

WILD GOOSE PHASE 3 GAS STORAGE EXPANSION

SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

– Final –

SEPTEMBER 2010



Prepared for:



State of California
Public Utilities
Commission

Prepared by:



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1. Introduction

1.1 Final SEIR Context

The Phase 3 Expansion of the Wild Goose Storage Facility (Phase 3 Expansion) has been proposed by Wild Goose Storage, LLC (Wild Goose, or applicant). A Draft Supplemental Environmental Impact Report (Draft SEIR) for the Phase 3 Expansion was prepared and distributed for public review on June 7, 2010, by the California Public Utilities Commission (CPUC), as the lead agency under the California Environmental Quality Act (CEQA). This Final Supplemental Environmental Impact Report (Final SEIR) addresses the potential environmental impacts of the proposed Phase 3 Expansion and approvals necessary to expand the permitted storage and operational capacity of the existing Wild Goose Gas Storage Field, which is located in Butte County, California.

The Final SEIR are supplemental to the document titled “Wild Goose Storage, Inc. Expansion Project Environmental Impact Report” (2002 EIR), which was prepared for the Phase 2 expansion of the Wild Goose facility.

The Phase 3 Expansion would provide:

- Gas storage of up to 50 billion cubic feet (bcf);
- Daily injection rates of up to 650 million cubic feet per day (MMcfd) and withdrawal rates of up to 1,200 MMcfd;
- Expansion of the existing Remote Facility Site (RFS; in Butte County);
- Expansion of the existing Delevan Interconnect Site (in Colusa County);
- PG&E’s installation of up to three new hot tapped pipeline connections between the Wild Goose Connection Pipeline and PG&E Lines 400 and 401, near the location of the Delevan Interconnect Site (in Colusa County); and
- Reconductoring of up to 6.1 miles of electrical distribution line east of the RFS by PG&E (in Butte County).

See Chapter 2, Description of Phase 3 Expansion, of the Draft SEIR for a complete description of the expansion.

This document has been prepared pursuant to the requirements of the CEQA. Section 15132 of the CEQA Guidelines states:

“The Final EIR shall consist of:

- a. The draft EIR or a revision of the draft. [Draft SEIR and Appendix A of this Final SEIR]
- b. Comments and recommendations received on the draft EIR either verbatim or in summary. [Chapter 4]
- c. A list of persons, organizations, and public agencies commenting on the draft EIR. [Chapters 1 and 4]
- d. The responses of the Lead Agency to significant environmental points raised in the review and consultation process. [Chapter 4]

- e. Any other information added by the Lead Agency.” [Chapters 1, 2, 3, and 5, and appendices]

The Final SEIR provides the CPUC with information prior to potential approval of the proposed Phase 3 Expansion. The Final SEIR presents comments and responses not available in the Draft SEIR. The findings and a statement of overriding considerations (if required) are included in the public record but not in the Final SEIR.

1.2 Comments on the Draft SEIR

The Draft SEIR was submitted to the State Clearinghouse for distribution to state agencies, and was available to agencies and the public for review and comment for 45 days between June 7 and July 21, 2010. A public meeting was conducted on June 29 to receive oral and written comments. Letters of comment were received from the state agencies, regional and local agencies, and organizations; each comment is assigned an identifier and its submitter is listed, below.

State Agencies

- A1. California Regional Water Quality Control Board, Central Valley Region
- A2. California Regional Water Quality Control Board, Central Valley Region
- A3. California Division of Oil, Gas, and Geothermal Resources (DOGGR)

Regional and Local Agencies

- A4. Butte County Department of Public Works
- A5. Butte County Air Quality Management District

Organizations

- O1. Dean Cortopassi, representing Wild Goose Club
- O2. Gary Theberge, representing Niska Gas Storage
- O3. Christoffer Ellis, representing Pacific Gas and Electric

1.3 Organization and Contents of the Final SEIR

This document contains five chapters and six appendices, as described below. The Final SEIR consists of two volumes. Volume I of the Final SEIR is the Draft SEIR, which was previously distributed and is available upon request; Volume II of the Final SEIR is this document, which includes changes to the Draft SEIR, and responses to comments on the Draft SEIR. Volumes I and II constitute the Final SEIR that will be the subject of hearings to certify the SEIR.

Chapter 1 introduces the Final SEIR, summarizing the Phase 3 Expansion and listing comment letters received during the public review period.

Chapter 2 presents a synopsis of the Phase 3 Expansion and environmental impacts.

Chapter 3 summarizes the environmental and public review process pursuant to CEQA.

Chapter 4 lists agencies and members of the public that commented on the Draft SEIR; comments received during the Draft SEIR public review process; and responses to comments received. Comment letters are reproduced in full in this section, and are numbered according to the list described earlier. Comments within each letter are numbered sequentially.

Chapter 5 presents the revised Mitigation Monitoring and Reporting Program (MMRP) from Chapter 5 of the Draft SEIR. All changes to mitigation measures are shown in strikeout and underline format.

Appendix A presents changes made to the Draft SEIR text, tables, and figures as a result of comments and responses. This volume of the Final SEIR does not reproduce the entire Draft SEIR.

Appendix B presents revised calculations of the air quality emissions that were presented in the Draft SEIR, in response to comments from Wild Goose.

Appendix C presents supplemental information related to an analysis of noise impacts at the Wild Goose Well Pad Site, in response to comments from the Wild Goose Club on the Draft SEIR.

Appendix D presents the Notice of Completion and Environmental Document Transmittal for the Draft SEIR.

Appendix E summarizes the Draft SEIR meeting conducted June 29, 2010, including oral comments.

Appendix F presents the Draft SEIR distribution list.

1.4 Decision-Making Process

Pursuant to Article XII of the Constitution of the State of California, the CPUC oversees the regulation of investor-owned public utilities, including those of the applicant. The CPUC is the lead state agency ensuring compliance of the Phase 3 Expansion with CEQA regulations. This Final SEIR will be used by the CPUC, in conjunction with other information developed in the CPUC's formal record, to act on the applicant's application to amend its Certificate of Public Convenience and Necessity (CPCN). Under CEQA, the CPUC will determine whether this Final SEIR is adequate, and, if it is, will certify the document as complying with CEQA.

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2. Phase 3 Expansion Overview and Environmental Impacts

2.1 Phase 3 Expansion Overview

The Wild Goose Gas Storage Facility (Wild Goose Facility), located in Butte County, California, began commercial operations in April 1999, underwent a significant facility expansion in 2002, and currently has approximately 29 billion cubic feet (Bcf) of storage capacity. The facility is owned by Wild Goose Storage, LLC (Wild Goose, or the applicant), a subsidiary of Niska Gas Storage. The Wild Goose Facility is interconnected with Pacific Gas and Electric's (PG&E's) Transmission System Line 167, a local natural gas transmission system, as well as with PG&E's Transmission System Line 400, via the Wild Goose Connection Pipeline. The expansion of the facility in 2002 included construction of a 25.5-mile natural gas pipeline (Wild Goose Connection Pipeline) from the main facility site (Remote Facility Site, or RFS) to PG&E Line 400. This pipeline passes through the Delevan Interconnect Site just before it reaches PG&E Line 400. The Delevan Interconnect Site was installed for monitoring, metering, and controlling gas flow from the RFS to PG&E Line 400. It is owned by PG&E but includes easements for Wild Goose Facility interconnect components.

An 8.5-acre Well Pad Site (WPS), which includes 24 current or planned injection/withdrawal and observation wells, is located within the property of the Wild Goose Club (a private hunting and outdoor recreation club), approximately 4.5 miles to the west of the RFS. Two bi-directional natural gas pipelines, one 18 inches in diameter and one 24 inches in diameter, are routed between the WPS and the RFS, along with a 3-inch-diameter water pipeline that removes water from the gas stream ("produced water") during extraction of natural gas from the reservoir.

The Wild Goose Phase 3 Gas Storage Expansion (Phase 3 Expansion) would result in an increase in the physical footprint and current operations at the Wild Goose Facility, and would primarily consist of the construction, operation, and maintenance of an expansion to the RFS; modifications to the Delevan Site; PG&E's installation of up to three new hot tapped pipeline connections between the Wild Goose Interconnect Pipeline and PG&E Lines 400 and 401 to increase permitted storage and operational capacity; and PG&E's reconductoring of up to 6.1 miles (32,400 feet) of electrical distribution line. The Phase 3 Expansion would increase the current injection capacity of the facility from 450 to 650 million cubic feet per day (MMcfd), the withdrawal capacity from 700 to 1,200 MMcfd, and the working gas storage capacity from 29 to 50 Bcf. Components of the Phase 3 Expansion would be consistent with the 2002 facility improvements, and would extend facility operations in a similar way. The Phase 3 Expansion would include four main components, described below.

Modifications to the RFS. The RFS is currently the operation hub of the Wild Goose Facility. Modifications would include installation of four new natural gas compressors in a new building; installation of four 15-foot-high associated gas coolers; and installation of two new 30-foot-high gas contactors (dehydration units). A new 6,000-gallon glycol storage tank may also be installed on the site. Work at the site would require expansion of the existing site area from 12.2 acres to approximately 16.7 acres, and the resulting fill of approximately 4.5 acres of rice field agricultural wetlands.

Modifications to the Delevan Site. The Delevan Site is approximately 25 miles west of the RFS, in Colusa County. Modifications would include expansions of both Wild Goose and PG&E operations at the Delevan Interconnect Site, including installation of new meters, piping, valves, and associated

equipment, to accommodate the increase in withdrawal and injection volume. This work would not result in an expansion of the existing site area.

Hot Tapped Pipeline Connections. Up to four new subsurface pipeline connections, totaling approximately 200 feet in length, would be installed using a hot tap process. The pipelines would run from the Wild Goose Connection Pipeline to PG&E Lines 400 and 401. (The Wild Goose Connection Pipeline currently only connects to PG&E Line 400.) The new hot tapped pipeline connections would be installed largely within an existing 100-foot-wide easement held by PG&E. The total area temporarily disturbed during construction would be approximately 0.25 acres, approximately 0.1 acres of which would be outside of the PG&E easement.

PG&E Distribution Line Reconductoring. To accommodate the increase in use at the Wild Goose Facility as well as to increase reliability, PG&E would upgrade distribution lines in the vicinity of the RFS by reconductoring up to 6.1 miles (32,400 feet) of electrical line. An additional ground- or pole-mounted 1,500-kilovolt-ampere (kVA) transformer would also be required.

For further details on the Phase 3 Expansion, refer to Chapter 2, Description of Phase 3 Expansion, of the Draft Supplemental Environmental Impact Report (Draft SEIR).

2.3 Summary of Environmental Impacts

All impacts identified during the course of this environmental analysis are summarized in this section. This summary is intended as an overview, and should be used in conjunction with a thorough reading of the Final SEIR. The technical analyses in the Final SEIR provide justification for the conclusions made in the summary. Table 2-1 summarizes the impacts addressed in this Final SEIR, the level of significance for each impact, and the changes made for this Final SEIR. For the full Mitigation Monitoring and Reporting Program (MMRP) with amendments, see Chapter 5 of this document. The MMRP will be adopted by the CPUC concurrent with approval of the Final SEIR.

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
<i>No new impacts or mitigation measures</i>			
Agriculture and Forestry Resources	Potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and monitoring Program of the California Resources Agency, to non-agricultural use.	<p>PHASE 3 MM AG-1. The applicant will purchase or obtain compensatory mitigation for the conversion of Prime Farmland and Farmland of Statewide Importance at a ratio of one unit of mitigation to one unit of agricultural land converted. Compensatory mitigation options for the conversion of FMMP designated farmland include one or more of the following:</p> <ol style="list-style-type: none"> 1. Purchase of mitigation credits from an agricultural mitigation bank located within Butte County; 2. Placement of an easement or other restrictions to non-agricultural uses on existing agricultural land in Butte County; and/or 3. Purchase of wetlands and/or endangered species habitat mitigation credits from an appropriate wetlands mitigation bank at a ratio of two units of mitigation to one unit of agricultural land converted. 	<u>Less Than Significant</u>
Air Quality and Greenhouse Gas Emissions	Potential to conflict with or obstruct implementation of the applicable air quality plan.	<p>PHASE 3 MM AIR-1: The applicant will implement the following measures for Phase 3 Expansion construction equipment:</p> <ul style="list-style-type: none"> • <u>Maintain all construction equipment in proper tune according to manufacturer's specifications.</u> • <u>Maximize the use of diesel construction equipment meeting the CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.</u> 	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>PHASE 3 MM AIR-2: The applicant will implement the following measures to prevent and control dust emissions:</u></p> <p><u>Land Clearing/Earth Moving</u></p> <ul style="list-style-type: none"> • <u>Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission.</u> • <u>Haul vehicles transporting soil into or out of the property shall be covered.</u> • <u>A water truck shall be on site at all times. Water shall be applied to disturbed areas a minimum of two times per day or more as necessary.</u> • <u>On-site vehicles will be limited to a speed which minimizes dust emissions on unpaved roads.</u> • <u>The applicant will post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the BCAQMD shall also be visible to ensure compliance with District Rule 200 & 205 (Nuisance and Fugitive Dust Emissions).</u> <p><u>Visibly Dry Disturbed Soil Surface Areas</u></p> <ul style="list-style-type: none"> • <u>All visibly dry disturbed soil surface areas of operation shall be watered to minimize dust emission.</u> <p><u>Paved Road Track-Out</u></p> <ul style="list-style-type: none"> • <u>Existing roads and streets adjacent to the Phase 3 Expansion area will be cleaned at least once per day unless conditions warrant a greater frequency.</u> <p><u>Visibly Dry Disturbed Unpaved Roads</u></p> <ul style="list-style-type: none"> • <u>All visibly dry disturbed unpaved road surface areas shall be watered to minimize dust emission.</u> 	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<ul style="list-style-type: none"> • A water truck shall be on site at all times. Water shall be applied to disturbed areas a minimum of two times per day or more as necessary. • On-site vehicles will be limited to a speed which minimizes dust emissions on unpaved roads. • Haul roads will be sprayed down at the end of the work shift to form a thin crust. This application of water shall be in addition to the minimum rate of application. <p>Vehicles Entering/Exiting Construction Area</p> <ul style="list-style-type: none"> • Vehicles entering or exiting the Phase 3 Expansion construction area shall travel at a speed which minimizes dust emissions. <p>Employee Vehicles</p> <ul style="list-style-type: none"> • Construction workers shall park in designated parking areas(s) to help reduce dust emissions. <p>Soil Piles</p> <ul style="list-style-type: none"> • Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material will be used to further reduce dust emissions. 	
		<p>PHASE 3 MM AIR-34: To address potentially significant construction emissions at the RFS and the PG&E reindustrializing component area, the applicant and PG&E will apply appropriate BCAQMD Best Available Mitigation Measures (BAMMs) and/or offsite measures such as purchase of offsets for NO_x and PM₁₀ emissions, as presented in the BCAQMD CEQA Air Quality Handbook (2008), in order to reduce construction emissions to a less than significant level. This measure will apply to emissions of NO_x and PM₁₀ in the years 2011 and 2012. The BCAQMD will include appropriate permit conditions on the Phase 3 Expansion ATC for the RFS to ensure that identify the BAMMs and/or offsite</p>	Less Than Significant

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		measures such as purchase of offsets for NO _x and PM ₁₀ emissions, <u>that will be implemented, and include them in a construction emissions reduction plan. The applicant will submit the construction emissions reduction plan to the CPUC and BCAQMD prior to the start of Phase 3 Expansion construction activities. chosen are adequate and applied.</u>	
		<u>PHASE 3 MM AIR-42:</u> To address potentially significant construction emissions at the Delevan Site, and in coordination with the Colusa County Air Pollution Control District (CCAPCD), the applicant will purchase NO _x offsets for exceedances over the CCAPCD threshold limit during the construction period. Based on calculations of NO _x pounds per day emissions for the construction phase, total NO _x emissions are anticipated to exceed the CCAPCD limit of 25 pounds per day by a total of approximately 925 pounds over the construction period. The applicant will be required to purchase NO _x offset credits <u>for daily NO_x emissions in excess of 25 pounds</u> for this amount as part of Authority to Construct permit conditions, and to provide documentation of the offsets purchase to the CPUC and the CCAPCD prior to <u>the start of Phase 3 Expansion construction activities. If required by the CCAPCD, these offset credits will also be incorporated into the Authority to Construct permit conditions.</u>	<u>Less Than Significant</u>
		<u>PHASE 3 MM AIR-53:</u> To address potentially significant operations emissions at the RFS, the applicant will purchase offsets for NO _x and ROG emissions, either from existing market-based offsets within Butte County, or from the BCAQMD community offset bank, as available. Based on the calculations of NO _x and ROG pounds per day emissions for the <u>construction operations</u> phase, these emissions are anticipated to exceed the Level B BCAQMD 25 pounds per day limit by a total of approximately 23 tons of NO_x and 15 pounds of ROG over the entire construction period. <u>It is anticipated that</u> the BCAQMD will include appropriate permit conditions in the Phase 3 Expansion Permit to Operate to ensure that offsets for NO _x and <u>ROG-PM₁₀</u> emissions are adequate and	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<u>applied. If the applicant identifies contemporaneous emission reductions to existing equipment that would result in no net emission increase of NO_x and ROG, the requirement for emission offsets may be removed as long as these emission reductions are verified and approved by the BCAQMD and appropriate documentation is provided to the CPUC prior to the start of Phase 3 Expansion construction.</u>	
	Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	<u>PHASE 3 MM AIR-64: Prior to construction of the Phase 3 Expansion, the applicant will enter into an agreement with PG&E to participate in PG&E's Climate Smart™ Program, to provide 50 percent of the electricity used at the RFS annually (approximately 1,000 900 metric tons CO₂e) from renewable energy sources. A copy of the agreement between the applicant and PG&E will be provided to CPUC prior to the start of operation of the expanded RFS. Annual reports on the applicant's participation in the program will also be submitted by the applicant to CPUC.</u>	<u>Less Than Significant</u>
		<u>PHASE 3 MM AIR-75: Until the applicant can participate in an appropriate, is required to comply with an adopted, verifiable state-wide cap and trade program, the applicant will obtain and retire, by the end of each year of Phase 3 Expansion construction and operation, sufficient carbon credits to fully offset GHG emissions ("carbon offsets") below the in excess of 10,000 metric tons of CO₂e level. After that time, the applicant will comply with the requirements of the adopted state-wide cap and trade program. The total amount of offsets purchased will be based on actual GHG emissions, which may be lower than the worst-case GHG emissions estimated for each year of construction and operation. Renewable Energy Certificates (RECs) and TRECS (Tradable RECs) do not qualify as GHG offsets. Carbon offsets will apply to Phase 3 Expansion construction GHG emissions (amortized over 30 years) as well as direct operational GHG emissions. Prior to completion of project construction, the applicant will prepare a detailed written summary of the carbon offsets, including offset type, location, calculation methodology protocol employed, and registration status. In addition,</u>	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>prior to completion of project construction, the applicant will provide to CPUC an independent verification opinion statement(s) for the carbon offsets, from a verification body registered with the California Climate Action Registry, ANSI, or the CARB.</u></p> <p><u>Offsets purchased from a third party or developed by the applicant must meet at least one of the following requirements:</u></p> <ol style="list-style-type: none"> 1. <u>Offset project is located within California;</u> 2. <u>Offset project is located in jurisdictions that hold current, specific agreements with California (such as the Climate Action Reserve), or exist in the context of an ISO-compliant regional trading system like that being developed in the Western Climate Initiative or other regional program; and/or</u> 3. <u>Offset project is an internally developed reduction measure following a recognized protocol (such as the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange). Some potential offset projects of this type include:</u> <ul style="list-style-type: none"> • <u>Fuel switching in applicant-owned equipment;</u> • <u>Energy efficiency upgrades beyond business as usual;</u> • <u>Implementation of a quantifiable carpooling program above and beyond what is currently in place; and</u> • <u>Sequestration and/or destruction of GHG conducted in accordance with any protocol available at the time of construction from the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange.</u> <p><u>Any carbon offset either purchased or developed by the applicant through another entity will either be registered in, or developed in accordance with a protocol for, an established Carbon Reduction/Sequestration Project. Established projects and protocols include those provided by recognized organizations, such as the Climate Action Reserve, the Voluntary Carbon Standard, or the</u></p>	

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>Chicago Climate Exchange, that can provide a reasonable level of assurance that GHG reductions are real, additional, permanent, and verifiable. If the applicant were to develop a carbon offset project without registering it with one of the above-referenced registration bodies, the applicant will demonstrate to CPUC that the offset satisfies the four additionality tests as outlined in the UNFCC Additionality Tool, and will obtain an independent evaluation by a qualified third party confirming that the offset meets additionality testing requirements.</u></p> <p><u>Prior to the start of project operation, the applicant will submit a project design document describing baseline procedures and emissions levels as well as projected levels of emissions reductions/offsets to CPUC. The design document will include the requirement that the applicant submit a report annually to CPUC documenting the previous year's offset activities and purchases. The annual report will be independently verified by an ANSI-accredited GHG emissions reduction verification body.</u></p>	
Biological Resources	Potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, polices, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	<p>PHASE 3 MM BIO-1: <u>The following general measures will reduce impacts to all sensitive wildlife species during Phase 3 Expansion construction activities:</u></p> <ol style="list-style-type: none"> <u>Preconstruction surveys will be conducted in suitable habitat in and adjacent to the Phase 3 Expansion areas at the RFS and the Delevan Site during the appropriate survey windows. Preconstruction surveys will be conducted in suitable habitat no more than 30 days in advance of construction. These surveys shall be conducted using standard approved methods, including the California Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines (1993), the Swainson's Hawk Technical Advisory Committee Methodology for Nesting Surveys in California's Central Valley (TAC 2000), and the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species (1996).</u> <u>Construction employees shall strictly limit activities, including</u> 	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>movement of vehicles, equipment, and construction materials, to the Phase 3 Expansion footprint and designated staging areas and routes of travel within the Phase 3 Expansion footprint.</u></p> <ol style="list-style-type: none"> 3. <u>The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.</u> 4. <u>Sensitive plant surveys will be conducted prior to construction within suitable habitat in and adjacent to Phase 3 Expansion work areas and during the appropriate survey window.</u> 5. <u>Where sensitive plants occur within the construction area, the work area will be adjusted in order to minimize impacts.</u> 6. <u>Exclusion fencing will be provided to protect sensitive plants that occur within 50 feet of construction work areas.</u> 7. <u>A qualified biologist will monitor construction to ensure that no sensitive wildlife species inadvertently enter the work area. Should a sensitive species be found, the appropriate resource agencies will be notified within 24 hours (USFWS and CDFG). Animals will be allowed to passively exit the work areas, and construction will be halted as needed to accomplish this.</u> 	
		<p>PHASE 3 MM BIO-2: <u>The following specific measures will reduce impacts to the wildlife species described below during Phase 3 Expansion construction activities:</u></p> <ol style="list-style-type: none"> 1. <u>Reptiles and Amphibians. The following measures will be supplemented with measures prescribed in the Phase 2 Expansion USFWS Biological Opinion and CDFG Take Permit for the giant garter snake:</u> <ul style="list-style-type: none"> • <u>Preconstruction surveys for giant garter snake (RFS, reconductoring area, and Delevan Site), northwestern pond turtle (RFS and Delevan Site), and western spadefoot toad (RFS and Delevan Site) will be performed within 24 hours prior to construction. If a giant garter snake or any other sensitive species is found, it will be</u> 	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>allowed to escape on its own, or will be removed by an authorized biologist and relocated to suitable habitat. USFWS and CDFG will be notified whenever a sensitive reptile or amphibian is handled by an authorized biologist.</u></p> <ul style="list-style-type: none"> • <u>Onsite monitoring biologists will obtain authorization from the USFWS and CDFG to handle the giant garter snake for the purposes of removing individuals during construction and operation of the Phase 3 Expansion components.</u> • <u>A qualified biologist will monitor construction to ensure that no sensitive reptile or amphibian species inadvertently enter the work area.</u> • <u>Other than isolation dike construction and irrigation flow culvert installation, earthwork adjacent to flooded rice fields and other potential habitat will be confined to May through September unless otherwise authorized by the USFWS and CDFG.</u> <p>2. <u>Raptors and Other Sensitive Nesting Species.</u> Preconstruction surveys will be conducted in suitable habitat at the RFS and Delevan Site to determine whether raptors or other sensitive bird species are nesting within or near the Phase 3 Expansion construction areas. The construction schedule or activities will be modified during nesting periods to preclude impacts. The general bird breeding season for this area is late February to early July. If it is not possible to adjust the schedule or construction activity, the following measures will be implemented:</p> <ul style="list-style-type: none"> • <u>Construction within 0.5 miles of active Swainson's hawk nests will be avoided between April 15 and August 1, if feasible. If not feasible, nesting hawks within 0.5 miles will be monitored, construction activities will be halted if signs of disturbance (i.e., birds show signs of upset, repeatedly leaving the nest as a result of construction) are noted as</u> 	

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>determined by a qualified biologist, and CDFG will be consulted to determine possible options.</u></p> <ul style="list-style-type: none"> • <u>A minimum 500-foot buffer will be maintained for other tree-nesting species such as white-tailed kites and the loggerhead shrike until after the young have fledged.</u> • <u>A minimum 250-foot buffer will be maintained for ground-nesting or shrub-nesting species (northern harriers, tricolored blackbird, black tern, white-faced ibis, burrowing owl, and loggerhead shrikes) until after nesting is complete.</u> • <u>Operations blowdowns and emergency shutdown valve blowdowns shall be routed into silencers.</u> • <u>The applicant will reduce the gas/volume in the pipeline to a minimum prior to a planned maintenance blowdown.</u> <p>3. <u>Burrowing Owls. Detailed preconstruction surveys will be conducted at the RFS and Delevan Site within 30 days prior to construction by a qualified biologist for burrowing owl within suitable habitat prior to the breeding season (February 1 through August 31). All areas within 250 feet of the Phase 3 Expansion areas at the RFS and Delevan Site, including road shoulders, will be surveyed. Where Phase 3 Expansion ground-disturbing activities will occur prior to the burrowing owl breeding season, all burrows, holes, crevices, or other cavities in suitable habitat in the Phase 3 Expansion areas at the RFS and Delevan Site, within the limits of proposed ground disturbance, will be thoroughly inspected by a qualified biologist before being collapsed. This will discourage owls from breeding on the construction site. Other species using burrows will be relocated prior to collapsing burrows.</u></p> <p><u>To the extent feasible, Phase 3 Expansion construction at the RFS and Delevan Site will avoid active burrows. If it is not possible to avoid burrowing owls, the following measures will</u></p>	

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>be implemented:</u></p> <ul style="list-style-type: none"> • <u>If burrowing owls occur within the proposed construction area, a 250-foot exclusion zone will be maintained around the burrows until relocation is complete or until chicks have fledged. Passive relocation will be used during the non-breeding season (September 1 through January 31) if it is determined that construction activities would disturb owls. Passive relocation will include installing one-way doors on the entrances of burrows located within the Phase 3 Expansion area.</u> • <u>The occurrence and location of any burrowing owl will be documented by the authorized biologist, who will report all incidents of disturbance or harm to burrowing owls within 24 hours to the appropriate resource agencies (USFWS and CDFG).</u> • <u>Under the supervision of a qualified biologist, burrows within the proposed construction area will be excavated using hand tools and then refilled to prevent reoccupation. If any owls are found during the excavation, the excavation will cease and the owls will be allowed to escape.</u> • <u>For each burrow excavated, one natural or artificial burrow will be provided in the adjacent habitat outside the 250-foot buffer zone.</u> 	
		<p><u>PHASE 3 MM BIO-3: For the reconductoring component area, if any vegetation removal occurs during the typical avian nesting season (February 1 – August 31), a pre-disturbance survey for common and special-status bird species protected under the MBTA and California Fish and Game Codes will be conducted, using standard approved methods, including the California Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines (1993) and the Swainson’s Hawk Technical Advisory Committee Methodology for Nesting Surveys in California’s Central Valley (TAC 2000). The</u></p>	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>survey will be conducted by a qualified biologist no more than two weeks prior to the onset of vegetation removal. If active nests are found within or adjacent to proposed work areas during the avian nesting season, disturbance or removal of the nest will be avoided until the young have fledged and the nest is no longer active. The project biologist will determine the appropriate buffer distance between work areas and active nests in coordination with the CDFG and depending on the species, site conditions, and proposed work activities near the active nest.</u></p>	
	<p>Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>	<p>PHASE 3 MM BIO-4: The following measures will reduce impacts related to wetland fill at the RFS during Phase 3 Expansion construction activities:</p> <ol style="list-style-type: none"> 1. <u>Erosion and sediment control measures (e.g., silt fencing, erosion control fabric or other measures) will be implemented at all locations where construction occurs within or directly adjacent to aquatic features.</u> 2. <u>Sediment stockpiling will be a minimum of 50 feet from wetland/drainage systems.</u> 3. <u>Loss of wetland habitat will be compensated at an appropriate ratio. This ratio will likely be 2:1, but will be determined by resource and permitting agencies (USACE, USFWS, and CDFG) during consultation.</u> 	<p><u>Less Than Significant</u></p>
		<p>PHASE 3 MM BIO-5: For the reconductoring component area, work will take place from existing paved surfaces or other maintained areas that lack wetland habitats. For the wetland areas that have been identified in the reconductoring Biological Assessment (TRC 2010) along West Evans Reimer Road and Pennington Road, the following measures will be taken:</p> <ol style="list-style-type: none"> 1. <u>A wetlands biologist will delineate the edges of each wetland area using USACE delineation methodology (USACE, 1987). Once wetland boundaries have been accurately identified, a 100-foot buffer area will be established around each wetland area. Buffer areas will be demarcated with lath and flagging.</u> 	<p><u>Less Than Significant</u></p>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>and no construction materials, equipment or vehicles will be permitted in this area.</u></p> <p>2. <u>Erosion and sediment control measures described under MM BIO-4 will be implemented to protect wetland habitats.</u></p>	
	<p>Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.</p>	<p>PHASE 3 MM BIO-6: <u>The following measures will reduce impacts to downstream fisheries and aquatic habitat at the RFS during Phase 3 Expansion construction activities:</u></p> <p>1. <u>The applicant will participate in ongoing consultations with CDFG (under Fish and Game Code 2081 and 1602) and USFWS (Section 7 consultation) to establish a rate of withdrawal such that to ensure water withdrawals and other activities at the RFS do not result in unacceptable impacts to downstream fisheries do not occur.</u> To this end, the applicant will adhere to <u>any stipulations required by CDFG and USFWS regarding the water withdrawal rate, volume, and timing established through the agency consultation process.</u> The applicant will also submit <u>any required documented evidence that the stipulated conditions of water withdrawal have been met to both CDFG and USFWS.</u></p> <p>2. <u>In coordination with CDFG and USFWS, the applicant shall conduct downstream monitoring required by CDFG and/or USFWS to verify that withdrawal volume does not adversely impact fisheries or the aquatic life components that support special status aquatic species.</u></p>	<p><u>Less Than Significant</u></p>
Cultural Resources	<p>Potential to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.</p>	<p>PHASE 3 MM CULT-1: <u>To avoid impacts to unknown historical resources in the area of the reconductoring component, PG&E or its contractor will, prior to and during reconductoring activities:</u></p> <p>1. <u>Retain a qualified archeologist to conduct a cultural resources survey to identify all potentially eligible historic resources present on the surface of the reconductoring site. The survey will be conducted at 10 meter intervals and any cultural resources that are identified will be subsequently avoided during construction. All cultural resources identified will be</u></p>	<p><u>Less Than Significant</u></p>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>recorded on Department of Parks and Recreation (DPR) 523 series forms and evaluated for their eligibility for inclusion in the NRHP and CRHR. The archaeologist will clearly mark the boundaries of any identified resources, including an additional 50-foot buffer area, around all identified sites, both on the ground and on construction maps. These boundaries will serve as construction exclusion zones where no reconductoring activities will be undertaken.</u></p> <p>2. <u>Retain an independent qualified archeologist for the duration of the reconductoring, to serve as a periodic site monitor during ground-disturbing and other activities that may affect historic resources at the site. The timing and frequency of monitoring will be at the discretion of the archeologist.</u></p> <p>3. <u>Notify construction supervisory personnel of the existence of all marked historical resources sites, and instruct supervisory personnel to keep personnel and equipment away from these areas.</u></p>	
	Potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	<p><u>PHASE 3 MM CULT-2: To avoid impacts to known and unknown archaeological resources in the area of the reconductoring component, PG&E or its contractor will, prior to and during reconductoring activities:</u></p> <p>1. <u>Retain a qualified archeologist to conduct an archaeological resources survey to identify all potentially eligible archaeological resources present on the surface of the reconductoring site. The survey will be conducted at 10 meter intervals and any archaeological resources that are identified will be subsequently avoided during construction. All archaeological resources identified will be recorded on DPR 523 series forms and evaluated for their eligibility for inclusion in the NRHP and CRHR. The archaeologist will clearly mark the boundaries of any identified resources, including an additional 50-foot buffer area, around all identified sites, both on the ground and on construction maps. These boundaries</u></p>	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>will serve as construction exclusion zones where no reconductoring activities will be undertaken.</u></p> <p>2. <u>Retain an independent, qualified archeologist for the duration of the reconductoring, to serve as a periodic site monitor during ground-disturbing and other activities that may affect archaeological resources at the site. The timing and frequency of monitoring will be at the discretion of the archeologist.</u></p> <p>3. <u>Notify construction supervisory personnel of the existence of all the identified and marked prehistoric site, as well as other marked archaeological sites, and instruct supervisory personnel to keep personnel and equipment away from these areas.</u></p>	
Geology, Soils, and Mineral Resources		<i>No new impacts or mitigation measures</i>	
Hazards and Hazardous Materials	Potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Mitigation Measure 3.7-3. <u>At the end of each injection cycle in the fall of each year, WGSJ shall conduct surface gas monitoring and vegetation inspections at each abandoned well within the original productive area. If gas is detected, samples will be collected, if possible, and analyzed to determine its source or origin. If a leak is indicated by the data, the necessary remedial actions will be implemented consistent with DOGGR procedures outlined in California Code of Regulations § 1723 et. seq. All monitoring and sampling results will be submitted to the DOGGR. Any surface disturbance associated with implementing remedial actions shall be conducted consistent with the wetland impact minimization and mitigation measures specified under Impact 3.4- 4 on page 3.4-27.</u>	Less Than Significant
		PHASE 3 MM HAZ-1: <u>Prior to Phase 3 Expansion construction activities, the applicant will ensure the Wild Goose Purging of Natural Gas Pipeline Systems Practice incorporates and includes measures for implementing all recommendations addressing pipeline purging procedures issued by the U.S. Chemical Safety and Hazard Investigation Board and adopted into the National Fuel Gas Code, and submit the revised practice to CPUC for review and confirmation.</u>	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p>PHASE 3 MM HAZ-2: PG&E shall follow all applicable local, state, federal, and industry-specific regulations and procedures during hot tapped pipeline connection installation, and shall ensure that the following measures are taken:</p> <ol style="list-style-type: none"> 1. <u>Ensure that all appropriate local (Colusa County) permits and approvals have been obtained for welding and hot tapping;</u> 2. <u>Ensure that construction personnel working on the hot tapped pipeline connection installation are competent and have been properly trained and qualified in the use of the hot tap equipment;</u> 3. <u>Ensure that construction personnel working on the hot tapped pipeline connection installation review detailed, written, job-specific hot tapping procedures prior to starting construction activities;</u> 4. <u>Communicate safety procedures clearly to all construction personnel prior to hot tap activities, including fire protection, emergency response, and other appropriate procedures and instructions;</u> 5. <u>Ensure that at least one worker has been designated as a dedicated fire watch, trained for fire detection and prevention, equipped with a suitable fire extinguisher, and equipped with appropriate equipment to communicate with personnel working in the area;</u> 6. <u>Ensure equipment is in good working condition;</u> 7. <u>Install appropriate barricades and warning signs prior to hot tapping activities;</u> 8. <u>Establish procedures for isolation of the work area in the event of an emergency;</u> 9. <u>Ensure provisions are made for an easily accessible means of egress from the work area;</u> 10. <u>Inspect the hot tapping location prior to hot tapping activities</u> 	Less Than Significant

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>and confirm pipeline diameter, wall thickness, evidence of corrosion, and general soundness;</u></p> <p>11. <u>Use combustible gas and oxygen detectors during hot tapping procedures as necessary to ensure that hot tapping activities do not take place if vapor/air or vapor/oxygen mixtures in piping or equipment are near or within the flammable explosive range;</u></p> <p>12. <u>Follow manufacturer's instructions and directions for operating the hot tapping equipment; and</u></p> <p>13. <u>Ensure provisions are made to assure that adequate containment is available to control liquids and vapors trapped within the hot tapping equipment which could be released upon removal of the machine after work is completed.</u></p>	
Hydrology	Potential to place within a 100-year flood hazard area structures which would impede or redirect flood flows.	<u>PHASE 3 MM HYDRO-1: Phase 3 Expansion components at the RFS, reconductoring component area, and Delevan Site would be engineered to withstand stresses associated with their proximity to waterways, and would be designed to withstand flooding associated with high ground water, agricultural activities, or overflow of canals during heavy rainstorms. Structures shall be constructed in compliance with the 2007 Uniform Building Code any other federal, state and local construction regulations.</u>	<u>Less Than Significant</u>
	Potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	<u>See PHASE 3 MM HYDRO-1, above.</u>	<u>Less Than Significant</u>
Land Use and Planning	<i>No new impacts or mitigation measures</i>		
Noise	Potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<p><u>PHASE 3 MM NOI-1: The applicant PG&E will employ the following noise reduction and control practices during construction reconductoring activities that could produce noise levels above 80 dBA L_{max} near sensitive receptors (within 100 feet):</u></p> <ul style="list-style-type: none"> <u>Unnecessary engine idling from construction equipment will be</u> 	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>limited during construction hours.</u></p> <ul style="list-style-type: none"> • <u>Construction equipment specifically designed for low noise emissions (i.e., equipment that is powered by electric or natural gas engines as opposed to those powered by diesel or gasoline reciprocating engines) will be used as much as feasible.</u> • <u>Temporary enclosures or noise barriers (i.e. noise blankets) will be used around loudest pieces of equipment, as feasible.</u> • <u>Construction traffic will be routed away from residences and other sensitive receptors, as feasible.</u> • <u>Noise from back-up alarms (alarms that signal vehicle travel in reverse) in construction vehicles and equipment will be reduced by providing a layout of construction sites that minimizes the need for back-up alarms and using flagmen to minimize time needed to back up vehicles. As feasible, and in compliance with the applicant’s safety practices and public and worker safety provisions required in the Occupational Safety and Health Standards for the Construction Industry (29 CFR Part 1926), the applicant may also use self-adjusting, manually adjustable, or broadband back-up alarms to reduce construction noise.</u> 	
		<p><u>PHASE 3 MM NOI-2: After full buildout of the Phase 3 Expansion, the applicant will employ the following noise reduction and control practices during operations at the WPS that could produce noise levels above 55 dBA L_{max} at a location 100 yards from the WPS berm:</u></p> <ul style="list-style-type: none"> • <u>During periods when fewer than 20 wells are in operation at the WPS, the applicant will record sound pressure levels (SPLs, dBA, L_{eq}) on a once-a-week basis at a location 100 yards from the WPS berm.</u> • <u>If noise levels exceed 55 dBA at a location 100 yards from the WPS berm, the applicant shall implement measures at the WPS to reduce noise levels to 55 dBA at this distance.</u> 	<u>Less Than Significant</u>

Table 2-1 Summary of Impacts

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation
		<p><u>Measures could include:</u></p> <ol style="list-style-type: none"> 1. <u>Increasing the WPS berm in height by 2 feet (estimated total minimum noise reduction: 5 dBA);</u> 2. <u>Increasing the WPS berm in height by 4 feet (estimated total minimum noise reduction: 10 dBA);</u> 3. <u>Application of sound insulating lagging to well lines and valves (estimated total noise reduction: 12 to 24 dBA); or</u> 4. <u>Installation of a cinder block (or other noise-absorbing material) enclosure or wall around the WPS equipment array (estimated total minimum noise reduction: 25 dBA).</u> 	
Population and Housing	<i>No new impacts or mitigation measures</i>		
Public Services and Socioeconomics	<i>No new impacts or mitigation measures</i>		
Recreation	<i>No new impacts or mitigation measures</i>		
Transportation and Traffic	<i>No new impacts or mitigation measures</i>		
Utilities and Services Systems	<i>No new impacts or mitigation measures</i>		

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3. Summary of Public Participation

3.1 Notice of Preparation and Public Scoping

The California Environmental Quality Act (CEQA) environmental review process for the Wild Goose Phase 3 Gas Storage Expansion (Phase 3 Expansion) started on October 7, 2009, with the California Public Utilities Commission's (CPUC's) issuance of a Notice of Preparation (NOP) of a Supplemental Environmental Impact Report (SEIR) to the State Clearinghouse. Pursuant to CEQA Section 15082, the NOP summarized the Phase 3 Expansion, stated the CPUC's intention to prepare an SEIR, and requested comments from public agencies and interested parties on the scope of the SEIR.

Issuance of the NOP initiated the 30-day public scoping period. Public notification of the NOP included direct mail and the CPUC's website for the Phase 3 Expansion. Notification of the scoping period was mailed to federal, state, regional, and local agencies; elected officials; and public stakeholders including property owners within 300 feet of the Phase 3 Expansion area.

One comment letter on the proposed Phase 3 Expansion, from the California Regional Water Quality Control Board, Central Valley Region (CVRWQCB), was received during the scoping period. This comment letter primarily provided an outline of the permits and approvals the CVRWQCB may require for the Phase 3 Expansion. The letter was included in Appendix B of the Draft SEIR.

3.2 Notice of Availability of the Draft SEIR and Public Review

The Draft SEIR and its Notice of Availability (NOA) were issued on June 7, 2010, to the State Clearinghouse (SCH# 2010062025), initiating a 45-day public review period. The Draft SEIR and NOA were mailed to public agencies and interested parties, and included information on the Draft SEIR and the public review process; information on the Phase 3 Expansion; the date, time, and location of the Draft SEIR public meeting; and how to provide comments on the Draft SEIR.

The Draft SEIR included a detailed description of the Phase 3 Expansion, a description of the affected environment, an evaluation of the environmental impacts of the proposed Phase 3 Expansion, and mitigation measures to avoid or reduce environmental impacts.

Electronic copies on CD-ROM of the Draft SEIR were distributed to interested parties, agencies, and the State Clearinghouse. Hard copies were distributed to two local libraries. The Draft SEIR was uploaded to the website for the Phase 3 Expansion. Additional copies (on CD-ROM and bound) were distributed at the public meeting.

3.2.1 Newspaper Notification

Notices on the release of the Draft SEIR and the date and location of the public meeting were published in the *Chico Enterprise Record*, *Colusa County Sun-Herald*, and *Gridley Herald* prior to the public meeting.

3.2.2 Information and Repository Sites

Two repository sites were established to facilitate public review of documents related to the Phase 3 Expansion, including the Draft SEIR and the Final SEIR. The document repository sites were:

Gridley Library 299 Spruce Street Gridley, CA 95948 (951) 674-4517	Maxwell Branch Library 34 Oak Street Maxwell, CA 95955 (951) 657-2358
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In addition, copies of documents related to the Phase 3 Expansion, including the Draft and Final SEIR, are available on the CPUC’s website for the Phase 3 Expansion (see website address, below).

3.2.3 Public Comment on the Draft SEIR

The CPUC accepted comments on the Draft SEIR during the 45-day public review period (June 7 through July 21, 2010) by mail, email, fax, and voicemail. The following contact information was provided in the NOA, newspaper announcements, and Draft SEIR; at the Draft SEIR public meeting; and on the CPUC’s website for the Phase 3 Expansion:

California Public Utilities Commission
 Attention: Eric Chiang c/o Ecology and Environment, Inc.
 130 Battery Street, Suite 400
 San Francisco, CA 94111
 Voicemail: (877) 551-3669
 Fax: (415) 981-0801
 Email: wildgoose3@ene.com
 Website: cpuc.ca.gov/Environment/info/ene/wild%20goose_phase%203/Wild_Goose_3.html

3.2.4 Draft SEIR Public Meeting

One public meeting was held on the Draft SEIR, on June 29, 2010 (Table 3-1). First, a short presentation was provided on the CPUC permitting process, the proposed Phase 3 Expansion, the CEQA review process, and the findings of the Draft SEIR. Members of the public, organizations, and agencies then had an opportunity to provide verbal comments on the Draft SEIR. All verbal comments provided at the public comment meeting were summarized and are included in Appendix E of this Final SEIR. Twelve members of the public and representatives from organizations and government agencies attended the meeting.

Table 3-1 Time, Date, and Location of Phase 3 Expansion Draft SEIR Public Meeting

Time	Date	Location
7 p.m.	Tuesday, June 29, 2010	City of Gridley Council Chambers 685 Kentucky Street, Gridley, CA 95948

4. Response to Comments

4.1 Introduction

Comments provided on the Draft Supplemental Environmental Impact Report (Draft SEIR) by agencies and organizations during the public review period (June 4 through July 21, 2010) are documented in this chapter. A list of all commenters is provided in Section 4.2. Eight letters with a total of 64 comments were received. Comments could be submitted by letter, facsimile, email, voicemail, or verbally at public meetings; those received and responses to them are presented in Section 4.3.

4.2 List of Comment Letters Received

The comment letters received on the Draft SEIR are grouped below and given a letter designation (A for agency and O for organization), as are the comments from each letter. The commenter and the letter numbers are listed below.

State Agencies

- A1. Central Valley Region Regional Water Quality Control Board (CVRWQCB)
- A2. CVRWQCB
- A3. California Division of Oil, Gas, and Geothermal Resources (DOGGR)

Regional and Local Agencies

- A4. Butte County Department of Public Works
- A5. Butte County Air Quality Management District ((BCAQMD)

Organizations

- O1. Dean Cortopassi, Wild Goose Club
- O2. Gary Theberge, Niska Gas Storage
- O3. Christoffer Ellis, Pacific Gas and Electric

4.3 Responses to Comments

This section presents responses to issues raised in comments received on the Draft SEIR during the review period related to environmental effects of the proposed Phase 3 Expansion. The California Environmental Quality Act (CEQA) Guidelines indicate that a Final EIR should address comments on the Draft EIR. Comments that state opinions about the overall merit of the Phase 3 Expansion are generally not responded to unless a specific environmental issue is also raised. Comments on the Phase 3 Expansion are referred to the decision-maker, which is the California Public Utilities Commission (CPUC).


Each letter received is reproduced here in its entirety. Responses are identified based on the system described above and are provided for each comment; the identifiers are shown within each letter. All changes to the Draft SEIR are described in the response, and the page number of the original text is referenced. Added text is underlined; deleted text is stricken.

4.3.1 Public Agency Comments

This section provides responses to comments about the Draft SEIR received from public agencies and their representatives.

A1 Scott A. Zaitz, R.E.H.S., CVRWQCB, 6/28/2010


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Linda S. Adams
Secretary for
Environmental
Protection

California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

415 Knollcrest Drive, Suite 100, Redding, California 96002
(530) 224-4845 • Fax (530) 224-4857
<http://www.waterboards.ca.gov/centralvalley>



Arnold Schwarzenegger
Governor

28 June 2010

Mr. Eric Chiang
California Public Utilities Commission
130 Battery Street, #400
San Francisco, CA 94111

COMMENTS ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED WILD GOOSE PHASE 3 GAS STORAGE EXPANSION PROJECT, ASSESSORS PARCEL NUMBER 021-010-047, BUTTE/COLUSA, GRIDLEY/MAXWELL

The Central Valley Regional Water Quality Control Board (Regional Water Board) is a responsible agency for this project, as defined by the California Environmental Quality Act (CEQA). On 08 June 2010, our office received a Notice of Availability and Public Meetings, Draft Environmental Impact Report, and Site Maps from your office regarding the proposed development referenced above.

California Public Utilities Commission is proposing to expand and improve the Wild Goose Remote Facility Site as well as the Wild Goose/PG&E Delevan Interconnect Site. Improvements would include up to four (4) new hot-tapped natural gas pipeline connections at PG&E's Line 400/401; and PG&E's reconductoring of up to six (6) miles of electrical distribution line within an existing right-of-way.

The following comments are provided to help outline the potential permitting which may be required by the Regional Water Board, policy issues concerning the project, and suggestions for mitigation measures. Our present comments focus primarily on discharges regulated under our CWA §401 and storm water programs.


Water Board entitlements include:

- Fill or dredged material discharges Clean Water Act (CWA) §401 water quality certification for federal waters; or Waste Discharge Requirements for non-federal waters
- Storm water and other wastewater discharges CWA §402 NPDES permit; Storm Water Discharges Associated with Construction Activity

The following summarizes project permits that may be required by our agency depending upon potential impacts to water quality:

Isolated wetlands not covered by the Federal Clean Water Act
Wetlands not covered by the Clean Water Act are known as "isolated wetlands." Should the U.S. Army Corps of Engineers determine that isolated wetlands exist at the project site, and should the project impact or have potential to impact the isolated wetlands, a Report of Waste Discharge and filing fee must be submitted for approval prior to commencing the construction

California Environmental Protection Agency



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Mr. Eric Chiang
California Public Utilities Commission

- 2 -

28 June 2010

activity. The Central Valley Board will consider the provided information and either issue or waive Waste Discharge Requirements. Failure to obtain waste discharge requirements or a waiver thereof, when required, may result in enforcement action.

A1-1 ctd.

As a protective measure for any stream habitat on-site, as well as any wetland, riparian areas and species of special concern, the final map should include an adequate buffer for those areas.

A1-2

Water Quality Certification (401 Certification)

Certifications are issued for activities resulting in dredge or fill within waters of the United States. All projects must be evaluated for the presence of jurisdictional waters, including wetlands and other waters of the state. Impacts to these waters should be avoided, minimized, and/or mitigated. Impacts to Water of the United States requires an Army Corps of Engineers (Corps) Clean Water Act (CWA) Section 404 Permit and a CWA Section 401 Water Quality Certification from the Central Valley Water Board. The Section 404 and 401 permits are required for activities involving a discharge (such as fill or dredged material) to Waters of the United States. "Waters" include wetlands, riparian zones, streambeds, rivers, lakes, and oceans. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. If required, the Section 404 Permit and Section 401 Certification must be obtained prior to site disturbance.

A1-3

General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP)

For projects disturbing 1 acre or more of land the property owner is required to obtain coverage under the CGP by submitting Permit Registration Documents electronically prior to construction. The Paradise Irrigation District Corporation Yard must be conditioned to implement storm water pollution controls during construction and post-construction as required by the CGP. Long-term post-construction Best Management Practices (BMPs) that protect water quality and control runoff ideally to the pre-development levels should be incorporated into the project. Detailed information on the CGP can be found on the State Water Board website: http://www.waterboards.ca.gov/water_issues/programs/stormwater/gen_const.shtml

A1-4

A1-5

A1-6

If you have any questions or comments regarding this matter please contact me at (530) 224-4784 or by email at szaitz@waterboards.ca.gov.

Scott A. Zaitz, R.E.H.S.
Environmental Scientist
Storm Water & Water Quality Certification Unit

SAZ: wrb/knr

cc: Mr. Brian Vierria, U.S. Army Corp of Engineers, Sacramento
Department of Fish and Game, Region 2, Rancho Cordova
State Clearing House Number (2010062025), Sacramento

U:\Clerical\Storm_water\SZaitz\2010\CEQA Comment (Wild Goose Phase 3 Gas Storage Expansion).doc

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A1 Scott A. Zaitz, R.E.H.S., CVRWQCB, 6/28/2010

A1-1

Response As discussed in the Draft SEIR (page 3.3-32), up to 6.15 acres of wetlands (rice fields and roadside drainage) would be temporarily impacted, and up to 4.5 acres of wetlands would be permanently filled as a result of Phase 3 Expansion activities at the Wild Goose Remote Facility Site (RFS). Ditches in the area of the reconductoring component may also be determined to be wetlands subject to the jurisdiction of the U.S. Army Corps of Engineers. Table 2-7 of the Draft SEIR (page 2-46) lists a Clean Water Act (CWA) Section 401 Certification and Low Threat Discharge Permit as approvals that Wild Goose Storage, LLC (Wild Goose, or applicant) would be required to obtain from the CVRWQCB for the Phase 3 Expansion.

A1-2

Response To protect wetlands, as described in Phase 3 Mitigation Measures (MMs) BIO-4 and BIO-5, (pages 3.3-33 and 3.3-34), appropriate buffers between wetlands and Phase 3 Expansion work areas will be maintained during construction. As discussed in the Draft SEIR (page 3.3-32), up to 6.15 acres of wetlands (rice fields and roadside drainage) would be temporarily impacted, and up to 4.5 acres of wetlands would be permanently filled as a result of Phase 3 Expansion activities at the RFS. Ditches in the area of the reconductoring component may also be determined to be wetlands subject to the jurisdiction of the U.S. Army Corps of Engineers. Applicant-proposed measures (APMs) and mitigation measures to reduce impacts to wetlands during Phase 3 Expansion construction activities have been included in the Draft SEIR.

A1-3

Response Delineation of wetlands within the Phase 3 Expansion area was completed in 2009 (see Section 3.3.1.2, Surveys Conducted, of the Draft SEIR, page 3.3-4). Requirements related to CWA Sections 401 and 404 compliance are discussed in Section 3.3.2, Regulatory Setting, of the Biological Resources section of the Draft SEIR, starting on page 3.3-23. In addition, Table 2-7, Permits Required for Phase 3 Expansion, of the Draft SEIR (page 2-46) lists a CWA Section 404 Individual Permit as an approval Wild Goose would be required to obtain from the U.S. Army Corps of Engineers, and a CWA Section 401 Certification and a Low Threat Discharge Permit as approvals Wild Goose would be required to obtain from the CVRWQCB, prior to site disturbance associated with the Phase 3 Expansion.

A1-4

Response Table 2-7, Permits Required for Phase 3 Expansion, of the Draft SEIR (page 2-46) lists a National Pollutant Discharge Elimination System (NPDES) Construction Storm Water General Permit as a permit that Wild Goose would be required to obtain coverage under from the CVRWQCB, prior to construction associated with the Phase 3 Expansion.




A1-5

Response This comment appears to apply to a different development proposal, and does not apply to the Phase 3 Expansion. The Paradise Irrigation District is located in Paradise, California, approximately 30 miles north of the Phase 3 Expansion area.

A1-6

Response Appendix A of the Draft SEIR, Sections A.5, Hazards and Hazardous Materials, and A.6, Hydrology, include measures such as long-term post-construction Best Management Practices (BMPs) that would protect water quality and control runoff. See Table A.1-1 of the Draft SEIR (starting on page A-3) for the full text of these measures.

A2 Heidi Bauer, CVRWQCB, 7/19/2010

<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55</p>	 <p>California Regional Water Quality Control Board Central Valley Region Katherine Hart, Chair</p> <hr/> <p>415 Knollcrest Drive, Suite 100, Redding, California 96002 (530) 224-4845 • Fax (530) 224-4857 http://www.waterboards.ca.gov/centralvalley</p>	 <p>Arnold Schwarzenegger Governor</p>				
	<p>19 July 2010</p> <p>Mr. Eric Chiang California Public Utilities Commission 130 Battery St., #400 San Francisco, CA 94111</p> <p>COMMENTS ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR WILD GOOSE PHASE 3 GAS STORAGE EXPANSION, ASSESSORS PARCEL NUMBER 021-010-047-000, GRIDLEY AND MAXWELL, BUTTE AND COLUSA COUNTIES</p> <p>The Central Valley Regional Water Quality Control Board (Regional Water Board) received a Draft Supplemental Environmental Impact Report from your office on 8 July 2010, regarding a proposed expansion of the Wild Goose Gas Storage facility.</p> <p>The expansion includes, construction, operation and maintenance to the remote facility Wild Goose Gas Storage; reconductoring of up to 6 miles of electrical distribution line; modifications to the Delevan Interconnect Site in Colusa County; and the installation of up to three new hot tapped pipeline connections between Wild Goose Connection Pipeline and PG&E lines, near the location of the Delevan Interconnect Site to increase permitted storage and operational capacity, APN 021-010-047-000, located in both Gridley and Maxwell, Butte and Colusa Counties.</p> <p>The following comments are provided to help outline the potential permitting which may be required by the Regional Water Board, policy issues concerning the project, and suggestions for mitigation measures. Our present comments focus primarily on discharges regulated under our CWA §401 and storm water programs.</p> <p>Water Board entitlements include:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">• Fill or dredged material discharges</td> <td>Clean Water Act (CWA) §401 water quality certification for federal waters; or Waste Discharge Requirements for non-federal waters</td> </tr> <tr> <td>• Storm water and other wastewater discharges</td> <td>CWA §402 NPDES permit; Storm Water Discharges Associated with Construction Activity</td> </tr> </table> <p>The following summarizes project permits that may be required by our agency depending upon potential impacts to water quality:</p>	• Fill or dredged material discharges	Clean Water Act (CWA) §401 water quality certification for federal waters; or Waste Discharge Requirements for non-federal waters	• Storm water and other wastewater discharges	CWA §402 NPDES permit; Storm Water Discharges Associated with Construction Activity	
• Fill or dredged material discharges	Clean Water Act (CWA) §401 water quality certification for federal waters; or Waste Discharge Requirements for non-federal waters					
• Storm water and other wastewater discharges	CWA §402 NPDES permit; Storm Water Discharges Associated with Construction Activity					
	<p><i>California Environmental Protection Agency</i></p> <hr style="width: 30%; margin: 0 auto;"/> <p> Recycled Paper</p>					
	<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33</p>					

Mr. Eric Chiang
California Public Utilities Commission

- 2 -

19 July 2010

Isolated wetlands not covered by the Federal Clean Water Act

Wetlands not covered by the Clean Water Act are known as "isolated wetlands." Should the U.S. Army Corps of Engineers determine that isolated wetlands exist at the project site, and should the project impact or have potential to impact the isolated wetlands, a Report of Waste Discharge and filing fee must be submitted for approval prior to commencing the construction activity. The Central Valley Board will consider the provided information and either issue or waive Waste Discharge Requirements. Failure to obtain waste discharge requirements or a waiver thereof, when required, may result in enforcement action.

A2-1

As a protective measure for any stream habitat on-site, as well as any wetland, riparian areas and species of special concern, the final map should include an adequate buffer for those areas.

A2-2

Water Quality Certification (401 Certification)

Certifications are issued for activities resulting in dredge or fill within waters of the United States. All projects must be evaluated for the presence of jurisdictional waters, including wetlands and other waters of the state. Impacts to these waters should be avoided, minimized, and/or mitigated. Impacts to Water of the United States requires an Army Corps of Engineers (Corps) Clean Water Act (CWA) Section 404 Permit and a CWA Section 401 Water Quality Certification from the Central Valley Water Board. The Section 404 and 401 permits are required for activities involving a discharge (such as fill or dredged material) to Waters of the United States. "Waters" include wetlands, riparian zones, streambeds, rivers, lakes, and oceans. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. If required, the Section 404 Permit and Section 401 Certification must be obtained prior to site disturbance.

A2-3

General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP)

For projects disturbing 1 acre or more of land the property owner is required to obtain coverage under the CGP by submitting Permit Registration Documents electronically prior to construction. This project must be conditioned to implement storm water pollution controls during construction and post-construction as required by the CGP. Long-term post-construction Best Management Practices (BMPs) that protect water quality and control runoff ideally to the pre-development levels should be incorporated into the project. Detailed information on the CGP can be found on the State Water Board website:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/gen_const.shtml


A2-4

A2-5

General Permit for Construction Dewatering

Individuals, public agencies, private businesses, and other legal entities of clean or relatively pollutant-free wastewaters that pose little or no threat to the quality of waters of the United States should be covered by General Order No. R5-2008-0081. This General Order covers Dischargers who discharge water either 4 months or less in duration or have an average dry weather flow less than 0.25 million gallons per day. Detailed information on the General Order for Dewatering and other low threat discharges to surface waters can be found on the State Water Board website:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2008-0081.pdf

A2-6

1 Mr. Eric Chiang - 3 - 19 July 2010
2 California Public Utilities Commission
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5 If you have any questions or comments regarding this matter, please contact me at
6 (530) 224-4996, or by email at hbauer@waterboards.ca.gov.
7
8 
9
10 Heidi Bauer
11 Sanitary Engineering Associate
12 South Regulatory Unit
13
14 HB: knr
15
16 cc: Mr. Brian Vierra, U.S. Army Corp of Engineers, Sacramento
17 Department of Fish and Game, Region 2, Rancho Cordova
18 Mr. Phil Isorena, Division of Water Quality, State Water Board, Sacramento
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A2 Heidi Bauer, CVRWQCB, 7/19/2010

A2-1

Response See response to comment A1-1.

A2-2

Response See response to comment A1-2.

A2-3

Response See response to comment A1-3.

A2-4

Response See response to comment A1-4.

A2-5

Response See response to comment A1-6.

A2-6

Response Table 2-7, Permits Required for Phase 3 Expansion, of the Draft SEIR (page 2-46) lists a National Pollutant Discharge Elimination System (NPDES) General Permit Covering Dewatering and Other Low Threat Discharges to Surface Water as a permit that Wild Goose would be required to obtain coverage under from the CVRWQCB, prior to construction associated with the Phase 3 Expansion.

A3 Hal Bopp, DOGGR

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NATURAL RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR



DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

801 K STREET • MS 20-22 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 322-1110 • FAX 916 / 322-1201 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

July 20, 2010

Mr. Eric Chiang
California Public Utilities Commission
c/o Ecology and Environment
130 Battery Street #400
San Francisco, CA 94111

Dear Mr. Chiang

**RE: WILD GOOSE PHASE 3 GAS STORAGE PROJECT EXPANSION DRAFT
SUPPLEMENTAL EIR – SCH 2010062025**

Thank you for the opportunity to comment on the subject Draft Supplemental EIR. The Department of Conservation, through its Division of Oil, Gas, and Geothermal Resources (DOGGR) has reviewed the above referenced project and offers the following comments for your consideration.

Overview of DOGGR Responsibilities Related to Oil and Gas Operations. DOGGR is mandated to supervise the drilling, operation, maintenance, and plugging and abandonment of wells and attendant facilities, including tanks and pipelines, for the purpose of preventing; 1) damage to life, health, property, and natural resources, 2) damage to underground and surface waters suitable for irrigation or domestic use, 3) loss of oil, gas, or reservoir energy, and 4) damage to oil and gas deposits by infiltrating water and other causes. DOGGR's State Oil and Gas Supervisor (Supervisor) has the authority to regulate the manner of drilling, operation, maintenance, and abandonment of oil and gas wells so as to conserve, protect, and prevent waste of these resources, while at the same time encouraging operators to apply viable methods for the purpose of increasing the ultimate recovery of oil and gas.

DOGGR's programs include well permitting and testing, safety inspections, oversight of production and injection projects, environmental lease inspections, idle-well testing, inspecting tanks, pipelines, and sumps, hazardous and orphan well plugging and abandonment contracts, and subsidence monitoring.

In California, all Class II injection wells are regulated by DOGGR under provisions of the Public Resources Code (PRC) and the federal Safe Drinking Water Act. Class II injection wells fall under the DOGGR's Underground Injection Control (UIC) program which is monitored and audited by the U.S. Environmental Protection Agency. The main features of the UIC program include permitting, inspection, enforcement, mechanical integrity testing, plugging and abandonment oversight, data management, and public outreach. UIC Class II wells inject fluids and gas associated with oil and natural gas production operations, including gas storage projects.

The Department of Conservation's mission is to balance today's needs with tomorrow's challenges and foster intelligent, sustainable, and efficient use of California's energy, land, and mineral resources.

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Mr. Eric Chiang
California Public Utilities Commission
July 20, 2010
Page 2

DOGGR's regulations also include standards for construction, testing, inspection, and operation of pipelines within oil and gas fields, thereby reducing the risk of spills and/or leaks that may pose a threat to public health and safety or the environment. These regulations are a risk-based two-tiered system, where the regulatory emphasis is focused on the pipelines' location relative to any environmentally sensitive areas. The first tier has standards that apply to all pipelines and in the second tier has standards for pipelines within environmentally sensitive areas. However, note that in a Memorandum of Agreement with the CPUC, the regulation of distribution pipelines beyond the wellhead located in a gas storage field, except for those pipelines associated with a water disposal project, fall under CPUC jurisdiction.

The scope and content of information that is germane to DOGGR's oil and gas authority are contained in Division 3 of the PRC, commencing with Section 3000. The administrative regulations are primarily found under Title 14 of the California Code of Regulations (CCR), Division 2, Chapter 4, commencing with Section 1712.

Specific Comment. Page A.5-14, under the heading of "Division of Oil, Gas, and Geothermal Resources" states, "Physical hazards, storage field maintenance, and operations within natural gas storage fields are under DOGGR's jurisdiction". Note that this is true to the extent that DOGGR statutes and regulations apply, for example hazards associated directly with reservoir or wellhead leakage. Other hazards, for example, those associated with the gas storage project compressors, would not necessarily fall within DOGGR jurisdiction.

A3-1

General Comments. As stated in the subject document, DOGGR issues a project approval for all fluid and gas injection wells. The data required and operational requirements are outlined in CCR Sections 1724.6 through 1724.10. While not specifically stated in the subject document, the Phase 3 project outlined in the subject document will require submission of a project approval request to DOGGR for a "significant expansion". DOGGR would consider the engineering, geological, and facilities condition and design changes in issuing an approval for such an expansion.

A3-2

This Draft Supplemental EIR makes no mention of additional wells required or changes to the well pad. These are the items, particularly any additional well drilling or rework, regarding which DOGGR retains the most direct jurisdiction. Because they are not mentioned, DOGGR has limited comments regarding this document. We emphasize again that DOGGR would issue a permit to expand the gas storage project as outlined in Phase 3 and additionally would issue a permit to drill, rework, or abandon any well related to the project.

A3-3

Sincerely,

Hal Bopp
Deputy Supervisor

A3 Hal Bopp, DOGGR

A3-1

Response Section A.5.2 (page A.5-15, under Division of Oil, Gas, and Geothermal Resources) has been revised to include the suggested change and to more accurately describe the jurisdiction and role of the DOGGR. Appendix A of this Final SEIR includes the pages of Section A.5, Hazards and Hazardous Materials, that have been revised.

A3-2


Response Table 2-7 (page 2-46) has been revised to include DOGGR's requirement of a project approval for a "significant expansion." Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

A3-3

Response The commenter is correct; Phase 3 Expansion activities do not include any additional wells or physical changes to the Well Pad Site (WPS).

A4 Stuart Edell, P.E., Department of Public Works, County of Butte

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Department of Public Works
County of Butte

7 County Center Drive
Oroville, CA 95965-3397
(530) 538-7681
(FAX) 538-7171

J. Michael Crump, *Director*
Shawn H. O'Brien, *Assistant Director*

RECEIVED JUL 19 2010

July 14, 2010

California Public Utilities Commission
Attention: Eric Chiang c/o Ecology and Environment
130 Battery Street #400
San Francisco, CA 94111

**Re: DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT
WILD GOOSE PHASE 3 GAS STORAGE EXPANSION
APPLICATION NO. A.09-04-021**

Dear Mr. Chiang:

We have the following comments, concerns and requirements with respect to Remote Facility Site access as defined on page 2-34 of the Phase 3 Expansion Draft SEIR for the above referenced project. Colusa Highway, not Gridley Road provides access to Pennington Road, West Liberty Road and the Remote Facility Site. Construction of previous phases of this project damaged Pennington Road and West Liberty Road some of which was repaired by the Wild Goose contractor. There was also a significant increase the County maintenance costs on both roads. A temporary bridge was placed over the legal load only bridge, and additional bracing was provided on this existing bridge, on West Liberty Road to allow construction traffic to access the Remote Facility Site. Prior to construction on the Remote Facility Site a Butte County Encroachment Permit will be required for use of Colusa Highway, Pennington Road, West Liberty Road and any other County roads providing construction access to the Site. Conditions on the encroachment permit will require an inspection deposit, field inspection of all roads by the Contractor and County Public Works Inspector to establish the baseline road conditions and a bridge plan showing how the existing legal load bridge will be protected. The Contractor will be responsible for maintenance and immediate repair of any damage to road facilities related to construction activities. At the end of the construction the Contractor shall restore all road facilities to baseline or better conditions. This encroachment permit will also cover construction of the new driveway on West Liberty Road serving the new parking area.

The minimum inspection deposit, to cover all project related construction within the County rights of way is \$3,000.00. This deposit shall be made prior to the County issuing the first Encroachment Permit. Inspections are based on real time billing at \$88.00 per hour, any fund balance remaining after construction will be refunded. If during construction, the deposited funds are depleted to an amount equal to twenty-five percent (25%) of the original deposit, the applicant shall deposit sufficient funds with Butte County to restore the initial \$3,000.00 deposit or all use of County rights of way shall cease.

All construction within a County right of way, requires a County Encroachment Permit. Forms and other information for Utility Encroachment Permits are available online at

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Wild Goose Gas

Page 2 of 2

<http://www.buttecounty.net/Public%20Works/Permits/Utility%20Permits.aspx> Prior to issuance of an Encroachment Permit for the construction of the bi-directional pipeline (Storage Loop Pipeline) from the Well Pad Site to a new remote operating facility (Remote Facility Site [RFS], either the existing Encroachment Agreement (recorded October 9, 2009, under Serial Number 2009-0037374, copy attached), must be modified to include this facility or a new Encroachment Agreement must be recorded for this facility.

A4-5 ctd.

If you should have any questions concerning this matter, please contact this office Monday through Friday, 7:30 a.m. to 4:30 p.m. at (530) 538-7266.

Sincerely,


Stuart Edell, P.E.
Manager, Land Development Division

Attachment

cc: Mike Crump, Director of Public Works (File 244.3812) w/o attachment
Tim Snellings, Director of Development Services w/attachment

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After Recording
Return to:
Dept. of Public Works
7 County Center Drive
Oroville, CA 95965


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AGREEMENT FOR ENCROACHMENT OF BUTTE COUNTY ROAD WAY
KNOWN AS West Liberty Rd

THIS ENCROACHMENT AGREEMENT, made and entered into this
19th day
of August 2009, by and between the COUNTY OF BUTTE, hereinafter
referred to as "County" and WILD GOOSE STORAGE INC
(Name)
, hereinafter referred to as "Owner",

WITNESSETH:

WHEREAS, Owner desires to construct or provide 24" NATURAL GAS PIPE LINE
(Sewer/Water)
to owner's property at 2780 WEST
LIBERTY ROAD
(Location) more particularly
described in attached Exhibit "A"; location per attached plat Exhibit "B"; and

WHEREAS, Owner desires to install 217' OF 0.625 W.T. X-70 24" DIAMETER GAS LINE
(Describe Service)
under THE WEST END OF WEST LIBERTY RD AS SHOWN ON EXHIBIT "B" from his
(Streets)
property to an existing EXISTING NATURAL GAS STORAGE facility located
(Type of Facility)
in SECTION 17, MOUNT DIABLO RANGE 1E, TOWNSHIP 17N, APN 021-030-002; and
(Street)

WHEREAS, County desires to protect County property and insure the safety of public traffic on county
roads;

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5. Owner, by the acceptance of this agreement, shall assume full responsibility for all liability resulting from operation and maintenance of the encroachment and for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure on the part of the Owner to do the work provided for under this permit. In the event any claim of such liability is made against the County of Butte or any department, official or employee thereof, the Owner shall defend, indemnify and hold them and each of them harmless of such claim.

6. This encroachment is for the benefit of the land described herein and shall run with said land.

7. County and Owner agree that this encroachment shall be recorded immediately.

WITNESS OUR HANDS THIS DAY AND YEAR HEREIN ABOVE FIRST WRITTEN

COUNTY OF BUTTE

By: *Mike Crump*
Mike Crump
Director of Public Works

By: *Pat Baynard*
Pat Baynard
Wild Goose Storage, LLC

2780 West Liberty Road
Gridley, CA 95948

By: _____
(Owner)

(Address)

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Exhibit A

PARCEL I

All that certain real property situate in the County of Butte, State of California, described as follows:

A portion of Section I, Township 17 North, Range 1 East, Mount Diablo Meridian, being more particularly described as follows:

Commencing at an iron pin with cap, "LS 3341", monumenting the Southwest corner of said Section 1, as shown on that certain parcel map on file in Book 113 of Maps at page 93; thence North 00°27'42" West, along the West line of said section, a distance of 30.00 feet to a point on the North line of West Liberty Road, said point being the true point of beginning for the parcel herein described; thence North 00° 27'42" West, continuing along said West line, a distance of 3 87.49 feet, thence North 89° 59'39" East, a distance of 691.68 feet, thence South 00° 08'09" East, a distance of 3 82.43 feet, more or less, to said North line of West Liberty Road; thence South 89° 34'28" West, along said North line, a distance of 689.48 feet, more or less, to the point of beginning and containing an area of 6.10 acres, more or less.

The basis of bearings for this description is the South line of Section 2, Township 17 North, Range 1 East, Mount Diablo Meridian, shown as being "N 89°28'56" E" on that certain map on file in Book 113 of Maps at page 93.

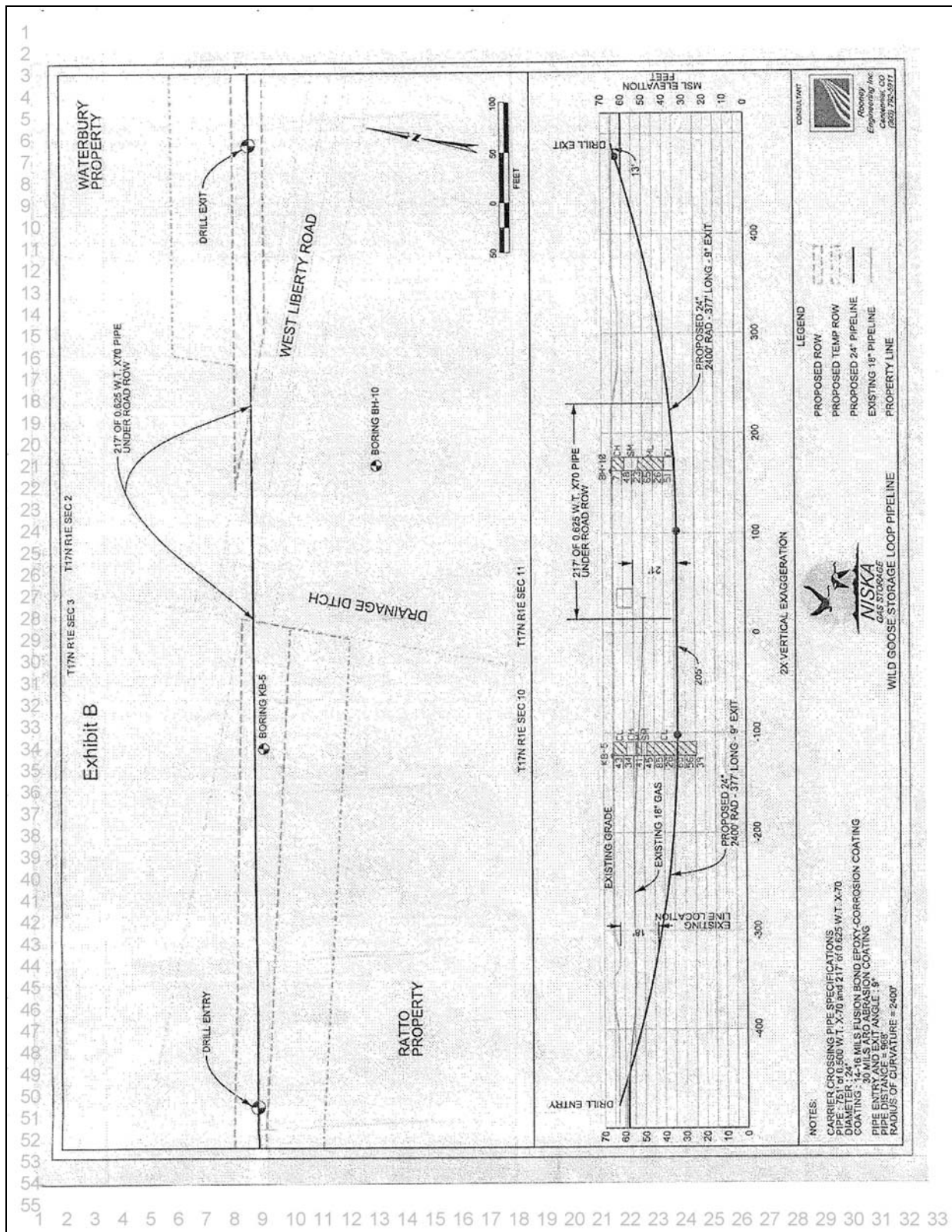
PARCEL II

A portion of Section 2, Township 17 North, Range 1 East, Mount Diablo Meridian, being more particularly described as follows:

Commencing at an iron pin with cap, "LS 3341", monumenting the Southeast corner of said Section 2, as shown on that certain parcel map on file in Book 113 of Maps at page 93; thence North 00°27'42" West, along the west line of said section, a distance of 30.00 feet to a point on the North line of west Liberty Road, said point being the true point of beginning for the parcel herein described; thence South 89°28'42" West, parallel with the south line of said Section 2, a distance of 685.74 feet; thence North 00°27'42" West, parallel with the east line of said Section 2, a distance of 387.49 feet; thence North 89°28' 42" East, parallel with the south line of said Section 2, a distance of 685.74 feet, more or less, to the east line of said Section 2; thence ,South 00°27'42" East, a distance of 387.49 feet, more or less, to the point of beginning and containing an area of 6.10 acres, more or less.

The basis of bearings for this description is the South line of Section 2, Township 17 North, Range 1 East, Mount Diablo Meridian, shown as being "N89°28'56"E" on that certain map on file in Book 113 of Maps at page 93.

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ACKNOWLEDGMENT

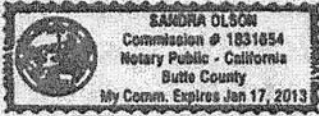
State of California)
) ss
County of BUTTE)

On August 19, 2009, before me, SANDRA OLSON, Notary Public, personally appeared PAT BAYNARD who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Sandra Olson (SEAL)



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State of California, County of Butte, on August 27, 2009, before me, Jennifer G. Goff,
Notary Public, personally appeared, Mike Crump

_____, who proved to me on the basis of satisfactory evidence to be the
person(s) whose name(s) are subscribed to the within instrument and acknowledged to me that he/she/they
executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is
true and correct.

WITNESS my hand and official seal.



Signature Jennifer G. Goff

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A4 Stuart Edell, P.E., Department of Public Works, County of Butte

A4-1

Response Section 2.4.5 (page 2-34, under Site Access) has been revised to show that Colusa Highway, not Gridley Road, provides access to Pennington Road, West Liberty Road, and the RFS. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

A4-2

Response Table 2-7, Permits Required for Phase 3 Expansion (page 2-46) includes a Butte County encroachment permit as one of the required approvals for the Phase 3 Expansion. Section A.12, Transportation and Traffic, also indicates that the applicant would obtain any necessary encroachment permits prior to starting construction activities.

A4-3

Response Table A.1-1 in Appendix A includes the text of Applicant Proposed Measure (APM) TRANS-3: Pre-construction Assessment of Access Roads and Post-Construction Repair. According to this APM, the applicant will conduct a preconstruction assessment of access roads and repair any damage to country roads or bridges or private roads caused by Phase 3 Expansion construction activities and traffic, as the comment requires.


A4-4

Response The applicant will abide by all Butte County Public Works Department requirements during Phase 3 Expansion activities.

A4-5

Response The Storage Pipeline Loop was a part of the Phase 2 Expansion of the Wild Goose Facility; no construction associated with the Storage Pipeline Loop would take place as part of Phase 3 Expansion, so a utility encroachment permit would not be required. As noted above in the response to comment A4-2, the applicant would be required to obtain an encroachment permit from Butte County for any work taking place in any county road rights-of-way, and would obtain encroachment permits prior to starting Phase 3 Expansion construction activities.

A5 Gail Williams, BCAQMD

1
2
3
4 2525 Dominic Drive, Suite J
5 Chico, CA 95928
6 (530) 891-2882
7 (530) 891-2878 Fax
8
9
10 July 21, 2010
11
12
13 California Public Utilities Commission
14 Attn: Eric Chiang c/o Ecology and Environment
15 130 Battery Street #400
16 San Francisco, CA 94111
17
18 Re: Draft Supplemental Environmental Impact Report (DSEIR) for Wild Goose Phase 3 Gas
19 Storage Expansion
20
21 Dear Mr. Chiang:
22
23 The Butte County Air Quality Management District (District) has reviewed the DSEIR for the
24 Wild Goose Phase 3 Expansion. Based on the information presented the District submits the
25 following comments.
26
27 1. The District's CEQA Air Quality Handbook is appropriate for review and analysis of land
28 use projects with "indirect" emission sources. The Wild Goose Phase 3 Expansion project
29 "indirect" emission sources are the temporary air quality impacts during construction
30 including engine exhaust emissions from onsite construction equipment and on road
31 vehicles. A5-1
32
33 2. To address potentially significant project construction emissions the applicant should
34 apply mitigation measures and/or offsite measures as presented in the District CEQA
35 Handbook and not through the District Authority to Construct permit. A5-2
36
37 3. The District, as regulatory authority for "direct" operation and maintenance emission
38 sources, will review and evaluate the proposed project in accordance with District
39 Regulation IV *Permits*. The potential operational activities include air emissions
40 generated from stationary combustion, operational and emergency blowdowns and
41 fugitive emissions. The operational air emissions do not include on road vehicles. A5-3
42
43 The District appreciates the opportunity to comment on the proposed project. If you have any
44 questions, please contact the District at 891-2882 extension 105.
45
46 Sincerely,
47 
48 Gail Williams
49 Senior Air Quality Planner
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51 File No 3457
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A5 Gail Williams, BCAQMD

A5-1

Response As the commentor suggests, the BCAQMD's CEQA Air Quality Handbook is appropriate for use in the review and analysis of indirect emission sources. Methodology and guidance contained within this handbook was used for the review and analysis of indirect emission sources related to the Phase 3 expansion, as shown in Tables 3.2-8 (page 3.2-18) and 3.2-11 (page 3.2-19) of the Draft SEIR, and as included in the discussion under Impact AIR-1: Conflict with or obstruct implementation of the applicable air quality plan (page 3.2-22).

A5-2

Response In response to this comment, two additional mitigation measures, Phase 3 MM AIR-1 and Phase 3 MM AIR-2, have been added to Section 3.2.3.2 (starting on page 3.2-23), to address construction emissions. These mitigation measures are consistent with measures outlined in BCAQMD's CEQA Air Quality Handbook.

In addition, the existing text on page 3.2-25 (Phase 3 MM AIR-4) has been revised to remove the connection between construction mitigation and the BCAQMD Authority to Construct permit. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

A5-3

Response Section 3.2.1.3 (page 3.2-7, under Regulatory Setting) has been revised to include additional information on BCAQMD's role in reviewing direct emission sources for permitting purposes. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

4.3.2 Organization Comments

This section provides responses to comments about the Draft SEIR received from organizations.

O1 Dean A. Cortopassi, Wild Goose Club



DEAN A. CORTOPASSI

June 24, 2010

Mr. Eric Chiang
c/o Ecology and Environment
California Public Utilities Commission
130 Battery Street, #400
San Francisco, CA 94111

Re: Wild Goose Phase 3 Expansion Draft SEIR

Dear Mr. Chiang,

I am the President of the Wild Goose Club, Inc., located at 4651-C North Butte Road, Live Oak, CA 95953.

We are forwarding, for the record, the following comments generated by a review of the **June 2010 Wild Goose Storage (WGS) Phase 3 Expansion Draft Supplemental Environmental Impact Report (SEIR)**. Our comments are focused upon **APPENDIX A.8 NOISE**, and particularly the total absence of any commentary regarding noise levels at the Wild Goose Club Well Pad Site.

PROGRESSION OF WGS CAPACITIES

The WGS Phase 1 began (1997) with the following permitted scope: storage size of 14bcf, injection rate of 80mmcf/d, and withdrawal rate of 200mmcf/d. Phase 2 (2002) permitted the following: storage 29bcf, injection rate of 450mmcf/d, and withdrawal rate of 700mmcf/d. See Chart below:

Phases and Dates	Storage Size maximum permitted (billion cubic feet) (bcf)	Injection Rate maximum permitted (million cf/day) (mmcf/d)	Withdrawal Rate maximum permitted (million cf/day) (mmcf/d)	Withdrawal Rate highest recorded (million cf/day) (mmcf/d)	Date highest recorded (million cf/day) (mmcf/d)
Phase 1 began 1997	14	80	200		
Phase 2 began 2002 still under construction	29	450	700	414	January 6, 2010
Phase 3 proposed 2001	50	650	1200		

Phase 2 also permitted an additional 24" manifold at the Well Pad Site to augment the original 18" manifold. (These two manifolds inject/withdraw the gas that travels to and from the Remote Facility Site 4.5 miles away.)

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Mr. Eric Chiang
June 24, 2010
Page Two

Under section 2.4.1 **Remote Facility Site** of the SEIR, WGS is planning the “Installation of four new additional natural gas-fueled compressor units in a new compressor building, for an increase in total facility gas compression capacity from approximately 21,000HP (six compressor units) to a total of approximately 35,000HP (10 compressor units)”.

Though WGS is not currently requesting permission to do more “*construction*” at the Wild Goose Club Well Pad Site, they are clearly requesting permission (with the installation of these 4 new compressors) to increase their *withdrawal flows at the Wild Goose Club Well Pad Site* far beyond what have been permitted since Phase 2, and furthermore, far, far greater than the *actual* maximum withdrawal rate to-date (414mmcf recorded on January 6, 2010).

01-1

The WGS Phase 3 SEIR is completely deficient as to measurement or comment on the environmental sound pollution at the well pad injection site that will occur if Phase 3 is granted as proposed; ie:

01-2

Even at 200mmcf of gas transference (Phase 1 permit), the operating noise is distracting to wildlife. As gas transference rates have increased, we have observed a corresponding increase in noise. We are extremely concerned about the impact of 6 times that rate (1200mmcf) on wildlife in our habitat.

01-3

Though WGS devotes 15 pages in Appendix A.8 to noise issues, there is not one word about the increased operational noise occurring at the well pad site located in our 1500 acre wildlife habitat?! Is it conceivable that the WGS Phase 3 SEIR “accidentally” omits any measurement or commentary about Well Pad Site noise levels?! We submit that the SEIR omission was deliberate because, in fact, without significant sound suppression investment* by WGS, the increased noise level at the well pad site is clearly polluting a pristine wildlife environment. (* For example, enclosing the Well Pad Site in sound suppressing structure(s) is just one way to address the noise pollution of the surrounding habitat.) We know the CPUC has in-house sound measuring expertise and we invite the CPUC/your department to come to the Wild Goose Club and measure the existing noise pollution at varying gas withdrawal rates.

In conclusion, we respectfully request that the CPUC reject the WGS SEIR as written and require WGS to mitigate the noise pollution at the Wild Goose Club well pad site. Please feel free to contact me regarding any additional information I can provide.

01-4

Yours truly,


Dean A. Cortopassi
President, Wild Goose Club
11292 North Alpine Road
Stockton, CA 95212
Telephone: (209) 948-0792

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Enclosure: Environmental Landscape of Well Pad Site at Wild Goose Club

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Environmental Landscape of the Well Pad Site (WPS) at the Wild Goose Club

The WPS is located within one of the richest and unique riparian habitats in California—the Butte Sink, featuring:

- A riparian corridor and fragile eco-system sustained and nourished by Butte Creek and the year around sweat and blood of its property owners.
- The 15,000 acre crown jewel of wetlands remaining from the 5,000,000 acres that once existed in California
- Home to one of the highest concentrations of migratory birds in the United States
- Home to many threatened and endangered species



The Butte Sink is the "pearl" of approximately 15,000 acres of riparian wetlands that remain from over 5,000,000 acres of wetlands that once existed in California. In the late 1800's these vast marshes supported as many as 40 million waterfowl and other migratory species. Even today, this delicate eco-system, sustain some three to four million migratory birds each year—many calling the Butte Sink their bed and breakfast for much of the period from late August into mid February. They take shelter in the tule and willow, and forage on the smartweed, water grass, and invertebrates.

In 1922, the Butte Sink embraced a symbiotic relationship with the emerging rice culture to the north. As the rice industry grew, so did its appetite for water—water that helped serve the migratory birds' brooding needs in late summer. And, as the pre-harvest rice drains grew and threatened to flood farms on the west, the Butte Sink property owners embraced the drain water, which in turn provided the fall and winter resting and foraging habitat critical for the many wetlands dependent species. And so, this cycle has repeated itself each year and does to this day.

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From before the turn of the century, and still to this day, the habitat know as the Butte Sink has been nurtured by some 50 small groups of environmentalists that, for lack of a better moniker, are commonly known as duck hunters. We reverently hunt ducks 25 to 40 days of the year and are habitat stewards for 365 days of the year. We pour their heart, sole, and resources into the Butte Sink habitat. The Butte Sink is in our veins and we will protect it and nurture it with a vengeance.



NOISE impact on Butte Sink Eco-system

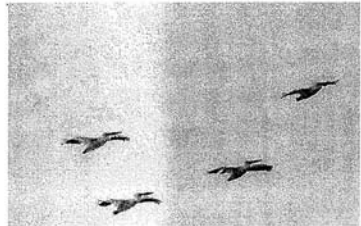
The Butte Sink is blessed and with a multitude of flora and fauna, but it is a fragile system and must be protected and nurtured. This is not a job for the armchair tree hugger. No, it takes knowledge, care, and sustained effort to annually foster, through fair weather, flood and drought, a healthy and vibrant marshland. We will list some of the at-risk, or endangered species found in the Butte Sink, all of which are impacted by noise

List of species

Listed below are the endangered, threatened, and species of special concern found on the Wild Goose Club, and throughout the Butte Sink. *(Note: All the Photographs in this document were taken on the Wild Goose Property).*

Avian:
American white pelican (*Pelicanus erythrorhynchos*)

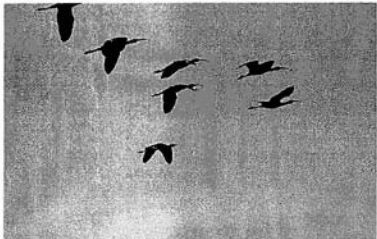
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Double-crested cormorant (*Phalacrocorax auritus*)
Great blue heron (*Ardea herodias*)



Great egret (*Casmerodius albus*)
Black-crowned night heron (*Nycticorax nycticorax*)
White-faced ibis (*Plegadis chihi*)



Cooper's hawk (*Accipiter cooperii*)
Sharp-shinned hawk (*Accipiter striatus*)
Northern harrier (*Circus cyaneus*)
Merlin (*Falco columbarius*)
Long-billed curlew (*Numenius americanus*)
Loggerhead shrike (*Lanius ludovicianus*)



Tricolored blackbird (*Agelaius tricolor*)

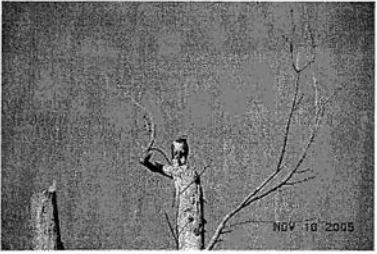
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Least bittern (*Ixobrychus exilis*)
Greater sandhill crane (*Grus canadensis*)
Yellow warbler (*Dendroica petechia*)
Tule greater white-fronted goose (*Anser albifrons elgasi*)



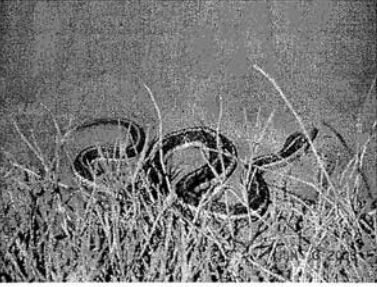
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
Bald eagle (*Haliaeetus leucocephalus*)
Prairie falcon (*Falco peregrinus*)
Swainson's hawk (*Buteo swainsoni*)



White-tailed kite (*Elanus leucurus*)*
Golden eagle (*Aquila chrysaetos*)*

Mammalian:
Ring-tailed cat (*bassariscus astutus*)*

Reptiles:
Northwestern pond turtle (*Clemmys marmorata marmorata*)
Giant garter snake (*Thamnophis gigas*)



Again, the Butte Sink is an irreplaceable resource that must be protected and revered.

6

O1 Dean A. Cortopassi, Wild Goose Club

O1-1

Response The commenter is correct in stating that the Phase 3 Expansion would result in an increase in natural gas withdrawal flows at the Wild Goose WPS. The Phase 3 Expansion would permit Wild Goose to increase injection capacity from 450 million cubic feet per day (MMcfd) to approximately 650 MMcfd, and increase withdrawal capacity from 700 to 1,200 MMcfd.

O1-2

Response The commenter is correct in stating that the Draft SEIR did not include an analysis of potential noise impacts at the WPS from the increased withdrawal and injection flow rates that would result from the proposed Phase 3 Expansion. In order to analyze any potential noise impacts that could be associated with an increase in flow rates at the WPS, the CPUC undertook a quantitative noise study. The results of the noise study are presented in Appendix C of this Final EIR, and discussed further in the responses to comments O1-3 and O1-4, below.

O1-3

Response As described in response O1-2 above, the CPUC undertook a study August 2-3, 2010, to evaluate potential impacts which could result from increased noise at the WPS related to the increase in natural gas injection and withdrawal flows that would result from the Phase 3 Expansion. The results of this noise study, and an assessment of potential impacts to wildlife related to noise at the WPS, are included in Appendix C of this Final SEIR.

As presented in the noise study report, the CPUC evaluated a “typical worst-case noise scenario,” in which 20 of the 24 wells at the WPS would be in operation. Fifteen gas injection and withdrawal wells are currently in operation at the WPS; an additional nine wells will come on line as part of the last phase of the Phase 2 Expansion, increasing the total wells at the site from 15 to 24. Noise from injection and withdrawal operations at the WPS is generated as a consequence of gas flows across valves and other well restrictions. As the number of wells in use at the WPS at any one time is increased, gas flow is more widely distributed among the wells, resulting in a corresponding decrease in cumulative gas injection and withdrawal noise.

For a scenario under which 20 of 24 wells would be in operation, the noise study modeled the increased gas injection and flow rates that would take place after the Phase 3 Expansion, to identify the likely increase in operational noise at the WPS. Results of this modeling indicated a moderate increase in noise at the immediate WPS location could occur. At the immediate WPS location, modeling results indicated a projected increase of up to 25 A-weighted decibels (dBA), resulting in a maximum estimated noise level of 75 dBA. At a location 100 yards from the WPS berm, a minor increase in noise of 1 dBA over the upper range of background noise levels would be expected, resulting in a maximum estimated noise level of 51 dBA. At locations 1,000 yards or farther from the WPS berm, injection and withdrawal noise is not anticipated to be perceptible above background levels.

Sensitive users in the area of the WPS include hunters, outdoors recreational users, and wildlife, particularly waterfowl. To determine potential noise impacts on wildlife as a result of the Phase 3 Expansion, and as part of ongoing coordination with the California Department of Fish and Game, research and a literature review were undertaken, and observations at the WPS were recorded during the noise study discussed above. The results of this research and literature review are presented in Appendix C along with the results of the noise study. Observations of wildlife at the WPS during the noise study were inconclusive, in part due to lack of significant numbers of wildlife, especially waterfowl, at the WPS during the season of the study.

As discussed further in Appendix C, existing data and research do not conclusively support a threshold for noise above which impacts to wildlife would be considered substantially adverse. Three general conclusions may be made, however: (1) a broad range of anthropogenic (human-caused) noise levels can have adverse effects on wildlife; (2) impacts to birds and waterfowl may include habitat avoidance and abandonment, decreased food intake, and decreased species richness and composition in the area of the noise impact; and (3) wildlife, especially waterfowl, have been shown to have the ability to acclimate to industrial noise of a continuous nature, such as the noise generated at the WPS. Although data on noise impact thresholds to wildlife are sparse, and no specific studies examining the impact of Phase 3 Expansion noise levels on wildlife species at the WPS have been undertaken, a conservative review of existing literature suggests that substantial adverse impacts to wildlife from exposure to continuous levels of noise may occur above a range of 75 and 85 dBA.

As discussed above, noise levels at the WPS after full buildout of the Phase 3 Expansion are projected to be less than 75 dBA at the immediate location of the WPS, and would decrease to less than 51 dbA at 100 yards from the WPS berm. Phase 3 Expansion noise levels would therefore be generally lower than a conservative threshold of adverse impacts to wildlife, and noise impacts above a background level would be limited to a relatively small area (approximately 20 acres, assuming that the area of impact includes the WPS and a 100-yard buffer around the WPS). In addition, abundant foraging and nesting resources for wildlife, including the Gray Lodge Waterfowl Management Area, the Sacramento National Wildlife Refuge, and the Delevan National Wildlife Refuge, and rice and other agricultural fields, exist in the areas and region surrounding the WPS. For these reasons, no significant adverse noise-related impacts to wildlife in the area of the WPS would be anticipated to result from the Phase 3 Expansion.

As discussed in Section A.8, Noise, of the Draft SEIR, the Butte County Noise Element establishes a normally acceptable maximum noise level in agricultural areas of 75 dBA, and a maximum acceptable community noise level of 60 dBA, Day-Night Level (L_{dn}). Impact thresholds addressing noise interference with outdoor activity are not well established, but the U.S. Environmental Protection Agency (USEPA) has indicated that a noise level of 55 dBA for “outdoor areas...and other places in which quiet is a basis for use” is sufficiently protective of public health and welfare with a margin of safety (it should be noted that this level is not a regulatory goal; USEPA 1978). With the assumption that hunters and outdoors recreational users would not be active on the WPS or within 100 yards of the WPS berm, the estimated maximum noise generated at the WPS after full buildout of the Phase 3 Expansion that may have an impact on these users would be 51 dBA, which is below the 55-dBA level. Thus, any noise impacts at the WPS

due to the Phase 3 Expansion would be minor, and would not be likely to interfere with the activities of hunters or other outdoors recreational users in the area.

Although noise impacts to wildlife and human user groups at the WPS from the Phase 3 Expansion are projected to be likely minor under an operating scenario in which 20 of the eventual 24 wells would be in operation, Wild Goose still could operate fewer than 20 wells at the WPS after the Phase 3 Expansion. For this reason, noise levels could increase above those modeled in the noise study, such that noise levels at 100 yards from the WPS could exceed the USEPA's suggested outdoors noise threshold of 55 dBA. For this reason, Section A.8, Noise of the Draft SEIR has been revised to include Phase 3 Mitigation Measure (MM) NOI-2, which would require Wild Goose to conduct regular noise monitoring during operations at the WPS, and to implement measures that would address noise from the WPS if noise levels at 100 yards from the WPS berm increased above 55 dBA. Implementation of Phase 3 MM NOI-2 would reduce noise impacts to wildlife as well as hunters and other recreational users in the vicinity of the WPS as a result of the Phase 3 Expansion to a less than significant level.

O1-4

Response As discussed in the response to comment O1-3, above, an additional mitigation measure, Phase 3 MM NOI-2, has been added to Section A.8, Noise, to address the potential for significant noise impacts in the vicinity of the WPS after the Phase 3 Expansion. Implementation of this mitigation measure would reduce impacts on users of the Wild Goose Club to less than significant.

02 Gary Theberge, Niska Gas Storage



July 21, 2010

California Public Utilities Commission
Attention: Eric Chiang c/o Ecology and Environment
130 Battery Street #400
San Francisco, CA 94111

Re: Comments on Wild Goose Storage, LLC Wild Goose Phase 3 Gas Storage
Expansion Draft SEIR

Dear Mr. Chiang:

The following are Wild Goose Storage, LLC's (WGS) comments regarding the Wild Goose
Phase 3 Gas Storage Expansion Draft SEIR:

Executive Summary

Introduction

Page ES-1

Please make the following change to the second paragraph:

The expansion would increase cumulative total injection capacity from 450 million cubic feet per day (MMcfd) to approximately 650 MMcfd, increase withdrawal capacity from 700 to approximately 1,200 MMcfd, and increase storage from approximately 2029 billion cubic feet (Bcf) of working gas capacity to 50 Bcf.

O2-1

Wild Goose is currently certificated to store approximately 29 Bcf.

Background

Beginning on Page ES-2

Please make changes to correct the hot tap descriptions as follows:

Page ES-2: on #4 under Phase 3 Expansion Description, change "three new hot tapped locations" to "four new hot tapped locations."

O2-2

(Note: the above change should be made globally wherever three new hot tapped locations are referenced.)

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1. Introduction

1.2.1 Background

Page 1-2

The second bullet regarding the initial project development under “Background” states the following:

O2-3

Construction of a bi-directional pipeline (Storage Loop Pipeline) from the Well Pad Site to a new remote operating facility (Remote Facility Site [RFS])

The initial development included construction of the bi-directional pipeline. The Storage Loop Pipeline was constructed adjacent to the bi-directional pipeline as part of the phase 2 expansion. Consequently, “(Storage Loop Pipeline)” should be deleted from this statement.

2. Description of Phase 3 Expansion

Section 2.3.3

2.3.3.1

Page 2-12

Please make the following change to the first sentence to correctly characterize our operations:

O2-4

Natural gas at the Wild Goose Facility is injected via wells into the underground storage zones during periods of low demand (generally the ~~winter~~ summer season), and withdrawn during periods of peak demand (generally the ~~summer~~ winter season).

Section 2.4.1

Remote Facility Site

Page 2-23

The second bullet on this page discusses injection of cushion gas and various gas storage zones. The use of the four gas storage reservoirs was previously approved under the 2002 EIR, so this bullet could simply be removed as it is not a part of the current project.

O2-5

Section 2.4.5

**Remote Facility Site
Site Preparation/Development**

Page 2-33

This section describes the giant garter snake protection fencing that will be placed around the RFS. WGS understands that the intent of the species exclusion fencing is to prevent giant garter snakes from moving onto the site during construction. The current language is very

O2-6

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detailed and prescribed about exactly how the fence will be installed and relocated. WGS suggests adding the following sentence at the end of the second paragraph to allow for performance-based adjustments by the Biological Monitor based on site conditions: "The exact configuration and placement of the species exclusion fencing would be adjusted as determined by the Biological Monitor based on field conditions to prevent giant garter snakes from moving onto the site."

O2-6 ctd.

Section 2.4.6

**Table 2-2
Tentative Site Restoration, Construction, and Restoration/Cleanup
Schedule**

Page 2-38

As a result of the timing for obtaining regulatory authorizations for the project as well as long lead times for obtaining the necessary equipment, the schedule should be modified to reflect the work at Delevan beginning no earlier than the first quarter of 2011.

O2-7

Section 3.2. Air Quality and Greenhouse Gas Emissions

Section 3.2.3.1 Applicant Proposed Measures (APMs)

Page 3.2-13

The first paragraph of Section 3.2.3.1 states that, "...full text of the APMs is included in Table A.1-1 of Section A.1-1." WGS could not find the full text of APMs-1 through 12 in the referenced Table. However, the full text of these APMs is provided in Table 2-6 under Section 2.4.8 starting on page 2-39. WGS therefore recommends referencing Table 2-6 instead of Table A.1-1 of Section A.1-1.

O2-8

Operations and Maintenance

Page 3.2-20

The first sentence of the second paragraph states the following:

Stationary combustion equipment associated with the proposed expansion of the RFS would include four additional compressor units and two additional dehydration units.

O2-9

Upon further review, WGS has determined that only one dehydration unit was included in the operational emission calculations. We have therefore provided a table showing the original and revised operations emissions for criteria pollutants and greenhouse gases as well as the increase in emissions due to the addition of one dehydration unit. These emission tables are included as Attachment 1 to this letter. These revisions do not result in changes to the significance determinations for project emissions.

Later in the same paragraph, please make the following change to accurately reflect WGS's proposed equipment (WGS is not proposing to use any gas-powered pumps):

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5 *Most emissions from operation and maintenance of the Phase 3 Expansion elements*
6 *would be associated with combustion of natural gas to run pumps and other process*
7 *equipment at the RFS, as well as from direct fugitive release of gas to the atmosphere*
8 *from leaks and designed pressure release points such as valves.*
9

O2-9 ctd.

10 **Table 3.2-11**

Page 3.2-21

11
12 For all pollutants and elements that are listed in Table 3.2-11, the calculated lbs/day values
13 do not agree with the tons/yr values, derived using the formula presented in the notes. For
14 example, 14.8 tons/year of NOx would equate to 81.1 lbs/day but the table lists it at 89.4
15 lbs/day. Please clarify how this was calculated.

O2-10

16 **Phase 3 MM AIR-2**

Page 3.2-24

17
18 WGS believes that mitigation offsets required at Delevan should be tied to the permitting
19 requirements of the Colusa County Air Pollution Control District similarly to what is being
20 required under MM Air-1 for Butte County Air Pollution Control District. WGS suggests the
21 following modifications to Phase 3 MM Air-2:
22

O2-11

23
24 *To address potentially significant construction emissions at the Delevan Site, and in*
25 *coordination with the Colusa County Air Pollution Control District (CCAPCD), the*
26 *applicant will purchase NOx offsets for exceedances over the CCAPCD threshold limit*
27 *during the construction period. Based on calculations of NOx pounds per day emissions for*
28 *the construction phase, total NOx emissions are anticipated to exceed the CCAPCD limit of*
29 *25 pounds per day by a total of approximately 925 pounds over the construction period. The*
30 *applicant will be required to purchase NOx offset credits for this amount as part of Authority*
31 *to Construct permit conditions, and provide documentation of the offsets purchase to the*
32 *CPUC and the CCAPCD prior to construction activities. The CCAPCD will include*
33 *appropriate permit conditions in the Phase 3 Expansion Authority to Construct for the*
34 *Delevan Site requiring the applicant to purchase any required NOx offset credits for*
35 *construction emissions. The applicant will provide documentation of any required offset*
36 *purchases to the CPUC and the CCAPCD within the timeframe specified by the relevant ATC*
37 *permit condition.*
38

39 **Operations**

Page 3.2-24

40
41 The paragraph under Operations includes the following statement:
42

43 *Of these emissions, NOx and ROG would exceed the BCAQMD thresholds and would*
44 *thus require purchased offsets in order to mitigate the impacts to a less than*
45 *significant level (below the Level C threshold).*
46

O2-12

47
48 WGS is working with the BCAQMD on the permit requirements for the project and at this
49 time believes that contemporaneous reductions to existing equipment will offset the
50 emissions from the new equipment to result in no net-increase. As a result, we recommend
51 the above statement be re-stated as follows:
52
53
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55

Of these emissions, NOx and ROG may exceed the BCAQMD thresholds and if they do, may require purchased offsets in order to meet the BCAQMD requirements (and US EPA New Source Review regulations).

O2-12 ctd.

Phase 3 MM AIR-3

Page 3.2-24

Phase 3 MM Air-3 states the following:

To address potentially significant operations emissions at the RFS, the applicant will purchase offsets for NOx and ROG emissions, either from existing market-based offsets within Butte County, or from the BCAQMD community offset bank, as available. Based on the calculations of NOx and ROG pounds per day emissions for the construction phase, these emissions are anticipated to exceed the Level B BCAQMD 25 pounds per day limit by a total of approximately 23 tons of NOx and 15 pounds of ROG over the entire construction period. The BCAQMD will include appropriate permit conditions in the Phase 3 Expansion Permit to Operate to ensure that offsets for NOx and PM10 emissions are adequate and applied.

Comment
O2-13

A) WGS requests that the CPUC reword the first sentence of this measure from “will” to “may have to purchase offsets...” As stated above, contemporaneous reductions to existing equipment will likely offset the emissions from the new equipment to result in no net-increase in NOx and ROG emissions.

B) This references construction phase and period, whereas it should be operations, and exceedances should be annual.

C) It is unclear how the 23 tons of NOx and 15 pounds of ROG annual exceedance values for operations were derived. Calculation using values presented in Table 3.2-11 do not yield this result; please clarify. Using values from Table 3.2-11, WGS calculates annual exceedances of 10.2 tons per year for NOx and 5.4 tons per year of ROG (above the 25 lb/day threshold). This is based on the ton/yr values for the Phase 3 Expansion, converted to lb/day (assuming 365 days per year operation).

We believe Phase 3 MM Air-3 should be corrected to read as follows:

To address potentially significant operations emissions at the RFS, the applicant will may be required to purchase offsets for NOx and ROG emissions, either from existing market-based offsets within Butte County, or from the BCAQMD community offset bank, as available. Based on the calculations of NOx and ROG pounds per day emissions for the ~~construction~~ operations phase, these emissions are anticipated to exceed the Level B BCAQMD 25 pounds per day limit by a total of approximately ~~23~~ 10.2 tons per year of NOx and ~~15~~ 5.4 pounds tons per year of ROG over the entire construction period. The BCAQMD will include appropriate permit conditions in the Phase 3 Expansion Permit to Operate to ensure that offsets for NOx and PM10 emissions are adequate and applied.

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Table 3.2-14

Page 3.2-28

Table 3.2-14 lists the direct emissions that will result from construction activities. However, the note at the bottom of Table 3.2-14, references operations sources, but should reference construction sources. The following edit should be made to the note below Table 3.2-14:

O2-14

Direct emissions are from compressor engines, compressor blowdowns, compressor starter vents, reboilers, thermal oxidizer stacks, and fugitive releases, diesel-fueled construction equipment, diesel-fueled heavy trucks, and gasoline-fueled light trucks.

Operations

Page 3.2-28

WGS recommends the following modification to the first sentence of the paragraph under Operations to accurately reflect our proposed equipment (no pumps are proposed):

O2-15

During operation of the Phase 3 Expansion elements, most GHG emissions would be CO2 from combustion of fossil fuel (primarily natural gas) associated with stationary combustion of natural gas in compressors pumps and other equipment at the RFS; additional direct release of CH4 (the primary component of natural gas) will also occur during blowdowns and as unintended fugitive release from valves, flanges, and other equipment.

Impact AIR-6

Page 3.2-29

The first paragraph under Impact AIR-6 states:

O2-16

Total GHG emissions for the Phase 3 Expansion from construction and operations combined have been estimated under a worst-case scenario to be approximately 36,386 tons per year (36 tons per year of amortized construction emissions, as summarized in Table 3.2-14, and 36,350 tons per year of operations emissions, as summarized in Table 3.2-15), which assumes maximum daily emissions levels are applied to the entire year. Actual emissions can reasonably be expected to be lower than this estimate because construction would not occur every day of the year. Using the maximum daily emissions level for every day overestimates actual construction levels on most days.

The discussion describes how the total Greenhouse gas (GHG) emissions were calculated for a worst-case scenario. This discussion should describe how the worst-case operations emissions were calculated, and the significance of this approach. Similar to the construction emissions, WGS believes the worst-case operations emissions also greatly overestimate the actual emissions.

Therefore, WGS requests that the CPUC add the following language to Impact AIR-6:

In addition, the worst-case emissions for operations are estimated based on the fuel-use limitations imposed by BCAQMD on Plant 3. In the years 2006 - 2008 WGS has not exceeded these fuel use limitations and has emitted on average less than half of

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5 *this potential-to-emit value. Using the potential-to-emit emissions level greatly*
6 *overestimates the annual GHG emissions from the operation of the Phase 3*
7 *Expansion.*

O2-16 ctd.

9 **Phase 3 MM AIR-5**

Page 3.2-30

10
11 WGS requests that the first sentence of Phase 3 MM AIR-5 be replaced with the following
12 language to clarify that the CPUC's mitigation measure for GHG emissions will serve as an
13 interim measure until a state-wide GHG emission reduction program is in place, and to
14 specify that any required offsets will be based on actual emissions rather than worst-case
15 estimates:

O2-17

16
17 *Until the applicant is required to comply with a state-wide cap and trade program,*
18 *the applicant will obtain and retire, by the end of each year of Phase 3 Expansion*
19 *construction and operation, sufficient carbon credits to fully offset GHG emissions*
20 *("carbon offsets") for GHG emissions in excess of 10,000 metric tons of CO₂e. After*
21 *that time, the applicant must comply with the requirements of the state-wide cap and*
22 *trade program. The amount of offsets purchased will be based on actual emissions,*
23 *which are likely to be much lower than the worst-case emissions.*

24
25 Table 3.2-16 lists the GHG emission reductions that would be required through mitigation to
26 reduce impacts to a less than significant level. WGS does not believe the amount of
27 purchased offsets should be based on the worst-case GHG emissions estimate, but instead
28 should use actual emissions. Typically, offsets are used to mitigate what actually occurs, not
29 what could potentially occur. The offset reduction amounts would be verified and therefore
30 the excess emissions should be also known with reasonable certainty.

31
32
33 **Section 3.3. Biological Resources**

34
35 **Number of Wildlife Species Identified in Table 3.3-1** Page 3.3-4, Literature Review

36
37
38 WGS suggests changing the number of wildlife species from 32 to 31 in this statement:

O2-18

39
40 *A total of ~~5756~~ sensitive species—25 plant and ~~3231~~ wildlife species—were identified*
41 *from these databases, and are listed in Table 3.3-1.*

42
43 **California Tiger Salamander Status** Page 3.3-12, last row in table

44
45 WGS suggests changing the state status of the California tiger salamander (*Ambystoma*
46 *californiense*) from CSC to ST in Table 3.3-1.

O2-19

47
48 **Osprey Status** Page 3.3-17, first row in table

49
50 WGS suggests changing the state status of the osprey (*Pandion haliaetus*) from CSC to WL.

O2-20

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Wildlife Species Known to Occur in Project Areas Page 3.3-19, 2nd paragraph

WGS suggests changing the number if wildlife species known to occur in the Phase 3 Expansion areas as follows:

O2-21

Evaluation of the literature (as discussed above) and results of the 2001, 2008/2009, and 2010 field surveys indicated that seven sensitive plant and 1814 sensitive wildlife species are either known to occur in the Phase 3 Expansion areas at the RFS, reconductoring area, or Delevan site, or use habitat that could be affected by the proposed Phase 3 Expansion components. These species are shaded in gray in Table 3.3.1, and are described below as relevant for the Phase 3 Expansion study area.

Table 3.3-3 Project Features Addressing Biological Resources Adopted as Part of the 2002 EIR Page 3.3-25, Mitigation 3.4-4, -5, and -8(b)

The following revisions are recommended for the associated measures:

O2-22

Mitigation 3.4-4: WSGI shall compensate the loss of 1.4 acres of wetlands by wetlands creation, restoration, or securing mitigation at an appropriate mitigation bank.

Measure 3.4-4 should be deleted from the SEIR because it no longer applies to the project. Measure 3.4-4 was originally required to mitigate the loss of wetlands. The only wetland impacts caused by the Phase 3 expansion will be from the culvert and driveway installed over the roadside ditch along West Liberty Road. This is being compensated for by removing a different driveway and restoring that portion of the ditch. Mitigation of these impacts is addressed by Phase 3 MM Bio-4 and Measure 3.4-4 is not needed

Mitigation 3.4-5: WSGI shall compensate the conversion of 23 acres of wetlands by wetlands creation, restoration, or securing mitigation at an appropriate mitigation bank.

O2-23

Measure 3.4-5 was required to mitigate for the potential conversion of freshwater marsh and wet meadow to other wetland types. Mitigation 3.4-5 should be removed from the SEIR because the project will not convert freshwater marsh and wet meadow wetlands to other wetland types.

Mitigation 3.4-8(b): Preconstruction surveys shall be conducted for giant garter snake and protective actions (such as snake removal) shall be initiated prior to implementation of the Habitat Enhancement Plan.

O2-24

Mitigation 3.4-8(b) should be removed from the SEIR because it is not relevant to the Phase 3 expansion. The Habitat Enhancement Plan activities were completed as part of the Phase 2 expansion and no additional activities are proposed as part of the current project.

Impact BIO-2 Page 3.3-31

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Regarding the paragraph under the heading “*Potential Loss of Riparian Habitat on RFS Isolation Berms*,” the majority of the vegetation on these berms, including the willows and blackberry, was planted to help screen the facility, and is sustained through irrigation. WGS believes that it is not appropriate to characterize the berms that will be removed as “riparian habitat” and requests that the impact be modified to “Temporary Loss of Habitat on Landscaped RFS Berms.” These berms will be reconstructed around the expanded facility and additional screening vegetation will be planted with a similar species composition. WGS suggests the following modifications:

02-25

Prior to Phase 3 Expansion construction at the RFS, berms that were built to screen the facility ~~isolate the rice fields from the Phase 2 Expansion construction~~ would be ~~removed~~ relocated around the expanded facility. Sparse riparian vegetation such as willows and blackberry bushes ~~has colonized~~ was planted on the existing dirt berms. This vegetation, which is irrigated, anchors the soil and reduces erosion. Although this vegetation is not located in a native riparian corridor, it may provide forage and shelter habitat for wildlife species. Removal of established isolation berms would require removal of the riparian vegetation. As part of APM BIO-13 (Comprehensive Landscape Restoration Plan), the applicant will transplant viable vegetation to the new, permanent berms and other locations at the RFS. Impacts would be temporary and less than significant.

Phase 3 MM BIO-5

Page 3.3-33

Regarding the requirement for a 100-foot buffer zone from wetland features, in order to install and replace hardware and possibly replace some poles, it is likely that PG&E will need to access existing poles that occur within 100 feet of wetland boundaries. WGS recommends modification of this mitigation measure to allow vehicle and crew access to poles from the adjacent road and road shoulder as follows:

02-26

A wetlands biologist will delineate the edges of each wetland area using USACE delineation methodology (USACE 1987). Once wetland boundaries have been accurately identified, ~~the boundaries a 100-foot buffer area will be established around each wetland area~~. Buffer areas will be demarcated with lath and flagging, and no construction materials, equipment, or vehicles will be permitted in these areas. As described in MM Bio-4, sediment barriers such as silt fencing will be installed in front of wetlands where pole replacement would entail earth disturbance in close proximity to wetland features.

Phase 3 MM BIO-6

Page 3.3-34

Regarding potential impacts to downstream fisheries and aquatic habitat in the vicinity of the RFS, WGS would like to modify Phase 3 MM BIO-6 to clarify that any stipulations regarding water withdrawal rates and downstream monitoring will be specified as part of our ongoing efforts to amend the project’s existing Streambed Alteration Agreement, Section 2081 Incidental Take Permit, and Section 7 Biological Opinion.

02-27

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PHASE 3 MM BIO-6: *The following measures will reduce impacts to downstream fisheries and aquatic habitat at the RFS during Phase 3 Expansion construction activities:*

O2-27 ctd.

1. The applicant will participate in ongoing consultations with CDFG (under Fish and Game Code 2081 and 1602) and USFWS (Section 7 Consultation) to ensure water withdrawals and other activities at the RFS do not result in unacceptable impacts to downstream fisheries. To this end, the applicant will adhere to any stipulations required by CDFG and USFWS regarding the water withdrawal rate, volume, and timing established through the agency consultation process. The applicant will also submit any required documented evidence that the stipulated conditions of water withdrawal have been met to both CDFG and USFWS.

2. The applicant shall conduct any downstream monitoring required by CDFG and/or USFWS to verify that withdrawal volume does not adversely impact fisheries or the aquatic life components that support special status aquatic species.

Appendix A.2 Agriculture and Forest Resources

Phase 3 MM AG-1

Page A.2-13

WGS would like to modify the third option under Phase 3 MM AG-1 to include both wetland and endangered species habitat mitigation credits:

O2-28

3. Purchase of wetlands and/or endangered species habitat mitigation credits from an appropriate wetlands mitigation bank at a ratio of two units of mitigation to one unit of agricultural land converted.

Endangered species habitat mitigation lands, like wetland mitigation lands, include land that is dedicated in perpetuity to open space preservation and conservation.

Appendix A.6 Hydrology

Table A.6-2 Project Features Addressing Hydrology Adopted as Part of the 2002 EIR

Page A.6-6

Mitigation Measure 3.8-6 is stated as follows:

Mitigation Measure 3.8-6: Locate all water supply wells in the project vicinity. After identifying the approved pipeline route and developing initial pipeline construction design plans, and prior to initiating construction, delineate wells in the immediate vicinity of the selected route. Conduct a hydrogeological investigation to determine de-water effects on the nearby area wells. Based on results of the hydrogeological investigation, modify construction plans or dewatering methods, if necessary, to

O2-29

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protect local groundwater supplies. The hydrogeological investigation shall be conducted by a California Certified Hydrogeologist or Certified Engineering Geologist with an appropriate background in evaluating impacts to water wells associated with surface de-watering activities. The revised plans or de-watering methods must be reviewed and approved by the CPUC prior to implementing those operations.

O2-29 ctd.

Mitigation Measure 3.8-6 should be removed because trench dewatering will not be required to install the short pipeline segment at Delevan.

A.6.4 Environmental Impacts and Mitigation Measures Page A.6-6, 1st paragraph under Construction

Regarding the first paragraph under A.6.4, municipal water from Gridley should also be considered as a potential source of water for hydrostatic testing. WGS recommends the paragraph be changed as follows:

O2-30

Water sources for the Phase 3 Expansion construction activities at the RFS and the Delevan Site would include the Belding Lateral Canal (or the 833 Canal if the Belding Canal were not available) and a water production well approximately 200 feet to the south of the existing RFS in the Gray Lodge Waterfowl Management Area, which is estimated to have a yield of at least 60 gpm. Construction water used primarily for dust suppression (approximately 2,000 gallons per day of construction, or a total of approximately 1.6 million gallons) would be drawn from the Belding Lateral Canal or 833 Canal; hydrostatic testing water (approximately 51,000 gallons total) would be trucked from the nearby Gray Lodge well or from a municipal water source in Gridley. Water from the Gray Lodge well has been obtained with the permission and approval of the facility manager for use during the Phase 2 Expansion construction; the applicant would obtain new approvals for the use of this well or will work with the Biggs-West Gridley Water District to purchase hydrostatic testing water for the Phase 3 Expansion. Except for drinking water brought onto the site by PG&E personnel, reconductoring activities would not require the use of water.

(Note: the above change should be made globally. It is also mentioned on page 3.3-34.)

Appendix A.8 Noise

Phase 3 MM NOI-1

Page A.8-12

The referenced mitigation measure is indicated as required to reduce the impact of noise from reconductoring activities, whereas activities at Delevan and the RFS were found to be less than significant. However, the mitigation measure makes no reference that it is specific to the reconductoring work. Furthermore, only a small fraction of the reconductoring activity would be within close proximity to sensitive receptors. Therefore, WGS suggests replacing the first sentence of Phase 3 MM NOI-1 with the following:

O2-31

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PHASE 3 MM NOI-1: PG&E The applicant will employ the following noise reduction and control practices during construction reconditioning activities that could produce noise levels above 80 dBA Lmax near sensitive receptors (within 100 feet):

O2-31 ctd.

Thank you for the opportunity to comment on this DSEIR. If you would like to discuss any of these comments or if you have any questions, please call me at your convenience.

Sincerely,



per Gary Theberge
Niska Gas Storage

3278/009/X120288.v1

O2 Gary Theberge, Niska Gas Storage

O2-1

Response The second paragraph of the Executive Summary (page ES-1) of the Draft SEIR has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of the Executive Summary that have been revised.

O2-2

Response The first paragraph of the Executive Summary (page ES-2) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of the Executive Summary that have been revised.

O2-3

Response Section 1.2.1 (page 1-2) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Chapter 1, Introduction, that have been revised.

O2-4

Response Section 2.3.3.1 (page 2-12) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O2-5

Response Although use of the L-1, L-4, and U-1/U-2 gas storage reservoirs was approved for the Phase 2 Expansion under the Wild Goose Storage, Inc. Expansion Project Environmental Impact Report (2002 EIR), the injection of additional cushion gas as described in this Section 2.4.1 would be performed only as a result of implementation of the Phase 3 Expansion, and not related to existing operations at the Wild Goose Facility; increasing the amount of cushion gas in each of the four storage reservoirs is therefore a component of the Phase 3 Expansion. Section 2.4.1 has not been revised to include the suggested change.

O2-6

Response Section 2.4.5 (page 2-33) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O2-7

Response Section 2.4.6 (page 2-38) has been revised to include the suggested change to the Phase 3 Expansion schedule. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion that have been revised.

O2-8

Response Section 3.2.3.1 (page 3.2-13) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-9

Response Text and tables in Section 3.2.3.2 (starting on page 3.2-18) have been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-10

Response Table 3.2-11 in Section 3.2.3.2 (page 3.2-19) has been updated with values based on the suggested revisions to Phase 3 Expansion emission estimates. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-11

Response Phase 3 MM AIR-2 (page 3.2-24) has been revised to include the suggested change. Since Authority to Construct (ATC) air permits are related to stationary emission sources, it has been determined that inclusion of emission offsets as permit conditions in an ATC permit is at the discretion of the Colusa County Air Pollution Control District (CCAPCD).

Further, the BAAQMD has indicated that mitigation measures for construction should not be presented as part of the district's ATC air permits. Related text has been revised accordingly.

Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-12

Response Because no specific information was provided on the proposed contemporaneous emission reductions, the text has not been revised as suggested. However, text has been added to this paragraph in Section 3.2.3.2 (under Operations) to indicate that, if the applicant identifies contemporaneous emission reductions to existing equipment that would result in no net emissions increase of NO_x and ROG, the requirement for emissions offsets may be removed, as long as these emissions reductions are verified and approved by the BCAQMD and appropriate documentation is provided to the CPUC. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-13

Response

- (A) See response to comment O2-13. Text has been added to Phase 3 MM AIR-5 in Section 3.2.3.2 (under Operations) to reflect this response.
- (B) Phase 3 MM AIR-5 has been revised to include the suggested changes.
- (C) Phase 3 MM AIR-5 has been revised to remove these estimates of annual exceedance values for NO_x and ROG.

Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-14

Response

Table 3.2-14 (page 3.2-28) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-15

Response

Section 3.2.2.1 (page 3.2-28, under Operations) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-16

Response

Section 3.2.2.1 (page 3.2-29, under Impact AIR-6) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-17

Response

Section 3.2.2.1 (page 3.2-30, under Phase 3 MM AIR-7) has been revised to include the substance of the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.2, Air Quality and Greenhouse Gas Emissions, that have been revised.

O2-18

Response

Section 3.3.1.2 (page 3.3-4, under Literature Review) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-19

Response Table 3.3.-1 (page 3.3-13) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-20

Response Table 3.3.-1 (page 3.3-17) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-21

Response Section 3.3.1.2 (page 3.3-19) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-22

Response MM 3.4-4 (page 3.3-25) has been removed to reflect the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-23

Response MM 3.4-5 (page 3.3-25) has been removed to reflect the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-24

Response MM 3.4-8(b) (page 3.3-25) has been removed to reflect the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-25

Response A portion of the text on page 3.3-31 (under Potential Loss of Riparian Habitat on RFS Isolation Berms) has been revised to include the suggested change. According to the California Invasive Plant Council, Himalayan blackberry is an invasive species and should not be used for landscaping.

O2-26

Response Establishing buffer zones to protect wetland areas during construction areas is commonly recommended by resource protection agencies. While exact buffer widths are prescribed by these agencies on a case-by-case basis, the current proposed 100-foot buffer width is recommended here to assure the agencies that impacts to wetlands would not occur for

the reconductoring component of the Phase 3 Expansion. Phase 3 MM BIO-5 has not been revised to include the suggested change.

O2-27

Response Phase 3 MM BIO-6 (page 3.3-34) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section 3.3, Biological Resources, that have been revised.

O2-28

Response Phase 3 MM AG-1 (page A.2-13) has been revised to include the suggested change. Appendix A of this Final SEIR includes the page of Section A.2, Agriculture and Forest Resources, that has been revised.

O2-29

Response Mitigation Measure 3.8-6 (page A.6-6) has been removed to reflect the suggested change. Appendix A of this Final SEIR includes the pages of Section A.6, Hydrology, that have been revised.

O2-30

Response Section A.6.4 (page A.6-6, under Construction) has been revised to include the suggested change. Appendix A of this Final SEIR includes the pages of Section A.6, Hydrology, that have been revised.

O2-31

Response Phase 3 MM NOI-1 (page A.8-12) has been revised to include the suggested change. Appendix A of this Final SEIR includes the page of Section A.8, Noise, that has been revised.

03 Christoffer Ellis, AICP, Pacific Gas and Electric Co.

1	Wild Goose Phase 3 Expansion	Page 1 of 2
2		
3	From: Herron, Christy	
4	Sent: Friday, July 23, 2010 11:03 AM	
5	To: Herron, Christy	
6	Subject: FW: Wild Goose Phase 3 Expansion	
7		
8	<hr/>	
9	From: Maier, Lonn [mailto:LCMk@pge.com]	
10	Sent: Friday, July 23, 2010 10:12 AM	
11	To: Chiang, Eric	
12	Cc: Ellis, Christoffer	
13	Subject: Wild Goose Phase 3 Expansion	
14	CPUC	
15	Attention: Eric Chiang c/o Ecology and Environment	
16	130 Battery Street #400	
17	San Francisco, CA 94111	
18		
19	Dear Mr. Chiang:	
20		
21	Thank you for the opportunity to comment on the Draft SEIR for the Wild Goose Phase 3 Expansion.	
22	Pacific Gas and Electric Company (PG&E) is committed to our ongoing working relationship with Wild	
23	Goose to provide both gas and electric connections for this project. We will continue to work with Wild	
24	Goose to ensure accuracy in the project documentation.	
25		
26	Electric Comments	
27		
28	The construction description in 2.4.4 for both the noise and air quality impacts seems to assume that	
29	there will be one PG&E crew in the area more or less continuously during the indicated reconductor	03-1
30	period with at least one of the various equipment types present and running at all times. The typical	
31	actual construction practice would be to schedule a few one-day pulling operations within this period.	
32	One or two crews would work in the area of each pull for several days beforehand doing preparatory	
33	work such as setting new poles and replacing crossarms. PG&E would bring in several crews during the	
34	day of the pull itself, then one or two crews would do follow-up work such as removing old poles.	
35	There would be substantial periods during the scheduling window when no work was being performed	
36	and the work at any one location would generally be limited to one or two days total. Each crew will	
37	typically have only two line trucks (one with bucket lift and one with boom and auger attachment for	
38	lifting and excavation) and two light crew trucks. The special pulling and tensioning rigs and the reel	
39	trucks (if used instead of reels on trailers and pulling attachments connected to the boom trucks)	
40	would only be present on the days of the pulls and would be limited to a pulling rig at the pull end, a	
41	tensioning rig at the feed end, and a reel truck at each end. Peak noise levels will typically be limited to	
42	comparatively short periods when the line trucks are being positioned (backup warning devices	
43	operating) or when the PTO (power takeoff) device on a line truck is operating (in order to position the	
44	bucket lift or use the boom for lifting or excavation). The crew trucks will typically only run their	
45	engines while moving between work locations or transporting materials between the PG&E yard or	
46	laydown area and the work locations. The line trucks will usually shut down their engines when not	
47	needed to provide power to the PTO.	
48		
49		
50	The description for Step 2 of the reconductoring process on Page 2–30 seems to imply that a line truck	
51	will be left at each pole location to support the existing conductors from the time when the	03-2
52	preparatory work is done through the end of the pulling phase. Actually, the existing conductors will	
53		
54		
55		
1	file:///O:\CPUC\Wild Goose\1 Draft SEIR\1 Comments on Draft SEIR\1 WGS SEIR Com... 7/23/2010	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55	Wild Goose Phase 3 Expansion	Page 2 of 2
	be placed on the rollers and the line truck will only support the conductors while they are being transferred.	03-2 ctd.
	The Wooden Pole Replacement description on Page 2–31 should note that existing poles with communications facilities attached may be topped and left in place for the communications utility to transfer the lines to the new poles. Historically, the old poles may remain in place for substantial lengths of time before the communications utility completes its work.	03-3
	The Construction Staging, Schedule, and Equipment description on page 2-31 states that all staging and laydown for the PG&E reconductor work will be confined to the roadway and shoulder. Please note that PG&E may need to secure a temporary laydown area(s) in the vicinity of the work area.	03-4
	On pages 2-32 and 2-46 there are references to the CPUC's General Order 131-D and the Notice of Construction. Since the line proposed for reconductoring is a 12 kV electric distribution line and General Order 131 -D pertains to electric transmission lines 50 kV and above, no notice or authorization under 131-D will be required.	03-5
	Gas Comments	
	In sections 2.1 Introduction, Hot Tapped Pipeline Connections and 2.4.3 Hot Tapped Pipeline Connections to PG&E Line 401 the language, and in the latter case the title, states that the existing connections are with Line 400 and that the future connections will be with Line 401. While it's true that the existing connections are only with Line 400 the four future connections will be to both Line 400 and 401.	03-6
	Thanks again for the opportunity to comment. If you have any questions regarding these comments please contact me.	
	Sincerely,	
	Lonn Maier <i>for</i>	
	Chris Ellis, AICP Principal Land Planner PG&E, Land and Environmental Management 916-923-7030 (Internal 720-7030)	
	file:///O:/CPUC/Wild Goose/1 Draft SEIR/1 Comments on Draft SEIR/1 WGS SEIR Com... 7/23/2010	

O3 Christoffer Ellis, AICP, Pacific Gas and Electric Co.

O3-1

Response Section 2.4.4 (starting on page 2-26) has been revised in response to the comment to more accurately describe PG&E's reconductoring activities. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O3-2

Response Section 2.4.4 (page 2-30, under Conductor Removal and Replacement) has been revised in response to the comment, to more accurately describe PG&E's reconductoring activities. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O3-3

Response Section 2.4.4 (page 2-31, under Wooden Pole Replacement) has been revised in response to the comment, to more accurately describe PG&E's reconductoring activities. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O3-4

Response Section 2.4.4 (page 2-31, under Construction Staging, Schedule, and Equipment) has been revised to show that PG&E may use temporary laydowns in disturbed areas in the vicinity of the reconductoring work area. Such laydown areas would be considered part of the reconductoring work area, and would be subject to mitigation measures that appear later in the document that apply to protection of wetlands (Phase 3 MM BIO-5), special status species (Phase 3 MM BIO-1, Phase 3 MM BIO-2, and Phase 3 MM BIO-3), and cultural resources surveys (Phase 3 MM CULT-1 and Phase 3 MM CULT-2). Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O3-5

Response The discussions about CPUC General Order 131-D and the Notice of Construction on pages 2-32 and 2-46 have been revised in response to the comment. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

O3-6

Response Sections 2.1 (page 2-1) and 2.4.3 (page 2-24) have been revised in response to the comment. Appendix A of this Final SEIR includes the pages of Chapter 2, Description of Phase 3 Expansion, that have been revised.

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5. Revised Mitigation, Monitoring, and Reporting Program

5.1 Introduction

The purpose of this Mitigation, Monitoring, and Reporting Program (MMRP) is to summarize the mitigation, monitoring, and reporting process for the proposed Wild Goose Phase 3 Gas Storage Expansion (Phase 3 Expansion) and the role and responsibilities of the California Public Utilities Commission (CPUC) in ensuring effective implementation of mitigation for potential adverse effects and cumulatively considerable effects.

This MMRP is a draft program, and will be finalized if the CPUC approves the project. At that time, final mitigation measures will be incorporated into the program and the roles and responsibilities for their implementation will be refined.

5.2 Roles and Responsibilities

As the lead agency under the California Environmental Quality Act (CEQA), the CPUC is required to monitor the project to ensure that mitigation measures are undertaken and that they accomplish the required levels of mitigation or compensation.

Wild Goose Storage, LLC, (Wild Goose) will be responsible for initiating implementation of all mitigation measures. Oversight of implementation will be divided among a variety of agencies, including:

- CPUC
- Butte County Agricultural Commissioner
- California Department of Fish and Game (CDFG)
- U.S. Army Corps of Engineers (USACE)
- Central Valley Regional Water Quality Control Board (CVRWQCB)
- U.S. Fish and Wildlife Service (USFWS)
- California Division of Oil, Gas, and Geothermal Resources (DOGGR)
- Butte County Planning and Building Departments
- Colusa County Planning and Building Departments
- City of Gridley Planning and Building Departments
- Butte County Public Works Department
- Colusa County Public Works Department
- Butte County Air Quality Management District (BCAQMD)
- Colusa County Air Pollution Control District (CCAPCD)
- Local fire departments
- Local sheriff's departments

For overall coordination and responsibility, the CPUC and its representatives would coordinate with Wild Goose to ensure implementation and adequate monitoring of all mitigation measures through construction and operation.

5.3 Environmental Sectors and Mitigation

Construction, operation, and maintenance of the proposed Phase 3 Expansion could result in potentially significant environmental impacts. Mitigation measures identified in this SEIR have been developed to reduce those potential impacts to a less than significant level. Mitigation measures addressing the Phase 2 Expansion have been amended and supplemented as necessary to address potential impacts from the Phase 3 Expansion.

The numbers of the mitigation measures summarized in Table 5-1 correspond with the numbers outlined in Chapter 3 of the Draft SEIR. Mitigation measures for resource areas discussed in Appendix A, Focusing Initial Study, of the Draft SEIR have been included in the table; discussion of impacts associated with these resource areas is included in Appendix A of the Draft SEIR.

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
<i>Aesthetics</i> <i>No new impacts or mitigation measures</i>				
Agriculture and Forest Resources	Potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and monitoring Program of the California Resources Agency, to non-agricultural use.	<p><u>PHASE 3 MM AG-1.</u> The applicant will purchase or obtain compensatory mitigation for the conversion of Prime Farmland and Farmland of Statewide Importance at a ratio of one unit of mitigation to one unit of agricultural land converted. Compensatory mitigation options for the conversion of FMMP designated farmland include one or more of the following:</p> <ol style="list-style-type: none"> 1. <u>Purchase of mitigation credits from an agricultural mitigation bank located within Butte County;</u> 2. <u>Placement of an easement or other restrictions to non-agricultural uses on existing agricultural land in Butte County; and/or</u> 3. <u>Purchase of wetlands and/or endangered species habitat mitigation credits from an appropriate wetlands mitigation bank at a ratio of two units of mitigation to one unit of agricultural land converted.</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, Butte County Planning Division, Butte County Agricultural Commissioner
Air Quality and Greenhouse Gases	Potential to conflict with or obstruct implementation of the applicable air quality plan.	<p><u>PHASE 3 MM AIR-1:</u> The applicant will implement the following measures for Phase 3 Expansion construction equipment:</p> <ul style="list-style-type: none"> • <u>Maintain all construction equipment in proper tune according to manufacturer's specifications.</u> • <u>Maximize the use of diesel construction equipment meeting the CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, BCAQMD

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
		<p><u>PHASE 3 MM AIR-2: The applicant will implement the following measures to prevent and control dust emissions:</u></p> <p><u>Land Clearing/Earth Moving</u></p> <ul style="list-style-type: none"> • <u>Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission.</u> • <u>Haul vehicles transporting soil into or out of the property shall be covered.</u> • <u>A water truck shall be on site at all times. Water shall be applied to disturbed areas a minimum of two times per day or more as necessary.</u> • <u>On-site vehicles will be limited to a speed which minimizes dust emissions on unpaved roads.</u> • <u>The applicant will post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the BCAQMD shall also be visible to ensure compliance with District Rule 200 & 205 (Nuisance and Fugitive Dust Emissions).</u> <p><u>Visibly Dry Disturbed Soil Surface Areas</u></p> <ul style="list-style-type: none"> • <u>All visibly dry disturbed soil surface areas of operation shall be watered to minimize dust emission.</u> <p><u>Paved Road Track-Out</u></p> <ul style="list-style-type: none"> • <u>Existing roads and streets adjacent to the Phase 3 Expansion area will be cleaned at least once per day unless conditions warrant a greater frequency.</u> <p><u>Visibly Dry Disturbed Unpaved Roads</u></p> <ul style="list-style-type: none"> • <u>All visibly dry disturbed unpaved road surface areas shall be watered to minimize dust emission.</u> • <u>A water truck shall be on site at all times. Water shall be applied</u> 	<p><u>Less Than Significant</u></p>	<p>CPUC, Wild Goose, BCAQMD</p>

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
		<p><u>to disturbed areas a minimum of two times per day or more as necessary.</u></p> <ul style="list-style-type: none"> • <u>On-site vehicles will be limited to a speed which minimizes dust emissions on unpaved roads.</u> • <u>Haul roads will be sprayed down at the end of the work shift to form a thin crust. This application of water shall be in addition to the minimum rate of application.</u> <p><u>Vehicles Entering/Exiting Construction Area</u></p> <ul style="list-style-type: none"> • <u>Vehicles entering or exiting the Phase 3 Expansion construction area shall travel at a speed which minimizes dust emissions.</u> <p><u>Employee Vehicles</u></p> <ul style="list-style-type: none"> • <u>Construction workers shall park in designated parking areas(s) to help reduce dust emissions.</u> <p><u>Soil Piles</u></p> <ul style="list-style-type: none"> • <u>Soil pile surfaces shall be moistened if dust is being emitted from the pile(s). Adequately secured tarps, plastic or other material will be used to further reduce dust emissions.</u> 		
		<p><u>PHASE 3 MM AIR-34: To address potentially significant construction emissions at the RFS and the PG&E reconductoring component area, the applicant and PG&E will apply appropriate BCAQMD Best Available Mitigation Measures (BAMMs) and/or offsite measures such as purchase of offsets for NO_x and PM₁₀ emissions, as presented in the BCAQMD CEQA Air Quality Handbook (2008), in order to reduce construction emissions to a less than significant level. This measure will apply to emissions of NO_x and PM₁₀ in the years 2011 and 2012. The BCAQMD will include appropriate permit conditions on the Phase 3 Expansion ATC for the RFS to ensure that <u>identify the BAMMs and/or offsite measures such as purchase of offsets for NO_x and PM₁₀ emissions, that will be implemented, and include them in a construction emissions reduction plan. The applicant will submit the construction emissions reduction plan to the CPUC and BCAQMD prior to the start of Phase 3 Expansion</u></u></p>	<p><u>Less Than Significant</u></p>	<p>CPUC, Wild Goose, BCAQMD</p>

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
		<u>construction activities chosen are adequate and applied.</u>		
		<u>PHASE 3 MM AIR-42:</u> To address potentially significant construction emissions at the Delevan Site, and in coordination with the Colusa County Air Pollution Control District (CCAPCD), the applicant will purchase NO _x offsets for exceedances over the CCAPCD threshold limit during the construction period. Based on calculations of NO _x pounds per day emissions for the construction phase, total NO _x emissions are anticipated to exceed the CCAPCD limit of 25 pounds per day by a total of approximately 925 pounds over the construction period. The applicant will be required to purchase NO _x offset credits for daily NO _x emissions in excess of 25 pounds for this amount as part of Authority to Construct permit conditions, and to provide documentation of the offsets purchase to the CPUC and the CCAPCD prior to the start of Phase 3 Expansion construction activities. <u>If required by the CCAPCD, these offset credits will also be incorporated into the Authority to Construct permit conditions.</u>	Less Than Significant	CPUC, Wild Goose, CCAPCD
		<u>PHASE 3 MM AIR-53:</u> To address potentially significant operations emissions at the RFS, the applicant will purchase offsets for NO _x and ROG emissions, either from existing market-based offsets within Butte County, or from the BCAQMD community offset bank, as available. Based on the calculations of NO _x and ROG pounds per day emissions for the construction operations phase, these emissions are anticipated to exceed the Level B BCAQMD 25 pounds per day limit by a total of approximately 23 tons of NO _x and 15 pounds of ROG over the entire construction period. <u>It is anticipated that the BCAQMD will include appropriate permit conditions in the Phase 3 Expansion Permit to Operate to ensure that offsets for NO_x and ROG-PM₁₀ emissions are adequate and applied. If the applicant identifies contemporaneous emission reductions to existing equipment that would result in no net emission increase of NO_x and ROG, the requirement for emission offsets may be removed as long as these emission reductions are verified and approved by the BCAQMD and appropriate documentation is provided to the CPUC prior to the start of Phase 3 Expansion construction.</u>	Less Than Significant	CPUC, Wild Goose, BCAQMD

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
	Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	<u>PHASE 3 MM AIR-64</u> : Prior to construction of the Phase 3 Expansion, the applicant will enter into an agreement with PG&E to participate in PG&E's Climate Smart™ Program, to provide 50 percent of the electricity used at the RFS annually (approximately 1,000 900 metric tons CO ₂ e) from renewable energy sources. A copy of the agreement between the applicant and PG&E will be provided to CPUC prior to the start of operation of the expanded RFS. Annual reports on the applicant's participation in the program will also be submitted by the applicant to CPUC.	<u>Less Than Significant</u>	CPUC, Wild Goose, PG&E
		<u>PHASE 3 MM AIR-75</u> : Until the applicant can participate in an appropriate, <u>is required to comply with an adopted</u> , verifiable state-wide cap and trade program, the applicant will obtain and retire, by the end of each year of Phase 3 Expansion construction and operation, sufficient carbon credits to fully offset GHG emissions ("carbon offsets") below the in excess of 10,000 metric tons of CO₂e level. <u>After that time, the applicant will comply with the requirements of the adopted state-wide cap and trade program. The total amount of offsets purchased will be based on actual GHG emissions, which may be lower than the worst-case GHG emissions estimated for each year of construction and operation.</u> Renewable Energy Certificates (RECs) and TRECS (Tradable RECs) do not qualify as GHG offsets. Carbon offsets will apply to Phase 3 Expansion construction GHG emissions (amortized over 30 years) as well as direct operational GHG emissions. Prior to completion of project construction, the applicant will prepare a detailed written summary of the carbon offsets, including offset type, location, calculation methodology protocol employed, and registration status. In addition, prior to completion of project construction, the applicant will provide to CPUC an independent verification opinion statement(s) for the carbon offsets, from a verification body registered with the California Climate Action Registry, ANSI, or the CARB.	<u>Less Than Significant</u>	CPUC, Wild Goose, Independent GHG Verification Body

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
		<p><u>Offsets purchased from a third party or developed by the applicant must meet at least one of the following requirements:</u></p> <ol style="list-style-type: none"> 1. <u>Offset project is located within California;</u> 2. <u>Offset project is located in jurisdictions that hold current, specific agreements with California (such as the Climate Action Reserve), or exist in the context of an ISO-compliant regional trading system like that being developed in the Western Climate Initiative or other regional program; and/or</u> 3. <u>Offset project is an internally developed reduction measure following a recognized protocol (such as the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange).</u> <u>Some potential offset projects of this type include:</u> <ul style="list-style-type: none"> • <u>Fuel switching in applicant-owned equipment;</u> • <u>Energy efficiency upgrades beyond business as usual;</u> • <u>Implementation of a quantifiable carpooling program above and beyond what is currently in place; and</u> • <u>Sequestration and/or destruction of GHG conducted in accordance with any protocol available at the time of construction from the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange.</u> <p><u>Any carbon offset either purchased or developed by the applicant through another entity will either be registered in, or developed in accordance with a protocol for, an established Carbon Reduction/Sequestration Project. Established projects and protocols include those provided by recognized organizations, such as the Climate Action Reserve, the Voluntary Carbon Standard, or the Chicago Climate Exchange, that can provide a reasonable level of assurance that GHG reductions are real, additional, permanent, and verifiable. If the applicant were to develop a carbon offset project without registering it with one of the above-referenced registration bodies, the applicant will demonstrate to CPUC that the offset satisfies the four additionality tests as outlined in the UNFCCC Additionality Tool, and will obtain an independent evaluation by a qualified third party confirming</u></p>		

Table 5-1 Draft Mitigation, Monitoring, and Reporting Program

Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
		<p><u>that the offset meets additionality testing requirements.</u></p> <p><u>Prior to the start of project operation, the applicant will submit a project design document describing baseline procedures and emissions levels as well as projected levels of emissions reductions/offsets to CPUC. The design document will include the requirement that the applicant submit a report annually to CPUC documenting the previous year's offset activities and purchases. The annual report will be independently verified by an ANSI-accredited GHG emissions reduction verification body.</u></p>		
Biological Resources	<p>Potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.</p>	<p>PHASE 3 MM BIO-1: <u>The following general measures will reduce impacts to all sensitive wildlife species during Phase 3 Expansion construction activities:</u></p> <ol style="list-style-type: none"> 1. <u>Preconstruction surveys will be conducted in suitable habitat in and adjacent to the Phase 3 Expansion areas at the RFS and the Delevan Site during the appropriate survey windows. Preconstruction surveys will be conducted in suitable habitat no more than 30 days in advance of construction. These surveys shall be conducted using standard approved methods, including the California Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines (1993), the Swainson's Hawk Technical Advisory Committee Methodology for Nesting Surveys in California's Central Valley (TAC 2000), and the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species (1996).</u> 2. <u>Construction employees shall strictly limit activities, including movement of vehicles, equipment, and construction materials, to the Phase 3 Expansion footprint and designated staging areas and routes of travel within the Phase 3 Expansion footprint.</u> 3. <u>The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.</u> 4. <u>Sensitive plant surveys will be conducted prior to construction within suitable habitat in and adjacent to Phase 3 Expansion work areas and during the appropriate survey window.</u> 5. <u>Where sensitive plants occur within the construction area, the work</u> 	Less Than Significant	CPUC, Wild Goose, USFWS, CDFG

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		<p><u>area will be adjusted in order to minimize impacts.</u></p> <p>6. <u>Exclusion fencing will be provided to protect sensitive plants that occur within 50 feet of construction work areas.</u></p> <p>7. <u>A qualified biologist will monitor construction to ensure that no sensitive wildlife species inadvertently enter the work area. Should a sensitive species be found, the appropriate resource agencies will be notified within 24 hours (USFWS and CDFG). Animals will be allowed to passively exit the work areas, and construction will be halted as needed to accomplish this.</u></p>		
		<p>PHASE 3 MM BIO-2: <u>The following specific measures will reduce impacts to the wildlife species described below during Phase 3 Expansion construction activities:</u></p> <p>1. <u>Reptiles and Amphibians.</u> <u>The following measures will be supplemented with measures prescribed in the Phase 2 Expansion USFWS Biological Opinion and CDFG Take Permit for the giant garter snake:</u></p> <ul style="list-style-type: none"> • <u>Preconstruction surveys for giant garter snake (RFS, reconductoring area, and Delevan Site), northwestern pond turtle (RFS and Delevan Site), and western spadefoot toad (RFS and Delevan Site) will be performed within 24 hours prior to construction. If a giant garter snake or any other sensitive species is found, it will be allowed to escape on its own, or will be removed by an authorized biologist and relocated to suitable habitat. USFWS and CDFG will be notified whenever a sensitive reptile or amphibian is handled by an authorized biologist.</u> • <u>Onsite monitoring biologists will obtain authorization from the USFWS and CDFG to handle the giant garter snake for the purposes of removing individuals during construction and operation of the Phase 3 Expansion components.</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, USFWS, CDFG

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		<ul style="list-style-type: none"> • <u>A qualified biologist will monitor construction to ensure that no sensitive reptile or amphibian species inadvertently enter the work area.</u> • <u>Other than isolation dike construction and irrigation flow culvert installation, earthwork adjacent to flooded rice fields and other potential habitat will be confined to May through September unless otherwise authorized by the USFWS and CDFG.</u> <p>2. <u>Raptors and Other Sensitive Nesting Species.</u> Preconstruction surveys will be conducted in suitable habitat at the RFS and Delevan Site to determine whether raptors or other sensitive bird species are nesting within or near the Phase 3 Expansion construction areas. The construction schedule or activities will be modified during nesting periods to preclude impacts. The general bird breeding season for this area is late February to early July. If it is not possible to adjust the schedule or construction activity, the following measures will be implemented:</p> <ul style="list-style-type: none"> • <u>Construction within 0.5 miles of active Swainson's hawk nests will be avoided between April 15 and August 1, if feasible. If not feasible, nesting hawks within 0.5 miles will be monitored, construction activities will be halted if signs of disturbance (i.e., birds show signs of upset, repeatedly leaving the nest as a result of construction) are noted as determined by a qualified biologist, and CDFG will be consulted to determine possible options.</u> • <u>A minimum 500-foot buffer will be maintained for other tree-nesting species such as white-tailed kites and the loggerhead shrike until after the young have fledged.</u> • <u>A minimum 250-foot buffer will be maintained for ground-nesting or shrub-nesting species (northern harriers, tricolored blackbird, black tern, white-faced ibis, burrowing owl, and loggerhead shrikes) until after nesting is complete.</u> 		

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		<ul style="list-style-type: none"> • <u>Operations blowdowns and emergency shutdown valve blowdowns shall be routed into silencers.</u> • <u>The applicant will reduce the gas/volume in the pipeline to a minimum prior to a planned maintenance blowdown.</u> <p>3. <u>Burrowing Owls.</u> Detailed preconstruction surveys will be conducted at the RFS and Delevan Site within 30 days prior to construction by a qualified biologist for burrowing owl within suitable habitat prior to the breeding season (February 1 through August 31). All areas within 250 feet of the Phase 3 Expansion areas at the RFS and Delevan Site, including road shoulders, will be surveyed. Where Phase 3 Expansion ground-disturbing activities will occur prior to the burrowing owl breeding season, all burrows, holes, crevices, or other cavities in suitable habitat in the Phase 3 Expansion areas at the RFS and Delevan Site, within the limits of proposed ground disturbance, will be thoroughly inspected by a qualified biologist before being collapsed. This will discourage owls from breeding on the construction site. Other species using burrows will be relocated prior to collapsing burrows.</p> <p><u>To the extent feasible, Phase 3 Expansion construction at the RFS and Delevan Site will avoid active burrows. If it is not possible to avoid burrowing owls, the following measures will be implemented:</u></p> <ul style="list-style-type: none"> • <u>If burrowing owls occur within the proposed construction area, a 250-foot exclusion zone will be maintained around the burrows until relocation is complete or until chicks have fledged. Passive relocation will be used during the non-breeding season (September 1 through January 31) if it is determined that construction activities would disturb owls. Passive relocation will include installing one-way doors on the entrances of burrows located within the Phase 3 Expansion area.</u> • <u>The occurrence and location of any burrowing owl will be documented by the authorized biologist, who will report all incidents of disturbance or harm to burrowing owls within 24 hours to the appropriate resource agencies (USFWS and</u> 		

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		<p><u>CDFG).</u></p> <ul style="list-style-type: none"> • <u>Under the supervision of a qualified biologist, burrows within the proposed construction area will be excavated using hand tools and then refilled to prevent reoccupation. If any owls are found during the excavation, the excavation will cease and the owls will be allowed to escape.</u> • <u>For each burrow excavated, one natural or artificial burrow will be provided in the adjacent habitat outside the 250-foot buffer zone.</u> 		
		<p>PHASE 3 MM BIO-3: <u>For the reconductoring component area, if any vegetation removal occurs during the typical avian nesting season (February 1 – August 31), a pre-disturbance survey for common and special-status bird species protected under the MBTA and California Fish and Game Codes will be conducted, using standard approved methods, including the California Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines (1993) and the Swainson’s Hawk Technical Advisory Committee Methodology for Nesting Surveys in California’s Central Valley (TAC 2000). The survey will be conducted by a qualified biologist no more than two weeks prior to the onset of vegetation removal. If active nests are found within or adjacent to proposed work areas during the avian nesting season, disturbance or removal of the nest will be avoided until the young have fledged and the nest is no longer active. The project biologist will determine the appropriate buffer distance between work areas and active nests in coordination with the CDFG and depending on the species, site conditions, and proposed work activities near the active nest.</u></p>	<u>Less Than Significant</u>	CPUC, Wild Goose, USFWS, CDFG
	Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or	<p>PHASE 3 MM BIO-4: <u>The following measures will reduce impacts related to wetland fill during Phase 3 Expansion construction activities:</u></p> <ol style="list-style-type: none"> 1. <u>Erosion and sediment control measures (e.g., silt fencing, erosion control fabric or other measures) will be implemented at all locations where construction occurs within or directly adjacent to aquatic features.</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, USACE, USFWS, CVRWQCB

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Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
	other means.	<ol style="list-style-type: none"> 2. <u>Sediment stockpiling will be a minimum of 50 feet from wetland/drainage systems.</u> 3. <u>Loss of wetland habitat will be compensated at an appropriate ratio. This ratio will likely be 2:1, but will be determined by resource and permitting agencies (USACE, USFWS, and CDFG) during consultation.</u> 		
		<p>PHASE 3 MM BIO-5: For the reconductoring component area, work will take place from existing paved surfaces or other maintained areas that lack wetland habitats. For the wetland areas that have been identified in the reconductoring Biological Assessment (TRC 2010) along West Evans Reimer Road and Pennington Road, the following measures will be taken:</p> <ol style="list-style-type: none"> 1. <u>A wetlands biologist will delineate the edges of each wetland area using USACE delineation methodology (USACE, 1987). Once wetland boundaries have been accurately identified, a 100-foot buffer area will be established around each wetland area. Buffer areas will be demarcated with lath and flagging, and no construction materials, equipment or vehicles will be permitted in this area.</u> 2. <u>Erosion and sediment control measures described under MM BIO-4 will be implemented to protect wetland habitats.</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, USACE, USFWS, CVRWQCB
	Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	<p>PHASE 3 MM BIO-6: The following measures will reduce impacts to downstream fisheries and aquatic habitat at the RFS during Phase 3 Expansion construction activities:</p> <ol style="list-style-type: none"> 1. <u>The applicant will participate in ongoing consultations with CDFG (under Fish and Game Code 2081 and 1602) and USFWS (Section 7 consultation) to establish a rate of withdrawal such that to ensure water withdrawals and other activities at the RFS do not result in unacceptable impacts to downstream fisheries do not occur. To this end, the applicant will adhere to any stipulations required by CDFG and USFWS regarding the water withdrawal rate, volume, and timing established through the agency consultation process. The applicant will also submit any required documented evidence that the stipulated conditions of water withdrawal have been met to both</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, USACE, USFWS, CVRWQCB

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Topic Area	Impact	Mitigation Measure	Level of Significance w/Mitigation	Responsible Party
		<p><u>CDFG and USFWS.</u></p> <p>2. <u>In coordination with CDFG and USFWS, the applicant shall conduct downstream monitoring required by CDFG and/or USFWS to verify that withdrawal volume does not adversely impact fisheries or the aquatic life components that support special status aquatic species.</u></p>		
Cultural Resources	Potential to cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	<p>PHASE 3 MM CULT-1: <u>To avoid impacts to unknown historical resources in the area of the reconductoring component, PG&E or its contractor will, prior to and during reconductoring activities:</u></p> <p>1. <u>Retain a qualified archeologist to conduct a cultural resources survey to identify all potentially eligible historic resources present on the surface of the reconductoring site. The survey will be conducted at 10 meter intervals and any cultural resources that are identified will be subsequently avoided during construction. All cultural resources identified will be recorded on Department of Parks and Recreation (DPR) 523 series forms and evaluated for their eligibility for inclusion in the NRHP and CRHR. The archaeologist will clearly mark the boundaries of any identified resources, including an additional 50-foot buffer area, around all identified sites, both on the ground and on construction maps. These boundaries will serve as construction exclusion zones where no reconductoring activities will be undertaken.</u></p> <p>2. <u>Retain an independent qualified archeologist for the duration of the reconductoring, to serve as a periodic site monitor during ground-disturbing and other activities that may affect historic resources at the site. The timing and frequency of monitoring will be at the discretion of the archeologist.</u></p> <p>3. <u>Notify construction supervisory personnel of the existence of all marked historical resources sites, and instruct supervisory personnel to keep personnel and equipment away from these areas.</u></p>	Less Than Significant	CPUC, Wild Goose, USACE
	Potential to cause a substantial adverse change in the significance of an archaeological resource pursuant	<p>PHASE 3 MM CULT-2: <u>To avoid impacts to known and unknown archeological resources in the area of the reconductoring component, PG&E or its contractor will, prior to and during reconductoring activities:</u></p>	Less Than Significant	CPUC, Wild Goose, USACE

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	to Section 15064.5.	<ol style="list-style-type: none"> 1. <u>Retain a qualified archeologist to conduct an archaeological resources survey to identify all potentially eligible archaeological resources present on the surface of the reconductoring site. The survey will be conducted at 10 meter intervals and any archaeological resources that are identified will be subsequently avoided during construction. All archaeological resources identified will be recorded on DPR 523 series forms and evaluated for their eligibility for inclusion in the NRHP and CRHR. The archeologist will clearly mark the boundaries of any identified resources, including an additional 50-foot buffer area, around all identified sites, both on the ground and on construction maps. These boundaries will serve as construction exclusion zones where no reconductoring activities will be undertaken.</u> 2. <u>Retain an independent, qualified archeologist for the duration of the reconductoring, to serve as a periodic site monitor during ground-disturbing and other activities that may affect archaeological resources at the site. The timing and frequency of monitoring will be at the discretion of the archeologist.</u> 3. <u>Notify construction supervisory personnel of the existence of all the identified and marked prehistoric site, as well as other marked archaeological sites, and instruct supervisory personnel to keep personnel and equipment away from these areas.</u> 		
Geology, Soils, and Mineral Resources		<i>No new impacts or mitigation measures</i>		
Hazards and Hazardous Materials	Potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Mitigation Measure 3.7-3. <u>At the end of each injection cycle in the fall of each year, WGSJ shall conduct surface gas monitoring and vegetation inspections at each abandoned well within the original productive area. If gas is detected, samples will be collected, if possible, and analyzed to determine its source or origin. If a leak is indicated by the data, the necessary remedial actions will be implemented consistent with DOGGR procedures outlined in California Code of Regulations § 1723 et. seq. All monitoring and sampling results will be submitted to the DOGGR. Any surface disturbance associated with implementing remedial actions shall be conducted consistent with the wetland impact minimization and</u>	Less Than Significant	CPUC, Wild Goose, DOGGR

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		mitigation measures specified under Impact 3.4- 4 on page 3.4-27.		
		<u>PHASE 3 MM HAZ-1: Prior to Phase 3 Expansion construction activities, the applicant will ensure the Wild Goose Purging of Natural Gas Pipeline Systems Practice incorporates and includes measures for implementing all recommendations addressing pipeline purging procedures issued by the U.S. Chemical Safety and Hazard Investigation Board and adopted into the National Fuel Gas Code, and submit the revised practice to CPUC for review and confirmation.</u>	<u>Less Than Significant</u>	CPUC, Wild Goose
		<p><u>PHASE 3 MM HAZ-2: PG&E shall follow all applicable local, state, federal, and industry-specific regulations and procedures during hot tapped pipeline connection installation, and shall ensure that the following measures are taken:</u></p> <ol style="list-style-type: none"> 1. <u>Ensure that all appropriate local (Colusa County) permits and approvals have been obtained for welding and hot tapping;</u> 2. <u>Ensure that construction personnel working on the hot tapped pipeline connection installation are competent and have been properly trained and qualified in the use of the hot tap equipment;</u> 3. <u>Ensure that construction personnel working on the hot tapped pipeline connection installation review detailed, written, job-specific hot tapping procedures prior to starting construction activities;</u> 4. <u>Communicate safety procedures clearly to all construction personnel prior to hot tap activities, including fire protection, emergency response, and other appropriate procedures and instructions;</u> 5. <u>Ensure that at least one worker has been designated as a dedicated fire watch, trained for fire detection and prevention, equipped with a suitable fire extinguisher, and equipped with appropriate equipment to communicate with personnel working in the area;</u> 6. <u>Ensure equipment is in good working condition;</u> 7. <u>Install appropriate barricades and warning signs prior to hot tapping activities;</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, Colusa County Planning Department

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		<ul style="list-style-type: none"> 8. <u>Establish procedures for isolation of the work area in the event of an emergency;</u> 9. <u>Ensure provisions are made for an easily accessible means of egress from the work area;</u> 10. <u>Inspect the hot tapping location prior to hot tapping activities and confirm pipeline diameter, wall thickness, evidence of corrosion, and general soundness;</u> 11. <u>Use combustible gas and oxygen detectors during hot tapping procedures as necessary to ensure that hot tapping activities do not take place if vapor/air or vapor/oxygen mixtures in piping or equipment are near or within the flammable explosive range;</u> 12. <u>Follow manufacturer's instructions and directions for operating the hot tapping equipment; and</u> 13. <u>Ensure provisions are made to assure that adequate containment is available to control liquids and vapors trapped within the hot tapping equipment which could be released upon removal of the machine after work is completed.</u> 		
Hydrology and Water Quality	Potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<u>PHASE 3 MM HYDRO-1: Phase 3 Expansion components at the RFS, reconductoring component area, and Delevan Site would be engineered to withstand stresses associated with their proximity to waterways, and would be designed to withstand flooding associated with high ground water, agricultural activities, or overflow of canals during heavy rainstorms. Structures shall be constructed in compliance with the 2007 Uniform Building Code any other federal, state and local construction regulations.</u>	<u>Less Than Significant</u>	CPUC, Wild Goose, Butte County Planning and Building Departments, Colusa County Planning and Building Departments

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<i>No new impacts or mitigation measures</i>				
Noise	Potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<p><u>PHASE 3 MM NOI-1: The applicant PG&E will employ the following noise reduction and control practices during construction reconditioning activities that could produce noise levels above 80 dBA L_{max} near sensitive receptors (within 100 feet):</u></p> <ul style="list-style-type: none"> • <u>Unnecessary engine idling from construction equipment will be limited during construction hours.</u> • <u>Construction equipment specifically designed for low noise emissions (i.e., equipment that is powered by electric or natural gas engines as opposed to those powered by diesel or gasoline reciprocating engines) will be used as much as feasible.</u> • <u>Temporary enclosures or noise barriers (i.e. noise blankets) will be used around loudest pieces of equipment, as feasible.</u> • <u>Construction traffic will be routed away from residences and other sensitive receptors, as feasible.</u> • <u>Noise from back-up alarms (alarms that signal vehicle travel in reverse) in construction vehicles and equipment will be reduced by providing a layout of construction sites that minimizes the need for back-up alarms and using flagmen to minimize time needed to back up vehicles. As feasible, and in compliance with the applicant's safety practices and public and worker safety provisions required in the Occupational Safety and Health Standards for the Construction Industry (29 CFR Part 1926), the applicant may also use self-adjusting, manually adjustable, or broadband back-up alarms to reduce construction noise.</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose, Butte County Planning and Building Departments, Colusa County Planning and Building Departments, City of Gridley Planning and Building Departments
		<p><u>PHASE 3 MM NOI-2: After full buildout of the Phase 3 Expansion, the applicant will employ the following noise reduction and control practices during operations at the WPS that could produce noise levels above 55 dBA L_{max} at a location 100 yards from the WPS berm:</u></p> <ul style="list-style-type: none"> • <u>During periods when fewer than 20 wells are in operation at the WPS, the applicant will record sound pressure levels (SPLs, dBA,</u> 	<u>Less Than Significant</u>	CPUC, Wild Goose

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		<p>Leq) on a once-a-week basis at a location 100 yards from the WPS berm.</p> <ul style="list-style-type: none"> • If noise levels exceed 55 dBA at a location 100 yards from the WPS berm, the applicant shall implement measures at the WPS to reduce noise levels to 55 dBA at this distance. Measures could include: <ol style="list-style-type: none"> 1. Increasing the WPS berm in height by 2 feet (estimated total minimum noise reduction: 5 dBA); 2. Increasing the WPS berm in height by 4 feet (estimated total minimum noise reduction: 10 dBA); 3. Application of sound insulating lagging to well lines and valves (estimated total noise reduction: 12 to 24 dBA); or 4. Installation of a cinder block (or other noise-absorbing material) enclosure or wall around the WPS equipment array (estimated total minimum noise reduction: 25 dBA). 		
Population and Housing		<i>No new impacts or mitigation measures</i>		
Public Services		<i>No new impacts or mitigation measures</i>		
Recreation		<i>No new impacts or mitigation measures</i>		
Transportation and Traffic		<i>No new impacts or mitigation measures</i>		
Utilities and Services Systems		<i>No new impacts or mitigation measures</i>		