specifications during the design phase. Ensure that requirement for the contractor to coordinate final construction plans and specifications with affected utilities is included in contract documents.</p> <p>2) Monitor to ensure that contractor notifies utility providers as necessary. Report noncompliance and ensure corrective action is taken.</p>	<p>1) Design 2) Construction</p>
		<p>Mitigation Measure M-UT-1g: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects.</p> <p>The final construction drawings for the SABPL project shall reflect any changes in utility locations as well as the locations of any new utilities installed during construction of other SFPUC projects in the Sunol Valley whose disturbance areas overlap with the SABPL project area. These overlapping projects include the Alameda Siphons</p>	<p>1) SFPUC EMB 2) CM Team</p>	<p>1) SFPUC BEM 2) SFPUC CMB</p>	<p>1) Coordinate final project construction plans and specifications with final construction plans and specifications of other overlapping SFPUC projects and verify that any changes in utility locations are shown.</p>	<p>1) Design 2) Construction</p>

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		Seismic Reliability Upgrade, Sunol Valley Water Treatment Plant Expansion and Treated Water Reservoir, San Antonio Pump Station Upgrade, and New Irvington Tunnel projects.			2) Monitor to ensure that contractor notifies utility providers as necessary. Report noncompliance and ensure corrective action is taken.	
		<p><i>Mitigation Measure M-UT-1h: Measures to Protect Alameda Siphons Nos. 1, 2, and 3.</i></p> <p>SFPUC engineers and the construction contractor's engineers shall evaluate the structural integrity of Alameda Siphons Nos. 1, 2, and 3 in the vicinity of the proposed connection with the backup pipeline and identify the specific design and construction techniques to be implemented during connection of the backup pipeline to Alameda Siphon No. 3 to prevent damage to Alameda Siphons Nos. 1, 2, and 3. Particular attention shall be paid to Alameda Siphons Nos. 1 and 2, which are historical resources. The SFPUC shall incorporate protective measures into the construction contract specifications if applicable to prevent damage to Alameda Siphons Nos. 1, 2, and 3. Potential measures include shoring excavated areas around the siphons, using low-impact tunneling equipment, prohibiting unnecessary equipment movement over or near the siphons, and/or securing or enclosing the siphons to</p>	<p>1) SFPUC EMB</p> <p>2) SFPUC EMB (qualified structural engineer)</p> <p>3) CM Team</p>	<p>1) SFPUC BEM</p> <p>2) SFPUC BEM</p> <p>3) SFPUC BEM</p>	<p>1) Ensure that contract documents include protection measures and the requirement that contractor's qualified structural engineer evaluate the structural integrity of Alameda Siphons Nos. 1, 2, and 3, and identify the specific design and construction techniques, as needed.</p> <p>2) Ensure that contractor's qualified structural engineer evaluates structural integrity of Alameda Siphons Nos. 1, 2, and 3 and identify protective measures to be implemented during construction.</p> <p>3) Monitor to ensure that contractor implements the identified</p>	<p>1) Design</p> <p>2) Design</p> <p>3) Construction</p>

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		prevent movement or damage during connection with the proposed backup pipeline.			protective measures. Report noncompliance and ensure corrective action.	
UT-2	Project construction could result in a substantial adverse effect related to the relocation of regional or local utilities.	Implement Mitigation Measures M-UT-1a (Confirm Utility Line Information); M-UT-1f (Coordinate Final Construction Plans with Affected Utilities); and M-UT-1g (Avoidance of Utilities Constructed or Modified by Other SFPUC Projects).	-	-	-	-
C-UT	Construction of the proposed project could result in a cumulatively considerable contribution to cumulative impacts related to disruption or relocation of	Implement Mitigation Measures M-UT-1a (Confirm Utility Line Information); M-UT-1b (Safeguard Employees from Potential Accidents Related to Underground Utilities); M-UT-1c (Notify Local Fire Departments); M-UT-1d (Emergency Response Plan); M-UT-1e (Ensure Prompt Reconnection of Utilities); M-UT-1f (Coordinate Final Construction Plans with Affected Utilities); M-UT-1g (Avoidance of Utilities Constructed or Modified by Other SFPUC Projects); and M-UT-1h (Measures to Protect Alameda Siphons Nos. 1, 2, and 3).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	utilities.					

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1	The proposed project could have a substantial adverse effect on special-status animal species during construction.	<p>Mitigation Measure M-BI-1a: General Protection Measures.</p> <p>The SFPUC shall ensure that the following general measures are implemented by the contractor(s) during construction to minimize or avoid impacts on biological resources:</p> <ul style="list-style-type: none"> Construction contractor(s) shall minimize the extent of the construction disturbance as much as feasible. Prior to the start of construction, the construction contractor, in coordination with a qualified biologist, shall install 4-foot-tall fencing at the limits of construction. In addition, fencing shall be installed outside the driplines of all trees to be retained that are located within 50 feet of any grading, road improvements, underground utilities, or other construction activity. A qualified biologist and the SFPUC must first approve any encroachment beyond these fenced areas. The contractor shall maintain the temporary fencing until all construction activities are completed. No construction activities, parking, or staging shall occur beyond the fenced areas. Project-related vehicles shall observe a 15-mile-per-hour speed limit on unpaved roads in the work area, unless otherwise specified by the applicable regulatory agencies. The contractor shall provide closed garbage containers for the disposal of all food-related trash items (e.g., wrappers, cans, bottles, food scraps). All garbage shall be collected daily from the project site and placed in a designated container, from which garbage shall be removed weekly. 	1) SFPUC EMB 2) CM Team	1) SFPUC BEM 2) SFPUC BEM	1) Ensure that the contract documents includes the general protection measures. 2) Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action.	1) Design 2) Preconstruction 3) Construction
San Antonio Backup Pipeline Project MMRP	Construction personnel shall not feed or otherwise attract fish or wildlife in the project area. <ul style="list-style-type: none"> No pets shall be allowed in the project area. No firearms shall be allowed in the project area. 				38	

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Mitigation Measure M-BI-1b: Worker Training and Awareness Program.</p> <p>The SFPUC shall ensure that mandatory biological-resources awareness training is provided to all construction personnel as follows:</p> <ul style="list-style-type: none"> The training shall be developed and provided by a qualified biologist or construction compliance manager familiar with the sensitive species that may occur in the project area. If a consulting biologist prepares the training program, SFPUC staff shall approve the program prior to implementation. 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB (qualified biologist) CM Team 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure the contract documents include the requirement that all construction personnel attend training. Prepare biological-resources awareness program. Include documentation of qualifications of the consulting biologist developing the training program (e.g., resume). Monitor to ensure that all personnel attend training prior to beginning work and sign training sign-in sheet. Maintain file of sign-in sheets. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Preconstruction Preconstruction/Construction
Biological Resources (cont.)						
BI-1 (cont.)		<ul style="list-style-type: none"> The training shall be provided before any work, including vegetation clearing and grading, occurs within the work area boundaries. The training shall provide education on the natural 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>history of the special-status species potentially occurring in the project area, and discuss the required mitigation measures to avoid impacts on the special-status species and the penalties for failing to comply with biological mitigation requirements.</p> <ul style="list-style-type: none"> If new construction personnel are added to the project, the contractor shall ensure that they receive training prior to starting work. The subsequent training of personnel can include a videotape of the initial training and/or the use of written materials rather than in-person training by a biologist. 				
		<p>Mitigation Measure M-BI-1c: Minimize Disturbance to Riparian Habitat.</p> <p>To minimize disturbance to creeks and riparian habitat, the SFPUC and its contractors shall conduct in-channel work in San Antonio Creek during the dry season.</p>	<p>1) SFPUC EMB 2) CM Team</p>	<p>1) SFPUC BEM 2) SFPUC BEM</p>	<p>1) Ensure construction schedule and phasing in contract documents include the requirement to conduct in-channel work in San Antonio Creek during the dry season. 2) Monitor to ensure contractor complies with timing restrictions for construction in San Antonio Creek. Report noncompliance and ensure corrective action.</p>	<p>1) Design 2) Construction</p>

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Mitigation Measure M-BI-1d: Prevent Movement of Specific Species through the Work Areas.</p> <p>To prevent CTS, CRLF, Alameda whipsnake, and other special-status species from moving through the project area, the SFPUC or its contractors shall install temporary exclusion fencing at selected locations along the work area boundaries (including access roads, staging areas, etc.) prior to the start of project construction activities. Fencing locations will be based on observations of these specific species or the presence of habitats that are likely to support higher densities of these species. Other portions of the work area boundaries would not be fenced, based on coordination with the CDFG and USFWS. The SFPUC shall monitor disturbance areas to determine whether additional fencing is necessary to minimize potential impacts. The SFPUC shall ensure that the temporary fencing is continuously maintained until all construction activities are completed and that construction equipment is confined to the designated work areas. The fencing shall be made of suitable material that does not allow any of the animals listed above to pass through, and the bottom shall be buried to a depth of 6 inches (or to a sufficient depth as specified by the applicable resource agencies) so that these</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team (qualified biologist) 3) CM Team 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure that contract documents include wildlife exclusionary fencing measures. 2) Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct monitoring and relocation as required. Document activities in monitoring logs. 3) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1) Design 2) Construction 3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		species cannot crawl under the fence. During fence installation, a qualified biological monitor shall be present onsite to relocate any animals to outside the work area boundaries. The biologist must be authorized by the federal (USFWS) and/or state (CDFG) regulatory agencies to relocate animals. After construction is completed, the exclusion fencing shall be removed.				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1 (cont.)		<p>Mitigation Measure M-BI-1e: Preconstruction Surveys and Construction Monitoring and Protocols for California Tiger Salamander, California Red-Legged Frog, and Alameda Whipsnake.</p> <p>Preconstruction Surveys</p> <p>Prior to initial ground-disturbing activities in the project area, a qualified biologist shall survey the construction areas as well as undeveloped areas in the immediate vicinity for the presence of CTS, CRLF, and Alameda whipsnake, as follows:</p> <p><u>California tiger salamander and California red-legged frog.</u> Not more than two weeks prior to the onset of work activities (including equipment mobilization) and immediately prior to commencing work, the qualified biologist shall survey upland habitat in the project area for CTS and CRLF, and potential refuge or burrow/estivation sites. As feasible, burrow/estivation areas identified within the project boundaries shall be temporarily fenced (per Mitigation Measure M-BI-1d) and avoided. At locations where potential refuge/estivation burrows are identified and cannot be avoided, the burrows shall be excavated by hand or by other means approved by the CDFG and USFWS prior to construction. If a burrow is occupied, the individual and family shall be relocated to a natural burrow or artificial burrow constructed at the same location as agreed to by the appropriate agencies.</p> <p><u>Alameda whipsnake.</u> Not more than two weeks prior to the onset of work activities (including equipment mobilization) and immediately prior to commencing work, a qualified biologist shall conduct a reconnaissance survey of suitable upland habitat for Alameda whipsnake in the project area. If an</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team (qualified biologist) 3) CM Team 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure that contract documents include the appropriate language. 2) Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct surveys, monitoring, burrow excavation and relocation activities. Document activities in monitoring logs. 3) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective actions. 	<ol style="list-style-type: none"> 1) Design 2) Preconstruction/ Construction 3) Construction
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>SFPUC = San Francisco Public Utilities Commission NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>				
San Antonio Backup Pipeline Project MMRP					44	

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1 (cont.)		<ul style="list-style-type: none"> Any CTS, CRLF, or Alameda whipsnakes found along and inside the fence shall be closely monitored until they move away from the construction area. All open trenches or holes and areas under parked vehicles shall be checked for the presence of CTS, CRLF, and whipsnakes. All excavated or deep-walled holes or trenches greater than 2 feet shall be covered at the end of each workday using plywood or similar materials, or escape ramps shall be constructed of earth fill or wooden planks. Before such holes are filled, they shall be thoroughly inspected for trapped animals. Project personnel shall be required to immediately report any harm, injury, or mortality of a special-status species during construction (including entrapment) to the construction foreman or biological monitor, and the construction foreman or biological monitor shall immediately notify the SFPUC. The SFPUC shall provide verbal notification to the USFWS Endangered Species Office in Sacramento, California and/or to the local CDFG warden or biologist (as applicable) within one working day of the incident. The SFPUC shall follow up with written notification to the USFWS and/or CDFG (as applicable) within five working days of the incident. All observations of federally and state-listed species shall be recorded on CNDDB field sheets and sent to the CDFG by the SFPUC or representative biological monitor. <p>While it is not necessary that the biological monitor stay onsite for the entire day, the monitor shall remain on-call in case any of these animals are discovered and it is necessary to move them. The SFPUC shall designate an SFPUC representative as the point of contact in the event that a CTS, CRLF, or Alameda whipsnake is discovered onsite when the biological monitor is not present.</p> <p>If the biological monitor or construction personnel find</p>				
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p> <p>SFPUC = San Francisco Public Utilities Commission (SFPUC) Construction Management Bureau (SFPUC) Bureau of Environmental Management</p> <p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p> <p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>	<p>San Antonio Backup Pipeline Project MMRP</p>	46				

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1 (cont.)		<p>Mitigation Measure M-BI-1f: Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation.</p> <p>The SFPUC shall prepare and implement a vegetation restoration plan with detailed specifications for minimizing the introduction of invasive weeds and restoring all temporarily disturbed areas, and shall ensure that the contractor successfully implements the plan. The plan shall indicate the best time of year for seeding to occur.</p> <p>To facilitate preparation of the plan, the SFPUC shall ensure that, prior to construction, a qualified botanist (i.e., one experienced in identifying sensitive plant species in the project area) performs additional preconstruction surveys of the areas to collect more detailed vegetation composition data, including species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species. Photo documentation shall be used to show pre-project conditions.</p> <p>If required, the SFPUC shall provide the vegetation restoration plan to the Corps, the CDFG, the RWQCB, and the USFWS during the permitting process, as any vegetation to be removed may provide habitat for sensitive species and may also be within areas under the jurisdiction of the Corps and the RWQCB.</p> <p>The minimum avoidance, minimization, and restoration measures as well as success criteria to be included in the vegetation restoration plan are described below.</p> <p>Invasive Weed Control Measures</p> <p>Invasive weeds such as yellow star-thistle, purple star-thistle, Italian thistle, bull thistle, and stinkwort readily colonize soils that have been disturbed by grading or other mechanical disturbance. Although the project area has an extensive weed infestation and relatively few native species, the SFPUC shall incorporate the following measures into the construction plans and</p>	<ol style="list-style-type: none"> 1) SFPUC BEM (qualified botanist) 2) SFPUC EMB 3) CM Team 4) CM Team 5) SFPUC NRLMD 6) SFPUC BEM 7) SFPUC BEM 8) SFPUC NRLMD 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 4) SFPUC BEM 5) SFPUC NRLMD 6) SFPUC BEM 7) SFPUC BEM 8) SFPUC NRLMD 	<ol style="list-style-type: none"> 1) Develop vegetation restoration plan in accordance with mitigation requirements, include documentation of qualifications of botanist (e.g., resume), and perform detailed vegetation surveys. Submit to applicable agencies for approval. 2) Ensure that contract documents include on-site restoration requirements, including invasive weed control measures. 3) Ensure that environmental training includes information on invasive weed control measures. 4) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action. Implement vegetation restoration plan. 5) Perform and document long-term monitoring of on-site restoration. Provide documentation to resource agencies as required. 6) Design habitat compensation in accordance with mitigation requirements. Submit to applicable agencies for approval. 7) Implement habitat compensation. 8) Perform and document long-term monitoring of compensatory mitigation. Provide documentation to resource agencies as required. 	<ol style="list-style-type: none"> 1) Design 2) Design 3) Construction 4) Construction 5) Postconstruction 6) Design 7) Construction, or as determined by applicable agencies 8) Postconstruction
		<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p> <p>SFPUC = San Francisco Public Utilities Commission EMB = (SFPUC) Engineering Management Bureau NRLMD = (SFPUC) Natural Resources and Land Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p> <p>Corps = U.S. Army Corps of Engineers Construction = (SFPUC) Construction Management Bureau Environmental = (SFPUC) Environmental Management Bureau Habitat Compensation = (SFPUC) Habitat Compensation Department Review Officer = SF Planning Department</p>				
San Antonio Backup Pipeline Project MMRP					<ol style="list-style-type: none"> 8) Perform and document long-term monitoring of compensatory mitigation. Provide documentation to resource agencies as required. 	

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1 (cont.)		<ul style="list-style-type: none"> Before construction equipment leaves the project area, any accumulation of plant debris, soil, and mud shall be washed off the equipment or otherwise removed onsite, and air filters shall be blown out. The restoration plan shall specify measures to remove and/or control weeds in the project area. No invasive species shall be used in any restoration plantings. Implementation of these measures during construction and site restoration activities shall be verified and documented by a biological or environmental monitor. <p>Minimum Restoration Measures</p> <p>Restoration areas are areas within the project area that would be disturbed during project-related construction activities but would subsequently be restored to their preconstruction conditions as defined by the success criteria described below. In order to restore these areas, the SFPUC shall ensure the following:</p> <ul style="list-style-type: none"> The SFPUC shall ensure that topsoil is salvaged during grading and earthmoving activities (including during the preparation of spoils sites), stockpiled separately from subsoils, and protected from erosion (e.g., covered or watered); that composting amendments are added, if needed; and that potentially compacted construction work areas are properly prepared for revegetation. The SFPUC shall ensure that a minimum of 12 inches of topsoil is salvaged, or if there is less than 12 inches of topsoil, as much as practicable. 				
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p> <p>SFPUC = San Francisco Public Utilities Commission CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p> <p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>						
San Antonio Backup Pipeline Project MMRP		<ul style="list-style-type: none"> For grassland and ruderal areas, the affected areas shall be reseeded with a native or non-invasive grass and forb seed mix. High seed application rates shall be used to help compete with the weedy seed bank. 			50	

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1 (cont.)		<ul style="list-style-type: none"> - Trees shall be replaced within the first year after the completion of construction or as soon as possible in an area where construction is completed during a favorable time period as determined by a qualified arborist or biologist. - Replacement trees shall be planted in or near the area experiencing surface disturbance from project construction and in locations suitable for the replacement species. - Selection of replacement sites and installation of replacement plantings shall be supervised by a qualified arborist or biologist. Irrigation of trees during the initial establishment period shall be provided as deemed necessary by a qualified arborist or biologist. - A qualified arborist or biologist shall monitor newly planted trees at least twice a year for 5 years (7 years for oaks, 10 years for trees in riparian habitat). - Any trees planted as remediation for failed plantings shall be planted as stipulated here for original plantings, and shall be monitored for a period of 5 years (7 years for oaks and 10 years for trees in riparian habitat) following installation, or as otherwise determined by the applicable resource agencies. <p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p> <p>SFPUC = San Francisco Public Utilities Commission CTR = Calaveras Tree Removal CTRM = Calaveras Tree Removal Management BEM = (SFPUC) Bureau of Environmental Management</p> <p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p> <p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>				
San Antonio Backup Pipeline Project MMRP		<ul style="list-style-type: none"> - For non-native trees that are between 2 and 6 inches dbh within the Calaveras Road right-of-way, replacement trees shall be planted on a one-to-one basis for any trees removed. <p>Minimum Success Criteria</p>			52	

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program							
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule				
			Responsible Party	Reviewing and Approval Party						
BI-1 (cont.)		<ul style="list-style-type: none"> Restoration areas shall be monitored for target invasive plants quarterly in the first 5 years following replanting. If invasive plants are found during the 5-year monitoring period, they shall be removed as necessary to support meeting the cover and vegetation composition success criteria. Monitoring and maintenance shall continue until the minimum success criteria specified in the table below are met, or as otherwise determined by the applicable resource agencies. <p>MINIMUM SUCCESS CRITERIA FOR VEGETATION RESTORATION</p> <table border="1"> <thead> <tr> <th>Field Indicator/Measurement</th> </tr> </thead> <tbody> <tr> <td>Grassland: 70 percent absolute cover of typical native naturalized grassland species known from the Sunol RE end of the fifth monitoring year.</td> </tr> <tr> <td>Individual Native Mature Trees: 65 percent plant survival the fifth monitoring year (by the seventh monitoring year and tenth monitoring year for trees in riparian habitat).</td> </tr> <tr> <td>San Antonio Creek Channel and Riparian Habitat: 60 percent or equal to 45 percent canopy cover of target riparian species end of the fifth monitoring year.</td> </tr> </tbody> </table> <p>Compensatory Mitigation The SFPUC shall fully compensate for permanent losses of non-native grassland and ruderal habitat that provide potential low-quality upland refugial and dispersal habitat for CTS and CRLF, as well as potential low quality foraging and dispersal habitat for Alameda whipsnake (approximately 0.7 acre). Compensatory mitigation may occur through habitat enhancements at two of the SFPUC's Bioregional</p>	Field Indicator/Measurement	Grassland: 70 percent absolute cover of typical native naturalized grassland species known from the Sunol RE end of the fifth monitoring year.	Individual Native Mature Trees: 65 percent plant survival the fifth monitoring year (by the seventh monitoring year and tenth monitoring year for trees in riparian habitat).	San Antonio Creek Channel and Riparian Habitat: 60 percent or equal to 45 percent canopy cover of target riparian species end of the fifth monitoring year.				
Field Indicator/Measurement										
Grassland: 70 percent absolute cover of typical native naturalized grassland species known from the Sunol RE end of the fifth monitoring year.										
Individual Native Mature Trees: 65 percent plant survival the fifth monitoring year (by the seventh monitoring year and tenth monitoring year for trees in riparian habitat).										
San Antonio Creek Channel and Riparian Habitat: 60 percent or equal to 45 percent canopy cover of target riparian species end of the fifth monitoring year.										
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p> <p>SFPUC = San Francisco Public Utilities Commission SFPUC Construction Management Team EMB = (SFPUC) Engineering Management Bureau BEM = (SFPUC) Bureau of Environmental Management</p>	<p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>								
San Antonio Backup Pipeline Project MMRP				54						

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BI-1 (cont.)		<p>Mitigation Measure M-BI-1g: Measures to Minimize Disturbance to Special-Status Bird Species.</p> <p>As feasible, the SFPUC shall conduct tree and shrub removal in the project area and the habitat compensation areas during the nonbreeding season (generally August 16 through February 14) for migratory birds, raptors, and special-status bat species.</p> <p>If construction activities must occur during the breeding season for special-status birds (February 15 to August 15), the SFPUC shall retain a qualified wildlife biologist who is experienced in identifying birds and their habitat to conduct nesting-raptor surveys in and within 500 feet of the project area. Migratory bird surveys shall be conducted within 100 feet of all work areas (as feasible) unless otherwise directed by CDFG. All migratory bird and active raptor nests within these areas shall be mapped. These surveys must be conducted within two weeks prior to initiation of construction activities at any time between February 15 and August 15. If no active nests are detected during surveys, no additional mitigation is required.</p> <p>If migratory bird and/or active raptor nests are found in the project area or in the adjacent surveyed area, the SFPUC shall establish a no-disturbance buffer around the nesting location to avoid disturbance or destruction of the nest site until after the breeding season or after a wildlife biologist determines that the young have fledged (usually late June through mid-July). The extent of these buffers would be determined by a wildlife biologist in consultation with CDFG and would depend on the species' sensitivity to disturbance (which can vary among species); the level of noise or construction disturbance; line of sight between the nest and the disturbance; ambient levels of noise and other disturbances; and consideration of other topographical or artificial barriers. The wildlife biologist shall analyze and use these factors to assist the CDFG in making an appropriate decision on buffer distances.</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team (qualified biologist) 3) CM Team 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure that contract documents include the appropriate language. 2) Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct surveys, mapping, and agency coordination. Document activities in monitoring logs. 3) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1) Design 2) Preconstruction/ Construction 3) Construction
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>SFPUC = San Francisco Public Utilities Commission CM Team = (SFPUC) Construction Management Bureau EMB = (SFPUC) Engineering Management Bureau BEM = (SFPUC) Bureau of Environmental Management</p>	<p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>	56		
San Antonio Backup Pipeline Project MMRP						

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Mitigation Measure M-BI-1h: Conduct Preconstruction Surveys for Any Special-Status Bats Found and Implement Avoidance and Minimization Measures.</p> <p>Not more than one week prior to tree removal and demolition of the two quarry buildings located to the east of Pit F3-East, a qualified biologist (i.e., one familiar with the identification of bats and signs of bats) shall survey the trees to be removed and the buildings to be demolished for the presence of roosting bats. Bats may be present any time of the year. The biologist shall thoroughly search the two buildings and any trees that provide appropriate habitat (trees with foliage or cavities or that are hollow) for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the trees, tree removal may proceed. Similarly, if no roosting bats or evidence of bats are found in the quarry buildings, demolition may proceed. If bats are found or evidence of use by bats is present, the biologist shall map and mark the trees and/or locations within the buildings with flagging. As appropriate, the SFPUC shall ensure that the trees are not removed and/or the buildings are not demolished until the CDFG has been consulted for guidance on measures to avoid and minimize disturbance of the</p>	<ol style="list-style-type: none"> 1) SFPUC EMB 2) CM Team (qualified biologist) 3) CM Team 	<ol style="list-style-type: none"> 1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM 	<ol style="list-style-type: none"> 1) Ensure contract documents include the appropriate language. 2) Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct surveys, mapping, and agency coordination and monitoring. Document activities in monitoring logs. 3) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1) Design 2) Preconstruction 3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		special-status bats. Measures may include: monitoring trees or structures and excluding bats from the tree(s) or structures to be removed/demolished; timing tree removal and building demolition to minimize disturbance to bats; and/or use of a construction buffer to avoid disturbance of young before they are able to fly (for pallid bats, this period is between April and August).				
Biological Resources (cont.)						
BI-1 (cont.)		Implement Mitigation Measures M-HY-1a (Preparation and Implementation of a SWPPP) and M-HY-1b (Creek Restoration and Revegetation).	-	-	-	-
BI-2	The proposed project could have a substantial adverse effect on riparian habitat and other sensitive habitats during construction.	Implement Mitigation Measures M-BI-1a (General Protection Measures); M-BI-1f (Preparation and Implementation of a Vegetation Restoration Plan and Compensatory Mitigation); M-BI-1b (Worker Training and Awareness Program); and M-BI-1c (Minimize Disturbance of Riparian Habitat).	-	-	-	-
BI-3	The proposed project could	<i>Mitigation Measure M-BI-3: Avoidance and Protection Measures for Jurisdictional Water</i>	1) SFPUC	1) SFPUC BEM	1) Design project to minimize disturbance to waters of the	1) Design

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	have a substantial adverse effect on jurisdictional waters during construction.	<p>Bodies.</p> <p>The SFPUC and its contractors shall minimize impacts on waters of the United States and waters of the state, including wetlands, by implementing the following measures:</p> <ul style="list-style-type: none"> • Construction activities in saturated or ponded wetlands and streams (typically during the spring and winter) shall be avoided to the maximum extent feasible. Where wetlands or other water features must be disturbed, the minimum area of disturbance necessary for construction shall be identified and the area outside avoided. • Where feasible, a silt fence shall be installed adjacent to all wetlands and drainages to be avoided within 50 feet of any proposed construction activity, and signs installed indicating the required avoidance. No equipment mobilization, grading, clearing, or storage of equipment or machinery, or similar activity, shall occur until a representative of the SFPUC has inspected and approved the fencing installed around these features. This restriction applies to both onsite construction and any offsite mitigation area. The SFPUC shall ensure that the 	<p>EMB</p> <p>2) CM Team</p>	<p>2) SFPUC BEM</p>	<p>United States and state. Ensure appropriate language is included in contract documents.</p> <p>2) Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action.</p>	<p>2) Construction</p>

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>temporary fencing is continuously maintained until all construction activities are completed. No construction activities, including equipment movement, material storage, or temporary spoil stockpiling, shall be allowed within the fenced areas protecting wetlands.</p> <ul style="list-style-type: none"> • In areas where a 50 foot buffer from the freshwater marsh is not feasible, the following measures shall be employed during installation of the chemical feedlines: <ul style="list-style-type: none"> – Biological monitor or environmental inspector shall be on-site during installation of the chemical feedlines if work is within the 50-foot buffer. The purpose of the biological monitor is to ensure that construction activities are kept outside of the marsh and that precautionary measures are taken to avoid impacts to the marsh. – Sidecasting for the trench shall be deposited on the side of the trench furthest from the wetland or imported to a designated staging area or other area within the construction footprint. • To minimize the degradation of wetland soils and vegetation where avoidance is infeasible, protective 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		practices such as geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, geotextile fabric) or vehicles with balloon tires shall be employed in saturated conditions (e.g., when there is noticeable rutting due to saturated conditions and mixing of topsoil and subsoil).				
Biological Resources (cont.)						
BI-3 (cont.)		<ul style="list-style-type: none"> In areas of temporary disturbance the bed and banks of the ephemeral drainage and San Antonio Creek shall be restored to pre-construction conditions after construction is complete. Exposed slopes and streambanks shall be stabilized immediately upon the completion of construction activities. The banks of San Antonio Creek shall be stabilized (if disturbed during construction) using a non-vegetative material that will bind the soil initially and break down within a few years (e.g., jute mat). More aggressive erosion control treatments shall be implemented as needed for stabilization, such as geotextile mats, excelsior blankets, or other soil 				

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		stabilization products. The following bank stabilization materials shall not be used below the mean high water mark: hydraulic mulch, tackifiers, hydroseeding, soil binders, and straw mulch.				
		Implement Mitigation Measures M-BI-1a (General Protection Measures); M-BI-1b (Worker Training and Awareness Program); M-BI-1c (Minimize Disturbance of Riparian Habitat); M-BI-1d (Prevent Movement of Specific Species through the Work Areas); M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation); M-HY-1a (Preparation and Implementation of a SWPPP); and M-HY-1b (Creek Restoration and Revegetation).	-	-	-	-
BI-4	The proposed project could have a substantial adverse effect on resident trout and other native fishes during construction, either by impeding movement or adversely	Implement Mitigation Measures M-HY-1a (Preparation and Implementation of a SWPPP); M-HY-1b (Creek Restoration and Revegetation); M-BI-1b (Worker Training and Awareness Program); M-BI-1c (Minimize Disturbance of Riparian Habitat); and M-BI-3 (Avoidance and Protection Measures for Jurisdictional Water Bodies).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	affecting aquatic habitat.					
BI-6	Construction activities associated with the proposed project could conflict with local policies or ordinances protecting biological resources.	Implement Mitigation Measure M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation).	-	-	-	-
BI-7	Project operations could have a substantial adverse effect on special-status animal species during project operations.	<i>Mitigation Measure M-BI-7: Screen Dewatering Pump Intakes.</i> The SFPUC shall screen the intake pipes for the submersible pumps at Pit F3-East, and the intakes for the pumps on floating platforms in Pit F3-West to prevent the entrainment of CRLF into these pipes. The screens shall be made of wire mesh with openings not larger than 5 millimeters.	1) SFPUC EMB	1) SFPUC BEM	1) Design intake pumps in accordance with specifications.	1) Design

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Biological Resources (cont.)						
C-BI	Project implementation could result in a cumulatively considerable contribution to cumulative impacts on biological resources during project construction and operation.	Implement Mitigation Measures M-BI-1a (General Protection Measures); M-BI-1b (Worker Training and Awareness Program); M-BI-1c (Minimize Disturbance to Riparian Habitat); M-BI-1d (Prevent Movement of Specific Species through the Work Areas); M-BI-1e (Preconstruction Surveys and Construction Monitoring and Protocols for California Tiger Salamander, Red-Legged Frog, and Alameda Whipsnake); M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation); M-BI-1g (Measures to Minimize Disturbance to Special-Status Bird Species); M-BI-1h (Conduct Preconstruction Surveys for Any Special-Status Bats Found and Implement Avoidance and Minimization Measures); M-BI-7 (Screen Dewatering Pump Intakes); M-HY-1a (Preparation and Implementation of a SWPPP); M-HY-1b (Creek Restoration and Revegetation); and M-BI-3 (Avoidance and Protection Measures for Jurisdictional Water Bodies).	-	-	-	-
Geology and Soils						
GE-	The project is located on a	Mitigation Measure M-GE-1: Shoring Plans for Pit F3-East.	1) SFPUC EMB	1) SFPUC BEM	1) Obtain and review resume and qualifications of consulting	1) Design

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
1	geologic unit that could become unstable as a result of project construction.	The SFPUC shall contract with a licensed geotechnical engineer to develop shoring plans assessing potential slope instability risks associated with the final design for construction of the outfall and splash pad on the southern slope of quarry Pit F3-East, and the drainage outfall and riprap dissipater on the northeastern slope of Pit F3-East. Each shoring plan shall specify measures to minimize the potential for slope failure during construction and shall include: a dimensioned site plan showing the location of the shoring; data regarding the expected loads on the shoring (surcharge); details of the shoring system; a soils report; and structural calculations for the shoring system. A qualified geotechnical or civil engineer shall prepare the soils report, and a civil and/or structural engineer shall prepare structural plans and calculations for the shoring. The SFPUC shall ensure that the construction contractor implements the plans; that the shorings are inspected by a qualified civil or structural engineer for compliance with the provisions of the shoring plans prior to beginning construction; and that construction activities are periodically observed to verify that all work conforms to the approved shoring plans.	(licensed geotechnical/civil/structural engineers) 2) SFPUC EMB 3) CM Team (civil/structural engineer) 4) CM Team	2) SFPUC BEM 3) SFPUC CMB 4) SFPUC CMB	geotechnical and civil and/or structural engineers retained for the shoring plan. Develop shoring plans (including soils reports) specifying measures to minimize potential for slope failure. 2) Ensure final construction plans and specifications include the requirement that the contractor implement the shoring plans. 3) Inspect shorings for compliance with shoring plans. 4) Monitor to ensure that construction activities conform to shoring plans. Report noncompliance and ensure corrective action.	2) Design 3) Construction 4) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
GE-2	The project could result in substantial soil erosion or loss of topsoil during construction.	Implement Mitigation Measures M-HY-1a (Preparation and Implementation of a SWPPP) and M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation).	-	-	-	-
C-GE	Project construction could result in a cumulatively considerable contribution to cumulative impacts related to the loss of topsoil.	Implement Mitigation Measure M-HY-1a (Preparation and Implementation of a SWPPP) and M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Hydrology and Water Quality						

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
HY-1	Project construction could substantially degrade water quality as a result of erosion and sedimentation or an accidental release of hazardous chemicals.	<p>Mitigation Measure M-HY-1a: Preparation and Implementation of a SWPPP.</p> <p>Consistent with the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction Activity, the SFPUC or its contractor(s) shall submit a notice of intent to the SWRCB's Division of Water Quality, develop a SWPPP, and implement site-specific BMPs to prevent discharges of nonpoint-source pollutants in construction-related stormwater runoff into downstream water bodies, including Alameda and San Antonio Creeks. The San Francisco Bay RWQCB, the primary agency responsible for protecting water quality in the project area, would review the SWPPP to ensure compliance with the general permit.</p> <p>The BMPs contained in the SWPPP are also subject to review and approval by the RWQCB. The recommended BMPs are listed below. However, the measures themselves may be altered, supplemented, or deleted during the review process, since the RWQCB has final authority over the terms of the SWPPP.</p> <p><u>Scheduling</u></p> <ul style="list-style-type: none"> Schedule construction to minimize ground disturbance during the rainy season. Stabilize all disturbed soils as soon as possible following the completion of soil-disturbing work in the project area. Provide plans to stabilize soil with vegetation or physical means in the event rainfall is expected. Install erosion and sediment control BMPs prior to the start of any ground-disturbing activities. <p><u>Erosion and Sedimentation</u></p> <ul style="list-style-type: none"> Preserve existing vegetation in areas where no construction activity is planned or where construction activity will occur at a later date. 	<ol style="list-style-type: none"> SFPUC EMB CM Team/SFPU C PMB CM Team 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that contract documents require that the contractor design, install, and maintain stormwater controls and prepare a SWPPP. Review SWPPP to ensure that it complies with the requirements and submit to RWQCB. Monitor to ensure the contractor implements the measures in the contract documents and SWPPP. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Preconstruction Construction
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>San Antonio Backup Pipeline Project MMRP</p>	<p>NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>	68		

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Hydrology and Water Quality (cont.)						
HY-1 (cont.)		<ul style="list-style-type: none"> Detain and treat water produced by construction site dewatering using sedimentation basins, sediment traps (when water is flowing and there is sediment), or other measures to ensure that discharges to receiving waters meet applicable water quality objectives. <p><u>Tracking Controls</u></p> <ul style="list-style-type: none"> Grade and stabilize construction site entrances and exits to prevent runoff from the site and to prevent erosion. Install a trackout control device (e.g., gravel pad, grizzlie, wash facility, etc.) at site access points to allow for carryout and trackout prevention when vehicles exit the site. This provision may be omitted if the RWQCB determines that vacuum sweepers, as required by Mitigation Measure M-AQ-1a (BAAQMD Basic Construction Measures), are sufficient to prevent trucks from tracking dirt. Remove any soil or sediment tracked off paved roads during construction by employing street sweeping. 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<u>Instream Construction BMPs</u> <ul style="list-style-type: none"> • Minimize disturbance of the ground surface and substrate within San Antonio Creek during installation of the backup pipeline. • Limit the use of construction vehicles in the San Antonio Creek channel not actively involved in construction across the creek. • Monitor instream construction activity and coordinate with the contractor to identify periods when localized increases in turbidity may occur. • Prevent raw cement, concrete or concrete washings, asphalt, paint or other coatings, oil or other petroleum products, or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses. • Any physical barriers within San Antonio Creek that are needed to isolate the construction area for dewatering purposes or for erosion and sediment control shall be installed under the direction of a qualified biologist to minimize stress, injury, and mortality to wildlife. • Keep visible oil, grease, or foam from forming on soil 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>or water surfaces.</p> <ul style="list-style-type: none"> In the event that construction activities create a visible plume in surface waters, initiate monitoring of turbidity concentrations at the discharge site and 50 feet downstream while the visible plume persists, and initiate corrective action to reduce construction-related turbidity so that it complies with turbidity criteria specified in the Basin Plan for the coldwater fish habitat beneficial use, as measured in surface waters 50 feet downstream of the working area. Implement corrective actions as needed to ensure construction activities are within the Basin Plan's surface water quality objective for turbidity, which states that turbidity increases shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU. Corrective actions would depend on the cause of the sediment discharge and could include installing additional silt fences and other erosion control devices, covering stockpiled material, and improving the system for treating water from the dewatering operation. 				
Hydrology and Water Quality (cont.)						
HY-1		<ul style="list-style-type: none"> Avoid operation of construction vehicles and 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
(cont.)		<p>equipment in flowing water.</p> <p><u>Non-stormwater Control</u></p> <ul style="list-style-type: none"> • Keep construction vehicles and equipment clean; do not allow excessive build-up of oil and grease. • Check construction vehicles and equipment daily at startup for leaks, and repair any leaks immediately. • Do not refuel vehicles and equipment within 100 feet of surface waters to prevent run-on and runoff and to contain spills. • Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility. • Cover all storm drain inlets when paving or applying seals or similar materials to prevent the offsite discharge of these materials. <p><u>Waste Management and Hazardous Materials Pollution Control</u></p> <ul style="list-style-type: none"> • Remove trash and construction debris from the 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>project area regularly. Provide an adequate number of waste containers with lids or covers to keep rain from out of the containers and to prevent trash and debris from being blown away during high winds.</p> <ul style="list-style-type: none"> • Locate sanitary facilities a minimum of 200 feet from Alameda and San Antonio Creeks. • Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water. • Maintain sanitary facilities regularly. • Store all hazardous materials in an area protected from rainfall and stormwater run-on and prevent the offsite discharge of leaks or spills. • Minimize the potential for contamination of surface water bodies, including Pits F3-East and F3-West, and Alameda and San Antonio Creeks, by maintaining spill containment and cleanup equipment onsite, and by properly labeling and disposing of hazardous wastes. • Locate waste collection areas close to construction entrances and away from roadways, Alameda and San Antonio Creeks, and Pits F3-East and F3-West. 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<ul style="list-style-type: none"> Inspect dumpsters and other waste and debris containers regularly for leaks, and remove and properly dispose of any hazardous materials and liquid wastes placed in these containers. Train construction personnel in proper material delivery, handling, storage, cleanup, and disposal procedures. 				

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Hydrology and Water Quality (cont.)						

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
HY-1 (cont.)		<p><u>BMP Inspection, Maintenance, and Repair</u></p> <ul style="list-style-type: none"> Inspect all BMPs on a regular basis to confirm proper installation and function. Inspect all stormwater BMPs daily during storms. Inspect sediment basins, sediment traps, and other detention and treatment facilities regularly throughout the construction period. Provide sufficient devices and materials (e.g., silt fence, fiber rolls, erosion blankets, etc.) throughout project construction to enable immediate repair or replacement of failed BMPs. Inspect all seeded areas regularly for failures, and remediate or repair as soon as feasible. <p><u>Permitting, Monitoring, and Reporting</u></p> <ul style="list-style-type: none"> Obtain and comply with the RWQCB Section 401 Water Quality Certification and California Department of Fish and Game Streambed Alteration Agreement. Provide the required documentation for SWPPP inspections, maintenance, and repair requirements. Maintain written records of inspections, spills, BMP-related maintenance activities, corrective actions, and visual observations of any offsite discharge of sediment or other pollutants, as required by the RWQCB. Monitor water quality to assess the effectiveness of control measures. Notify the RWQCB and other agencies as required (e.g., California Department of Fish and Game) if the criteria for turbidity, oil/grease, or foam are exceeded, and undertake corrective actions. 				
<p>USFWS = U.S. Fish and Wildlife Service CDFG = California Department of Fish and Game RWQCB = California Regional Water Quality Control Board BAAQMD = Bay Area Air Quality Management District</p>	<p>SFPUC = San Francisco Public Utilities Commission CM Team = (SFPUC) Construction Management Team EMB = (SFPUC) Engineering Management Bureau NRLMD = (SFPUC) Natural Resources and Lands Management Division Communications = (SFPUC) Communications Department PMB = (SFPUC) Project Management Bureau Real Estate = (SFPUC) Real Estate Division</p>	<p>CMB = (SFPUC) Construction Management Bureau ERO = (SF Planning Department) Environmental Review Officer SF Planning = SF Planning Department</p>				
San Antonio Backup Pipeline Project MMRP		<ul style="list-style-type: none"> Immediately notify the RWQCB and other agencies as required (e.g., California Department of Fish and Game) of any spill of petroleum products or other organic or earthen materials, and undertake 			76	

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Hydrology and Water Quality (cont.)						
HY-1 (cont.)		<p>Mitigation Measure M-HY-1b: Creek Restoration and Revegetation.</p> <p>Following installation of the backup pipeline at the San Antonio Creek crossing, the SFPUC shall revegetate the disturbed creek banks with native vegetation and restore the geometry of the disturbed creek channel to pre-existing conditions.</p> <p>Plantings shall be monitored and maintained for up to five years to ensure stabilization of the creek channel. This mitigation measure shall be implemented in conjunction with Mitigation Measure M-BI-1f (Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation).</p>	1) SFPUC EMB 2) CM Team 3) SFPUC NRLMD	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC NRLMD	1) Ensure that contract documents include creek restoration and revegetation measures per the vegetation restoration plan prepared under Mitigation Measure M-BI-1f, above. 2) Monitor to ensure contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 3) Perform and document monitoring of on-site restoration. Provide documentation to resource agencies as required.	1) Design 2) Construction 3) Postconstruction
HY-3	Discharges of dewatering effluent from excavated areas during project construction	<p>Mitigation Measure M-HY-3: Management of Dewatering Effluent Discharges.</p> <p>To address potential impacts on receiving water quality during the construction period related to dewatering effluent discharges and to comply with NPDES requirements, the construction contractor(s) shall</p>	1) SFPUC EMB 2) CM Team/SFPUC PMB	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM	1) Ensure that contract documents include the requirement for the contractor to prepare a dewatering plan in accordance with NPDES general construction permit	1) Design 2) Preconstruction (prior to dewatering activities)

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	could substantially degrade water quality.	<p>prepare and implement a project-specific dewatering plan. Discharges of dewatering effluent during project construction shall be conducted in accordance with NPDES general construction permit requirements.</p> <p>Construction Dewatering Plan</p> <p>The dewatering plan shall specify how the water will be collected, contained, treated, monitored, and discharged to vegetated areas, Alameda Creek, and San Antonio Creek. Subject to review and approval by the RWQCB, the plan shall at a minimum:</p> <ul style="list-style-type: none"> Identify methods and locations for collecting and handling water onsite prior to discharge, determine treatment requirements, and determine the capacity of settling basins, treatment ponds, and/or holding tanks. Identify methods for treating water onsite prior to discharge, such as filtration, coagulation, sedimentation settlement areas, oil skimmers, pH adjustment, and other BMPs. Establish procedures and methods for maintaining and monitoring dewatering operations to ensure that no breach in the process occurs that could result in an 	3) CM Team		<p>requirements.</p> <p>2) Review dewatering plan to ensure it complies with NPDES requirements and submit to RWQCB for approval.</p> <p>3) Monitor to ensure the contractor implements measures in contract documents and dewatering plan. Report noncompliance and ensure corrective action.</p>	3) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>exceedance of applicable water quality objectives.</p> <ul style="list-style-type: none"> Identify discharge locations and include details regarding how the discharge will be conducted to minimize erosion and scour. <p>Relevant Water Quality Objectives</p> <p>At a minimum, the project discharges to surface waters shall not exceed the water quality objectives for receiving waters included in the current San Francisco Bay Basin Plan, including (but not limited to):</p> <ul style="list-style-type: none"> pH shall not be depressed below 6.5 nor raised above 8.5. Turbidity shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU. Temperature shall not be increased by more than 5 °F (2.8 °C) above natural receiving water temperature. 				
Hydrology and Water Quality (cont.)						
HY-3 (con)		<ul style="list-style-type: none"> Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. Waters shall not contain floating material, including 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
t.)		<p>solids, liquids, foams, or scum, in concentrations that cause nuisance or adversely affect beneficial uses.</p> <ul style="list-style-type: none"> Waters shall not contain oils, greases, waxes, or other materials in concentrations that: result in a visible film or coating on the surface of the water or on objects in the water, cause nuisance, or otherwise adversely affect beneficial uses. All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. <p>Construction contractor(s) shall comply with all monitoring and reporting requirements established by the RWQCB. Any exceedences of established narrative or numeric water quality objectives shall be reported to the RWQCB and corrective action taken. Corrective action may include an increase in residence time in treatment features (e.g., longer holding time in settling basins) and/or incorporation of additional treatment measures (e.g., addition of sand filtration prior to discharge).</p>				
C-HY	Project construction	Implement Mitigation Measures M-HY-1a (Preparation and Implementation of a SWPPP); M-HY-1b (Creek	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	could result in a cumulatively considerable contribution to cumulative impacts on hydrology and water quality.	Restoration and Revegetation); and M-HY-3 (Management of Dewatering Effluent Discharges).				
Hazards and Hazardous Materials						
HZ-1	Project construction could result in a substantial adverse effect related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Mitigation Measure M-HZ-1a: Evaluate Soil Quality. Prior to project construction, the SFPUC shall perform a soil investigation to determine the presence of chemical residues within shallow soils in proposed construction work areas where sampling has not been previously conducted, and in the area south of the Alameda Siphons (in the vicinity of the San Antonio Pump Station, where a release of diesel and waste oil was previously remediated and concentrations of total oil and grease are reported to be ubiquitous). Samples shall be collected from surface soils (from the ground surface to 1.5 feet below the surface) in each of the proposed work areas and spoils sites that will be disturbed during project construction, and to the depth	1) SFPUC EMB (qualified professional) 2) CM Team	1) SFPUC BEM 2) SFPUC BEM/CM Team	1) Perform soil sampling and analysis. Document results. Present sampling results and procedures in a report or technical memo. 2) Ensure sampling results and appropriate soils management and handling requirements are incorporated into the construction risk and spoils management plan (CRSMP) that is prepared under Mitigation Measure M-HZ-1b, below.	1) Preconstruction 2) Preconstruction

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		of the planned excavation in the vicinity of the San Antonio Pump Station. At a minimum, surface soil samples shall be analyzed for total copper, arsenic, lead, mercury, and organochlorine pesticides. To evaluate the potential for petroleum products and semivolatile organic compounds to be present, subsurface soil samples from the vicinity of the San Antonio Pump Station shall be analyzed for total petroleum hydrocarbons (as gasoline, diesel, and waste oil) and for semivolatile organic compounds. The results of the soil investigation shall be incorporated into the construction risk and spoils management plan prepared in accordance with Mitigation Measure M-HZ-1b (Implement a Construction Risk and Spoils Management Plan) to determine whether: specific soils management and disposal procedures for contaminated materials are required; excavated soils are suitable for reuse; and appropriate construction worker health and safety procedures for working with contaminated materials are required.				
Hazards and Hazardous Materials (cont.)						
HZ-1 (con)		Mitigation Measure M-HZ-1b: Implement a Construction Risk and Spoils Management Plan.	1) SFPUC EMB	1) SFPUC BEM 2) SFPUC BEM	1) Ensure that contract documents include the requirement that the contractor prepare and	1) Design 2) Preconstruction

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
t.)		<p>The SFPUC shall require the construction contractor to prepare and implement a construction risk and spoils management plan (CRSMP), subject to review by the SFPUC, to address hazardous materials and other worker health and safety issues during construction of the proposed project. The CRSMP shall include all necessary procedures to ensure that excavated materials are stored, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. The SFPUC shall ensure that the CRSMP includes the following information:</p> <ul style="list-style-type: none"> • Results of previous soil sampling within the construction work areas as well as sampling conducted in accordance with Mitigation Measure M-HZ-1a (Evaluate Soil Quality). • A site-specific health and safety plan (HASP) prepared by a qualified environmental professional in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR 5192). The HASP shall include all required measures to protect construction workers and the general public by including engineering controls, monitoring, and 	<p>2) CM Team/SFPU C PMB</p> <p>3) CM Team</p>	<p>3) SFPUC CMB</p>	<p>implement a construction risk and spoils management plan (CRSMP).</p> <p>2) Review CRSMP to ensure that it complies with requirements cited in both Mitigation Measures M-HZ-1a and M-HZ-1b.</p> <p>3) Monitor to ensure that the contractor implements the measures in the contract documents and the CRSMP. Report noncompliance and ensure corrective action.</p>	<p>3) Construction</p>

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>security measures to prevent unauthorized entry to the construction area and to reduce hazards outside of the construction area. If prescribed contaminant exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations. Submission of the CRSMP to the SFPUC, or any review of the contractor's CRSMP or HASP by the SFPUC, shall not be construed as approval of the adequacy of the contractor's health and safety professional, the contractor's HASP, or any safety measure taken in or near the construction site. The contractor shall be solely and fully responsible for compliance with all laws, rules, and regulations applicable to health and safety during the performance of the construction work.</p> <ul style="list-style-type: none"> • Step-by-step procedures for evaluation, handling, stockpiling, storage, testing, and disposal of excavated material, including criteria for: reuse within the pipeline trenches; placement at the North Spoils Site; temporary storage in SMP-30 Pit F6 or aggregate processing facility prior to processing for resale and reuse; and offsite disposal. All excavated materials shall be inspected prior to initial stockpiling. 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		and spoils that are visibly stained and/or have a noticeable odor shall be stockpiled separately to minimize the amount of material that may require special handling. In addition, excavated materials shall be stored away from Alameda and San Antonio Creeks and other water features in accordance with the storm water pollution prevention plan (SWPPP) prepared in accordance with Mitigation Measure M-HY-1a (Preparation and Implementation of a SWPPP) and inspected for buried building materials, debris, and evidence of underground storage tanks; if identified, these materials shall be stockpiled separately and characterized in accordance with landfill disposal requirements. The chemical quality of the spoils intended for reuse shall be characterized, and spoils may be permanently placed at the North Spoils Site, or temporarily placed in Pit F6 or at the SMP-30 aggregate processing facility if they are found to meet the reuse criteria				
Hazards and Hazardous Materials (cont.)						
HZ-1 (con)		established in the CRSMP. Any spoils that do not meet the reuse criteria shall be segregated and disposed of at a permitted landfill facility.				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
t.)		<ul style="list-style-type: none"> Procedures to be implemented if unknown subsurface conditions or contamination are encountered, such as previously unreported tanks, wells, or contaminated soils. Detailed control measures for use and storage of hazardous materials to prevent the release of pollutants to the environment, and emergency procedures for the containment and cleanup of accidental releases of hazardous materials to minimize the impacts of any such release. These procedures shall also include reporting requirements in the event of a reportable spill or other emergency incident. At a minimum, the SFPUC or its contractor shall notify applicable agencies in accordance with guidance from the California Office of Emergency Services as well as the Alameda County Water District. Fire-prevention measures, including cigarette smoking in disturbed areas only and disposing of cigarette butts in waste bins, parking in non-vegetated areas, and complying with the requirements of the California PRC, beginning with Section 4427. 				

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<ul style="list-style-type: none"> Required worker health and safety provisions for all workers potentially exposed to contaminated materials, in accordance with state and federal worker safety regulations, and designated personnel responsible for implementation of the CRSMP. 				
		<p>Mitigation Measure M-HZ-1c: Hazardous Building Materials.</p> <p>Prior to demolishing the residential-style building and associated shed, the SFPUC shall ensure that a qualified environmental professional survey the buildings for electrical equipment containing polychlorinated biphenyls (PCBs), fluorescent lights containing mercury vapors or fluorescent light ballasts containing PCBs or Di (2-ethylhexyl) phthalate (DEHP). Any of these materials shall be removed and disposed of properly prior to demolition of the buildings.</p>	1) SFPUC EMB (qualified professional) 2) SFPUC EMB 3) CM Team	1) SFPUC BEM 2) SFPUC BEM 3) SFPUC BEM	1) Conduct hazardous building materials survey. Document results and develop appropriate abatement practices. 2) Ensure that contract documents include requirement that contractor implement the applicable abatement practices. 3) Monitor to ensure that contractor implements the abatement practices and measures in contract documents. Report noncompliance and ensure corrective action.	1) Design 2) Design 3) Construction

USFWS = U.S. Fish and Wildlife Service
 CDFG = California Department of Fish and Game
 RWQCB = California Regional Water Quality Control Board
 BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
 CM Team = (SFPUC) Construction Management Team
 EMB = (SFPUC) Engineering Management Bureau
 BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
 Communications = (SFPUC) Communications Department
 PMB = (SFPUC) Project Management Bureau
 Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
 ERO = (SF Planning Department) Environmental Review Officer
 SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
HZ-2	Project construction could result in a substantial adverse effect related to accident conditions involving the release of hazardous construction chemicals into the environment.	Implement Mitigation Measure M-HY-1a (Preparation and Implementation of a SWPPP).	-	-	-	-
Hazards and Hazardous Materials (cont.)						
C-HZ	Construction of the proposed project would result in a	Implement Mitigation Measure M-HZ-1a (Evaluate Soil Quality); M-HZ-1b (Implement a Construction Risk and Spoils Management Plan); M-HZ-1c (Hazardous Building Materials); and M-HY-1a (Preparation and	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	cumulatively considerable contribution related to cumulative impacts related to hazards and hazardous materials.	Implementation of a SWPPP).				
Minerals and Energy Resources						
ME-2	Project construction could result in substantial adverse effects related to the use of large amounts of fuel or energy, or the use of these resources in a wasteful manner.	Implement Mitigation Measures M-AQ-1a (BAAQMD Basic Construction Measures) and M-AQ-1b (BAAQMD Additional Construction Measures for NOx Reduction).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
C-ME	Project construction would result in a cumulatively considerable contribution to cumulative impacts related to mineral and energy resources.	Implement Mitigation Measures M-AQ-1a (BAAQMD Basic Construction Measures) and M-AQ-1b (BAAQMD Additional Construction Measures for NOx Reduction).	-	-	-	-
Agriculture and Forest Resources						
AG-1	Implementation of the proposed project would result in the conversion of Unique Farmland, as shown on the maps pursuant to the Farmland Mapping and Monitoring	<p>Mitigation Measure M-AG-1: Compensation for Loss of Unique Farmland.</p> <p>The SFPUC shall compensate for the conversion of Unique Farmland to non-agricultural use as follows:</p> <ul style="list-style-type: none"> As compensation for the permanent loss of Unique Farmland at the former nursery site, the SFPUC shall dedicate a permanent agricultural conservation easement equal in area to the Unique Farmland converted to non-agricultural use. 	1) SFPUC Real Estate/SFPUC PMB	1) SFPUC BEM	1) Document equivalent agricultural conservation easement or funding contribution to local agricultural land conservancy.	1) Construction

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	Program of the California Resources Agency, to non-agricultural use.	<ul style="list-style-type: none"> As an alternative to the permanent agricultural easement described above, the SFPUC shall contribute funds to a local agricultural land conservancy to establish a conservation easement to protect an equivalent acreage of similarly valued land in the area. <p>Should the Farmland Mapping and Monitoring Program remove the Unique Farmland designation from the former nursery site before the earthen berm is constructed, this mitigation measure would no longer be warranted and would not be required.</p>				
Agriculture and Forest Resources (cont.)						
C-AG	Implementation of the proposed project would result in a cumulatively considerable contribution to	Implement Mitigation Measure M-AG-1 (Compensation for Loss of Unique Farmland).	-	-	-	-

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department

ATTACHMENT B (Continued)
SAN ANTONIO BACKUP PIPELINE PROJECT (SF PLANNING DEPARTMENT CASE NO. 2007.0039E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	cumulative impacts related to the conversion of Unique Farmland to non-agricultural uses.					

USFWS = U.S. Fish and Wildlife Service
CDFG = California Department of Fish and Game
RWQCB = California Regional Water Quality Control Board
BAAQMD = Bay Area Air Quality Management District

SFPUC = San Francisco Public Utilities Commission
CM Team = (SFPUC) Construction Management Team
EMB = (SFPUC) Engineering Management Bureau
BEM = (SFPUC) Bureau of Environmental Management

NRLMD = (SFPUC) Natural Resources and Lands Management Division
Communications = (SFPUC) Communications Department
PMB = (SFPUC) Project Management Bureau
Real Estate = (SFPUC) Real Estate Division

CMB = (SFPUC) Construction Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
SF Planning = SF Planning Department