

Mitigation Monitoring Plan

Hughson-Grayson 115-kV Transmission Line and Substation Project

Prepared for:

Turlock Irrigation
District



Prepared by:

Parus Consulting

*1508 Eureka Rd, Suite 170
Roseville, CA 95621*



August 2009

Introduction

The mitigation measures identified in Turlock Irrigation District's (TID's) environmental documentation for the Hughson-Grayson Transmission Line and Substation Project have been developed to minimize potential environmental impacts during project construction and operation. These measures have been incorporated into this Mitigation Monitoring Plan, and are listed in Table 1. This Mitigation Monitoring Plan is intended to be used by TID to ensure that each mitigation measure, adopted as a condition for project approval, is implemented appropriately. This monitoring plan meets the requirements of the California Environmental Quality Act, as amended (Guidelines §15074(d)), which mandates the preparation of monitoring provisions for the implementation of mitigation assigned as part of project approval or adoption.

Mitigation Implementation and Monitoring

Implementing measures assigned to mitigate impacts associated with the proposed project is ultimately the responsibility of TID. Although others have been assigned responsibility for certain mitigation measures, TID will be responsible for monitoring the implementation of these mitigation measures. TID will retain primary responsibility for ensuring that the proposed project meets the requirements of this Mitigation Monitoring Plan and other permit conditions imposed by participating regulatory agencies.

TID will designate specific personnel who will be responsible for monitoring implementation of the mitigation that will occur during project construction. The designated personnel will be responsible for submitting all documentation and reports necessary for demonstrating compliance with mitigation requirements to TID in a timely manner. TID will ensure that the designated personnel have authority to require implementation of mitigation requirements and will be capable of terminating project construction activities found to be inconsistent with mitigation objectives or project approval conditions.

TID will be responsible for demonstrating compliance with other agency permit conditions to the appropriate regulatory agency. It will also be responsible for ensuring that its construction personnel understand their responsibilities for adhering to the performance requirements of the mitigation plan and other contractual requirements related to the implementation of mitigation as part of project construction. In addition to the prescribed mitigation measures, Table 1 lists the

time-table corresponding to the monitoring and reporting requirement, and the party responsible for ensuring implementation of the mitigation measure and monitoring effort.

Mitigation Enforcement

TID will be responsible for enforcing all mitigation measures. If alternative mitigation measures are identified that would be equally effective in mitigating the identified impacts, the implementation of these alternative measures will not occur until agreed upon by TID.

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
WORKER ENVIRONMENTAL AWARENESS PROGRAM							
Personnel training	A Worker Environmental Awareness Program shall be conducted by qualified personnel and shall include discussion of the following: state and federal Endangered Species Acts and the consequences of non-compliance with these acts; identification and values of sensitive plant and wildlife species; hazardous substance spill prevention and containment measures; and potential cultural resources and instructions on actions to take if resources are found, including work curtailment or redirection and immediate notification.	Prior to construction	As needed		X	Biologist/ Archeologist	TID
BIOLOGICAL RESOURCES							
Nesting birds	Vegetation removal associated shall be conducted outside of the nesting-bird season, which extends from February 15 to August 31; or a qualified biologist shall conduct a nesting bird survey to identify any potential nesting activity within five days of proposed construction activities. If the survey finds passerine birds (i.e. small, perching birds) to be nesting, or there is evidence of nesting behavior within 250 feet of the impact area, a 250-foot buffer shall be required around the	Prior to construction ⁱ		X ⁱ		Construction Contractor/ Biologist/ TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	nests. For raptor species, the buffer should be 500 feet. A qualified biologist shall monitor the nests, and construction activities may commence within the buffer area at the discretion and presence of the biological monitor.						
Swainson's hawk	<p>If construction activities occur during the nesting season for Swainson's hawk (March 1 through October 31), a survey shall be conducted by a qualified biologist along the project alignment, and within a 250-foot buffer. Surveys shall follow the guidance of the <i>Recommended Timing and Methodology For Swainson's Hawk Nesting Surveys in California's Central Valley</i> (SWTAC 2000).</p> <p>If an active nest is identified, a 0.5-mile buffer shall be established around the nesting location. Construction activities may commence within the buffer area at the discretion and in the presence of a biological monitor, pending consultation and coordination the CDFG.</p>	Prior to construction ⁱ		X ⁱ		Construction Contractor/ Biologist/ TID	TID
San Joaquin kit fox	<p>Pre-construction surveys for San Joaquin kit fox shall be implemented. If an active den is detected within 500 feet of the work area, standard den clearance shall be conducted in accordance with USFWS ground disturbance protocol.</p> <p>TID shall also implement USFWS' 1999</p>	Prior to construction ⁱ		X ⁱ		Construction Contractor/ Biologist/ TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	construction and operation requirements contained in the <i>Standardized Recommendations for Protection of San Joaquin Kit Fox Prior to or During Ground Disturbance</i> (available online at: http://www.fws.gov/sacramento/es/documents/kitfox_standard_rec.PDF).						
Burrowing owl	A qualified biologist shall conduct a pre-construction survey for burrowing owl. If burrowing owls or their sign are determined to be present on the on the transmission line routes or at the Grayson Substation site, mitigation measures for potential impacts shall be established in accordance with the guidelines outlined by the Burrowing Owl Consortium’s 1993 <i>Burrowing Owl Survey Protocol and Mitigation Guidelines</i> (available online at: http://www.dfg.ca.gov/wildlife/nongame/docs/boconsortium.pdf), including passive relocation.	Prior to construction ⁱ		X ⁱ		Construction Contractor/ Biologist/ TID	TID
SOIL EROSION AND WATER QUALITY							
Erosion resulting from soil disturbance	The construction contractor shall comply with applicable federal and state regulations governing soil erosion, including the National Pollution and Discharge Elimination System. TID shall prepare the appropriate Notice of Intent and other necessary engineering plans and specifications for	Prior to construction	As needed		Contractor shall conduct site inspections prior to a forecasted	Construction Contractor/ TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	<p>pollution prevention and control. A project-specific Storm Water Pollution Prevention Plan (SWPPP) shall be prepared that identifies best management practices (BMPs), means of waste disposal, non stormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities. The SWPPP shall also specify the hazardous materials that are likely to be used during construction and that could be present in stormwater drainage and non-stormwater discharges.</p> <p>The SWPPP shall be available for review by the Regional Water Quality Control Board. Water quality BMPs shall be applied according to the California Stormwater Quality Association's <i>Stormwater Best Management Practices Handbooks</i>. BMPs shall be designed to mitigate stormwater runoff through minimization, infiltration, or treatment and shall include, but shall not be limited to, the following components:</p> <ul style="list-style-type: none"> • Sediment control measures, including silt fencing, fiber rolls, water dust suppression, and street sweeping and vacuuming; • A wash area for concrete mixers intended to eliminate the discharge of concrete or rinse slurries into stormwater or 				storm, after a rain event, at 24-hour periods during extended rain events, weekly during the rainy season, and every two weeks during the non-rainy season		

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	<p>watercourses; and</p> <ul style="list-style-type: none"> Watering procedures to prevent wind-driven erosion. <p>Compliance reports shall be documented on a standard inspection checklist developed by the contractor and kept on file at the project site.</p>						
HYDROLOGY							
Alter stormwater runoff patterns	Substation grading and design shall ensure that all drainage water is contained within the substation site.	Before approval of final design		X		TID	TID
AIR QUALITY							
Air Quality Degradation/ PM₁₀	<p>All disturbed areas, including storage piles that are not being actively used for construction purposes and access roads, shall be effectively stabilized using water, chemical stabilizer/suppressant, or vegetative ground cover.</p> <p>All land clearing, grubbing, scraping, excavation, land leveling, and grading shall be effectively controlled of fugitive dust emissions using application of water or by presoaking.</p> <p>All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when</p>	Throughout construction			X	Construction Contractor/ TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	<p>operations are occurring. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions and use of blower devices is expressly forbidden.)</p> <p>Traffic speeds on shall be limited on unpaved roads to 15 mph.</p> <p>Excavation and grading shall be suspended activity when winds exceed 20 mph*.</p> <p>Limit area subject to excavation, grading, and other construction activity at any one time.</p> <p>*Regardless of wind speed, an owner/operator must comply with Regulation VIII's 20 percent opacity limitation.</p>						
<i>CULTURAL RESOURCES</i>							
Protection of cultural resources	<p>If cultural resources such as: structure features, unusual amounts of bone or shell, artifacts, or architectural remains are encountered during construction grading, trenching, augering, and/or excavation for the transmission lines or substation, work within 100 feet of the find shall be halted and a qualified archaeologist shall be notified immediately to evaluate the resource(s) encountered and recommend the development of mitigation measures for potentially significant resources consistent with PRC Section 21083.2(i).</p>	Upon discovery			X	Construction Personnel/ TID/ Archeologist	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment shall be conducted by qualified archaeologists who meet the federal standards as stated in the CFR (36 CFR 61), and Native American representatives who are approved by the local Native American community as keepers of their cultural traditions. In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted.						
Disturbance of human remains	If human remains are encountered during project construction grading, trenching, augering, and/or excavation for the transmission lines or substation, the County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendent.	Upon discovery			X	Construction Personnel/ TID/ Archeologist	TID
HAZARDS AND HAZARDOUS MATERIALS							
Accidental spills or release of	The construction contractor shall prepare a Spill Prevention, Control, and Countermeasure (SPCC)	Prior to the start of		X		Construction	

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
hazardous materials (construction)	<p>Plan that describes the methods for working with hazardous materials during construction. The SPCC Plan shall describe methods for avoiding spills as well as the required response if a spill occurs.</p> <p>The construction contractor shall be trained regarding the identification and handling of hazardous materials (including PCB-containing transformers) and spill containment and agency notification procedures.</p> <p>Where project facilities would traverse previously developed properties, the potential for chemical releases or other recognized environmental hazards shall be ascertained through Phase I or Phase II environmental assessment activities.</p> <p>TID shall also conduct a limited soil sampling and analysis program in representative agricultural or grazing land areas to determine if the above-listed chemicals or constituents are present at or above health-based risk criteria (such as the USEPA Preliminary Remediation Goals (PRGs) or California Human Health Screening Levels (CHHSLs)). If PRGs or CHHSLs are exceeded, then TID shall develop a Construction Soil Management Plan to minimize worker exposures and determine appropriate soil handling procedures.</p>	construction activities				Contractor/ TID	

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan

Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
Accidental Spills or Release of Hazardous Materials	TID shall notify applicable agencies and perform the required remediation if there is a release of reportable (or otherwise significant) quantities of hazardous materials.		Throughout Operation and Construction		X	Construction Contractor/ TID	TID
Fire Hazards	Facility designs shall conform to applicable regulations with respect to required safety features and setbacks between energized facilities and vegetation or other flammable materials. TID shall institute a program of regular inspection along the selected transmission line segments to assure that plant growth subsequent to installation does not prevent conformance with applicable regulations as they apply to required setbacks from vegetation or other flammable materials.	During design	Throughout Operation	Facility design	Vegetation inspection program	TID	TID
NOISE							
Construction Noise	Construction shall be limited to the hours between 7 a.m. and 8 p.m. Monday through Friday, and 8 a.m. and 8 p.m. Saturday, Sunday, and legal holidays. Construction equipment and haul trucks shall be properly maintained and operated (including adherence to speed limit requirements) and equipped with mufflers. Construction staging and parking areas shall be located away from existing residences.		Throughout Construction		X	Construction Contractor/ TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
TRANSPORTATION							
Impair ability to adapt transit systems or conflict with adopted programs supporting alternative transportation	<p>The location of proposed utility infrastructure shall be made available to the Stanislaus County Department of Public Works for review and comment prior to construction. In addition, TID will review the City of Hughson’s Street Master Plan prior to design and utility pole placement, in an effort to minimize conflicts with proposed upgrades.</p> <p>TID will make construction plans and alignment details available to local agencies (including the City of Hughson and StanCOG) for identification of potential right-of-way issues related to future roadway and bikeway path upgrades.</p>	During design		X		TID	TID
Increase local traffic volumes	<p>Temporary traffic controls shall be implemented to minimize the potential for construction activities to result in traffic disruptions. Signs and/or flagmen shall be in place to alert drivers of approaching lane closures and construction activities, and to safely maintain potential alternate one-way traffic flow, as needed. Controls shall follow Caltrans’ most recent <i>Manual of Traffic Controls for Construction and Maintenance in Work Zones</i>, and road closures shall be coordinated with the Stanislaus County inspector. All traffic lanes shall</p>		Throughout construction		X	Construction Contractor/ TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
	be opened during peak traffic hours: Monday thru Friday 7:30 to 8:30 a.m. and 4:30 to 5:30 p.m. Any traffic control plan to be implemented within Stanislaus County's right-of-way shall be submitted to Stanislaus County Public Works for approval.						
Increase traffic hazards	TID shall consult with county officials in the field regarding the proper placement of poles at intersections on a case-by-case basis. Visibility strips shall be placed on the poles to reduce potential hazards to motorists.	During design/ Upon project completion		X		TID	TID
Conflict with the operation of railways or SR 99	Appropriate BNSF, UPRR, and Caltrans procedures shall be followed at all crossings. All work near the BNSF line shall be conducted in conformance with the procedures contained in the railway's <i>Utility Accommodation Policy</i> (2007). UPRR crossings shall follow the railway's <i>Procedures for Wireline Crossings</i> , and TID shall complete and submit to UPRR the required online application for work. For construction of lines that cross the SR 99, an encroachment permit (TR-0100) shall be obtained from Caltrans. In conjunction with this permit, traffic control shall be implemented by the California Highway Patrol (CHP).	Prior to construction			X	TID	TID

Hughson-Grayson 115-kV Transmission Line and Substation Project
Mitigation Monitoring Plan
Table 1

IMPACT	MITIGATION	DURATION OF MITIGATION IMPLEMENTATION		MONITORING DURATION		RESPONSIBILITY	
		ONE-TIME	ONGOING	ONE-TIME	ONGOING	MITIGATION IMPLEMENTATION	MITIGATION MONITORING
<i>PUBLIC SERVICES AND UTILITIES</i>							
Existing utilities	TID shall coordinate with applicable utility providers to ensure that no damage is implemented on existing facilities. Underground Service Alert shall be notified at least two working days prior to any digging. TID shall provide 48 hours advance notice to customers along the transmission line of any temporary disruptions in service that may result from project construction.		Throughout construction		X	TID	TID
Fire department access	TID shall coordinate with applicable fire districts to minimize impacts to emergency response times in the project area.	Prior to construction		X		TID	TID

ⁱ Assumes species not identified in pre-construction surveys.