



1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108
Phone: (619) 294-9400
Fax: (619) 293-7920

LETTER OF TRANSMITTAL

TO:
California Energy Commission
Docket No. 06-AFC-10
1516 Ninth Street
Sacramento, CA 95814

DOCKET 06-AFC-10	
DATE	AUG 09 2007
RECD.	AUG 10 2007

DATE: August 9, 2007

SUBJECT: Starwood-Power Midway, LLC Peaking Project (06-AFC-10)

Enclosed/Attached please find the following:

- Applicant's Comments on CEC Staff Preliminary Staff Analysis
-

For: Review and Approval As Requested
 Signature and Return For Your Information
 Appropriate Action

Remarks:

Provided is the Applicant's Comments on CEC Staff Preliminary Staff Analysis. If you have any questions or need any further information, please feel free to call. Thank you!!

Kindly,

Amy Gramlich
Visual Resource Specialist

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE
STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION
FOR THE **STARWOOD POWER
PLANT**

Docket No. 06-AFC-10
PROOF OF SERVICE
(Revised 3/16/07)

INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 06-AFC-10
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

APPLICANT

Ron Watkins
Calpeak Power
7365 Mission Gorge Road, Suite C
San Diego, CA 92120

Rich Weiss
2737 Arbuckle St.
Houston, TX 77005 USA

APPLICANT'S CONSULTANTS

Angela Leiba, URS
1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108

COUNSEL FOR APPLICANT

Allan Thompson
21 "C" Orinda Way, No. 314
Orinda, CA 94563
allanori@comcast.net

INTERESTED AGENCIES

Larry Tobias
Ca. Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
LTobias@caiso.com

Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
esaltmarsh@eob.ca.gov

INTERVENORS

ENERGY COMMISSION

JOHN L. GEESMAN
Associate Member
jgeesman@energy.state.ca.us

JEFFREY D. BYRON
Presiding Member
jbyron@energy.state.ca.us

Garret Shean
Hearing Officer
gshean@energy.state.ca.us

Che McFarlin
Project Manager
cmcfarli@energy.state.ca.us

Dick Ratliff
Staff Counsel
dratliff@energy.state.ca.us

Public Adviser
pao@energy.state.ca.us

DECLARATION OF SERVICE

I, Amy Gramlich, declare that on August 9, 2007, I deposited copies of the attached Starwood-Power Midway, LLC Peaking Project (06-AFC-10) Applicant's Comments on CEC Staff Preliminary Staff Analysis, to Fedex in San Diego, California fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.



[signature]

**STARWOOD-POWER MIDWAY, LLC
PEAKING PROJECT (06-AFC-10)**

Applicant's Comments on CEC Staff Preliminary Staff Analysis

AQ Page 4.1-6

"The project site is in Fresno County, about 40 miles (64 kilometers [km]) west of the City of Fresno, 2.5 miles (4.0 km) east northeast of Interstate 5 (I-5) and approximately 2.5 miles (4.0 km) west southwest of the California Aqueduct."

Comment

In the Air Quality intro (page 4.1-6) it says Fresno is 40 miles distant - other places it is 50:

"The project site is in Fresno County, about ~~40~~50 miles (64 kilometers [km]) west of the City of Fresno, 2.5 miles (4.0 km) east northeast of Interstate 5 (I-5) and approximately 2.5 miles (4.0 km) west southwest of the California Aqueduct."

AQ Page 4.1-60

"AQ-SC6 The project owner shall ensure that the multi-unit apartment property located on property adjacent and north of the project site is vacated prior to the initiation of major construction activities.

Verification: The project owner shall provide a written declaration to the CPM signed by the owner/residents of the multi-unit apartment property that the property has been vacated at least 15 days prior to the initiation of on-site construction activities."

Comment

Change "owner/residents" to "owner or residents" to make it clear that either the owner or the existing resident can make this written declaration. This is desirable as the owner lives out of state and the resident may not be available.

Additionally, Starwood's agreement with the owner of these apartments is that this event would occur prior to first turbine roll/fire. The text of this PSA section justifies this condition as necessary because of the current non-attainment status of the project area with respect to the PM₁₀ and PM_{2.5} ambient standards. However, review of the dispersion modeling results of the construction phase shows that maximum incremental PM₁₀ and PM_{2.5} concentrations, due to the various phases of construction, occur primarily at or near the southeast or western boundaries of the property, not to the north where the multi-unit apartment property (5-plex) is located. In fact, the peak 24-hour PM_{2.5} levels are only 1.9 µg/m³ and 4.2 µg/m³ during the Building and Excavation and Grading phases, respectively. Starwood does not believe these predicted impacts justify a requirement to relocate the residents prior to initiation of major construction activities. Recommended that this condition be revised to state the following:

"AQ-SC6 The project owner shall ensure that the multi-unit apartment property located on property adjacent and north of the project site is vacated prior to first turbine roll/fire. the initiation of major construction activities.

Verification: The project owner shall provide a written declaration to the CPM signed by the owner or residentsowner/residents of the multi-unit apartment property that the property has been vacated at least 15 days prior to first turbine roll/fire. initiation of on-site construction activities."

AQ Page 4.1-64

"AQ-8 Emission rates from each CTG, during the commissioning period, shall not exceed any of the following limits: NO_x (as NO₂) – 41.65 lb/hr; CO – 19.9 lb/hr; VOC (as methane) – 0.80 lb/hr; PM₁₀ – 1.85 lb/hr; or SO_x (as SO₂) – 0.89 lb/hr.

Verification: The project owner shall provide emissions data to demonstrate compliance with this condition, and that data shall be submitted to the CEC CPM as part of the monthly commissioning status report noted in the verification of Condition AQ-7."

Comment

The Verification part of this condition requires submittal of data showing compliance with commissioning emission limits for all pollutants. CEMs are required for NO_x and CO, but there is no practical way to record emissions of VOC, PM₁₀ and SO₂. The verification requirements should acknowledge that only data on NO_x and CO emissions will be available until source testing is conducted for the other pollutants:

"AQ-8 Emission rates from each CTG, during the commissioning period, shall not exceed any of the following limits: NO_x (as NO₂) – 41.65 lb/hr; CO – 19.9 lb/hr; VOC (as methane) – 0.80 lb/hr; PM₁₀ – 1.85 lb/hr; or SO_x (as SO₂) – 0.89 lb/hr.

Verification: The project owner shall provide emissions data for NO_x and CO to demonstrate compliance with this condition until source testing is conducted for the other pollutants. That data shall be submitted to the CEC CPM as part of the monthly commissioning status report noted in the verification of Condition AQ-7."

AQ Page 4.1-65

"AQ-10 The continuous monitors specified in this permit shall be installed, calibrated, and operational prior to the first firing of this unit...."

Comment

Remove "specified in this permit," which is not appropriate for the CEC Conditions of Certification:

"AQ-10 The continuous monitors ~~specified in this permit~~ shall be installed, calibrated, and operational prior to the first firing of this unit...."

AQ Page 4.1-65

"AQ-11 The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours during the commissioning period...."

Comment

Replace the words "this unit" (an ambiguous reference) with "each CTG":

"AQ-11 The total number of firing hours of each CTG ~~this unit~~ without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours during the commissioning period...."

AQ Page 4.1-65

"AQ-12 The total mass emissions of NO_x, CO, VOC, PM₁₀, and SO_x that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limits specified in Condition AQ-28."

Comment

Replace reference to Condition AQ-28 to Condition AQ-29:

"AQ-12 The total mass emissions of NO_x, CO, VOC, PM₁₀, and SO_x that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limits specified in Condition AQ-29."

AQ Page 4.1-65

"AQ-13 A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine...."

Comment

Replace "shall serve this gas turbine engine" with "shall serve each gas turbine engine":

"AQ-13 A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve each ~~this~~ gas turbine engine...."

AQ Page 4.1-66

"AQ-15 The project owner shall submit to the District information correlating the NO_x control system operating parameters to the associated measured NO_x output...."

Verification: The project owner shall compile the required NO_x control system and emissions data and submit the information to the CPM and the APCO in the Quarterly Operation Report."

Comment

First sentence should read as follows: The project owner shall submit to the District before issuance of the Permit to Operate information correlating...." Also, under Verification, replace "in the Quarterly Operation Report" with "before issuance of the Permit to Operate":

"AQ-15 The project owner shall submit to the District before issuance of the Permit to Operate information correlating the NO_x control system operating parameters to the associated measured NO_x output...."

Verification: The project owner shall compile the required NO_x control system and emissions data and submit the information to the CPM and the APCO before the issuance of the Permit to Operate in the Quarterly Operation Report.

AQ Page 4.1-67

"AQ-21 During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO_x (as NO₂) – 4.17 lb/hr; CO – 12.5 lb/hr; VOC (as methane) – 0.83 lb/hr; PM₁₀ – 1.85 lb/hr; or SO_x (as SO₂) – 0.89 lb/hr, based on three hour averages.

Verification: The project owner shall submit to the CPM and APCO CTG emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report."

Comment

First sentence should start "During start-up of each CTG, exhaust emission rates for that CTG shall...."

Also, the verification part of the condition requires submittal of data verifying that emissions during startups did not exceed the stipulated values. There should be an acknowledgement that only data for NO_x and CO emissions will be available (from CEMS) during individual startups, except when source testing is required during startups as required in Condition AQ-34:

"AQ-21 During start-up of each CTG, exhaust emission rates for that CTG shall not exceed any of the following limits: NO_x (as NO₂) – 4.17 lb/hr; CO – 12.5 lb/hr; VOC (as methane) – 0.83 lb/hr; PM₁₀ – 1.85 lb/hr; or SO_x (as SO₂) – 0.89 lb/hr, based on three hour averages.

Verification: The project owner shall submit to the CPM and APCO CTG emissions data for NO_x and CO (except when source testing is required during startups) demonstrating compliance with this condition as part of the Quarterly Operation Report."

AQ Page 4.1-67

"AQ-22 During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO_x (as NO₂) – 1.50 lb/hr; CO – 21.33 lb/hr; VOC (as

methane) – 0.83 lb/hr; PM₁₀ – 1.85 lb/hr; or SO_x (as SO₂) – 0.89 lb/hr, based on three hour averages.

Verification: The project owner shall submit to the CPM and APCO CTG emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report.”

Comment

Same points as in Condition AQ-21 apply to CTG shutdowns:

“**AQ-22** During shutdown of each CTG, exhaust emission rates for that CTG shall not exceed any of the following limits: NO_x (as NO₂) – 1.50 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM₁₀ – 1.85 lb/hr; or SO_x (as SO₂) – 0.89 lb/hr, based on three hour averages.

Verification: The project owner shall submit to the CPM and APCO CTG emissions data for NO_x and CO (except when source testing is required during shutdowns) demonstrating compliance with this condition as part of the Quarterly Operation Report.”

AQ Page 4.1-68

“**AQ-26** Daily emissions from the CTG shall not exceed any of the following limits: NO_x (as NO₂) – 67.3 lb/day; CO – 126.0 lb/day; VOC – 19.7 lb/day; PM₁₀ – 44.4 lb/day; or SO_x (as SO₂) – 21.4 lb/day.”

Comment

Replace "Daily emissions from the CTG" with "Daily emissions from each CTG":

“**AQ-26** Daily emissions from each the CTG shall not exceed any of the following limits: NO_x (as NO₂) – 67.3 lb/day; CO – 126.0 lb/day; VOC – 19.7 lb/day; PM₁₀ – 44.4 lb/day; or SO_x (as SO₂) – 21.4 lb/day.”

AQ Page 4.1-70

“**AQ-35** Initial source testing to determine compliance with the NO_x, CO and VOC emission rates (lb/hr and ppmvd @ 15% O₂) NH₃ emission rate (ppmvd @ 15% O₂) and PM₁₀ emission rate (lb/hr) shall be conducted within 120 days after initial operation. Initial source testing shall be conducted while unit C-7286-1 is operating independently and while unit C-7286-2 is operating independently and while units C-7286-1 and C-7286-2 are operating simultaneously.”

Comment

The condition is written as though it only applies to two of the CTGs, (C-7268-1 and C-7268-2) whereas it also presumably pertains to units C-7268-3 and C-7268-4:

“**AQ-35** Initial source testing to determine compliance with the NO_x, CO and VOC emission rates (lb/hr and ppmvd @ 15% O₂) NH₃ emission rate (ppmvd @

15% O₂) and PM₁₀ emission rate (lb/hr) shall be conducted within 120 days after initial operation. Initial source testing shall be conducted while unit C-7286-1 is operating independently and while unit C-7286-2 is operating independently and while units C-7286-1 and C-7286-2 are operating simultaneously. This condition also applies to units C-7268-3 and C-7268-4."

AQ Page 4.1-70

"AQ-36 Source testing to determine compliance with the NO_x, CO and VOC emission rates (lb/hr and ppmvd @ 15% O₂), NH₃ emission rate (ppmvd @ 15% O₂) and PM₁₀ emission rate (lb/hr) shall be conducted at least once every 12 months. Source testing may be conducted while unit C-7286-1 is operating independently or when units C-7286-1 and C-7286-2 are operating simultaneously."

Comment

Language for this condition should be changed to match the corresponding condition in the FDOC. The text after the first sentence should read: "Source testing shall be conducted when units C-7286-1 and C-7286-2 are operating simultaneously. If C-7286-1 operates independently for more than 400 hours during any calendar year, Source testing will be conducted while C-7286-1 is operating independently":

"AQ-36 Source testing to determine compliance with the NO_x, CO and VOC emission rates (lb/hr and ppmvd @ 15% O₂), NH₃ emission rate (ppmvd @ 15% O₂) and PM₁₀ emission rate (lb/hr) shall be conducted at least once every 12 months. Source testing shall be conducted when units C-7286-1 and C-7286-2 are operating simultaneously. If C-7286-1 operates independently for more than 400 hours during any calendar year, Source testing will be conducted while C-7286-1 is operating independently."

BIO Page 4.2-2

**"BIOLOGICAL RESOURCES Table 1
Laws, Ordinances, Regulations, and Standards"**

Applicable Law	Description
State	
Fully Protected Species (Fish and Game Code, sections 3511, 4700, 5050, and 5515)	Designates certain species as fully protected and prohibits take of such species or their habitat. The administering agency is CDFG.

Comment

The description for fully protected species is incorrect as to prohibition of loss of habitat. In Table 1 Description for Fully Protected Species: "Designates certain species as fully protected and prohibits take of such species or their habitat. The administering agency is CDFG. Fish and Game code section 86 defines "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. There is no mention of habitat or habitat modification.

Likewise, Fish and Game codes 3511, 4700, 5050, 5515 - dealing with identifying Fully Protected Species- makes no mention of habitat or habitat modification.

Recommend that the LORS description delete "or their habitat" since take is defined as killing of an individual that is listed as a fully protected species. This means you need to have occupied habitat and a direct mortality event occur for take to occur. Harassment is also not included in the State definition of take:

**"BIOLOGICAL RESOURCES Table 1
Laws, Ordinances, Regulations, and Standards"**

Applicable Law	Description
State	
Fully Protected Species (Fish and Game Code, sections 3511, 4700, 5050, and 5515)	Designates certain species as fully protected and prohibits take of such species or their habitat . The administering agency is CDFG.

BIO Page 4.2-2

**"BIOLOGICAL RESOURCES Table 1
Laws, Ordinances, Regulations, and Standards"**

Applicable Law	Description
State	
Significant Natural Areas (Fish and Game Code, section 1930 <i>et seq.</i>)	Designates certain areas such as refuges, natural sloughs, riparian areas, and vernal pools as significant wildlife habitat. The administering agency is CDFG.

Comment

Regarding Fish and Game 1930-1933 regarding Significant Natural Areas (SNA): these sections of code are not relevant to the Starwood-Midway project as the project is located in a developed landscape (see Biological Resources Attachment A). Additionally, there is no mention in the PSA that the CEC did a search of the SNA database to see where the nearest designated SNA is located.

CUL Page 4.3-5

"A cluster of three historic buildings is located at 43405 West Panoche Road, within the agricultural complex known, perhaps inaccurately, as the Chaney Ranch. Two additional clusters of historic buildings are situated within 0.5 mile of the proposed SPP site."

Comment

The buildings should not be described as "historic buildings" since this implies that these buildings are listed on or eligible to a local, state, or national registry (per CEQA definition of historic resources per Section 15064.5). As part of the PEC Staff Assessment from June 2007, these buildings were evaluated as part of an intensive architectural history study and determined ineligible to the CRHR (These buildings were not re-recorded and evaluated for SPP.) A more accurate description (rather than

historic buildings) would be “a cluster of three buildings built more than 50 years ago” or “historic-period buildings”:

“A cluster of three historic-period buildings is located at 43405 West Panoche Road, within the agricultural complex known, perhaps inaccurately, as the Chaney Ranch. Two additional clusters of historic-period buildings are situated within 0.5 mile of the proposed SPP site.”

CUL Page 4.3-14

“One of the early twentieth-century land speculators left his name on a local landmark: the Chaney Ranch.”

Comment

We should not describe the Chaney Ranch as a “local landmark.” First, the term “landmark” implies that there is some form of a conspicuous object or distinguishing marker for the site. However, historical research has indicated that there is no evidence of the original Chaney Ranch (at least above-ground) in the area. Additionally, the use of the term local landmark implies that the site may be considered a California Historic Landmark, California Point of Historical Interest, or even a landmark eligible for a local listing. The Chaney Ranch is more a general place name and not a landmark:

“One of the early twentieth-century land speculators left his name on a ~~local landmark~~: the Chaney Ranch.”

CUL Page 4.3-15

“Staff examined the report of a review of inventories of known historic properties conducted for the PEC project, proposed for a location just southwest of the proposed SPP site. Rand F. Herbert, a qualified architectural historian, Steven J. Melvin, and Nathan Hallam, of JRP Historical Consulting, reviewed the inventories to identify any known or evaluated historic-period standing structures located within a 0.5-mile-radius around the proposed PEC plant site, laydown area, and substation expansion.”

Comment

The CEC is using the records search data for the PEC project instead of the SPP records search data. While the PEC data encompasses the SPP data, the CEC should identify the dates when the records search for PEC and SPP were conducted. Though the PEC report was submitted in 2006-2007, the PEC records search could have been done several years earlier. We should mention that the PEC records search was conducted in May 2006 and that the SPP records search was conducted in October 2006:

“Staff examined the report of a review of inventories of known historic properties conducted for the PEC project in May 2006, proposed for a location just southwest of the proposed SPP site. Rand F. Herbert, a qualified architectural historian, Steven J. Melvin, and Nathan Hallam, of JRP Historical Consulting, reviewed the inventories in October 2006 to identify any known or evaluated historic-period standing structures located within a 0.5-mile-radius around the proposed PEC plant site, laydown area, and substation expansion.”

CUL Page 4.3-16

"In response to this request, URS architectural historian Jeremy Hollins conducted historical research on April 1 through April 4, 2004."

Comment

Historical Research was done in April 2007 not 2004:

"In response to this request, URS architectural historian Jeremy Hollins conducted historical research on April 1 through April 4, 20074."

CUL Page 4.3-17

"The records search found that none of the impact areas associated with the proposed SPP had been previously surveyed."

Comment

Should include date of most recent records search by URS October 2006:

"The records search, conducted in October 2006, found that none of the impact areas associated with the proposed SPP had been previously surveyed."

CUL Page 4.3-18

"As close to the proposed PEC site as it is, the proposed SPP site could hold the same prospect: subsurface irrigation and water supply lines associated with the original Chaney Ranch could be present. If encountered, these could be considered archaeological remains, depending on their age and significance. To be historically significant, they would have to be more than 45 years old and would have to be unusual or unique in materials (not-mass-produced) or in design."

Comment

While it is possible that ground disturbance can lead to the discovery of unusual or unique water supply lines, it is more likely that the water supply lines would be considered "vernacular resources." Vernacular resources are structures built of local materials in a functional style devised to meet the needs of common people in their time and place. As such, any discovered water supply lines may be representative of the early regional irrigation forms and materials of the San Joaquin Valley western Fresno County. Also, the use of a vernacular design and materials would illustrate features common to that particular class of resources (e.g., irrigation features) for that place and would illustrate themes, like developing agricultural technologies. By considering the significance of any water supply lines as a type of "vernacular resource," then NRHP/CRHR Criterion A (Events) would be very applicable:

"As close to the proposed PEC site as it is, the proposed SPP site could hold the same prospect: subsurface irrigation and water supply lines associated with the original Chaney Ranch could be present. If encountered, these could be considered vernacular resources~~archaeological remains~~, depending on their age and significance. To be historically significant, they would have to be more than 45 years old and would have to be unusual or unique in materials (not-mass-produced) or in design."

CUL Page 4.3-22

"In the abstract, direct impacts to cultural resources are those associated with project development, construction, and coexistence. Construction usually entails surface and subsurface disturbance of the ground, and direct impacts to archaeological resources may result from the immediate disturbance of the deposits, whether from vegetation removal, vehicle travel over the surface, earth-moving activities, excavation, or demolition of overlying structures. Construction can have direct impacts on historic standing structures when those structures must be removed to make way for new structures or when the vibrations of construction impair the stability of historic structures nearby. New structures can have direct impacts on historic structures when the new structures are stylistically incompatible with their neighbors and the setting, and when the new structures produce something harmful to the materials or structural integrity of the historic structures, such as emissions or vibrations."

Comment

Typically, effects from noise, vibration, and impacts to feeling and setting are considered "indirect effects" and not "direct effects." A direct effect is typically when the project physically alters a property in the APE (e.g., demolition or materially alters). An indirect effect would be a construction related impact from increased noise, vibration, and dust, or an impact to aspects of historic integrity (like feeling and setting) caused by new construction or viewshed obstructions:

"In the abstract, direct impacts to cultural resources are those associated with project development, construction, and coexistence. Construction usually entails surface and subsurface disturbance of the ground, and direct impacts to archaeological resources may result when those structures must be removed to make way for new structures or from the immediate disturbance of the deposits, whether from vegetation removal, vehicle travel over the surface, earth-moving activities, excavation, or demolition of overlying structures. Construction can have indirect impacts on historic standing structures ~~when those structures must be removed to make way for new structures~~ or when the vibrations of construction impair the stability of historic structures nearby. New structures can have indirect impacts on historic structures when the new structures are stylistically incompatible with their neighbors and the setting, and when the new structures produce something harmful to the materials or structural integrity of the historic structures, such as emissions or vibrations."

CUL Page 4.3-33,34

"**CUL-6** The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor preconstruction site mobilization, construction ground disturbance, construction grading, boring and trenching, and construction full time at the project site and linear facilities, and ground disturbance full time at laydown areas or other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner (Discovery). Specifically, the CRS, alternate CRS, or CRMs shall monitor the initial soil stripping and any grading of the plant site; the excavation of structural foundations, of trenches for the natural gas and water pipelines, and of the 25,000 square-foot evaporation pond; and the drilling of the 1,500-foot-deep well, if this alternate water source is necessary.

Full-time archaeological monitoring for this project shall be the archaeological monitoring of all earth-moving activities on the construction site or along the linear facility routes for as long as the activities are ongoing. Full-time archaeological monitoring shall require one monitor per active earth-moving machine working in archaeologically sensitive areas, as determined by the CRS in consultation with the CPM."

Comment

Starwood-Midway does not agree with the rigorous employment of cultural resource specialist prescribed here is warranted given the nature and historic use of the site:

"CUL-6 The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor ~~preconstruction—site—mobilization,~~initial construction ground disturbance, construction grading, boring and trenching, and construction full time at the project site and linear facilities, and ground disturbance full time at laydown areas or other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner (Discovery). Specifically, the CRS, alternate CRS, or CRMs shall monitor the initial soil stripping and any grading of the plant site; the excavation of structural foundations, of trenches for the natural gas and water pipelines, and of the 25,000 square-foot evaporation pond; and the drilling of the 1,500-foot-deep well, if this alternate water source is necessary.

~~Full-time~~An archaeological monitoring for this project shall be the archaeological monitoring of all earth-moving activities on the construction site or along the linear facility routes for as long as the activities are ongoing. ~~Full-time archaeological monitoring shall require one monitor per active earth-moving machine working in archaeologically sensitive areas, as determined by the CRS in consultation with the CPM."~~

HAZ MAT Page 4.4-5

"The nearest sensitive receptor is a 5-plex located about 100 feet from the northern project fenceline, but these residents will be relocated as part of a noise mitigation measure. This will make the nearest sensitive receptor a residence that is located 600 meters (about 1968 feet or 0.37 miles) away from the project site (URS 2006a, Section 5.16.1)."

Comment

Add "At the time of the COD, no residences will be located within 0.37 miles of the site":

"The nearest sensitive receptor is a 5-plex located about 100 feet from the northern project fenceline, but these residents will be relocated as part of a noise mitigation measure. This will make the nearest sensitive receptor a residence that is located 600 meters (about 1968 feet or 0.37 miles) away from the project site (URS 2006a, Section 5.16.1)." At the time of the COD, no residences will be located within 0.37 miles of the site."

LAND Page 4.5-1

"Additionally, Fresno County has not provided sufficient information in its Site Plan Review (SPR) analysis to determine whether the project would be consistent with the intent and purpose of the AE-20 zone."

Comment

A joint General Plan Conformity Application with PEC has been filed with the County to allow the Department of Public Works an opportunity to describe how the Starwood-Midway project conforms to the County General Plan and AE-20 zoning. This application was filed on July 18, 2007. The County expects to issue its conformity analysis by August 15, 2007. Starwood believes that the County will provide arguments to further support the findings that the Starwood-Midway project conforms with County General Plan and zoning ordinance.

LAND Page 4.5-16

"LAND-1 The project owner shall mitigate for the permanent loss of 6.16 acres of prime farmland at a one-to-one ratio.

Verification: The project owner shall provide a mitigation fee payment to a Fresno County agricultural land trust or a statewide agricultural land trust at least 30 days prior to the start of construction. The fee payment will be determined by Fresno County and the project owner and set forth in a prepared Farmlands Mitigation Agreement (FMA), also determined between the project owner and Fresno County. The project owner shall provide a copy of the FMA to the Compliance Project Manager (CPM) for approval at the time of fee payment submittal. The FMA will require that 6.16 acres of prime farmland and/or easements shall be purchased within five years of start of construction as compensation for the 6.16 acres of prime farmland to be converted by the SPP...."

Comment

During the Williamson Act cancellation process, Fresno County did not identify the need to impose this mitigation requirement. The project site has been utilized as a fenced in equipment storage yard, and has not been actively farmed, for a minimum of 5 years. Additionally, the majority of economic use surrounding the project site is not generated from farming activities. The project site is virtually surrounded by power facilities. It gives the impression that the CEC is conflicting with the County's decision process. Starwood does not agree with the need for this mitigation. It is recommended that this condition be deleted:

~~**"LAND-1** The project owner shall mitigate for the permanent loss of 6.16 acres of prime farmland at a one-to-one ratio.~~

~~**Verification:** The project owner shall provide a mitigation fee payment to a Fresno County agricultural land trust or a statewide agricultural land trust at least 30 days prior to the start of construction. The fee payment will be determined by Fresno County and the project owner and set forth in a prepared Farmlands Mitigation Agreement (FMA), also determined between the project owner and Fresno County. The project owner shall provide a copy of the FMA to the~~

~~Compliance Project Manager (CPM) for approval at the time of fee payment submittal. The FMA will require that 6.16 acres of prime farmland and/or easements shall be purchased within five years of start of construction as compensation for the 6.16 acres of prime farmland to be converted by the SPP...."~~

NOISE Page 4.6-9

"The applicant commits to performing noisy construction work during the daytime hours between 7:00 a.m. and 7:00 p.m. on any day except Saturdays and Sundays, and between 7:00 a.m. and 5:00 p.m. on Saturdays and Sundays (URS 2006a, section 5.12.5.1). This would be in compliance with the noise ordinance of the Fresno County Code (see Condition of Certification NOISE-7)."

Comment

The time restrictions are incorrectly identified as: weekday time restriction 7 a.m. to 7 p.m. instead of 6 a.m. to 9 p.m. as recognized in the Fresno County Noise Ordinance as well as PSA NOISE-7:

"The applicant commits to performing noisy construction work during the daytime hours between ~~6~~7:00 a.m. and ~~9~~7:00 p.m. on any day except Saturdays and Sundays, and between 7:00 a.m. and 5:00 p.m. on Saturdays and Sundays (URS 2006a, section 5.12.5.1). This would be in compliance with the noise ordinance of the Fresno County Code (see Condition of Certification NOISE-7)."

NOISE Page 4.6-17,18

"**NOISE-2** Throughout the construction and operation of the SPP, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints.

Verification: Within five days of receiving a noise complaint, the project owner shall file a copy of the noise complaint resolution form with the local jurisdiction and the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a three-day period, the project owner shall submit an updated noise complaint resolution form when the mitigation is implemented."

Comment

Verification implies that all complaints must be resolved or mitigated. There is no provision within the condition or verification that the operator may be well within all established, reasonable, and agreed upon noise limits and still get occasional complaints. We propose that the operator may present proof of compliance with established and agreed upon noise limits in lieu of implementing addition noise mitigation elements, when appropriate:

"**NOISE-2** Throughout the construction and operation of the SPP, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints.

Verification: Within five days of receiving a noise complaint, the project owner shall file a copy of the noise complaint resolution form with the local jurisdiction and the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a three-day period, the project owner shall submit an updated noise complaint resolution form when the mitigation is implemented. The owner may present proof of compliance with established and agreed upon noise limits in lieu of implementing additional noise mitigation elements, when appropriate.

NOISE Page 4.6-18,19

“NOISE-4 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation plus ambient, during the four quietest consecutive hours of the nighttime, to exceed an average of 45 dBA L_{50} as measured near monitoring locations ML2 (approximately 1,600 feet west of the center of the project site) and ML3 (43405 West Panoche Road).”

Comment

The specified allowable noise level at ML2 and ML3 is 45 dBA L_{50} . The predicted operational noise level for SPP is predicted to be 42 and 44 dBA L_{eq} at ML2 and ML3, respectively (for steady state noise levels L_{eq} and L_{50} would be fairly similar). However, the cumulative levels with the neighboring Panoche Energy Center (PEC) in operation are predicted to be 58, and 45 dBA, L_{eq} at ML2 and ML3, respectively. At ML2 specifically the noise from PEC is clearly dominant (predicted 58 dBA versus 42 dBA from SPP). If these numbers are to be accepted as accurate then no amount of additional noise mitigation for the SPP would influence noise levels at ML2 with PEC operating. Also please note that without PEC, it is expected that SPP would meet the specified noise level at ML2. Further, on page 4.6-8 of the PSA it is stated that PEC has signed an agreement with the landowner of ML2 to relocate the residents to a location that is approximately 4000 feet away. If ML2 is no longer residential, presumably it will no longer be required to conduct or report noise level measurements at that location. Therefore, it is recommended that this condition be removed:

~~“NOISE-4 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation plus ambient, during the four quietest consecutive hours of the nighttime, to exceed an average of 45 dBA L_{50} as measured near monitoring locations ML2 (approximately 1,600 feet west of the center of the project site) and ML3 (43405 West Panoche Road).”~~

NOISE Page 4.6-19,20

“NOISE-5 Prior to start of construction activities, the project owner shall relocate the residents on the property at ML1 to a location not near the project site. The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation plus ambient, during the four quietest

consecutive hours of the nighttime, to exceed an average of 45 dBA L₅₀ as measured near this new location...

...If during the operating life of the project, the project owner plans to convert the five-unit multiplex at ML1 back to a residential use, the project owner shall repeat this survey at ML1 or at a closer location acceptable to the CPM, prior to any resident(s) occupying the multiplex."

Comment

This condition implies that the owner is responsible for the actual relocation of the current residents at ML1. The AFC noise section states that "a signed agreement is in place between the landowner of the 5-Plex at ML1 and Starwood-Power Midway LLC (now SPP), to relocate the current residence":

"NOISE-5 Prior to first turbine roll/fire start of construction activities, the project owner shall relocate the residents on the property at ML1 to a location not near the project site. The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation plus ambient, during the four quietest consecutive hours of the nighttime, to exceed an average of 45 dBA L₅₀ as measured near this new location."

NOISE Page 4.6-21

"NOISE-8 The project owner shall perform pile driving using a quieter process than the traditional pile driving techniques to ensure that noise from these operations does not cause annoyance at monitoring locations ML2 and ML3."

Comment

Condition only states that the owner will "conduct pile driving using quieter process than traditional pile driving technique." This leaves a fairly wide berth for compliance. No specific noise levels are specified. Also, on page 4.6-8 it is stated that PEC will begin construction before SPP, and that PEC has signed an agreement with the landowner of ML2 to relocate the residents to a location that is approximately 4000 feet away. If ML2 is no longer residential when SPP construction begins, presumably it will no longer be required to report pile driving noise levels at that location. Therefore, it is recommended that this condition be removed:

~~**"NOISE-8** The project owner shall perform pile driving using a quieter process than the traditional pile driving techniques to ensure that noise from these operations does not cause annoyance at monitoring locations ML2 and ML3."~~

SOIL & WATER Global and:

Page 4.9-13

"The applicant proposes to obtain water from the existing CalPeak Panoche upper aquifer well adjacent to the site"

Page 4.9-19

“SOIL&WATER-4: Water used for project operation shall be upper-aquifer well water obtained from the adjacent CalPeak well. Water use shall not exceed the annual water-use limit of 136 acre-feet without prior approval by the CPM. The project owner shall monitor and record the total water used on a monthly basis.”

Comment

The PSA relies heavily on the Starwood-Midway project use of upper-aquifer groundwater. However, two other water alternatives were discussed in the project AFC (06-AFC-10) and should still be included/discussed as potential water sources for the project (see Section 4.0 Alternatives, and Section 5.5 Water Resources, for further discussion related to these water supply alternatives).

- Water supply alternative 1: Irrigation Return Flow – Agricultural Backwash Pond
This water supply source includes use of filter backwash water from the Baker Farming Company, LLC irrigation practices.
- Water supply alternative 2: New Deep Well at Project Site
This water supply source includes use of lower aquifer groundwater and drilling a new 1,500-foot well on-site to access this aquifer.

Page 4.9-13

“The applicant proposes to obtain water from the existing CalPeak Panoche upper aquifer well adjacent to the site. In addition, two water supply alternatives were identified: (1) Irrigation Return Flow – Agricultural Backwash Pond (2) New Deep Well at Project Site.”

Page 4.9-19

“SOIL&WATER-4: If ~~W~~water used for project operation ~~is~~shall be upper-aquifer well water obtained from the adjacent CalPeak well, ~~W~~water use shall not exceed the annual water-use limit of 136 acre-feet without prior approval by the CPM. The project owner shall monitor and record the total water used on a monthly basis. Should one of the other two water supply alternatives be chosen, further environmental analysis would be required to fully identify potential environmental impacts associated with the water supply source.”

SOIL & WATER Page 4.9-2

**“SOIL AND WATER RESOURCES Table 1
Laws, Ordinances, Regulations, and Standards (LORS)”**

Applicable Law	Description
State	
Porter-Cologne Water Quality Control Act (Water Code §13000 et seq.)	requires the State Water Resources Control Board (SWRCB) and the nine RWQCBs to adopt water-quality criteria to protect state waters. These standards are typically applied to the proposed project through the waste-discharge requirements permit. These regulations require that RWQCB issue waste-discharge requirements specifying conditions regarding the construction, operation, monitoring and closure of waste disposal sites, including injection wells and evaporation ponds for waste disposal.

Comment

Suggest adding a sentence at the end of the description. "In addition, the PCWQCA assigns the RWQCB the authority to designate beneficial uses of the water resources of the State":

**“SOIL AND WATER RESOURCES Table 1
Laws, Ordinances, Regulations, and Standards (LORS)”**

Applicable Law	Description
State	
Porter-Cologne Water Quality Control Act (Water Code §13000 et seq.)	requires the State Water Resources Control Board (SWRCB) and the nine RWQCBs to adopt water-quality criteria to protect state waters. These standards are typically applied to the proposed project through the waste-discharge requirements permit. These regulations require that RWQCB issue waste-discharge requirements specifying conditions regarding the construction, operation, monitoring and closure of waste disposal sites, including injection wells and evaporation ponds for waste disposal. <u>In addition, the PCWQCA assigns the RWQCB the authority to designate beneficial uses of the water resources of the State.</u>

SOIL & WATER Page 4.9-3

“A site stormwater drainage system would handle drainage of rain water from areas away from where equipment is stored. An on-site, lined evaporation pond would collect discharge waste water from the RO unit.”

Comment

Suggest adding a sentence to end of second paragraph. "The Project will not incorporate a thermal cycle that employs the steam-water system as the thermodynamic medium. As such, the Project is not a "steam-electric" power plant":

"A site stormwater drainage system would handle drainage of rain water from areas away from where equipment is stored. An on-site, lined evaporation pond would collect discharge waste water from the RO unit. The Project will not incorporate a thermal cycle that employs the steam-water system as the thermodynamic medium. As such, the Project is not a "steam-electric" power plant."

SOIL & WATER Page 4.9-19

"SOIL&WATER-3: The project owner shall comply with the requirements of the general NPDES permit for discharges of storm water associated with industrial activity. The project owner shall develop and implement a storm water pollution prevention plan for the operation of the site."

Comment

In the AFC, we indicate that the project is not required to comply with the general NPDES permit for discharges of storm water associated with industrial activity because: 1) the project is not a steam electric power generating facility, 2) the project facility type is not included in any of the designated Standard Industrial Classifications subject to stormwater effluent, and 3) the project is not located within a municipal separate storm sewer system areas. However, this being said, I do not necessarily have a significant issue with Soil&Water-3 because this sentence provides allowance if RWQCB backs up our assertion in the AFC that the industrial stormwater permit does not apply in this case. CEC does not appear willing to back our claim, but is relying on the RWQCB who is responsible for enforcing the NPDES General Industrial Permit for making the call on whether it is applicable. If possible add after last sentence of Condition Soil&Water 3 "A letter from the RWQCB indicating that there is no requirement for a general NPDES permit for discharges of storm water associated with industrial activity will satisfy this condition," to make this more clear:

"SOIL&WATER-3:The project owner shall comply with the requirements of the general NPDES permit for discharges of storm water associated with industrial activity. The project owner shall develop and implement a storm water pollution prevention plan for the operation of the site. A letter from the RWQCB indicating that there is no requirement for a general NPDES permit for discharges of storm water associated with industrial activity will satisfy this condition."

WATER SAFETY & BUYER PROTECTION Page 4.14-18

"WORKER SAFETY-6: The project owner shall construct a berm on the northwest fenceline adjacent to the diesel tank farm that will be adequate to prevent spilled diesel fuel at the tank farm from entering the project site, provide for a secondary access gate and road a suitable safe distance from the tank farm, include measures

and procedures for workers to follow if a leak, a fire, or an explosion occurs at the tank farm, and conduct a study to determine if additional protective measures such as fire walls are necessary to protect the ammonia storage tank and critical power plant components from a fire or explosion at the tank farm. If this study, to be reviewed and approved by the CPM, recommends that additional protection measures are warranted, such protection shall be provided.

Verification: At least 30 days prior to the start of site mobilization the project owner shall submit to the CPM for review and approval design drawings showing the berm at the northwest fenceline adjacent to the tank farm, a second access road or walkway with a gate, the Emergency Action Plan that gives instructions on worker procedures if there is a spill, fire, or explosion at the tank farm, and the study of the vulnerability of the ammonia storage tank and critical power plant components to a fire or explosion at the tank farm. If the study recommends that additional protection is required, the project owner shall submit design drawings showing the installation of the protection measures to the CPM for review and approval."

Comment

The fuel tank farm is owned by Baker Farming, and is not located on the project site. Starwood will properly analyze the potential for drainage of a fuel leak from the tank farm onto the project site. Starwood will take whatever steps are appropriate to prevent contamination of the site after reviewing the elevation levels of the tanks as well as at the site. If it is determined that the topography would not allow for fuel to flow from the tank farm onto the site, then berming is not necessary to prevent contamination of the site and no action would be taken. However, as the access route from Panoche Road onto the site does extend immediately adjacent to the tank farm, a secondary access gate and road will be provided:

"WORKER SAFETY-6: The project owner shall provide for a secondary access gate and road a suitable safe distance from the tank farm. In addition, the project owner shall conduct the proper analysis to determine if there is potential for fuel leakage from the fuel tank farm to flow onto the project site. If it is determined that spilled fuel from the tanks could flow onto the site, the project owner shall construct a berm on the northwest fenceline adjacent to the diesel tank farm that will be adequate to prevent spilled diesel fuel at the tank farm from entering the project site, provide for a secondary access gate and road a suitable safe distance from the tank farm, include measures and procedures for workers to follow if a leak, a fire, or an explosion occurs at the tank farm, and conduct a study to determine if additional protective measures such as fire walls are necessary to protect the ammonia storage tank and critical power plant components from a fire or explosion at the tank farm. If this study, to be reviewed and approved by the CPM,

recommends that additional protection measures are warranted, such protection shall be provided.

Verification: The project owner shall provide for a secondary access gate and road a suitable safe distance from the tank farm. In addition, the project owner shall conduct the proper analysis to determine if there is potential for fuel leakage from the fuel tank farm to flow onto the project site. If it is determined that spilled fuel from the tanks could flow onto the site At least 30 days prior to the start of site mobilization the project owner shall submit to the CPM for review and approval design drawings showing the berm at the northwest fenceline adjacent to the tank farm, ~~a second access road or walkway with a gate,~~ the Emergency Action Plan that gives instructions on worker procedures if there is a spill, fire, or explosion at the tank farm, and the study of the vulnerability of the ammonia storage tank and critical power plant components to a fire or explosion at the tank farm. If the study recommends that additional protection is required, the project owner shall submit design drawings showing the installation of the protection measures to the CPM for review and approval."

ATTACHMENT A
BIOLOGICAL RESOURCES

Fish and Game Code Cited in LORS Table 1

86. "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

3511. (a) (1) Except as provided in Section 2081.7, fully protected birds or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected bird, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species, and may authorize the live capture and relocation of those species pursuant to a permit for the protection of livestock. Prior to authorizing the take of any of those species, the department shall make an effort to notify all affected and interested parties to solicit information and comments on the proposed authorization. The notification shall be published in the California Regulatory Notice Register and be made available to each person who has notified the department, in writing, of his or her interest in fully protected species and who has provided an e-mail address, if available, or postal address to the department. Affected and interested parties shall have 30 days after notification is published in the California Regulatory Notice Register to provide any relevant information and comments on the proposed authorization.

(2) As used in this subdivision, "scientific research" does not include any actions taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

(3) Legally imported fully protected birds or parts thereof may be possessed under a permit issued by the department.

(b) The following are fully protected birds:

- (1) American peregrine falcon (*Falco peregrinus anatum*).
- (2) Brown pelican.
- (3) California black rail (*Laterallus jamaicensis coturniculus*).
- (4) California clapper rail (*Rallus longirostris obsoletus*).
- (5) California condor (*Gymnogyps californianus*).
- (6) California least tern (*Sterna albifrons browni*).
- (7) Golden eagle.
- (8) Greater sandhill crane (*Grus canadensis tabida*).
- (9) Light-footed clapper rail (*Rallus longirostris levipes*).
- (10) Southern bald eagle (*Haliaeetus leucocephalus leucocephalus*).

- (11) Trumpeter swan (*Cygnus buccinator*).
- (12) White-tailed kite (*Elanus leucurus*).
- (13) Yuma clapper rail (*Rallus longirostris yumanensis*).

4700. (a) (1) Except as provided in Section 2081.7, fully protected mammals or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected mammal, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened,

or endangered species. Prior to authorizing the take of any of those species, the department shall make an effort to notify all affected and interested parties to solicit information and comments on the proposed authorization. The notification shall be published in the California Regulatory Notice Register and be made available to each person who has notified the department, in writing, of his or her interest in fully protected species and who has provided an e-mail address, if available, or postal address to the department. Affected and interested parties shall have 30 days after notification is published in the California Regulatory Notice Register to provide any relevant information and comments on the proposed authorization.

(2) As used in this subdivision, "scientific research" does not include any actions taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

(3) Legally imported fully protected mammals or parts thereof may be possessed under a permit issued by the department.

(b) The following are fully protected mammals:

(1) Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*).

(2) Bighorn sheep (*Ovis canadensis*), except Nelson bighorn sheep (subspecies *Ovis canadensis nelsoni*) as provided by subdivision (b) of Section 4902.

(3) Northern elephant seal (*Mirounga angustirostris*).

(4) Guadalupe fur seal (*Arctocephalus townsendi*).

(5) Ring-tailed cat (genus *Bassariscus*).

(6) Pacific right whale (*Eubalaena sieboldi*).

(7) Salt-marsh harvest mouse (*Reithrodontomys raviventris*).

(8) Southern sea otter (*Enhydra lutris nereis*).

(9) Wolverine (*Gulo luscus*).

5050. (a) (1) Except as provided in Section 2081.7, fully protected reptiles and amphibians or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected reptile or amphibian, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species. Prior to authorizing the take of any of those species, the department shall make an effort to notify all affected and interested parties to solicit information and comments on the proposed authorization. The notification shall be published in the California Regulatory Notice Register and be made available to each person who has notified the department, in writing, of his or her interest in fully protected species and who has provided an e-mail address, if available, or postal address to the department. Affected and interested parties shall have 30 days after notification is published in the California Regulatory Notice Register to provide any relevant information and comments on the proposed authorization.

(2) As used in this subdivision, "scientific research" does not include any actions taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

(3) Legally imported fully protected reptiles or amphibians or parts thereof may be possessed under a permit issued by the



department.

(b) The following are fully protected reptiles and amphibians:

- (1) Blunt-nosed leopard lizard (*Crotaphytus wislizenii silus*).
- (2) San Francisco garter snake (*Thamnophis sirtalis tetrataenia*).

(3) Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*).

- (4) Limestone salamander (*Hydromantes brunus*).
- (5) Black toad (*Bufo boreas exsul*).

5515. (a) (1) Except as provided in Section 2081.7, fully protected fish or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected fish, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species. Prior to authorizing the take of any of those species, the department shall make an effort to notify all affected and interested parties to solicit information and comments on the proposed authorization. The notification shall be published in the California Regulatory Notice Register and be made available to each person who has notified the department, in writing, of his or her interest in fully protected species and who has provided an e-mail address, if available, or postal address to the department. Affected and interested parties shall have 30 days after notification is published in the California Regulatory Notice Register to provide any relevant information and comments on the proposed authorization.

(2) As used in this subdivision, "scientific research" does not include any actions taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

(3) Legally imported fully protected fish or parts thereof may be possessed under a permit issued by the department.

(b) The following are fully protected fish:

- (1) Colorado River squawfish (*Ptychocheilus lucius*).
- (2) Thicktail chub (*Gila crassicauda*).
- (3) Mohave chub (*Gila mohavensis*).
- (4) Lost River sucker (*Catostomus luxatus*).
- (5) Modoc sucker (*Catostomus microps*).
- (6) Shortnose sucker (*Chasmistes brevirostris*).
- (7) Humpback sucker (*Xyrauchen texanus*).
- (8) Owens River pupfish (*Cyprinoden radiosus*).
- (9) Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*).
- (10) Rough sculpin (*Cottus asperimus*).

1930. The Legislature finds and declares that:

(a) Areas containing diverse ecological and geological characteristics are vital to the continual health and well being of the state's natural resources and of its citizens.

(b) Many habitats and ecosystems that constitute the state's natural diversity are in danger of being lost.

(c) There is insufficient incentive for private landowners to maintain and perpetuate significant local natural areas in their natural state.

(d) Efforts to preserve natural areas have been fragmented between federal, state, local, and private sectors.

1931. The Legislature further finds and declares that it is the policy of this state to encourage the cooperation of federal, state, local, and private sectors, including private organizations and individuals, in efforts to maintain the state's most significant natural areas.

1932. There is hereby established the Significant Natural Areas Program which shall be administered by the department. The department, in administering this program, shall do all of the following:

(a) Obtain access to the most recent information with respect to natural resources. In order to accomplish this, the department shall maintain, expand, and keep current a data management system, designated the California Natural Diversity Data Base, designed to document information on these resources. That data shall be made available to interested parties on request.

(b) Ensure cost-sharing by all who use the data management system and develop an appropriate schedule of compensation to be paid by individuals using the data management system, not to exceed the actual costs for use of the data management system.

(c) Ensure recognition of the state's most significant natural areas. The department shall, after consultation with federal, state, and local agencies, education institutions, civic and public interest organizations, private organizations, landowners, and other private individuals, identify by means of periodic reports those natural areas deemed to be most significant.

(d) Seek the maintenance and perpetuation of the state's most significant natural areas for present and future generations in the most feasible manner. The department shall consider alternative approaches for that maintenance, including alternatives to fee acquisition such as incentives, leasing, and dedication.

(e) Reduce unnecessary duplication of effort. The department shall provide coordinating services to federal, state, local, and private interests wishing to aid in the maintenance and perpetuation of significant natural areas.

1933. No authority or responsibility provided for in this chapter shall, of itself, change or prevent the change of the use of any area identified pursuant to the Significant Natural Areas Program.

RESOURCES

Significant Natural Areas Program

The Significant Natural Areas Program was established to identify high-priority sites for the conservation of California's biological diversity and to inform resource decision-makers about the importance of these sites. The program's goals, as directed by the *Fish and Game Code* (Section 1930-1933), are to:

1. Identify the most significant natural areas in California;
2. Ensure the recognition of these areas;
3. Seek the long-term perpetuation of these areas;
4. Provide coordinating services for other public agencies and private organizations interested in protecting natural areas.

What type of products are available?

Reports and maps of Significant Natural Areas (SNA's) are available for each county in California. Also available is a digital shapefile for use on Geographic Information Systems.

How is this information used?

1. Watershed or bioregional conservation planning (Habitat Conservation Plans, Natural Community Conservation Planning, regional open space plans)
2. Environmental document review, recommended sites for mitigation banking
3. Designation of special-status areas on public lands or acquisition planning for nature reserves

more information on the Significant Natural Areas Program, contact 916 322-2493.

Timber Tax Credit Program

The Timber Tax Credit Program (TTCP) was created by the Department of Fish and Game to administer state laws AB 2925 (Sher) and SB 846 (Thompson). These laws were established to give private California landowners a financial incentive to improve salmon and steelhead habitat on their land. This program is scheduled to sunset December 1, 2000, although legislation (SB 1158, Sher and AB 1254, Strom-Martin) is currently being considered which would expand and extend this program.

To date, credited projects have ranged from road stabilization to in-stream structures and improved irrigation systems. Those taking advantage of the credits range from some of the State's largest corporate land owners to small private residential owners. The common thread is their desire to improve salmon and steelhead habitat and their understanding that, collectively, we can make a difference.

TTCP participants receive up to a 10 percent state tax credit for qualified costs associated with salmon and steelhead habitat improvement. Maximum credit for an individual or entity is \$50,000 per year.

In short, any project that is beneficial to salmon or steelhead be considered for tax credit. However, credit can not be given work required under the Forest Practices Act, by a Timber Harvest Plan or mitigation required under CEQA.

For additional information e-mail, write or call: PO Box 2219, McKinleyville CA, 95519-2219, 707 839-3378 voice & fax
mzspan@dfg2.ca.gov or www.dfg.ca.gov/timber/ttcp.l.htm.

California Wildlife Habitat Relationships (CWHR)

CWHR is a state-of-the-art information system for California's wildlife. It has information on life history, geographic distribution, taxonomy and legal status, and habitat relationships for 675 species of regularly occurring amphibians, reptiles, birds, and mammals. The information is based on current published and unpublished biological information and professional judgement by recognized experts on California's wildlife. Because of its predictive nature, CWHR has many applications for wildlife resource issues, including habitat conservation and management, land use planning, impact assessment, education and research. The CWHR System is operated and maintained by the California Department of Fish and Game in cooperation with the California Interagency Wildlife Task Group (CIWTG). Components of the system include:

CWHR Version 7.0 Software

A community-level matrix model for predicting wildlife habitat relationships for the 675 vertebrates included in CWHR. Presence/absence and habitat suitability predictions are based on geographic distribution, relationships to 59 habitat types averaging 12 stages each, and use of 124 special habitat elements. Also includes life history and legal status information. Produces 9 types of reports.

GIS Data

Distribution maps for all of the modeled species in CWHR, originally published in "California's Wildlife, Volumes I-III". Approximately 70% of all maps have undergone minor to major revision since publication and are now available electronically both as ArcInfo GIS coverages and as images..

Publications

Mayer, K.E. and W.F. Laudenslayer, Jr., eds. 1988. **A Guide to Wildlife Habitats of California**. State of California, Resources Agency, Department of Fish and Game, Sacramento, CA. Describes the CWHR habitat classification system upon which the wildlife habitat relationship models are based. Currently under revision, this first edition includes vegetation crosswalks to Holland (1986) and Cheatham and Haller (1975). It does not include descriptions or classification rules for habitat types added since 1988. *Out of print; black and white copies only.*

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. **California's Wildlife. Volumes I (Amphibians and Reptiles), II (Birds) and III (Mammals)**. State of California, Resources Agency, Department of Fish and Game, Sacramento, CA. A three volume set containing life history attributes, range and distribution information for 650 of the species modeled in the computerized database. A valuable reference that can be used independently of the CWHR system.

California's Wildlife on CD-ROM. A program which allows the user to search for a species and print a report containing life history information, references and a range map. Users can also print an entire species list for California. Contains updated information on species in the original publication plus some additional species. Also contains descriptions from the original "A Guide to Wildlife Habitats of California" plus habitats added since publication. Note to those ordering Version 7.0 subscriptions: "California's Wildlife" is contained within Version 7.0.

Airola, D.A. 1988. **A Guide to the Wildlife Habitat Relationships System**. A broad overview of the CWHR System which describes various uses and limitations of the system. Provides examples of system output from the CWHR database program as of 1988. *Out of print; black and white copies only.*

For information on CWHR or an order form for CWHR products, contact; CWHR Program Coordinator, California Department of Fish and Game, 1807 13th Street, Suite 202, Sacramento, CA 95814, 916 327-8822, or www.dfg.ca.gov/whdab/cwhr/whrintro.html.

