

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find two copies of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1). CBP requests SHPO concurrence with this determination.

Pursuant to Section 800.2(c)(1)(i) and Section 800.2(c)(2), CBP is also inviting the following tribes to consult concerning this undertaking. The consultation letter is also enclosed.

Barona Band of Mission Indians	Manzanita Band of Kumeyaay Indians
Campo Band of Mission Indians	Mesa Grande Band of Mission Indians
Cocopah Indian Tribe	San Pasqual Band of Diegueño Indians
Ewiiapaayp Band of Kumeyaay Indians	Santa Ysabel Band of Diegueno Indians
Fort Yuma Quechan Indian Tribe	Sycuan Band of Kumeyaay Nation
Jamul Indian Village of California	Torres-Martinez Desert Cahuilla Indians
Kwaaymii Laguna Band of Indians	Viejas Band of Kumeyaay Indians
La Posta Band of Kumeyaay Indians	

Your prompt attention to this request would be greatly appreciated. Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,



Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosures

DEC 06 2012



**U.S. Customs and
Border Protection**

The Honorable Kenneth A. Meza
Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA 91935

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Meza:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

Improvements to an existing border road would occur from near Border Monument 224 (approximately N 32° 38.96544, W 115° 42.1974), to near Border Monument 225 (approximately N32° 38.89518, W115° 43.52994). The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed. This road would be a 16-foot-wide road with necessary drainage structures to include all-weather surfacing.

Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find a copy of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

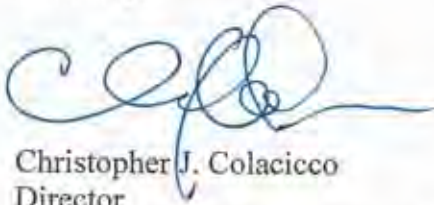
Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. Colacicco", with a long horizontal flourish extending to the right.

Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

DEC 06 2012



**U.S. Customs and
Border Protection**

The Honorable Carmen Lucas
Chairperson
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA 91962

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Lucas:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

Improvements to an existing border road would occur from near Border Monument 224 (approximately N 32° 38.96544, W 115° 42.1974), to near Border Monument 225 (approximately N32° 38.89518, W115° 43.52994). The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed. This road would be a 16-foot-wide road with necessary drainage structures to include all-weather surfacing.

Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find a copy of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,



Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

DEC 06 2012



**U.S. Customs and
Border Protection**

The Honorable Mark Romero
Chairperson
Mesa Grande Band of Mission Indians
P.O. Box 270
Santa Ysabel, CA 92082

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Romero:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

Improvements to an existing border road would occur from near Border Monument 224 (approximately N 32° 38.96544, W 115° 42.1974), to near Border Monument 225 (approximately N32° 38.89518, W115° 43.52994). The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed. This road would be a 16-foot-wide road with necessary drainage structures to include all-weather surfacing.

Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find a copy of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

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CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

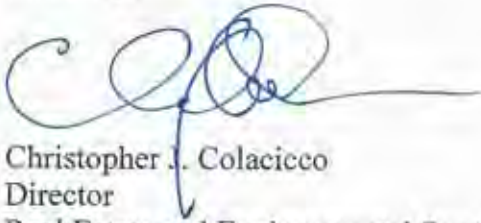
Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,



Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



**U.S. Customs and
Border Protection**

DEC 06 2012

The Honorable Keeny Escalanti
President
Fort Yuma Quechan Indian Nation
P.O. Box 1899
Yuma, AZ 85366

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear President Escalanti:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

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Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

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As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,



Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



**U.S. Customs and
Border Protection**

DEC 06 2012

Mr. John P. Bathke
THPO
Quechan Indian Nation
P.O. Box 1899
Yuma, AZ 85366

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Mr. Bathke:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

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Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

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Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

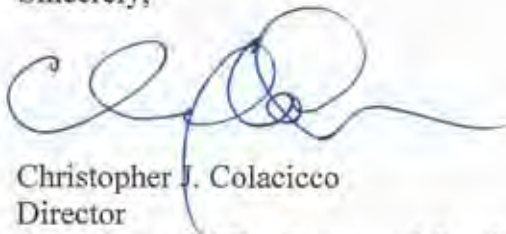
Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Colacicco', with a long horizontal flourish extending to the right.

Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



**U.S. Customs and
Border Protection**

DEC 06 2012

The Honorable Allen E. Lawson
Chairperson
San Pasqual Band of Mission Indians
P.O. Box 365
Valley Center, CA 92082

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Lawson:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

Improvements to an existing border road would occur from near Border Monument 224 (approximately N 32° 38.96544, W 115° 42.1974), to near Border Monument 225 (approximately N32° 38.89518, W115° 43.52994). The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed. This road would be a 16-foot-wide road with necessary drainage structures to include all-weather surfacing.

Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find a copy of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

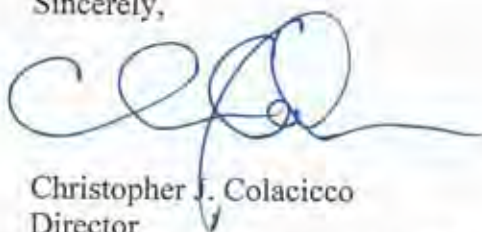
Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'CJ Colacicco', with a long horizontal flourish extending to the right.

Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



**U.S. Customs and
Border Protection**

DEC 06 2012

The Honorable Virgil Perez
Chairperson
Santa Ysabel Band of Diegueno Indians
P.O. Box 130
Santa Ysabel, CA 92070

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Perez:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

Improvements to an existing border road would occur from near Border Monument 224 (approximately N 32° 38.96544, W 115° 42.1974), to near Border Monument 225 (approximately N32° 38.89518, W115° 43.52994). The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed. This road would be a 16-foot-wide road with necessary drainage structures to include all-weather surfacing.

Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find a copy of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Colacicco', with a long horizontal flourish extending to the right.

Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

DEC 06 2012



U.S. Customs and
Border Protection

The Honorable Mary L. Resvaloso
Chairperson
Torres Martinez Desert Cahuilla Indians
P.O. Box 1160
Thermal, CA 92274

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Resvaloso:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

Description of Undertaking

Improvements to an existing border road would occur from near Border Monument 224 (approximately N 32° 38.96544, W 115° 42.1974), to near Border Monument 225 (approximately N32° 38.89518, W115° 43.52994). The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed. This road would be a 16-foot-wide road with necessary drainage structures to include all-weather surfacing.

Area of Potential Effect

The area of potential effect (APE) for the proposed undertaking includes the existing border road to be improved and the proposed alignment of the new access road leading to BP Hill, as well as an approximately 200-foot-wide corridor (300-foot-wide in some locations) along them that would take into account any temporary impacts from road improvement and construction

activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

Identification and Evaluation of Historic Properties

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, a Class III pedestrian survey of the entire APE was completed to determine if cultural resources (archaeological sites, isolated finds, or historic structures) are present. Enclosed please find a copy of the cultural resources technical report titled *A Class III Cultural Resources Survey of the Proposed Improvement and Construction, Operation, and Maintenance of Approximately 1.6 Miles of All-Weather Road in the El Centro Area of Responsibility, U.S. Customs and Border Protection, El Centro Sector, Imperial County, California* for your records and comment.

As part of the background research, two previously recorded sites were identified as being located within or adjacent to the project corridor. CA-IMP-4833 is described as a cairn and trail segment located near the eastern end of the border road. CA-IMP-4829 is described as a quartz chipping station in the same vicinity. Attempts to relocate both sites were made; however, both sites have been completely destroyed by the extensive gravel quarry operated by the Imperial Irrigation District. During surveys, an isolated feature (13-009617), which consists of International Boundary Monument No. 225, was relocated.

No new archaeological sites were identified during the Class III survey of the project corridor. However, the survey of the APE did result in the identification of nine isolated finds. The isolated finds consist of five historic General Land Office survey markers, a scatter of milled lumber and nails, International Boundary Monument No. 224, a tobacco tin, and a shell fragment.

CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Colacicco', with a long horizontal flourish extending to the right.

Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



U.S. Customs and
Border Protection

DEC 06 2012

The Honorable Allen E. Lawson
Chairperson
San Pasqual Band of Mission Indians
P.O. Box 365
Valley Center, CA 92082

Subject: Proposed Improvement and Construction, Operation, and Maintenance of
Approximately 1.6 Miles of All-Weather Road in Imperial County, California

Dear Chairperson Lawson:

U.S. Customs and Border Protection (CBP) is proposing the improvement and construction, operation, and maintenance of approximately 1.6 miles of road along the U.S./Mexico border west of Calexico, California. The proposed all-weather roads are located west of the All-American Canal adjacent to and within U.S. Bureau of Land Management (BLM) lands, near the U.S./Mexico border in Imperial County, California. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800 "Protection of Historic Properties (Section 106)," this letter and enclosures are being transmitted to initiate consultation, identify historic properties, and to assess adverse effects of this undertaking.

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Area of Potential Effect

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activities. A large portion of the APE has been previously disturbed by an extensive gravel quarry, while other disturbances include the existing road footprint, refuse, and erosion.

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CBP has determined that the isolated artifacts, survey markers, and destroyed archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). Both International Boundary Monuments are eligible for listing on the NRHP under criteria A and C, and as such will be avoided by all road improvement and construction activities.

Determination of Effects on Historic Properties

Based on the location of the International Boundary Monuments in relation to the proposed road improvement and construction activities, the commitment by CBP to avoid the International Boundary Monuments during all road improvement and construction activities, and the absence of other historic buildings, structures, sites, districts or objects located within the APE, CBP has made a determination of no historic properties present or affected for this undertaking pursuant to Section 800.4(d)(1).

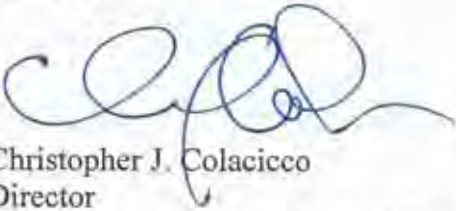
Please let us know if you have any concerns or would like to provide any additional information relative to the proposed undertaking within 30 days of receipt of this letter. Your prompt attention to this request would be greatly appreciated.

Please direct all correspondence to:

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by email at john.petrilla@dhs.gov. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Colacicco', with a stylized flourish extending to the right.

Christopher J. Colacicco
Director
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



IID

Imperial Irrigation District

GS-ES

December 12, 2012

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

SUBJECT: US CBP Improvement and Construction, Operation & Maintenance
Proposed All-Weather Road near the U.S./Mexico Border

Dear Mr. Petrilla:

On November 13, 2012, the U.S. Customs and Border Protection (CBP) issued a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the improvement, construction, operation and maintenance of an all-weather road along the U.S./Mexico Border. The Proposed Action would improve and construct, operate, and maintain approximately 1.6 miles of all-weather road near the U.S./Mexico border within the U.S. Border Patrol El Centro Station's Area of Responsibility. The existing 1.4-mile road that would be improved is west of the All-American Canal and adjacent to and within U.S. Bureau of Land Management's Yuha Desert Area of Critical Environmental Concern. The Proposed Action includes improvements to the existing border road, construction of a new access road to the top of BP Hill, and required maintenance activities upon completion of the proposed project. The Proposed Action also includes the construction of a new access road to the top of BP Hill (0.2 mile in length).

The Imperial Irrigation District (IID) has reviewed the Draft EA and Draft FONSI and has the following comments:

1. On page 3-4, 3.2.1 *Affected Environment*, lines 8, 9, 10 state, "IID has an extant gravel/sand quarry located near the eastern terminus of the project area. This site is currently not in use; however, IID could continue operations in the future." (See Figure 3-1, page 3-5)". In 2012 IID relinquished the mineral materials site and did not renew the permit for gravel and clay out of the Mount Signal Gravel Pit. The Bureau of Land Management (BLM) concluded that the IID had completed all the reclamation tasks and responsibilities associated with the operation of the Mount Signal gravel pit and complied with all BLM conditions and general stipulations. The Mount Signal Gravel Pit is located within the

Southwest Quarter of Section 24, Township 17 South, Range 12 East, San Bernardino Meridian.

2. The project site lies outside the All-American Canal (AAC) Service Area Boundary. Thus, the developer is ineligible to draw water from the Westside Main Canal/AAC for this project and will require to contract water from a commercial source.

Should you have any questions, please do not hesitate to contact me by phone at 760-482-3609 or by e-mail at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,



Donald Vargas
Environmental Specialist

Kevin Kelley – General Manager
Jesse Silva – Manager, Water Dept.
Mario Escalera – Interim Deputy Manager - Operations, Energy Dept.
Carl Stills – Interim Deputy Manager – Strategic Planning, Energy Dept.
Paul G. Peschel – Interim General Services Manager
Jeff M. Garber – General Counsel
Tom King – Interim Project Management Officer, Portfolio Mgmt. Office
Carlos Villalon – Asst. Mgr., Water Dept. System Control & Monitoring
Juan Carlos Sandoval – Asst. Mgr. Energy Dept.
Shayne Farber – Asst. Supervisor, Real Estate
Vikki Dee Bradshaw – Interim Supervisor, Environmental Services

Josh McEnany

From: Josh McEnany
Sent: Wednesday, January 02, 2013 9:54 AM
To: Josh McEnany
Subject: FW: Improvement and Construction, Operation and Maintenance in Imperial County

From: Julie Hagen [<mailto:jhagen@VIEJAS.com>]
Sent: Thursday, December 27, 2012 8:14 AM
To: PETRILLA, JOHN
Cc: Raymond Cuero; Tina Estrada
Subject: Improvement and Construction, Operation and Maintenance in Imperial County

Good Morning,

Viejas Band of Kumeyaay Indians received your notice on improving an existing border road and we are concern with the fact there are cultural resources in the vicinity. Viejas Band would like to know if there is going to be a Native American Cultural monitor present when you are doing your improvements to help you with avoiding any impacts to cultural resources. Thank you

Julie Hagen
Viejas Band of Kumeyaay Indians
Environmental Coordinator
Phone: 619-659-2339
Cell: 619-890-2346

Public Comment Response Matrix
Draft EA for the Improvement and Construction, Operation, and Maintenance
of Proposed All-Weather Road in the El Centro Station Area of Responsibility,
U.S. Customs and Border Protection (CBP), El Centro Sector

December 2012

#	Location		Comment	Reviewer	CBP's Response
	Page	Line Section			
0					
1		General	The Native American Heritage Commission did conduct a Sacred Lands File (SLF) search of its inventory and Native American cultural resources were not identified in the location you specified.	Dave Singleton, Program Analyst, Native American Heritage Commission	Thank you for your comment and analyses.
2		General	The U.S. Section International Boundary and Water Commission (USIBWC) has responsibility through treaties between the United States and Mexico to maintain the integrity of the border. Included in the demarcation of the boundary through the maintenance of permanent boundary monuments to include access for their inspection and maintenance. Any proposed construction must allow for line of sight visibility between each of the boundary monuments. The USIBWC requires that all structures be off-set from the international boundary by a minimum of 3 feet and allow a clear line of sight between any affected boundary monuments. The USIBWC will not approve any construction near the international boundary in the United States that increases, concentrates, or relocates overland drainage flows into either country.	John L. Merino, Principal Engineer, USIBWC	Thank you for your comment, no structures would be built as part of the Proposed Action.
3		General		John L. Merino, Principal Engineer, USIBWC	Thank you for your comment. No construction or improvement activities would increase, concentrate or relocate any overland drainages flowing into either the United States or Mexico.

Public Comment Response Matrix
Draft EA for the Improvement and Construction, Operation, and Maintenance
of Proposed All-Weather Road in the El Centro Station Area of Responsibility,
U.S. Customs and Border Protection (CBP), El Centro Sector

December 2012

#	Location		Comment	Reviewer	CBP's Response
	Page	Line			
4			General	John L. Merino, Principal Engineer, USIBWC	Thank you for your comment. Design drawings for Phase A (2 Miles of All-Weather Road Improvements from Mount Signal Road moving West) has been submitted to the USIBWC for approval. Phase B will be submitted for approval prior to construction activities occurring.
5			General	Jill McCormick, Cultural Resource Manager, Cocopah Indian Tribe	Thank you for your comment and support. CBP will keep the Cocopah Indian Tribe informed as the project moves forward.
6	3-4	8-10	3.2.1	Donald Vargas, Environmental Specialist, Imperial Irrigation District	The document has been revised to reflect that IID has no intention of using the quarry site in the future.

Public Comment Response Matrix
Draft EA for the Improvement and Construction, Operation, and Maintenance
of Proposed All-Weather Road in the El Centro Station Area of Responsibility,
U.S. Customs and Border Protection (CBP), El Centro Sector

December 2012

#	Location		Section	Comment	Reviewer	CBP's Response
	Page	Line				
7			General	The project site lies outside the All-American Canal (AAC) Service Area Boundary. Thus, the developer is ineligible to draw water from the Westside Main Canal/AAC for this project and will be required to contract water from a commercial source.	Donald Vargas, Environmental Specialist, Imperial Irrigation District	CBP will obtain its water from a contract source.
8			General	Viejas Band of Kumeyaay Indians received your notice on improving an existing border road and we are concern with the fact there are cultural resources in the vicinity. Viejas Band would like to know if there is going to be a Native American Cultural monitor present when you are doing your improvements to help you with avoiding any impacts to cultural resources.	Julie Hagen Viejas Band of Kumeyaay Indians Environmental Coordinator	Native American monitors will be onsite during construction.



THE COCOPAHI INDIAN TRIBE

Cultural Resource Department

14515 S. Veterans Drive

Somerton, Arizona 85350

Telephone (928) 627-4849

Cell (928) 503-2291

Fax (928) 627-3173

CCR-018-12-007

January 2, 2013

Mr. John Petrilla
U.S. Customs and Border Protection
Facilities Management and Engineering
Laguna Niguel Facilities Center
24000 Avila Rd, Room 5020
Laguna Niguel, CA 92677-3400

RE: Request for Comments for U.S. Customs and Border Protection Proposed
Improvement and Construction, Operation and Maintenance of Approximately 1.6
Miles of All-Weather Road in Imperial County, California

Dear Mr. Petilla:

The Cultural Resources Department of the Cocopah Indian Tribe appreciates your consultation efforts on this project. We are pleased that you contacted this department on this cultural resource issue for the purpose of solicitation of our input and to address our concerns on this matter. We concur with the No Historic Properties Affected determination made by your agency. We would like to continue to be kept informed on the progression of the project and be a part of the consultation process in the future.

If you have any questions or need additional information please feel free to contact the cultural resource department. We will be happy to assist you with any future concerns or questions.

Sincerely,

H. Jill McCormick, M.A.

Cultural Resource Manager



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

December 17, 2012

John Petrilla
U.S. Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Subject: West Desert Road Project
SCH#: 2012114001

Dear John Petrilla:

The State Clearinghouse submitted the above named Joint Document to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 14, 2012, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2012114001
Project Title West Desert Road Project
Lead Agency U.S. Customs and Border Protection

Type JD Joint Document
Description Note: EA / FONSI

The Proposed Action comprises improvement of an existing border road and construction of a new access road to the top of BP Hill RVSS tower. The border road improvements would occur from near Border Monument 224 to near Border Monument 225. The border road would be improved to an all-weather surface road (1.4 miles long) approximately 20 feet wide with 2-foot shoulders and would include any necessary drainage structures (i.e., culverts, low-water crossing, or bridge). A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 0.3 mile within the construction corridor. In addition to the 1.4 miles of road improvement, a new access road (approximately 0.2 mile) leading to the BP Hill RVSS tower from the improved border road would be constructed.

Lead Agency Contact

Name John Petrilla
Agency U.S. Customs and Border Protection
Phone 949 360 2382 **Fax**
email
Address 24000 Avila Road, Suite 5020
City Laguna Niguel **State** CA **Zip** 92677

Project Location

County Imperial
City Calexico
Region
Lat / Long 32° 38' 57.95" N / 115° 42' 29.11" W
Cross Streets SR 98 and Signal Road
Parcel No. Mount Signal Quadrangle
Township 17S **Range** 12E **Section** 23/24 **Base**

Proximity to:

Highways SR 98
Airports
Railways
Waterways All-American Canal
Schools
Land Use Currently Roosevelt Reservation and Bureau of Land Management Yuha Desert Management Area for the FTHL

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Management Agency, California; California Highway Patrol; Caltrans, District 11; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 7; Native American Heritage Commission; State Lands Commission

Document Details Report
State Clearinghouse Data Base

Date Received 11/15/2012 *Start of Review* 11/15/2012 *End of Review* 12/14/2012

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-6251
 Fax (916) 657-5390
 Web Site www.nahc.ca.gov
 e-mail: ds_nahc@pacbell.net



RECEIVED

November 20, 2012

NOV 27 2012

Mr. John Petrilla
 Office of Healthcare Programs

STATE CLEARING HOUSE

**U.S. Customs & Border Protection | Facilities
 Management and Engineering**

24000 Avila Road, Room 5020
 Laguna Niguel, CA 92677-3400

Clear
 12/14/12
 C

Sent by U.S. Mail

No. of Pages: 5

Re: "**SCH#2012114001; NEPA 'Document: Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the West Desert Road Project;**" located in the El Centro Sector; Imperial County, California

Dear Mr. Petrilla:

The Native American Heritage Commission (NAHC) is the California State 'Trustee Agency' pursuant to Public Resources Code §21070 for the protection of California's Native American Cultural Resources. The NAHC is also a 'reviewing agency' for environmental documents prepared under the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq*), 36 CFR Part 800.3, .5 and are subject to the Tribal and interested Native American consultation as required by the National Historic Preservation Act, as amended (Section 106) (16 U.S.C. 470; Section 106, [4f], 110 [f] [k], 304). The provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001-3013) and its implementation (43 CFR Part 10.2), and California Government Code §27491 may apply to this project if Native American human remains are inadvertently discovered.

The NAHC is of the opinion that the federal standards, pursuant to the above-referenced Acts and the Council on Environmental Quality (CSQ; 42 U.S.C. 4371 *et seq*) are similar to and in many cases more stringent with regard to the 'significance' of historic, including Native American items, and archaeological, including Native American items at least equal to the California Environmental Quality Act (CEQA.). In most cases, federal environmental policy require that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Statement (EIS).

The NAHC did conduct a Sacred Lands File (SLF) search of its Inventory and Native American cultural resources were not identified in the location you specified. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American traditional cultural places or cultural landscapes in any APE. While in this case, a search of the NAHC *Sacred Lands File* did not indicate the presence of any sites within the APE you provided, a Native American tribe or individual may be the only source for the presence of traditional cultural places. For that reason, enclosed is a list of Native American

individuals/organizations who may have knowledge of traditional cultural places in your project area. This list should provide a starting place in locating any areas of potential adverse impact

The NAHC Sacred Lands File Inventory of the Native American Heritage Commission is established by the California Legislature pursuant to California Public Resources Code §§5097.94(a) and 5097.96. The NAHC Sacred Lands Inventory is populated by submission to the data by Native American tribes and Native American elders. In this way it differs from the California and National Register of Historic Places under the jurisdiction of the U.S. Secretary of the Interior.

The NAHC, pursuant to Appendix B of the Guidelines to the California Environmental Quality Act (CEQA) is designated as the agency with expertise in the areas of issues of cultural significance to California Native American communities. Also, in the 1985 California Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites.

Culturally affiliated tribes are to be consulted to determine possible project impacts pursuant to the National Historic Preservation Act, as amended. Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. The NAHC recommends as part of 'due diligence', that you also contact the nearest Information Center of the California Historical Resources Information System (CHRIS) of the State Historic Preservation Office (SHPO) for other possible recorded sites in or near the APE (contact the Office of Historic Preservation at 916-445-7000).

Attached is a list of Native American contacts is attached to assist you pursuant to Section 800.2(c)(1)(i) and Section 800.2(c)(2); they may have knowledge of cultural resources in the project area. It is advisable to contact the persons listed and seek to establish a 'trust' relationship with them; if they cannot supply you with specific information about the impact on cultural resources, they may be able to refer you to another tribe or person knowledgeable of the cultural resources in or near the affected project area.

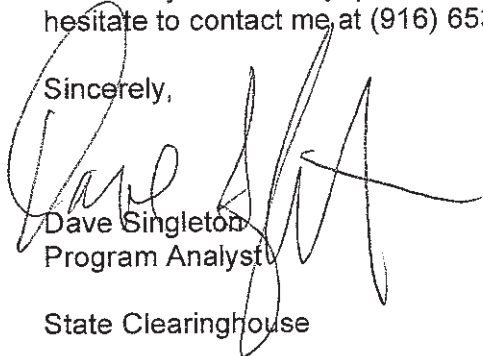
Lead agencies should consider avoidance, in the case of cultural resources that are discovered. A tribe or Native American individual may be the only source of information about a cultural resource; this is consistent with the NHPA (16 U.S.C. 470 *et seq* Sections. 106, 110, and 304) Section 106 Guidelines amended in 2009. Also, recommended for serious consideration are the federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) NAGPRA (25 U.S.C. 3001-3013) as appropriate. In addition, consider the 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes and are supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

NEPA regulations provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Even though a discovery may be in federal property, California Government Code §27460 should be followed in the event of an accidental discovery of human remains during any groundbreaking activity; in such cases California Government Code §27491

and California Health & Safety Code §7050.5 will apply and construction cease in the affected area.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Singleton", written over the typed name.

Dave Singleton
Program Analyst

State Clearinghouse

Attachment: Native American Contacts list

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



December 20, 2012

Reply in Reference To: CBP_2012_1210_001

Christopher Colacicco, Director
Real Estate and Environmental Services
Border Patrol Facilities and Tactical Infrastructure
1301 Constitution Avenue, NW
EPA West Building, B-155
Washington, DC 20229

Re: Section 106 Consultation for Improvement, Construction, Operation and Maintenance of 1.6 Miles of All-Weather Road, Imperial County

Dear Director Colacicco:

Thank you for initiating consultation regarding the U.S. Customs and Border Protection's (CBP) efforts to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation found at 36 CFR Part 800.

You have identified the undertaking as the construction, operation and maintenance of 1.6 miles of all-weather road in Imperial County. Project activities include the improvement of a segment of existing border road between Border Monuments 224 and 225 through widening, installation of drainage features and new access road.

It is my understanding that Native American tribes have been notified about this project but no comments have been received at this time. No listed or eligible National Register resources have been identified within the project area and CBP is requesting my concurrence with their finding of no historic properties affected. After reviewing the information submitted by CBP, I have no objection to this finding. Please be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have future responsibilities for this undertaking under 36 CFR Part 800.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact Ed Carroll of my staff at (916) 445-7006 or at email at ecarroll@parks.ca.gov.

Sincerely,

A handwritten signature in cursive script that reads "Susan K. Stratton for".

Carol Roland-Nawi, PhD
State Historic Preservation Officer

APPENDIX B
BIOLOGICAL SURVEY REPORT



Biological Survey for the West Desert Road El Centro Station, El Centro Sector

Dates Surveyed: June 28, 2012
Climate: Calm winds, Sunny, 85° F

Biologist: Josh McEnany – Gulf South Research Corporation
John Ginter – Gulf South Research Corporation

U.S. Customs and Border Protection (CBP) is proposing the improvement, construction, operation, and maintenance of approximately 2 miles of all-weather road along the U.S./Mexico border within the U.S. Border Patrol (USBP) El Centro Station's Area of Responsibility (AOR). Currently, the existing road is impassable, which creates long drive times for agents to reach patrol areas and restricts agents' abilities to assist with interdictions and apprehensions. The improvements to the West Desert Road begin at the Dump Turnaround (approximately N32° 38.993, W115° 41.996), near Border Monument 224, and extend to the Iron Gate (approximately N32° 38.861, W115° 43.725), near Border Monument 225. The road would be improved to an all-weather surface road (1.8 miles long) approximately 20 feet wide with 2-foot shoulders, and would include any necessary drainage structures. A drag road would also be constructed along the north side of the all-weather surface. Staging areas would be located approximately every 1/3 mile within the construction corridor and at the eastern and western terminuses. In addition to the 1.8 miles of road improvement, a new access road leading to the BP Hill Remote Video Surveillance System (RVSS) (approximately 0.2 mile) from the project road would be constructed (Figure 1). The entire project corridor, which includes the new road to BP Hill, was surveyed on foot (meandering transects) by biologists from Gulf South Research Corporation on June 28, 2012. The survey limits varied from 200 to 300 feet wide, depending on the terrain and suggestions by the project engineer. Vegetation, wildlife, and any potential waters of the United States were identified and recorded as needed. Photographs taken during the field survey are included in Attachment 1, and the location of each photo point is depicted on Figure 1.

The project lies in the Lower Colorado River Valley (LCRV) biome of the Sonoran Desert, and the vegetation community is broadly classified as Sonoran Desert scrub (Brown 1994). The project corridor contained less than five percent groundcover, and the predominant vegetation observed was creosote bush (*Larrea tridentata*), which is typical for this area within the Sonoran Desert. Other species observed included desert holly (*Atriplex hymenelytra*), skeleton weed (*Eriogonum deflexum*), white bursage (*Ambrosia dumosa*), velvet mesquite (*Prosopis velutina*), and catclaw acacia (*Acacia greggii*). Table 1 includes the full list of plant species observed during the survey.

The Sonoran Desert is extremely hot, and many animals are nocturnal or crepuscular. Many of the animals that inhabit the Sonoran Desert are found throughout the warmer and drier regions of the southwestern United States (Brown 1994). Common mammals found in this habitat include multiple species of bats, coyote (*Canis latrans*), black-tailed jack-rabbit (*Lepus californicus*), desert pocket mouse (*Chaetodipus penicillatus*), road runner (*Geococcyx californianus*), mourning dove (*Zenaida macroura*), lesser nighthawk (*Chordeiles acutipennis*), and desert iguana (*Dipsosaurus dorsalis*). The most common wildlife observed during the survey



Figure 1: Survey Map

Table 1. Plant Species Observed During the West Desert Road Survey

Common Name	Scientific Name
Velvet mesquite	<i>Prosopis velutina</i>
Desert holly	<i>Atriplex hymenelytra</i>
Cattle saltbush	<i>Atriplex polycarpa</i>
Desert trumpet	<i>Eriogonum inflatum</i>
Catclaw acacia	<i>Acacia greggii</i>
Skeleton weed	<i>Eriogonum deflexum</i>
White bursage	<i>Ambrosia dumosa</i>
Sahara mustard	<i>Brassica tournefortii</i>
Desert Indianwheat	<i>Plantago ovate</i>
White ratany	<i>Krameria grayi</i>
Sweetbush	<i>Bebia juncea</i>
Devil's spineflower	<i>Chorizanthe rigida</i>
Desert lavender	<i>Hyptis emoryi</i>
Wild heliotrope	<i>Phacelia crenulata</i>
Arabian schismus	<i>Schismus arabicus</i>
Sixweeks fescue	<i>Vulpia octoflora</i>
California threeawn	<i>Aristida californica</i>
Desert smoketree	<i>Psorothamnus spinosor</i>
Dyebush	<i>Psorothamnus emoryi</i>
Jointfir	<i>Ephedra nevadensis</i>
Fanleaf crinklemat	<i>Tiquilia plicata</i>
Creosote bush	<i>Larrea tridentata</i>

includes mourning dove, lesser nighthawk, black-throated sparrow (*Amphispiza bilineata*), tiger whiptail (*Aspidoscelis tigris*), and long-tailed brush lizard (*Urosuarus graciosus*). All of the wildlife species observed during the survey are included in Table 2.

Table 2. Wildlife Observed During the West Desert Road Survey

Common Name	Scientific Name
Black-throated sparrow	<i>Amphispiza bilineata</i>
Lesser nighthawk	<i>Chordeiles acutipennis</i>
Mourning dove	<i>Zenaida macroura</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Flat-tail horned lizard*	<i>Phrynosoma mcallii</i>
Desert kangaroo rat*	<i>Dipodomys deserti</i>
Coyote*	<i>Canis latrans</i>
Kit fox*	<i>Vulpes macrotis</i>
Sidewinder*	<i>Crotalus cerastes</i>
Tiger whiptail	<i>Aspidoscelis tigris</i>
Desert iguana	<i>Dipsosaurus dorsalis</i>
Zebra-tailed lizard	<i>Callisaurus draconoides</i>
Long-tailed brush lizard	<i>Urosuarus graciosus</i>

*These species were not observed; however, tracks and/or scat were observed within the project corridor.

The survey identified seven ephemeral washes bisecting the project corridor that might be regulated as waters of the United States (Figure 1). The total impact on the seven potential waters of the United States would be less than 0.1 acre. Dominant plants found along the drainages include velvet mesquite, catclaw acacia, and skeleton weed.

Although no Federally listed or state-listed species were observed during the surveys, tracks and scat of the flat-tail horned lizard (*Phrynosoma mcallii*) (FTHL) were recorded at one location. FTHL, a conservation agreement species, is not a Federally protected species. However, five Federal agencies signed a Memorandum of Agreement to protect the FTHL and its habitat on Federal lands. Habitat for the FTHL exists within the project corridor in the Yuma Desert Management Area (YDMA). Established by the 1997 Flat-Tailed Horned Lizard Rangeland Management Strategy, the YDMA serves as a tool to facilitate FTHL conservation. The project area is located within the YDMA. One burrow complex, presumably inhabited by desert kangaroo rats (*Dipodomys deserti*) and which could provide habitat for the BLM listed western burrowing owl (*Athene cunicularia*) and kit fox (*Vulpes macrotis*), was also observed and recorded during the survey efforts (Figure 1).

References

Brown, D. E. (ed.). 1994. *Biotic Communities: Southwestern United States and Northwestern Mexico*. Salt Lake City, UT: University of Utah Press.

ATTACHMENT 1



Photograph Point 1. Facing West



Photograph Point 1. Facing North



Photograph Point 1. Facing East



Photograph Point 2. Facing West



Photograph Point 2. Facing North



Photograph Point 3. Facing East



Photograph Point 3. Facing Southeast



Photograph Point 3. Facing East



Photograph Point 4. Facing West



Photograph Point 4. Facing Southeast



Photograph Point 5. Facing Southwest



Photograph Point 5. Facing Northeast



Photograph Point 6. Facing North



Photograph Point 6. Facing West



Photograph Point 6. Facing East



Photograph Point 6. Facing South



Photograph Point 7. Facing North



Photograph Point 8. Facing South



Photograph Point 8. Facing North



Photograph Point 9. Facing South



Photograph Point 9. Facing North



Photograph Point 10. Facing North



Photograph Point 10. Facing West



Photograph Point 11. Facing Southwest



Photograph Point 12. Facing Northeast



Photograph Point 12. Facing North



Photograph Point 13. Facing South

APPENDIX C
PROTECTED SPECIES: FEDERAL, STATE, AND BLM SENSITIVE

Scientific Name	Common Name	Taxon Abbrev.	Lead Office	State Status	Fed. Status	LISTING		RECOVERY			FEDERAL REGISTER	DISTRIBUTION [2]				
						Date Listed	Critical Habitat [3]	Plan	5-Year Review	RPN [4]	Most Recent Publication	LA	O	SB	Riv	SD
PLANTS																
<i>Acanthoscyphus parishii</i> var. <i>gouldianiana</i> (<i>Oxytheca</i> p. var. p.) [1]	Cushenbury oxytheca	ACPAGO	CFWO		FE	24-Aug-94	1-02	D-97	2009	9C					X	
<i>Acanthomntha ilicifolia</i>	San Diego thornmint	ACIL	CFWO		FT	13-Oct-98	1-08		2009	8					X	
<i>Acmispion dendroideus</i> var. <i>traskiae</i> (<i>Leino</i> s. subsp. <i>traskiae</i>) [1]	San Clemente Island lotus	LODETR	CFWO	SE	FE	11-Aug-77		F-84	2007	15	16-May-12	X				
<i>Allium manzi</i>	Manz's onion	ALMI	CFWO	ST	FE	13-Oct-98	n-12		2009	2C	11-Sep-12				X	
<i>Ambrosia pumila</i>	San Diego ambrosia	AMPU	CFWO		FE	2-Jul-02	1-10		2010	11C					X X	
<i>Arctostaphylos glandulosa</i> subsp. <i>crassifolia</i>	Del Mar manzanita	ARGICR	CFWO		FE	7-Oct-96			2010	6C					X	
<i>Arenaria pulchricola</i>	marsh sandwort	ARPA	VFWO	SE	FE	3-Aug-93		F-98	2008	2		X	X			
<i>Astragalus albus</i>	Cushenbury milk-veitch	ASAL	CFWO		FE	24-Aug-94	1-02	D-97	2009	8C					X	
<i>Astragalus brauntonii</i>	Braunton's milk-veitch	ASBR	VFWO		FE	29-Jan-97	1-06	F-99	2009	2		X	X		X	
<i>Astragalus lentiginosus</i> var. <i>coacheliae</i>	Coachelia Valley milk-veitch	ASLECO	CFWO		FE	6-Oct-98	1-05		2009	6C	16-May-12				X	
<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	Peirson's milk-veitch	ASMAPE	CFWO	SE	FT	6-Oct-98	1-08		2008	9	17-Jul-08				X	
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura marsh milk-veitch	ASPYLA	VFWO	SE	FE	21-May-01	1-04		2010	6C		X	X			
<i>Astragalus tener</i> var. <i>trii</i>	coastal dunes milk-veitch	ASTEIT	VFWO	SE	FE	12-Aug-98		F-05	2009	6C		X			X	
<i>Astragalus tricarlinatus</i>	triple-ribbed milk-veitch	ASTR	CFWO		FE	6-Oct-98			2009	14				X	X	
<i>Atriplex coronata</i> var. <i>notatae</i>	San Jacinto Valley crowscale	ATCONO	CFWO		FE	13-Oct-98	n-12		2008	3	11-Sep-12				X	
<i>Baccharis vauquensis</i>	Encinitas baccharis	BAVA	CFWO	SE	FT	7-Oct-96			2011	9C					X	
<i>Berberis nevadensis</i>	Nevad's barberry	BENE	CFWO	SE	FE	13-Oct-98	1-08		2009	2		X	X	X	X	
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	BRFI	CFWO	SE	FT	13-Oct-98	1-11		2009	8C		X	X	X	X	
<i>Casillaria cinerea</i>	ash-gray paintbrush	CACI	CFWO		FT	14-Sep-98	1-07		2008	8					X	
<i>Casillaria grisea</i>	San Clemente Island paintbrush	CAGR	CFWO	SE	FE	11-Aug-77		F-84	2007	14	16-May-12	X				
<i>Ceanothus sphaerocephalus</i>	Vail Lake ceanothus	CEOP	CFWO	SE	FT	13-Oct-98	1-07		2008	2					X	
<i>Cercocarpus traskiae</i>	Catalina Island mountain-mahogany	CTTR	CFWO	SE	FT	8-Aug-97			2007	8			X			
<i>Chloroceryon maritimum</i> subsp. <i>maritimum</i> (<i>Cordylanthus maritimus</i> subsp. <i>maritimus</i>) [1]	salt marsh bird's-beak	CHMAMA	CFWO	SE	FE	28-Sep-78		F-85	2009	0		X	X		X	
<i>Chorizanthe ocutiana</i>	Ocut's spinnelower	CHOR	CFWO	SE	FE	7-Oct-96			2008	5					X	
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spinnelower	CHPAFE	VFWO	SE	C	25-Oct-99			na			X	X	X		
<i>Demandra conjugens</i> (<i>Hemiclonia</i> s.) [1]	Otay tarplant	DECO	CFWO	SE	FT	13-Oct-98	1-02	F-04	2009	8C					X	
<i>Delphinium variegatum</i> subsp. <i>limbica</i>	San Clemente Island larkspur	DEVAKI	CFWO	SE	FE	11-Aug-77		F-84	2008	15	19-Jan-11	X				
<i>Dodecathema leptoceras</i> [1]	slender-horned spinnelower	DOLJ	CFWO	SE	FE	28-Sep-87			2010	7C		X	X	X		
<i>Dudleya cymosa</i> subsp. <i>swartzii</i>	Santa Monica Mountains dudleya	DUCYOV	VFWO		FT	29-Jan-97		F-99	2009	6		X	X			
<i>Dudleya stolonifera</i>	Laguna Beach live-forever	DUST	CFWO	ST	FT	13-Oct-98			2010	8			X			
<i>Eriogonum arisium</i> (<i>Arenaria arisium</i>) [1]	Bear Valley sandwort	ERUR	CFWO		FT	14-Sep-98	1-07		2008	8					X	
<i>Eriogonum densifolium</i> subsp. <i>sanctorum</i>	Santa Ana River woolly-star	ERDESA	CFWO	SE	FL	28-Sep-97			2010	6C		X	X	X		
<i>Eriogonum parishii</i>	Parish's daisy	ERPA	CFWO		FT	24-Aug-94	1-02	D-97	2009	8C					X X	
<i>Eriogonum kennedyi</i> var. <i>sanctimonianum</i>	southern mountain wild buckwheat	ERKEAU	CFWO		FT	14-Sep-98	1-07		2008	9					X	
<i>Eriogonum ovalifolium</i> var. <i>viratum</i>	Cushenbury buckwheat	EROVVI	CFWO		FE	24-Aug-94	1-02	D-97	2009	9C					X	
<i>Eriogonum aristolatum</i> var. <i>parishii</i>	San Diego button celery	ERARPA	CFWO	SE	FL	3-Aug-94		F-98	2010	9C					X X	
<i>Fremontodendron mexicanum</i>	Mexican flannelbush	FRME	CFWO	SR	FE	13-Oct-98	1-07		2009	8					X	
<i>Hazardia ocutii</i>	Ocut's hazardia	HAOR	CFWO	ST	C				na		26-Oct-11				X	
<i>Helianthemum Greenei</i>	Island rush-rose	HEGR	VFWO		FT	13-Jul-97		F-00	2010	14		X				
<i>Lathyrus maximus</i>	San Clemente Island woodland star	LIMA	CFWO	SE	FE	8-Aug-97		F-84	2007	2			X			
<i>Malacothamnus clemantinus</i>	San Clemente Island bush mallard	MACI	CFWO	SE	FE	11-Aug-77		F-84	2007	8	16-May-12	X				
<i>Mimrodella cinnerea</i> (<i>M. limboldi</i> subsp. s.) [1]	willow mimrodella	MOVI	CFWO	SE	FE	13-Oct-98	n-12		2008	2	6-Mar-12				X	
<i>Navarretia fissalis</i>	spreading navarretia	NAFO	CFWO		FT	13-Oct-98	1-10	F-98	2009	8		X	X	X		
<i>Orcuttia californica</i>	California Orcutt grass	ORCA	CFWO	SE	FE	3-Aug-93		F-98	2011	11C		X	X	X		
<i>Pentstemon fremii</i>	Lyons' pentstemon	PELY	VFWO	SE	FE	29-Jan-97	1-06	F-99	2008	2C					X	
<i>Phacelia stellaris</i>	Brand's phacelia	PHST	CFWO		C				na		26-Oct-11	X		X	X	
<i>Phytolacca kingii</i> subsp. <i>bernardina</i> (<i>Lesquerella</i> s. subsp. <i>bernardina</i>) [1]	San Bernardino Mountains bladderpod	PHRJBE	CFWO		FE	24-Aug-94	1-02	D-97	2009	9C					X	
<i>Poa airopurpurea</i>	San Bernardino bluegrass	POAT	CFWO		FE	14-Sep-98	1-08		2008	2			X		X	
<i>Pogogyne abramii</i>	San Diego mesa mint	POAB	CFWO	SE	FE	28-Sep-78		F-98	2010	8C					X	
<i>Pogogyne molliscula</i>	Otay mesa mint	POJU	CFWO	SE	FE	3-Aug-93		F-98	2010	2C					X	
<i>Nasturtium gambelii</i> (<i>Rorippa gambelii</i>) [1]	Gambel's watercress	ROGA	VFWO	ST	FE	3-Aug-93		F-98	in prep.	5		X	X	X	X	
<i>Silene filifolia</i>	Santa Cruz Island rock-cress	SIFI	CFWO		FE	8-Aug-97			2006	2		X				
<i>Stalacea pedata</i>	pedate checker-mallow	SIPE	CFWO	SE	FE	31-Aug-84		F-98	2011	5C					X	
<i>Taraxacum californicum</i>	California taraxacum	TACA	CFWO		FE	14-Sep-98	1-08		2008	5					X	
<i>Thlaspidium stenopetalum</i>	slender-petaled mustard	THST	CFWO	SE	FE	31-Aug-84		F-98	2011	5C					X	

<i>Trichostema microcomatum</i> subsp. <i>compactum</i>	Hidden Lake bluecurl	TRAUCO	CFWO		FT	14-Sep-98	nrc-07		2009	15							X
<i>Verbesina distata</i>	bug-leaved crown beard	VEDI	CFWO	ST	FT	7-Oct-96			2010	11C			X				
INVERTEBRATES																	
<i>Branchinecta birchii</i>	vernal pool fairy shrimp	VPTS	SFWO		FT	19-Sep-94	f-05	F-05	2007	2C							X
<i>Branchinecta sandiegomanis</i>	San Diego fairy shrimp	SDFS	CFWO		FE	31-Jul-97	f-07	F-98	2008	8C			X				X
<i>Dinacoma caseyi</i>	Casey's June beetle	CJB	CFWO		FE	22-Sep-11	f-11		na								X
<i>Euphilotes bartolides affini</i>	El Segundo blue butterfly	ESB	CFWO		FE	1-Jun-76	n-77	F-98	2008	9			X				
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	QCB	CFWO		FE	16-Jan-97	f-09	F-03	2009	9C			X	X	X	X	X
<i>Glaucopsyche lygdamus palmeraeletensis</i>	Palos Verdes blue butterfly	PVB	CFWO		FE	2-Jul-80	f-80	F-84	2008	6			X				
<i>Lycanaea hermes</i>	Hermes copper butterfly	HCB	CFWO		C	14-Aug-11			na								X
<i>Peryass ruralis lagunae</i>	Laguna Mountains skipper	LMS	CFWO		FE	16-Jan-97	f-06		2007	3C							X
<i>Rhopisomidas terminatus abalominatus</i>	Delhi Sands flower-loving fly	DSF	CFWO		FE	23-Sep-93		F-97	2008	6C						X	X
<i>Streptopogonias westoni</i>	Riverside fairy shrimp	RFS	CFWO		FE	2-Aug-93	n-11	F-98	2008	8C			X	X	X	X	X
<i>Calliophrys (Mitsuru) geyneus thornii</i>	Thorne's Hairstreak butterfly	THB	CFWO		M				na								X
FISH																	
<i>Catostomus commersoni</i>	Santa Ana sucker	SAS	CFWO	SSC	FT	12-Apr-00	f-10		2011	5C			X	X	X	X	X
<i>Cyprinodon macularius</i>	desert pupfish	DEPU	R02	SE	FE	31-Mar-86	f-86	F-94	2010	2C						X	X
<i>Eucyclogobius newberryi</i>	ridgewater goby	TWG	VFWO	SSC	FE	4-Feb-94	f-08	F-05	2007	7C			X			X	X
<i>Gasterosteus aculeatus willamami</i>	unarmored threespine stickleback	UTS	VFWO	SE	FE	13-Oct-70	Ind-02	F-85	2009	6C			X	X	X	X	X
<i>Gila bicolor mohavensis</i>	Mohave jui chub	MTC	VFWO	SE	FE	13-Dec-70		F-84	2009	6						X	X
<i>Gila elegans</i>	hopetail chub	HOCH	R06	SE	FE	23-Apr-80	f-94	F-02		9C					X	X	X
<i>Oncorhynchus mykiss</i>	steelhead (southern California DPS)	WCSH	NMFS	SSC	FE	7-Jan-86		F-14		3			X	X	X	X	X
<i>Ptychocheilus lucina</i>	Colorado Pikeminnow	COPM	R06	SE	FE	24-Jul-85	f-94	F-02		8C					X	X	X
<i>Xylocheilus texanus</i>	razorback sucker	RASU	R06	SE	FE	25-Oct-91	f-94	F-02		1C					X	X	X
AMPHIBIANS																	
<i>Anaxyrus californicus</i> (<i>Bufo microscaphus c.</i>) [11]	arroyo toad (s. southwestern s.)	ARTO	VFWO	SSC	FE	16-Dec-94	f-11	F-99	2009	8			4-Jan-12	X	X	X	X
<i>Batrachoseps major aridus</i> (B. s.) [11]	desert slender salamander	DSS	CFWO	SE	FE	4-Jun-73		F-89	2009	8						X	X
<i>Rana draytoni</i> (<i>R. aurora</i> s.) [11]	California red-legged frog	CRLF	SFWO	SSC	FT	23-May-96	f-10	F-02		9C			X	X	X	X	X
<i>Rana muscosa</i>	mountain yellow-legged frog (southern California DPS)	MYLF	CFWO	SE	FE	2-Jul-02	f-09		in prep.	3			X	X	X	X	X
REPTILES																	
<i>Gopheryx agassizii</i>	desert tortoise (Mojave population DPS)	DETO	SFWO	ST	FT	2-Apr-80	f-94	F-94	2010	12C					X	X	X
<i>Phrynosoma mcallii</i>	flat-tailed horned lizard	FDHL	CFWO	SSC	W	15-Mar-11			na							X	X
<i>Uma inornata</i>	Ciachella Valley fringe-toed lizard	CVFTL	CFWO	SE	FT	25-Sep-89	f-80	F-85	2010	5C						X	X
<i>Xantusia riveriana</i>	island night lizard	INL	CFWO	na	FT	13-Aug-77		F-84	2009	8			22-Aug-06	X			
BIRDS																	
<i>Amphispiza belli clementae</i>	San Clemente sage sparrow	SCSS	CFWO	SSC	FT	11-Aug-77		F-84	2009	9			X				
<i>Brachyramphus aurimaculatus</i>	marbled murrelet	MAMU	R01	SE	FT	1-Oct-92	n-08	F-97	2009	2C			21-Jan-10	X			X
<i>Charadrius hiemalis hiemalis</i> (<i>C. alexandrinus</i> s.) [11]	western snowy plover (Pacific Coast population DPS)	WSP	AFWO	SSC	FT	5-Mar-93	n-11	F-07	2006	3C			19-Jan-12	X	X	X	X
<i>Charadrius montanus</i>	mountain plover	MOPL	R06	SSC	W	12-May-11			na						X	X	X
<i>Coccyzus americanus</i>	yellow-billed cuckoo (western U.S. (delete "U.S.") DPS)	YHCU	SFWO	SE	C	25-Jul-01			na				X	X	X	X	X
<i>Empidonax traillii eximius</i>	southwestern willow flycatcher	SWFL	R02	SE	FE	27-Feb-95	n-11	F-02	in prep.	3C			X	X	X	X	X
<i>Gelochelidon nilotica vanrossumi</i>	van Rossum's gull-billed tern	GGBT	CFWO	SSC	M				na				21-Sep-11				X
<i>Gymnogyps californianus</i>	California condor	CAUCO	VFWO	SE	FT	11-Mar-67	f-77	F-96		4C			X	X	X	X	X
<i>Haliaeetus leuccephalus</i>	bald eagle	BAEA	R03	SE	FT/M	14-Feb-78	fde-07	F-86		na			2-Jul-07	X	X	X	X
<i>Lanius ludovicianus excubitorides</i>	San Clemente logperchard shrike	SLCS	CFWO	SSC	FE	11-Aug-77		F-84	2009	12			X				
<i>Pelecanus occidentalis</i>	brown pelican	BRPE	VFWO	SE	FT/M	4-Feb-85	fde-09	F-83		na			17-Sep-09	X	X	X	X
<i>Phoebastria albatrus</i>	short-tailed albatross	STAL	R07	SSC	FE	31-Jul-00		F-08	2009	8			X	X	X	X	X
<i>Poliolimnys californica californica</i>	coastal California gnatcatcher	CAGN	CFWO	SSC	FT	30-Mar-93	f-07		2010	9C			26-Dec-11	X	X	X	X
<i>Rallus longirostris levipes</i>	light-footed clapper rail	LICR	CFWO	SE	FE	8-Mar-69		F-85	2009	6			X	X	X	X	X
<i>Rallus longirostris sumatrensis</i>	Yuma clapper rail	YUCR	R02	ST	FE	11-Mar-67		D-10	2006	6					X	X	X
<i>Sterna anillularum browni</i> (<i>Sterna s. b.</i>) [11]	California least tern	CLT	CFWO	SE	FE	8-Mar-69		F-85	2006	15C			X	X	X	X	X
<i>Vireo bellii pusillus</i>	least Bell's vireo	LBV	CFWO	SE	FE	2-May-86	f-94	D-98	2006	9C			X	X	X	X	X
MAMMALS																	
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	SBKR	CFWO	SSC	FE	27-Jan-98	f-02		2009	6C			X	X	X	X	X
<i>Glaucomys sabrinus californicus</i>	San Bernardino flying squirrel	SBFS	CFWO	SSC	N								1-Feb-12			X	X
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	SKR	CFWO	ST	FE	30-Sep-88		D-97	2011	11			19-Aug-10			X	X
<i>Enhydra lutris nereis</i>	southern sea otter	SSO	VFWO	FP	FT/X*	11-Aug-87		F-03		9C			6-Feb-04	X	X		X
<i>Ovis montanus nelsoni</i>	Nelson bighorn sheep (Peninsular Range DPS; Peninsular bighorn sheep)	PBS	CFWO	ST	FE	18-Mar-08	f-09	F-09	2011	9C						X	X
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	PPM	CFWO	SSC	FE	3-Feb-94		F-98	2010	6C			X	X			X
<i>Urocyon littoralis catalinae</i>	Santa Catalina Island fox	CAIF	CFWO	ST	FE	5-Mar-04	W-05		in prep.	9			X				

INDEX
Federal Status: FE = endangered; FT = threatened; C = candidate for listing; P = proposed; W = proposal withdrawn; PDM = post delisting monitoring plan; X* = experimental population; N = 90-day finding; M = 12-month finding.
State Status: SE = state endangered; ST = state threatened; SCE = state candidate endangered; SCT = state candidate threatened; sde = state delisted; SR = state listed rare; FP = fully protected; SSC = species of special concern (does not apply to plants or invertebrates).
Critical Habitat: p = Proposed; f = Designated; pf=Prudent Finding; npf=Not Prudent Finding; pr = Proposed Revised; fr = Final Revised; fde = Final delisting; W* = proposal withdrawn; fnd = final not designated.
Recovery Plan: F = Final-year published, D = Draft-year published
Distribution (historical county occurrences): LA = Los Angeles; O = Orange; SB = San Bernardino; Riv = Riverside; SD = San Diego; Imp = Imperial
Note: Santa Catalina Island and San Clemente Island are considered to be located within L.A. County
* Plant names format: scientific name including synonym, if any, followed by common name in parentheses [e.g. <i>Allium munzii</i> (Munz's onion); <i>Eremogone ursina</i> (<i>Arenaria ursina</i>) (Bear Valley sandwort)] Animal names format: common name including name of DPS, if any, followed by scientific name (including synonyms, if any) in parentheses [e.g. Santa Ana sucker (<i>Catostomus santaanae</i>); western snowy plover (Pacific Coast population DPS) (<i>Charadrius nivosus nivosus</i> (<i>Charadrius alexandrinus nivosus</i>))]
[1] Current name, followed by name under which the taxon was listed, or otherwise recognized, in parentheses. Cite "current name (older name)" form at least once in the beginning of a document, otherwise use the current name throughout.
[2] For species' range refer to the 5-Year Review or utilize the "Distribution" link to access the ECOS Mapper.
[3] For species' Critical Habitat refer to the final critical habitat rule or utilize the "Critical Habitat" link to access the ECOS critical habitat Mapper.
[4] Recovery Priority Number (RPN) for listed taxa; definitions relate to Degree of Threat, Recovery Potential, Taxonomic Status, and Conflict (na = not applicable).
PLEASE SEND CHANGES OR CORRECTIONS CONCERNING: SPECIES NAMES TO GARY WALLACE (Gary_Wallace@fws.gov, 760-431-9440); CRITICAL HABITAT MAPPING TO TONY MCKINNEY (Tony_McKinney@fws.gov, 760-431-9440); HYPERLINKS OR ASSOCIATED DOCUMENTS TO JASON STAYER (Jason_Stayer@fws.gov, 760-431-9440).
LIST REVISED September 12, 2012

BLM Special Status Plants under the jurisdiction of the El Centro Field Office as of September 18, 2012.

SCIENTIFIC NAME	COMMON NAME	TYPE OF PLANT	FAMILY	STATUS	KNOWN OR SUSPECTED ON BLM LANDS?
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	Vascular Plant	Nyctaginaceae	BLM Sensitive	Suspected on BLM lands
<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	Peirson's milk-vetch	Vascular Plant	Fabaceae	Federal Threatened	Known on BLM lands
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	Vascular Plant	Asteraceae	BLM Sensitive	Suspected on BLM lands
<i>Chamaesyce platysperma</i>	flat-seeded spurge	Vascular Plant	Euphorbiaceae	BLM Sensitive	Suspected on BLM lands
<i>Charizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	Vascular Plant	Polygonaceae	BLM Sensitive	Suspected on BLM lands
<i>Croton wigginsii</i>	Wiggins' croton	Vascular Plant	Euphorbiaceae	BLM Sensitive	Known on BLM lands
<i>Cylindropuntia fosbergii</i>	pink teddy-bear cholla	Vascular Plant	Cactaceae	BLM Sensitive	Known on BLM lands
<i>Cylindropuntia munzii</i>	Munz cholla	Vascular Plant	Cactaceae	BLM Sensitive	Known on BLM lands
<i>Dieteria asteroides</i> var. <i>lagunensis</i>	Mount Laguna aster	Vascular Plant	Asteraceae	BLM Sensitive	Known on BLM lands
<i>Fremontodendron mexicanum</i>	Mexican flannelbush	Vascular Plant	Malvaceae	Federal Endangered	Known on BLM lands
<i>Grindelia hallii</i>	San Diego gumplant	Vascular Plant	Asteraceae	BLM Sensitive	Known on BLM lands
<i>Helianthus niveus</i> subsp. <i>tephrodes</i>	Algodones Dunes sunflower	Vascular Plant	Asteraceae	BLM Sensitive	Known on BLM lands
<i>Hulsea californica</i>	San Diego sunflower	Vascular Plant	Asteraceae	BLM Sensitive	Known on BLM lands
<i>Lupinus excubitus</i> var. <i>medius</i>	Mountain Springs bush lupine	Vascular Plant	Fabaceae	BLM Sensitive	Known on BLM lands
<i>Monardella nana</i> subsp. <i>leptosiphon</i>	San Felipe monardella	Vascular Plant	Lamiaceae	BLM Sensitive	Suspected on BLM lands
<i>Palafoxia arida</i> var. <i>gigantea</i>	giant Spanish needle	Vascular Plant	Asteraceae	BLM Sensitive	Known on BLM lands
<i>Pholisma sonorae</i>	sand food	Vascular Plant	Boraginaceae	BLM Sensitive	Known on BLM lands
<i>Streptanthus campestris</i>	southern jewel-flower	Vascular Plant	Brassicaceae	BLM Sensitive	Suspected on BLM lands
<i>Symphotrichum defoliatum</i>	San Bernardino aster	Vascular Plant	Asteraceae	BLM Sensitive	Suspected on BLM lands
<i>Thermopsis californica</i> var. <i>semota</i>	velvety false lupine	Vascular Plant	Fabaceae	BLM Sensitive	Suspected on BLM lands
<i>Thysanocarpus rigidus</i>	Ridge Fringe-pod	Vascular Plant	Brassicaceae	BLM Sensitive	Suspected on BLM lands
<i>Xylorhiza orcuttii</i>	Orcutt's woody aster	Vascular Plant	Asteraceae	BLM Sensitive	Known on BLM lands

El Centro Faunal Sensitive Species 2011

MAMMALS

California leaf-nosed bat	<i>Macrotus californicus</i>
Cave myotis	<i>Myotis velifer</i>
Desert bighorn sheep	<i>Ovis canadensis nelsoni</i>
Fringed myotis	<i>Myotis thysanodes</i>
Long-eared myotis	<i>Myotis evotis</i>
Pallid bat	<i>Antrozous pallidus</i>
Palm Springs little pocket mouse	<i>Perognathus longimembris bangsi</i>
Small-footed myotis	<i>Myotis ciliolabrum</i>
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>
Western mastiff-bat	<i>Eumops perotis californicus</i>
Yuma myotis	<i>Myotis yumanensis</i>

BIRDS

Brown pelican	<i>Pelecanus occidentalis</i>
Burrowing owl	<i>Athene cunicularia</i>
California black rail	<i>Laterallus jamaicensis coturniculus</i>
California spotted owl	<i>Strix occidentalis occidentalis</i>
Elf owl	<i>Micrathene whitneyi</i>
Gila woodpecker	<i>Melanerpes uropygialis</i>
Mountain plover	<i>Charadrius montanus</i>
Tricolored blackbird	<i>Agelaius tricolor</i>
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>

REPTILES

Barefoot banded gecko	<i>Coleonyx switaki</i>
Colorado Desert fringe-toed lizard	<i>Uma notata notata</i>
Flat-tailed horned lizard	<i>Phrynosoma mcalli</i>
	<i>Actinemys (=Clemmys) marmorata</i>
	<i>Pallid</i>
Southwestern pond turtle	
Two-striped garter snake	<i>Thamnophis hammondi</i>

AMPHIBIANS

Couch's spadefoot toad

Lowland leopard frog

Scaphiopus couchi

Lithobates (=Rana) yavapaiensis

State of California
The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Biogeographic Data Branch
California Natural Diversity Database

STATE & FEDERALLY LISTED ENDANGERED & THREATENED ANIMALS OF CALIFORNIA

January 2011

This is a list of animals found within California or off the coast of the State that have been classified as Endangered or Threatened by the California Fish & Game Commission (state list) or by the U.S. Secretary of the Interior or the U.S. Secretary of Commerce (federal list).

The official California listing of Endangered and Threatened animals is contained in the California Code of Regulations, Title 14, Section 670.5. The official federal listing of Endangered and Threatened animals is published in the Federal Register, 50 CFR 17.11. The California Endangered Species Act of 1970 created the categories of "Endangered" and "Rare". The California Endangered Species Act of 1984 created the categories of "Endangered" and "Threatened". On January 1, 1985, all animal species designated as "Rare" were reclassified as "Threatened".

Animals that are candidates for state listing and animals proposed for federal listing are also included on this list. A state candidate species is one that the Fish and Game commission had formally noticed as being under review by the Department for addition to the State list. A federal proposed species is one for which a proposed regulation has been published in the Federal Register.

Code Designation:	Totals as of January 2011
SE = State-listed as Endangered	46
ST = State listed as Threatened	35
SR = State listed as Rare – old designation, all animals reclassified to Threatened on 1/1/85	0
FE = Federally listed as Endangered (21.2% of all U.S. listed endangered animals as of 1/10/11)	88
FT = Federally listed as Threatened (24.4% of all U.S. listed threatened animals as of 1/10/11)	40
SCE = State candidate (Endangered)	2
SCT = State Candidate (Threatened)	0
SCD = State Candidate (Delisting)	1
FPE = Federally proposed (Endangered)	1
FPT = Federally proposed (Threatened)	1
FPD = Federally proposed (Delisting)	0
Total number of animals listed (includes subspecies & population segments)	157
Total number of candidate/proposed animals for listing	4
Number of animals State listed only	31
Number of animals Federally listed only	71
Number of animals listed under both State & Federal Acts	55

Common and scientific names are shown as they appear on the state or federal lists. If the nomenclature differs for a species that is included on both lists, the state nomenclature is given and the federal nomenclature is shown in a footnote. Synonyms, name changes, and other clarifying points are also footnoted.

Critical Habitat is defined in Section 3 of the federal Endangered Species Act as specific areas, both occupied and unoccupied, that is essential to the conservation of a listed species and that may require special management considerations or protection.

Recovery Plans are discussed in Section 4 of the federal Endangered Species Act. Each plan incorporates site-specific management actions necessary for the conservation and survival of the species.

The "List Date" for **final** federal listing and **final** Critical Habitat designation is the date the listing or designation becomes effective, this is usually not the date of publication of the rule in the Federal Register; it is usually about 30 days after publication, but may be longer.

If a taxa that was previously listed or proposed for listing no longer has any listing status the entry has been grayed out.

For taxa that have more than one status entry, the current status is in bold and underlined.

Changes to this update of the list are denoted by *

	<u>LISTING STATUS</u>			<u>CRITICAL</u>	<u>RECOVERY</u>		
	State	List Date	Federal	HABITAT	Effective Date	Version	Date
<u>GASTROPODS</u>							
Trinity bristle snail <i>Monadenia setosa</i> ¹	ST ²	10-02-80					
Morro shoulderband (=banded dune) snail <i>Helminthoglypta walkeriana</i>			FE	1-17-95	Final	3-09-01	Final 1998
White abalone <i>Haliotis sorenseni</i>			FE	6-28-01	Not prudent	6-28-01	Final 2008
Black abalone <i>Haliotis cracherodii</i>			FE	2-13-09	*Proposed	9-28-10	
<u>CRUSTACEANS</u>							
Riverside fairy shrimp <i>Streptocephalus woottoni</i>			FE	8-03-93	Final ³ Proposed	5-12-05 4-27-04	Final 1998
Conservancy fairy shrimp <i>Branchinecta conservatio</i>			FE	9-19-94	Final ⁴ Proposed	2-10-06 12-28-04	Final 2005
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>			FE	9-19-94	Final 4 Proposed	2-10-06 12-28-04	Final 2005
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>			FT	9-19-94	Final 4 Proposed	2-10-06 12-28-04	Final 2005
San Diego fairy shrimp <i>Branchinecta sandiegoensis</i>			FE	2-03-97	Final Proposed ⁵	1-11-08 4-22-03	Final 1998
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>			FE	9-19-94	Final 4 Proposed	2-10-06 12-28-04	Final 2005
Shasta crayfish <i>Pacifastacus fortis</i>	<u>SE</u> ST	2-26-88 10-02-80	FE	9-30-88			Final 1998
California freshwater shrimp <i>Syncaris pacifica</i>	SE	10-02-80	FE	10-31-88			Final 1998
<u>INSECTS</u>							
Zayante band-winged grasshopper <i>Trimerotropis infantilis</i>			FE	2-24-97	Final	3-09-01	Final 1998

¹ Current taxonomy is *Monadenia infumata setosa*.

² On January 1, 1985, all species designated as "rare" were reclassified as "threatened", as stipulated by the California Endangered Species Act.

³ The Federal Circuit Court vacated critical habitat for the Riverside fairy shrimp on 10-30-02. The judge instructed the USFWS to begin the process of re-designating critical habitat for this species. New critical habitat was proposed 4-27-04 and finalized effective 5-12-05.

⁴ On October 28, 2004 the courts ordered the USFWS to reconsider the areas excluded from the final critical habitat designation made August 6, 2003. The December 28 2004 proposed rule is only for lands previously excluded and does not affect the areas included in the August 6, 2003 final rule. The non-economic exclusions made to the August 6, 2003 final rule were confirmed effective March 8, 2005

⁵ Due to court order the previously designated critical habitat was vacated and the USFWS was directed to re-proposed critical habitat.

	<u>LISTING STATUS</u>		<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>			
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Mount Hermon June beetle <i>Polyphylla barbata</i>			FE	2-24-97			Final	1998
Casey's June beetle <i>Dinacoma caseyi</i>			FPE	7-09-09	Proposed	7-09-09		
Delta green ground beetle <i>Elaphrus viridis</i>			FT	8-08-80	Final	8-08-80	Final	2006 1985
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>			FT	8-08-80	Final	8-08-80	Final	1984
Ohlone tiger beetle <i>Cicindela ohlone</i>			FE	10-03-01			Final	1998
Kern primrose sphinx moth <i>Euproserpinus euterpe</i>			FT	4-08-80	Proposed	7-03-78	Final	1984
Mission blue butterfly <i>Icaricia icarioides missionensis</i> ⁶			FE	6-01-76	Proposed	2-08-77	Final	1984
Lotis blue butterfly <i>Lycaeides argyrognomon lotis</i> ⁷			FE	6-01-76	Proposed	2-08-77	Final	1985
Palos Verdes blue butterfly <i>Glaucopsyche lygdamus palosverdesensis</i>			FE	7-02-80	Final	7-02-80	Final	1984
El Segundo blue butterfly <i>Euphilotes battoides allyni</i>			FE	6-01-76	Proposed	2-08-77	Final	1998
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>			FE	6-01-76	Proposed	2-08-77	Final	1984
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>			FE	6-01-76	Proposed	2-08-77	Final	1984
Lange's metalmark butterfly <i>Apodemia mormo langei</i>			FE	6-01-76	Proposed	2-08-77	Revised	1984
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>			FT	10-18-87	Final Proposed Final	9-25-08 8-22-07 5-30-01	Final	1998
Quino checkerspot <i>Euphydras editha quino (=E.e.wrighti)</i>			FE	1-16-97	Proposed ⁸ Final Proposed	1-17-08 5-15-02 2-07-01	Final	2003
Carson wandering skipper <i>Pseudocopaodes enus obscurus</i>			FE	8-07-02			Final Draft	2007 2005
Laguna Mountains skipper <i>Pyrgus ruralis lagunae</i>			FE	1-16-97	Final	1-11-07		
Callippe silverspot butterfly <i>Speyeria callippe callippe</i>			FE	12-05-97	Proposed	3-28-80		
Behren's silverspot butterfly <i>Speyeria zerene behrensii</i>			FE	12-05-97			Draft	2004
Oregon silverspot butterfly ⁹ <i>Speyeria zerene hippolyta</i>			FT	7-02-80	Final	7-02-80	Revised	2001
Myrtle's silverspot butterfly <i>Speyeria zerene myrtilae</i>			FE	6-22-92			Final	1998
Delhi Sands flower-loving fly <i>Rhaphiomidas terminatus abdominalis</i>			FE	9-23-93			Final	1997

⁶ Current taxonomy is *Plebejus icarioides missionensis*

⁷ Current taxonomy is *Plebejus idas lotis*

⁸ Proposed rule is to revise designated Critical Habitat

⁹ Current common name is *Hippolyta fritillary*

Endangered and Threatened Animals of California

	<u>LISTING STATUS</u>			<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
<u>FISHES</u>								
Green sturgeon – southern DPS <i>Acipenser medirostris</i>			FT ¹⁰	6-06-06	Final Proposed	11-09-09 9-08-08		
Chinook salmon-Winter-run ¹¹ <i>Oncorhynchus tshawytscha</i>	SE	9-22-89	<u>FE</u> ¹² FE	8-29-05 2-03-94	Final	3-23-99	Draft	2009 1997
Chinook salmon-California coastal ESU ¹³ <i>Oncorhynchus tshawytscha</i>			<u>FT</u> ¹⁴ <u>FT</u> ¹⁵	8-29-05 11-15-99	Final Proposed Rescinded Final	1-02-06 12-10-04 4-30-02 2-16-00		
Chinook salmon-Spring-run <i>Oncorhynchus tshawytscha</i>	ST ¹⁶	2-05-99	<u>FT</u> ¹⁷ <u>FT</u> ¹⁸	8-29-05 11-15-99	Final Proposed Rescinded Final	1-02-06 12-10-04 4-30-02 2-16-00	Draft	2009
Coho salmon-Central California Coast ESU <i>Oncorhynchus kisutch</i>	SE ¹⁹	3-30-05	<u>FE</u> ²⁰ <u>FT</u> ²¹	8-29-05 12-02-96	Final	6-04-99	Final (state)	2004
Coho salmon-So. Oregon/No. Calif ESU <i>Oncorhynchus kisutch</i>	ST ²²	3-30-05	<u>FT</u> ²³ <u>FT</u> ²⁴	8-29-05 6-05-97	Final	3-17-00	Final (state)	2004
Little Kern golden trout <i>Oncorhynchus mykiss whitei</i>			FT	4-13-78	Final	4-13-78	Exempt	
Lahontan cutthroat trout <i>Oncorhynchus clarki henshawi</i>			<u>FT</u> FE	7-16-75 10-13-70			Final	1995
Paiute cutthroat trout <i>Oncorhynchus clarki seleniris</i>			<u>FT</u> FE	7-16-75 3-11-67 ²⁵			Revised Final	2004 1985
Steelhead-Northern California DPS ^{26 27} <i>Oncorhynchus mykiss</i>			<u>FT</u> ²⁸ FT	2-06-06 8-07-00	Final Proposed	1-02-06 12-10-04		

¹⁰ Includes all spawning populations south of the Eel River

¹¹ Federal: Sacramento River winter run Chinook salmon

¹² The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

¹³ ESU = Evolutionarily Significant Unit

¹⁴ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

¹⁵ Naturally spawned coastal spring & fall Chinook salmon between Redwood Creek in Humboldt County & the Russian River in Sonoma County.

¹⁶ State listing is for the Sacramento River drainage.

¹⁷ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

¹⁸ Federal: Central Valley Spring-Run ESU. Includes populations spawning in the Sacramento River & its tributaries.

¹⁹ The Coho south of San Francisco Bay were state listed in 1995; in February 2004 the Fish and Game Commission determined that the Coho from San Francisco to Punta Gorda should also be listed as Endangered. This changed was finalized by of Office of Administrative Law on March 30, 2005.

²⁰ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

²¹ The Federal listing is limited to naturally spawning populations in streams between Punta Gorda, Humboldt County & the San Lorenzo River, Santa Cruz County.

²² The Fish and Game Commission determined that the Coho from Punta Gorda to the Oregon border should be listed as Threatened on February 25, 2004. This determination was finalized by the Office of Administrative Law on March 30, 2005.

²³ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

²⁴ The Federal listing is for populations between Cape Blanco, Oregon & Punta Gorda, California.

²⁵ All species with a list date of 03-11-67 were listed under the Endangered Species Preservation Act of Oct 15, 1966.

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LISTING STATUS

CRITICAL HABITAT

RECOVERY PLAN

	State	LISTING STATUS		CRITICAL HABITAT		RECOVERY PLAN		
		List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Steelhead-Central California Coast DPS ²⁹ <i>Oncorhynchus mykiss</i>			<u>FT</u> ³⁰	2-06-06	Final	1-02-06		
			FT	10-17-97	Proposed	12-10-04		
					Rescinded	4-30-02		
Steelhead-South/Central Calif Coast DPS ³¹ <i>Oncorhynchus mykiss</i>			<u>FT</u> ³²	2-06-06	Final	1-02-06		
			FT	10-17-97	Proposed	12-10-04		
					Rescinded	4-30-02		
Steelhead-Southern California DPS ³³ <i>Oncorhynchus mykiss</i>			<u>FE</u> ³⁴	2-06-06	Final	1-02-06	Draft	2009
			FE	10-17-97	Proposed	12-10-04		
					Rescinded	4-30-02		
Steelhead-Central Valley DPS ³⁵ <i>Oncorhynchus mykiss</i>			<u>FT</u> ³⁶	2-06-06	Final	1-02-06	Draft	2009
			FT	5-18-98	Proposed	12-10-04		
					Rescinded	4-30-02		
Bull trout <i>Salvelinus confluentus</i>	SE	10-02-80	FT	12-01-99	*Proposed (revised) ³⁷	1-14-10		
					Final	10-26-05		
Delta smelt <i>Hypomesus transpacificus</i>	<u>SE</u>	1-20-10	FT	3-05-93	Final	12-19-94	Final	1996
Longfin smelt <i>Spirinchus thaleichthys</i>	<u>ST</u>	12-09-93						
Eulachon – southern DPS <i>Thaleichthys pacificus</i>	<u>SCE</u>	4-09-10						
Mohave tui chub <i>Gila bicolor mohavensis</i> ³⁸		2-02-08	FT	5-17-10	*Proposed	1-05-11		
Owens tui chub <i>Gila bicolor snyderi</i> ³⁹	SE	6-27-71	FE	10-13-70			Final	1984
Cowhead Lake tui chub <i>Gila bicolor vaccaiceps</i>	SE	1-10-74	FE	8-05-85	Final	8-05-85	Final	1998
			withdrawn	10-11-06				
			FPE	3-30-98				

²⁶ Naturally spawned populations residing below impassable barriers in coastal basins from Redwood Creek in Humboldt County to, and including, the Gualala River in Mendocino County.

²⁷ DPS = Distinct Population Segment

²⁸ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

²⁹ Coastal basins from the Russian River, south to Soquel Creek, inclusive. Includes the San Francisco & San Pablo Bay basins, but excludes the Sacramento-San Joaquin River basins.

³⁰ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

³¹ Coastal basins from the Pajaro River south to, but not including, the Santa Maria River.

³² The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

³³ Coastal basins from the Santa Maria River (inclusive), south to the U.S.-Mexico Border.

³⁴ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

³⁵ The Sacramento and San Joaquin Rivers and their tributaries.

³⁶ The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

³⁷ There is no designated or proposed Critical Habitat for bull trout in California.

³⁸ Current taxonomy: *Siphateles bicolor mohavensis*

³⁹ Current taxonomy: *Siphateles bicolor snyderi*

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	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Tecopa pupfish (Extinct)	delisted	1987	delisted	1-15-82				
<i>Cyprinodon nevadensis calidae</i>	SE	6-27-71	FE	10-13-70				
Bonytail ⁴⁰	<u>SE</u>	1-10-74	FE	4-23-80	Final	3-21-94	Revised	2002
<i>Gila elegans</i>	SR	6-27-71					Revised	1990
Sacramento splittail			deleted ⁴¹	9-22-03				
<i>Pogonichthys macrolepidotus</i>			FT	3-10-99				
Colorado squawfish ⁴²	SE	6-27-71	FE	3-11-67	Final	3-21-94	Revised	2002
<i>Ptychocheilus lucius</i>							Revised	1991
Lost River sucker	<u>SE</u>	1-10-74	FE	7-18-88	Proposed	12-01-94	Final	1993
<i>Deltistes luxatus</i>	SR	6-27-67						
Modoc sucker	<u>SE</u>	10-02-80	FE	6-11-85	Final	6-11-85	Exempt	
<i>Catostomus microps</i>	SR	1-10-74						
Santa Ana sucker			FT ⁴³	5-12-00	*Final	1-13-11		
<i>Catostomus santaanae</i>					Proposed (revised)	12-09-09		
Shortnose sucker	<u>SE</u>	1-10-74	FE	7-18-88	Proposed	12-01-94	Final	1993
<i>Chasmistes brevirostris</i>	SR	6-27-71						
Razorback sucker	<u>SE</u>	1-10-74	FE	10-23-91	Final	3-21-94	Revised	2002
<i>Xyrauchen texanus</i>	SR	6-27-71					Final	1998
Desert pupfish	SE	10-02-80	FE	3-31-86	Final	3-31-86	Final	1993
<i>Cyprinodon macularius</i>								
Cottonball Marsh pupfish	ST	1-10-74						
<i>Cyprinodon salinus milleri</i>								
Owens pupfish	SE	6-27-71	FE	3-11-67			Final	1998
<i>Cyprinodon radiosus</i>								
Thicktail chub (Extinct)	delisted	10-02-80						
<i>Gila crassicauda</i>	SE	1-10-74						
Unarmored threespine stickleback	SE	6-27-71	FE	10-13-70	Designation should not be made ⁴⁴	9-17-02	Final	1985
<i>Gasterosteus aculeatus williamsoni</i>					Proposed	11-17-80		
Tidewater goby			With-drawn	12-09-02	Final	3-03-08	Final	2005
<i>Eucyclogobius newberryi</i>			FPD ⁴⁵	6-24-99	Proposed	11-28-06		
			<u>FE</u>	2-04-94	Final	11-20-00		
Rough sculpin	ST	1-10-74						
<i>Cottus asperrimus</i>								

⁴⁰ Federal: Bonytail chub

⁴¹ On 23 June 2000, the Federal Eastern District Court of Calif. found the final rule to be unlawful and on 22 Sept 2000 remanded the determination back to the USFWS for a reevaluation of the final decision. After a thorough review the USFWS removed the Sacramento splittail from the list of threatened species.

⁴² Current nomenclature and federal listing: Colorado pikeminnow

⁴³ Populations in the Los Angeles, San Gabriel and Santa Ana River basins.

⁴⁴ Full explanation of this situation is given in the Federal Register notice.

⁴⁵ Proposal to delist refers to populations north of Orange County only.

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	<u>LISTING STATUS</u>			<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
<u>AMPHIBIANS</u>								
California tiger salamander (central valley DPS) <i>Ambystoma californiense</i>	ST ^{46,47}	5-20-10	FT ⁴⁸	9-03-04	Final ⁴⁹ Proposed ⁵⁰	9-22-05 8-10-04		
California tiger salamander (Santa Barbara County DPS) <i>Ambystoma californiense</i>	(ST)		FE 48	9-15-00	Final ⁵¹	11-24-04		
California tiger salamander (Sonoma County DPS) <i>Ambystoma californiense</i>	(ST)		FE 48	3-19-03	Proposed ⁵²	8-18-09 8-02-05		
Santa Cruz long-toed salamander <i>Ambystoma macrodactylum croceum</i>	SE	6-27-71	FE	3-11-67	Proposed	6-22-78	Draft	1999
Siskiyou Mountains salamander <i>Plethodon stormi</i>	SCD <u>ST</u>	9-30-05 6-27-71						
Scott Bar salamander <i>Plethodon asupak</i>	ST ⁵³	6-27-71						
Techachapi slender salamander <i>Batrachoseps stebbinsi</i>	ST	6-27-71						
Kern Canyon slender salamander <i>Batrachoseps simatus</i>	ST	6-27-71						
Desert slender salamander <i>Batrachoseps aridus</i> ⁵⁴	SE	6-27-71	FE	6-04-73			Final	1982
Shasta salamander <i>Hydromantes shastae</i>	ST	6-27-71						
Limestone salamander <i>Hydromantes brunus</i>	ST	6-27-71						
Black toad <i>Bufo exsul</i> ⁵⁵	ST	6-27-71						
Arroyo toad ⁵⁶ <i>Bufo californicus</i> ⁵⁷			FE	1-17-95	Proposed (Revised) Final Proposed ⁵⁸ Final	10-13-09 5-13-05 2-14-05 4-27-04 3-09-01	Final	1999

⁴⁶ The state listing refers to the entire range of the species.

⁴⁷ The Office of Administrative Law approved the listing on Aug 2, 2010. The regulations become effective on Aug 19, 2010.

⁴⁸ In 2004 the California tiger salamander was listed as “threatened” statewide. The Santa Barbara County and Sonoma County Distinct Vertebrate Population Segments (DPS), formerly listed as “endangered”, were reclassified to “threatened”. On Aug 19 2005 U.S. District court vacated the downlisting of the Sonoma and Santa Barbara populations from “endangered” to “threatened”. Therefore, the Sonoma & Santa Barbara populations are once again listed as “endangered”

⁴⁹ Final rule published Aug 23, 2005 is for the central valley population only.

⁵⁰ Critical Habitat proposal published Aug 10, 2004 is for the central valley population only.

⁵¹ Final rule published Nov 24, 2004 is for the Santa Barbara County population only.

⁵² Proposed rule published Aug 2, 2005 is for the Sonoma County population only. The proposed rule published Aug 18, 2009 encompasses the same geographic area as the Aug 2, 2005 proposal.

⁵³ Since this newly described species was formerly considered to be a subpopulation of *Plethodon stormi*, and since *Plethodon stormi* is listed a Threatened under the California Endangered Species Act (CESA), *Plethodon asupak* retains the designation as a Threatened species under CESA.

⁵⁴ Current taxonomy: *Batrachoseps major aridus*.

⁵⁵ Current taxonomy: *Anaxyrus exsul*

⁵⁶ Former taxonomy: *Bufo microscaphus californicus*.

⁵⁷ Current taxonomy: *Anaxyrus californicus*

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	<u>LISTING STATUS</u>			<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
California red-legged frog ⁵⁹ <i>Rana aurora draytonii</i>			FT	5-20-96	Final Proposed ⁶⁰ Final	4-16-10 9-16-08 4-12-01	Final	2002
Mountain yellow-legged frog – Southern California DPS ^{61,62} <i>Rana muscosa</i>	*SCE or SCT ⁶³	9-21-10	FE	8-01-02	Final Proposed	10-16-06 9-13-05		
Mountain yellow-legged frog <i>Rana sierrae</i>	*SCE or SCT	9-21-10						

REPTILES

Desert tortoise <i>Gopherus agassizii</i>	ST	8-03-89	FT	4-02-90	Final	2-08-94	Draft Revised Final	2008 1994
Green sea turtle <i>Chelonia mydas</i>			FT FE	7-28-78 10-13-70	Final	3-23-99	Revised	1998
Loggerhead sea turtle – North Pacific DPS ⁶⁴ <i>Caretta caretta</i>			FPE FT	3-16-10 7-28-78	Proposed	3-19-80	Revised	1998
Olive (=Pacific) Ridley sea turtle <i>Lepidochelys olivacea</i>			FT	7-28-78	Proposed	3-19-80	Revised	1998
Leatherback sea turtle <i>Dermochelys coriacea</i>			FE	6-02-70	Proposed (Revised) Final	1-05-10 3-23-99	Revised	1998
Barefoot banded gecko ⁶⁵ <i>Coleonyx switaki</i>	ST	10-02-80						
Coachella Valley fringe-toed lizard <i>Uma inornata</i>	SE	10-02-80	FT	9-25-80	Final	9-25-80	Final	1985
Blunt-nosed leopard lizard <i>Gambelia silus</i> ⁶⁶	SE	6-27-71	FE	3-11-67			Final	1998
Flat-tailed horned lizard <i>Phrynosoma mcallii</i>			Withdrawn ⁶⁷ FPT ⁶⁸	6-28-06 11-29-93				
Island night lizard <i>Xantusia riversiana</i>			FT	8-11-77			Final	1984
Southern rubber boa <i>Charina bottae umbratica</i> ⁶⁹	ST	6-27-71						

⁵⁸ The Federal Circuit Court vacated critical habitat for the Arroyo toad on 10-30-02. The judge instructed the USFWS to begin the process of re-designating critical habitat for this species. New critical habitat was first proposed on 4-27-04 and proposed with revisions on 2-14-05. A new final rule became effective 5-13-05.

⁵⁹ Current taxonomy: *Rana draytoni*

⁶⁰ Proposed rule is for revised Critical Habitat boundaries

⁶¹ Federal listing refers to the distinct population segment (DPS) in the San Gabriel, San Jacinto & San Bernardino Mountains only.

⁶² The current common name for this species is Sierra Madre yellow-legged frog.

⁶³ The Fish and Game Commission notice of finding states that the mountain yellow-legged frog, *Rana muscosa* and *Rana sierrae* are candidates for listing as either endangered or threatened species.

⁶⁴ 1978 listing was for the worldwide range of the species. The Mar 16, 2010 proposed rule is for the north pacific DPS (north of the equator & south of 60 degrees north latitude).

⁶⁵ Current nomenclature: Barefoot gecko.

⁶⁶ Current taxonomy: *Gambelia sila*. is the scientific name and bluntnose leopard lizard is the common name

⁶⁷ On June 28, 2006 the USFWS determined that the proposed listing was not warranted and the proposed rule that had been reinstated on Nov 17, 2005 was withdrawn.

⁶⁸ On November 17, 2005, the U. S. District Court for the District of Arizona vacated the January 3, 2003 withdrawal of the proposed rule to list the flat-tailed horned lizard and reinstated the 1993 proposed rule.

⁶⁹ Current taxonomy: *Charina umbratica*.

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LISTING STATUS

CRITICAL HABITAT

RECOVERY PLAN

	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	ST	6-27-71	FT	12-05-97	Final Proposed ⁷⁰ Vacated ⁷¹ Final	11-01-06 10-18-05 5-09-03 10-03-00	Draft	2003
San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	SE	6-27-71	FE	3-11-67			Final	1985
Giant garter snake <i>Thamnophis couchi gigas</i> ⁷²	ST	6-27-71	FT	10-20-93			Draft	1999
<u>BIRDS</u>								
Short-tailed albatross <i>Phoebastria albatrus</i>			FE	8-30-00			Final	2009
California brown pelican ⁷³ (Recovered) <i>Pelecanus occidentalis californicus</i>	delisted SE	6-03-09 6-27-71	delisted FE	12-17-09 2-20-08 10-13-70			Final	1983
Aleutian Canada goose (Recovered) <i>Branta canadensis leucopareia</i> ⁷⁴			delisted FT FE	3-20-01 12-12-90 3-11-67			Final	1991
California condor <i>Gymnogyps californianus</i>	SE	6-27-71	FE	3-11-67	Final	9-22-77	Revised	1996
Bald eagle <i>Haliaeetus leucocephalus</i>	SE (rev) SE	10-02-80 6-27-71	delisted ⁷⁵ FT FE(rev) FE	8-08-07 7-06-99 8-11-95 2-14-78 3-11-67			Final	1982
Swainson's hawk <i>Buteo swainsoni</i>	ST	4-17-83						
American peregrine falcon (Recovered) <i>Falco peregrinus anatum</i>	delisted SE	11-04-09 6-27-71	delisted FE	8-25-99 6-02-70	Final	9-22-77	Final	1982
Arctic peregrine falcon (Recovered) <i>Falco peregrinus tundrius</i>			delisted FT FE	10-05-94 3-20-84 6-02-70				
California black rail <i>Laterallus jamaicensis coturniculus</i>	ST	6-27-71						
California clapper rail <i>Rallus longirostris obsoletus</i>	SE	6-27-71	FE	10-13-70			Final	1984
Light-footed clapper rail <i>Rallus longirostris levipes</i>	SE	6-27-71	FE	10-13-70			Revised Final	1985 1979
Yuma clapper rail <i>Rallus longirostris yumanensis</i>	ST SE	2-22-78 6-27-71	FE	3-11-67			Final	1983

⁷⁰ The proposed rule redesignates Critical Habitat that was vacated in 2003.

⁷¹ Due to legal action on 9 May 2003, the Critical Habitat designation has been completely vacated; there is currently no Critical Habitat for Alameda whipsnake.

⁷² Current taxonomy and Federal listing: *Thamnophis gigas*.

⁷³ Federal: Brown pelican, *Pelecanus occidentalis*.

⁷⁴ Current taxonomy: *Branta hutchinsii leucopareia*, and common name is now cackling goose.

⁷⁵ The Post-delisting Monitoring Plan will monitor the status of the bald eagle over a 20 year period with sampling events held once every 5 years.

Endangered and Threatened Animals of California

	<u>LISTING STATUS</u>			<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Greater sandhill crane <i>Grus Canadensis tabida</i>	ST	4-17-83					Draft (state)	
Western snowy plover ⁷⁶ <i>Charadrius alexandrinus nivosus</i>			FT	4-05-93	Final Proposed Final	10-31-05 8-16-05 12-07-99 ⁷⁷	Final Draft	2007 2001
Mountain plover ⁷⁸ <i>Charadrius montanus</i>			FPT	6-29-10				
California least tern <i>Sterna antillarum browni</i> ⁷⁹	SE	6-27-71	FE	10-13-70			Revised Final	1985 1980
Marbled murrelet <i>Brachyramphus marmoratus</i> ⁸⁰	SE	3-12-92	FT	9-30-92	Proposed ⁸¹ Final	7-31-08 5-24-96	Final	1997
Xantus's murrelet <i>Synthliboramphus hypoleucus</i>	ST ⁸²	12-22-04						
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	<u>SE</u> ST	3-26-88 6-27-71						
Elf owl <i>Micrathene whitneyi</i>	SE	10-02-80						
Northern spotted owl <i>Strix occidentalis caurina</i>			FT	6-22-90	Final Proposed Final	9-12-08 6-17-07 1-15-92	Final Draft	2008 2007
Great gray owl <i>Strix nebulosa</i>	SE	10-02-80						
Gila woodpecker <i>Melanerpes uropygialis</i>	SE	3-17-88						
Gilded northern flicker ⁸³ <i>Colaptes auratus chrysoides</i>	SE	3-17-88						
Willow flycatcher <i>Empidonax traillii</i>	SE ⁸⁴	1-02-91						
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	(SE)		FE	3-29-95	Final Proposed Final ⁸⁵	11-18-05 10-12-04 7-22-97	Final	2002
Bank swallow <i>Riparia riparia</i>	ST	6-11-89					Final (state)	1993
Coastal California gnatcatcher <i>Polioptila californica californica</i>			FT	3-30-93	Final Proposed ⁸⁶ Final	1-18-08 4-24-03 10-24-00	Exempt	

⁷⁶ Federal status applies only to the Pacific coastal population.

⁷⁷ The Dec 7, 1999 designation was remanded & partially vacated by the US District Court for the District of Oregon on July 2, 2003.

⁷⁸ The Jun 29, 2010 proposed rule reinstates that portion of the Dec 5, 2002 proposed rule concerning the listing of the plover as threatened. It doesn't reinstate the portion of the rule regarding a special rule under section 4(d) of the ESA.

⁷⁹ Current taxonomy is *Sternula antillarum browni*

⁸⁰ Federal: *Brachyramphus marmoratus marmoratus* with a proposal (7-31-08) to change the name to *Brachyramphus marmoratus*.

⁸¹ Proposed rule to revise the previously designated Critical Habitat.

⁸² The Fish and Game Commission determined that Xantus's murrelet should be listed as a Threatened species February 24, 2004. As part of the normal listing process, this decision was reviewed by the Office of Administrative Law. The listing became effective on Dec 22, 2004.

⁸³ Current taxonomy: Gilded flicker (*Colaptes chrysoides*).

⁸⁴ State listing includes all subspecies.

⁸⁵ On May 11, 2001 the 10th Circuit Court of Appeals vacated the previously designated Critical Habitat

⁸⁶ Due to court order the previously designated critical habitat was vacated and the USFWS was directed to re-propose critical habitat.

Endangered and Threatened Animals of California

	State	<u>LISTING STATUS</u>		<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>		
		List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
San Clemente loggerhead shrike <i>Lanius ludovicianus mearnsi</i>			FE	8-11-77			Final	1984
Arizona Bell's vireo <i>Vireo bellii arizonae</i>	SE	3-17-88						
Least Bell's vireo <i>Vireo bellii pusillus</i>	SE	10-02-80	FE	5-02-86	Final	2-02-94	Draft	1998
Inyo California towhee ^{87 88} <i>Pipilo crissalis eremophilus</i>	SE	10-02-80	FT	8-03-87	Final	8-03-87	Final	1998
San Clemente sage sparrow <i>Amphispiza belli clementeae</i>			FT	8-11-77			Final	1984
Belding's savannah sparrow <i>Passerculus sandwichensis beldingi</i>	SE	1-10-74						
Santa Barbara song sparrow (Extinct) <i>Melospiza melodia graminea</i>			<u>delisted</u> FE	10-12-83 6-04-73				

MAMMALS

Buena Vista Lake shrew <i>Sorex ornatus relictus</i>			FE ⁸⁹	4-05-02	Final Proposed	2-23-05 8-19-04	Final	1998
Lesser long-nosed bat <i>Leptonycteris yerbabuenae</i>			FE	10-31-88			Final	1997
Riparian brush rabbit <i>Sylvilagus bachmani riparius</i>	SE	5-29-94	FE	3-24-00			Final	1998
Point Arena mountain beaver <i>Aplodontia rufa nigra</i>			FE	12-12-91			Final	1998
San Joaquin antelope squirrel ⁹⁰ <i>Ammospermophilus nelsoni</i>	ST	10-02-80						
Mohave ground squirrel ⁹¹ <i>Spermophilus mohavensis</i>	ST	6-27-71						
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>			FE	9-26-94			Final	1998
Morro Bay kangaroo rat <i>Dipodomys heermanni morroensis</i>	SE	6-27-71	FE	10-13-70	Final	8-11-77	Draft revision Final	2000 1982
Giant kangaroo rat <i>Dipodomys ingens</i>	SE	10-02-80	FE	1-05-87			Final	1998
Stephens' kangaroo rat <i>Dipodomys stephensi</i> ⁹²	ST	6-27-71	FE	9-30-88				
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>			FE ⁹³	9-24-98	Final ⁹⁴ Final	11-17-08 5-23-02		
Tipton kangaroo rat <i>Dipodomys nitratooides nitratooides</i>	SE	6-11-89	FE	7-08-88			Final	1998
Fresno kangaroo rat <i>Dipodomys nitratooides exilis</i>	<u>SE</u> SR	10-02-80 6-27-71	FE	3-01-85	Final	1-30-85	Final	1998

⁸⁷ Federal: Inyo California (=brown) towhee.

⁸⁸ Current taxonomy is *Melospiza crissalis eremophilus*

⁸⁹ Federal: Buena Vista Lake ornate shrew

⁹⁰ Current taxonomy: Nelson's antelope squirrel

⁹¹ Current taxonomy: *Xerospermophilus mohavensis*

⁹² Federal: includes *Dipodomys cactus*.

⁹³ Federal: San Bernardino Merriam's kangaroo rat

⁹⁴ This final revised designation constitutes a reduction of approximately 25,516 acres from the 2002 designation of Critical Habitat.

Endangered and Threatened Animals of California

	<u>LISTING STATUS</u>			<u>CRITICAL HABITAT</u>		<u>RECOVERY PLAN</u>		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	SE	6-27-71	FE	10-13-70			Final	1984
Amargosa vole <i>Microtus californicus scirpensis</i>	SE	10-02-80	FE	11-15-84	Final	11-15-84	Final	1997
Riparian woodrat <i>Neotoma fuscipes riparia</i>			FE ⁹⁵	3-24-00			Final	1998
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	ST	10-02-80						
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	ST	6-27-71	FE	3-11-67			Final	1998
Island fox <i>Urocyon littoralis</i>	ST ⁹⁶	6-27-71						
San Miguel Island Fox <i>Urocyon littoralis littoralis</i>	(ST)		FE	4-05-04	Final ⁹⁷ (none) Proposed ⁹⁸	12-09-05 10-07-04		
Santa Rosa Island Fox <i>Urocyon littoralis santarosae</i>	(ST)		FE	4-05-04	Final ⁹⁷ (none) Proposed ⁹⁸	12-09-05 10-07-04		
Santa Cruz Island Fox <i>Urocyon littoralis santacruzae</i>	(ST)		FE	4-05-04	Final ⁹⁷ (none) Proposed ⁹⁸	12-09-05 10-07-04		
Santa Catalina Island Fox <i>Urocyon littoralis catalinae</i>	(ST)		FE	4-05-04	Final ⁹⁷ (none) Proposed ⁹⁸	12-09-05 10-07-04		
Guadalupe fur seal <i>Arctocephalus townsendi</i>	ST	6-27-71	<u>FT</u> FE	1-15-86 3-11-67			Draft (revised)	2007
Stellar (=northern) sea lion <i>Eumetopias jubatus</i>			FT	4-05-90	Final	3-23-99	Revised Final	2008 1992
Wolverine <i>Gulo gulo</i>	ST	6-27-71						
Southern sea otter <i>Enhydra lutris nereis</i>			FT	1-14-77			Revised Final	2003 1981
Pacific fisher <i>Martes pennanti(pacifica)</i> DPS	SCT or SCE ⁹⁹	Listing Not warranted						
Gray whale (Recovered) <i>Eschrichtius robustus</i>			delisted FE	6-15-94 6-02-70				
Sei whale <i>Balaenoptera borealis</i>			FE	6-02-70				

⁹⁵ Federal: Riparian (=San Joaquin Valley) woodrat

⁹⁶ State listing includes all 6 subspecies on all 6 islands. Federal listing is for only 4 subspecies on 4 islands

⁹⁷ The USFWS did not find any habitat on the 4 islands occupied by the foxes that meets the definition of Critical Habitat under the Act. Therefore, the final rule does not designate any Critical Habitat

⁹⁸ The USFWS did not find any habitat on the 4 islands occupied by the foxes that meets the definition of Critical Habitat under the Act. Therefore, the proposal is that zero Critical Habitat be designated.

⁹⁹ The Fish and Game Commission notice of finding states that the Pacific fisher is a candidate for listing as either an endangered or a threatened species. At the June 23, 2010 meeting the Commission determined that the listing was not warranted.

Endangered and Threatened Animals of California

	<u>LISTING STATUS</u>			<u>CRITICAL</u>	<u>RECOVERY</u>			
	State	List Date	Federal	HABITAT	Effective Date	Version	Effective Date	Date
Blue whale <i>Balaenoptera musculus</i>			FE		6-02-70		Final	1998
Fin whale <i>Balaenoptera physalus</i>			FE		6-02-70		Draft	2006
Humpback whale ¹⁰⁰ <i>Megaptera novaeangliae</i>			FE		6-02-70		Final	1991
Right whale ¹⁰¹ <i>Eubalaena japonica</i> ¹⁰²			FE		6-02-70		Final	1991
Sperm whale <i>Physeter macrocephalus</i>			FE		6-02-70		Draft	2006
Killer whale (Southern resident DPS) <i>Orcinus orca</i>			FE ¹⁰³		4-04-07		Final	2008
					2-16-06			
					12-22-04			
California (=Sierra Nevada) bighorn sheep <i>Ovis canadensis californiana</i> ¹⁰⁴	<u>SE</u>	8-27-99	FE		1-03-00	Final	9-04-08	Final
	ST	6-27-71				Proposed	7-25-07	Draft
Peninsular bighorn sheep DPS ¹⁰⁵ <i>Ovis canadensis cremnobates</i>	ST	6-27-71	FE		3-18-98	Final	5-14-09	Final
						Proposed (Revised)	10-10-07	
						Final	3-05-01	

¹⁰⁰ Also known as Hump-backed whale.

¹⁰¹ Also known as Black right whale.

¹⁰² The scientific name was clarified in the Federal Register Vol. 68, No. 69 April 10, 2003.

¹⁰³ The killer whale was listed as endangered by the NMFS on Feb 16, 2006 and by the USFWS on Apr 4, 2007.

¹⁰⁴ Current & Federal taxonomy: Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*)

¹⁰⁵ Current taxonomy: the subspecies *O.c. cremnobates* has been synonymized with *O.c. nelsoni*. Peninsular bighorn sheep are now considered to be a Distinct Vertebrate Population Segment (DPS).

State of California
The Resources Agency
DEPARTMENT OF FISH AND GAME
Resource Management and Planning Division
Biogeographic Data Branch
California Natural Diversity Database

STATE AND FEDERALLY LISTED
ENDANGERED, THREATENED, AND RARE PLANTS OF CALIFORNIA

October 2012

Designations and Subtotals for each Designation:

Designations:	Subtotals:
SE State-listed endangered	134
ST State-listed threatened	22
SR State-listed rare	64
SC State candidate for listing	0
FE Federally listed endangered	139
FT Federally listed threatened	47
FPE Federally proposed endangered	0
FPT Federally proposed threatened	0
Both State and Federally listed	125

State listing is pursuant to §1904 (Native Plant Protection Act of 1977) and §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals. Federal listing is pursuant with the Federal Endangered Species Act of 1973, as amended. For information regarding plant conservation, contact the Habitat Conservation Planning Branch, 1416 Ninth Street, Sacramento, CA 95814, phone (916) 653-9767, or the nearest Department of Fish and Game office. For information on this list, contact CNDDDB's Information Services at (916) 324-3812. Scientific and common names for State-listed plants are listed in Title 14, §670.2. Scientific or common names in parentheses are the most scientifically accepted nomenclature but have yet to be officially adopted into the California Code of Regulations, Title 14, Division 1, §670.2.

State Designated Plants

Classification

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Acanthomintha duttonii</i> San Mateo thorn-mint	SE	Jul 1979	FE	Sep 18,1985
<i>Acanthomintha ilicifolia</i> San Diego thorn-mint	SE	Jan 1982	FT	Oct 13,1998
<i>Agrostis blasdalei</i> var. <i>marinensis</i> (= <i>Agrostis blasdalei</i>) Marin bent grass		Delisted April 2008.		
<i>Allium munzii</i> Munz's onion	ST	Jan 1990	FE	Oct 13,1998
<i>Allium yosemitense</i> Yosemite onion	SR	Jul 1982		

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus			FE	Oct 22,1997
<i>Ambrosia pumila</i> San Diego ambrosia			FE	July 2, 2002
<i>Amsinckia grandiflora</i> large-flowered fiddleneck	SE	Apr 1982	FE	May 08,1985
<i>Arabis hoffmannii</i> Hoffmann's rock cress			FE	Jul 31,1997
<i>Arabis macdonaldiana</i> McDonald's rock cress	SE	Jul 1979	FE	Sep 28,1978
<i>Arctostaphylos bakeri</i> (= <i>A. b. ssp. bakeri</i> and <i>A. b. ssp. sublaevis</i>) Baker's manzanita	SR	Sep 1979		
<i>Arctostaphylos confertiflora</i> Santa Rosa Island manzanita			FE	Jul 31,1997
<i>Arctostaphylos densiflora</i> Vine Hill manzanita	SE	Aug 1981		
<i>Arctostaphylos edmundsii</i> var. <i>parvifolia</i> Hanging Gardens manzanita		Delisted April 2008		
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> Del Mar manzanita			FE	Oct 07,1996
<i>Arctostaphylos hookeri</i> ssp. <i>hearstiorum</i> Hearst's manzanita	SE	Sep 1979		
<i>Arctostaphylos hookeri</i> ssp. <i>ravenii</i> Presidio manzanita	SE	Nov 1978	FE	Oct 26,1979
<i>Arctostaphylos imbricata</i> San Bruno Mountain manzanita	SE	Sep 1979		
<i>Arctostaphylos morroensis</i> Morro manzanita			FT	Dec 15,1994
<i>Arctostaphylos myrtifolia</i> Ione manzanita			FT	May 26,1999
<i>Arctostaphylos pacifica</i> Pacific manzanita	SE	Sep 1979		
<i>Arctostaphylos pallida</i> pallid manzanita	SE	Nov 1979	FT	Apr 22,1998
<i>Arenaria paludicola</i> marsh sandwort	SE	Feb 1990	FE	Aug 03,1993
<i>Arenaria ursina</i> Big Bear Valley sandwort			FT	Sep 14,1998
<i>Astragalus agnicidus</i> Humboldt milk-vetch	SE	Apr 1982		
<i>Astragalus albens</i> Cushenbury milk-vetch			FE	Aug 24,1994

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Astragalus brauntonii</i> Braunton's milk-vetch			FE	Jan 29,1997
<i>Astragalus claranus</i> (= <i>A. clarianus</i>) Clara Hunt's milk-vetch	ST	Jan 1990	FE	Oct 22,1997
<i>Astragalus jaegerianus</i> Lane Mountain milk-vetch			FE	Oct 06,1998
<i>Astragalus johannis-howellii</i> Long Valley milk-vetch	SR	Jul 1982		
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch			FE	Oct 06,1998
<i>Astragalus lentiginosus</i> var. <i>piscinensis</i> Fish Slough milk-vetch			FT	Oct 06,1998
<i>Astragalus lentiginosus</i> var. <i>sesquimetralis</i> Sodaville milk-vetch	SE	Sep 1979		
<i>Astragalus magdalenae</i> var. <i>peirsonii</i> Peirson's milk-vetch	SE	Nov 1979	FT	Oct 06,1998
<i>Astragalus monoensis</i> (= <i>A. monoensis</i> var. <i>monoensis</i>) Mono milk-vetch	SR	Jul 1982		
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i> Ventura Marsh milk-vetch	SE	Apr 2000	FE	May 21,2001
<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch	SE	Feb 1982	FE	Aug 12,1998
<i>Astragalus traskiae</i> Trask's milk-vetch	SR	Nov 1979		
<i>Astragalus tricarinatus</i> triple-ribbed milk-vetch			FE	Oct 06,1998
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crownscale			FE	Oct 13,1998
<i>Atriplex tularensis</i> Bakersfield smallscale	SE	Jan 1987		
<i>Baccharis vanessae</i> Encinitas baccharis	SE	Jan 1987	FT	Oct 07,1996
<i>Bensoniella oregona</i> bensoniella	SR	Jul 1982		
<i>Berberis nevinii</i> Nevin's barberry	SE	Jan 1987	FE	Oct 13,1998
<i>Berberis pinnata</i> ssp. <i>insularis</i> island barberry	SE	Nov 1979	FE	Jul 31,1997
<i>Blennosperma bakeri</i> Sonoma sunshine	SE	Feb 1992	FE	Dec 02,1991
<i>Blennosperma nanum</i> var. <i>robustum</i> Point Reyes blennosperma	SR	Nov 1978		
<i>Bloomeria humilis</i> dwarf goldenstar	SR	Nov 1978		
<i>Brodiaea coronaria</i> ssp. <i>rosea</i> Indian Valley brodiaea	SE	Sep 1979		

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Brodiaea filifolia</i> thread-leaved brodiaea	SE	Jan 1982	FT	Oct 13,1998
<i>Brodiaea insignis</i> Kaweah brodiaea	SE	Nov 1979		
<i>Brodiaea pallida</i> Chinese Camp brodiaea	SE	Nov 1978	FT	Sep 14,1998
<i>Calamagrostis foliosa</i> leafy reed grass	SR	Nov 1979		
<i>Calochortus dunnii</i> Dunn's mariposa lily	SR	Nov 1979		
<i>Calochortus persistens</i> Siskiyou mariposa lily	SR	Jul 1982		
<i>Calochortus tiburonensis</i> Tiburon mariposa lily	ST	May 1987	FT	Feb 03,1995
<i>Calyptridium pulchellum</i> Mariposa pussypaws			FT	Sep 14,1998
<i>Calystegia stebbinsii</i> Stebbins's morning-glory	SE	Aug 1981	FE	Oct 18,1996
<i>Camissonia benitensis</i> San Benito evening-primrose			FT	Feb 12,1985
<i>Carex albida</i> white sedge	SE	Nov 1979	FE	Oct 22,1997
<i>Carex tompkinsii</i> Tompkins's sedge	SR	Nov 1979		
<i>Carpenteria californica</i> tree-anemone	ST	Jan 1990		
<i>Castilleja affinis</i> ssp. <i>neglecta</i> Tiburon Indian paintbrush	ST	Jan 1990	FE	Feb 03, 1995
<i>Castilleja campestris</i> ssp. <i>succulenta</i> succulent owl's-clover	SE	Sep 1979	FT	Mar 26,1997
<i>Castilleja cinerea</i> ash-gray Indian paintbrush			FT	Sep 14,1998
<i>Castilleja gleasonii</i> Mt. Gleason Indian paintbrush	SR	Jul 1982		
<i>Castilleja grisea</i> San Clemente Island Indian paintbrush	SE	Apr 1982	FE	Aug 11,1977

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Castilleja mollis</i> soft-leaved Indian paintbrush			FE	Jul 31,1997
<i>Castilleja uliginosa</i> Pitkin Marsh Indian paintbrush	SE	Nov 1978		
<i>Caulanthus californicus</i> California jewel-flower	SE	Jan 1987	FE	Jul 19,1990
<i>Caulanthus stenocarpus</i> slender-pod jewel-flower		Delisted April 2008		
<i>Ceanothus ferrisiae</i> coyote ceanothus			FE	Feb 03,1995
<i>Ceanothus hearstiorum</i> Hearst's ceanothus	SR	Aug 1981		
<i>Ceanothus maritimus</i> maritime ceanothus	SR	Nov 1978		
<i>Ceanothus masonii</i> Mason's ceanothus	SR	Nov 1978		
<i>Ceanothus ophiochilus</i> Vail Lake ceanothus	SE	Jan 1994	FT	Oct 13,1998
<i>Ceanothus roderickii</i> Pine Hill ceanothus	SR	Jul 1982	FE	Oct 18,1996
<i>Cercocarpus traskiae</i> Catalina Island mountain-mahogany	SE	Apr 1982	FE	Aug 08,1997
<i>Chamaesyce hooveri</i> Hoover's spurge			FT	Mar 26,1997
<i>Chlorogalum purpureum</i> var. <i>purpureum</i> ¹ purple amole			FT	Mar 20,2000
<i>Chlorogalum purpureum</i> var. <i>reductum</i> ² Camatta Canyon amole	SR	Nov 1978	FT	Mar 20,2000
<i>Chorizanthe howellii</i> Howell's spineflower	ST	Jan 1987	FE	Jun 22,1992
<i>Chorizanthe orcuttiana</i> Orcutt's spineflower	SE	Nov 1979	FE	Oct 07,1996

¹ The U.S. Fish & Wildlife Service listed the entire species, *Chlorogalum purpureum*.

² The U.S. Fish & Wildlife Service listed the entire species, *Chlorogalum purpureum*.

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	SE	Aug 2001		
<i>Chorizanthe pungens</i> var. <i>hartwegiana</i> Ben Lomond spineflower			FE	Feb 04,1994
<i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower			FT	Feb 04,1994
<i>Chorizanthe robusta</i> (includes vars. <i>hartwegii</i> and <i>robusta</i>) robust spineflower			FE	Feb 04,1994
<i>Chorizanthe valida</i> Sonoma spineflower	SE	Jan 1990	FE	Jun 22,1992
<i>Cirsium ciliolatum</i> Ashland thistle	SE	Sep 1982		
<i>Cirsium fontinale</i> var. <i>fontinale</i> fountain thistle	SE	Jul 1979	FE	Feb 03,1995
<i>Cirsium fontinale</i> var. <i>obispoense</i> Chorro Creek bog thistle	SE	Jun 1993	FE	Dec 15,1994
<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i> Suisun thistle			FE	Nov 20,1997
<i>Cirsium loncholepis</i> La Graciosa thistle	ST	Feb 1990	FE	Mar 20,2000
<i>Cirsium rhotophilum</i> surf thistle	ST	Feb 1990		
<i>Clarkia franciscana</i> Presidio clarkia	SE	Nov 1978	FE	Feb 03,1995
<i>Clarkia imbricata</i> Vine Hill clarkia	SE	Nov 1978	FE	Oct 22,1997
<i>Clarkia lingulata</i> Merced clarkia	SE	Jan 1989		
<i>Clarkia speciosa</i> ssp. <i>immaculata</i> Pismo clarkia	SR	Nov 1978	FE	Dec 15,1994
<i>Clarkia springvillensis</i> Springville clarkia	SE	Sep 1979	FT	Sep 14,1998
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i> salt marsh bird's-beak	SE	Jul 1979	FE	Sep 28,1978
<i>Cordylanthus mollis</i> ssp. <i>mollis</i> soft bird's-beak	SR	Jul 1979	FE	Nov 20,1997
<i>Cordylanthus nidularius</i> Mt. Diablo bird's-beak	SR	Nov 1978		
<i>Cordylanthus palmatus</i> palmate-bracted bird's-beak	SE	May 1984	FE	Jul 01, 1986
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> seaside bird's-beak	SE	Jan 1982		

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Cordylanthus tenuis</i> ssp. <i>capillaris</i> Pennell's bird's-beak	SR	Nov 1978	FE	Feb 03,1995
<i>Croton wigginsii</i> Wiggins' croton	SR	Jan 1982		
<i>Cryptantha roosiorum</i> bristlecone cryptantha	SR	Jul 1982		
<i>Cupressus abramsiana</i> (= <i>Callitropsis abramsiana</i>) Santa Cruz cypress	SE	Nov 1979	FE	Jan 08,1987
<i>Cupressus goveniana</i> ssp. <i>goveniana</i> (= <i>Callitropsis goveniana</i>) Gowen cypress			FT	Aug 12,1998
<i>Dedeckera eurekaensis</i> July gold	SR	Nov 1978		
<i>Deinandra arida</i> (= <i>Hemizonia arida</i>) Red Rock tarplant	SR	Jul 1982		
<i>Deinandra conjugens</i> (= <i>Hemizonia conjugens</i>) Otay tarplant	SE	Nov 1979	FT	Oct 13,1998
<i>Deinandra increscens</i> ssp. <i>villosa</i> (= <i>Hemizonia increscens</i> ssp. <i>villosa</i>) Gaviota tarplant	SE	Jan 1990	FE	Mar 20,2000
<i>Deinandra minthornii</i> (= <i>Hemizonia minthornii</i>) Santa Susana tarplant	SR	Nov 1978		
<i>Deinandra mohavensis</i> (= <i>Hemizonia mohavensis</i>) Mojave tarplant	SE	Aug 1981		
<i>Delphinium bakeri</i> Baker's larkspur	SE	April 2007	FE	Jan 26,2000
<i>Delphinium hesperium</i> ssp. <i>cuyamaca</i> Cuyamaca larkspur	SR	Jul 1982		
<i>Delphinium luteum</i> yellow larkspur	SR	Sep 1979	FE	Jan 26,2000
<i>Delphinium variegatum</i> ssp. <i>kinkiense</i> San Clemente Island larkspur	SE	Sep 1979	FE	Aug 11,1977
<i>Dichanthelium lanuginosum</i> var. <i>thermale</i> Geysers dichanthelium	SE	Sep 1978		
<i>Dieteria asteroides</i> var. <i>lagunensis</i> Mount Laguna aster (= <i>Machaeranthera asteroides</i> var. <i>lagunensis</i>)	SR	Sep 1979		
<i>Dithyrea maritima</i> beach spectaclepod	ST	Feb 1990		
<i>Dodecahema leptoceras</i> slender-horned spineflower	SE	Jan 1982	FE	Sep 28,1987
<i>Downingia concolor</i> var. <i>brevior</i> Cuyamaca Lake downingia	SE	Feb 1982		

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Dudleya abramsii</i> ssp. <i>parva</i> (=D. <i>parva</i>) Conejo dudleya			FT	Jan 29,1997
<i>Dudleya brevifolia</i> (=D. <i>blochmaniae</i> ssp. <i>brevifolia</i>) short-leaved dudleya	SE	Jan 1982		
<i>Dudleya cymosa</i> ssp. <i>agourensis</i> ³ Santa Monica Mtns. dudleya			FT	Jan 29, 1997
<i>Dudleya cymosa</i> ssp. <i>marcescens</i> marcescent dudleya	SR	Nov 1978	FT	Jan 29,1997
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Santa Monica Mountains dudleya			FT	Jan 29,1997
<i>Dudleya nesiotica</i> Santa Cruz Island dudleya	SR	Nov 1979	FT	Jul 31,1997
<i>Dudleya setchellii</i> Santa Clara Valley dudleya			FE	Feb 03,1995
<i>Dudleya stolonifera</i> Laguna Beach dudleya	ST	Jan 1987	FT	Oct 13,1998
<i>Dudleya traskiae</i> Santa Barbara Island dudleya	SE	Nov 1979	FE	Apr 26,1978
<i>Dudleya verityi</i> Verity's dudleya			FT	Jan 29,1997
<i>Enceliopsis nudicaulis</i> var. <i>corrugata</i> Ash Meadows daisy			FT	May 20,1985
<i>Eremalche kernensis</i> Kern mallow			FE	Jul 19,1990
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	SE	Jan 1987	FE	Sep 28,1987
<i>Eriastrum hooveri</i> Hoover's woolly-star			Delisted	Oct 7,2003
<i>Eriastrum tracyi</i> Tracy's eriastrum	SR	Jul 1982		
<i>Erigeron parishii</i> Parish's daisy			FT	Aug 24,1994
<i>Eriodictyon altissimum</i> Indian Knob mountainbalm	SE	Jul 1979	FE	Dec 15,1994
<i>Eriodictyon capitatum</i> Lompoc yerba santa	SR	Sep 1979	FE	Mar 20,2000

³ The U.S. Fish & Wildlife Service has listed the more encompassing *Dudleya cymosa* ssp. *ovatifolia* from which ssp. *agourensis* was split.

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Eriogonum alpinum</i> Trinity buckwheat	SE	Jul 1979		
<i>Eriogonum apricum</i> var. <i>apricum</i> ⁴ Ione buckwheat	SE	Aug 1981	FE	May 26,1999
<i>Eriogonum apricum</i> var. <i>prostratum</i> ⁵ Irish Hill buckwheat	SE	Jan 1987	FE	May 26,1999
<i>Eriogonum butterworthianum</i> Butterworth's buckwheat	SR	Nov 1979		
<i>Eriogonum crocatum</i> Conejo buckwheat	SR	Sep 1979		
<i>Eriogonum giganteum</i> var. <i>compactum</i> Santa Barbara Island buckwheat	SR	Nov 1979		
<i>Eriogonum grande</i> ssp. <i>timorum</i> (= <i>Eriogonum grande</i> var. <i>timorum</i>) San Nicolas Island buckwheat	SE	Nov 1979		
<i>Eriogonum kelloggii</i> Kellogg's buckwheat	SE	Apr 1982		
<i>Eriogonum kennedyi</i> var. <i>austromontanum</i> southern mountain buckwheat			FT	Sep 14,1978
<i>Eriogonum ovalifolium</i> var. <i>vineum</i> Cushenbury buckwheat			FE	Aug 24,1994
<i>Eriogonum thornei</i> (= <i>E. ericifolium</i> var. <i>thornei</i>) Thorne's buckwheat	SE	Nov 1979		
<i>Eriogonum twisselmannii</i> Twisselmann's buckwheat	SR	Jul 1982		
<i>Eriophyllum congdonii</i> Congdon's woolly sunflower	SR	Jul 1982		
<i>Eriophyllum latilobum</i> San Mateo woolly sunflower	SE	Jun 1992	FE	Feb 03,1995
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	SE	Jul 1979	FE	Aug 03,1993
<i>Eryngium constancei</i> Loch Lomond button-celery	SE	Jan 1987	FE	Dec 23,1986
<i>Eryngium racemosum</i> Delta button-celery	SE	Aug 1981		
<i>Erysimum capitatum</i> var. <i>angustatum</i> Contra Costa wallflower	SE	Nov 1978	FE	Apr 26,1978

⁴ The U.S. Fish & Wildlife Service has listed *Eriogonum apricum* as the species, which includes both rare varieties.

⁵ The U.S. Fish & Wildlife Service has listed *Eriogonum apricum* as the species, which includes both rare varieties.

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Erysimum menziesii</i> ⁶ Menzies' wallflower	SE	Sep 1984	FE	Jun 22,1992
<i>Erysimum teretifolium</i> Santa Cruz wallflower	SE	Aug 1981	FE	Feb 04,1994
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	SR	Jul 1979	FE	Oct 18,1996
<i>Fremontodendron mexicanum</i> Mexican flannelbush	SR	Jul 1982	FE	Oct 13,1998
<i>Fritillaria gentneri</i> Gentner's fritillary			FE	Dec 10,1999
<i>Fritillaria roderickii</i> Roderick's fritillary	SE	Nov 1979		
<i>Fritillaria striata</i> striped adobe-lily	ST	Jan 1987		
<i>Galium angustifolium</i> ssp. <i>borregoense</i> Borrego bedstraw	SR	Sep 1979		
<i>Galium buxifolium</i> box bedstraw	SR	Nov 1979	FE	Jul 31,1997
<i>Galium californicum</i> ssp. <i>sierrae</i> El Dorado bedstraw	SR	Nov 1979	FE	Oct 18,1996
<i>Galium catalinense</i> ssp. <i>acrispum</i> San Clemente Island bedstraw	SE	Apr 1982		
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> sand gilia	ST	Jan 1987	FE	Jun 22,1992
<i>Gilia tenuiflora</i> ssp. <i>hoffmannii</i> Hoffmann's slender-flowered gilia			FE	Jul 31,1997
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	SE	Nov 1978		
<i>Grindelia fraxino-pratensis</i> Ash Meadows gumplant			FT	May 20,1985
<i>Hazardia orcuttii</i> Orcutt's hazardia	ST	Aug 2002		
<i>Helianthemum greenei</i> island rush-rose			FT	Jul 31,1997
<i>Helianthus niveus</i> ssp. <i>tephrodes</i> Algodones Dunes sunflower	SE	Nov 1979		
<i>Hesperolinon congestum</i> Marin western flax	ST	Jun 1992	FT	Feb 03,1995

⁶ The U.S. Fish & Wildlife Service separately listed all as endangered, *E. menziesii* ssp. *eurekaense*, *E. menziesii* ssp. *menziesii*, and *E. menziesii* ssp. *yadonii*.

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Hesperolinon didymocarpum</i> Lake County western flax	SE	Aug 1981		
<i>Holmgrenanthe petrophila</i> (= <i>Maurandya petrophila</i>) rock lady	SR	Jul 1982		
<i>Holocarpha macradenia</i> Santa Cruz tarplant	SE	Sep 1979	FT	Mar 20,2000
<i>Howellia aquatilis</i> water howellia			FT	Jul 14,1994
<i>Ivesia callida</i> Tahquitz ivesia	SR	Jul 1982		
<i>Lasthenia burkei</i> Burke's goldfields	SE	Sep 1979	FE	Dec 02,1991
<i>Lasthenia conjugens</i> Contra Costa goldfields			FE	Jun 18,1997
<i>Layia carnosa</i> beach layia	SE	Jan 1990	FE	Jun 22,1992
<i>Lembertia congdonii</i> (= <i>Monolopia congdonii</i>) San Joaquin woollythreads			FE	Jul 19,1990
<i>Lesquerella kingii</i> ssp. <i>bernardina</i> San Bernardino Mountains bladderpod			FE	Aug 24,1994
<i>Lessingia germanorum</i> San Francisco lessingia	SE	Jan 1990	FE	Jun 19,1997
<i>Lewisia congdonii</i> Congdon's lewisia	SR	Jul 1982		
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	SR	Nov 1979		
<i>Lilium occidentale</i> western lily	SE	Jan 1982	FE	Aug 17,1994
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i> Pitkin Marsh lily	SE	Nov 1978	FE	Oct 22,1997
<i>Limnanthes bakeri</i> Baker's meadowfoam	SR	Nov 1978		
<i>Limnanthes douglasii</i> var. <i>sulphurea</i> (= <i>Limnanthes douglasii</i> ssp. <i>sulphurea</i>) Point Reyes meadowfoam	SE	Apr 1982		
<i>Limnanthes floccosa</i> ssp. <i>californica</i> Butte County meadowfoam	SE	Feb 1982	FE	Jun 08,1992
<i>Limnanthes gracilis</i> var. <i>parishii</i> (= <i>Limnanthes gracilis</i> ssp. <i>parishii</i>) Parish's meadowfoam	SE	Jul 1979		
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	SE	Nov 1979	FE	Dec 02,1991

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Lithophragma maximum</i> San Clemente Island woodland star	SE	Feb 1982	FE	Aug 08,1997
<i>Lotus argophyllus</i> var. <i>adsurgens</i> San Clemente Island bird's-foot trefoil	SE	Nov 1979		
<i>Lotus argophyllus</i> var. <i>niveus</i> Santa Cruz Island bird's-foot trefoil	SE	Aug 1981		
<i>Lotus dendroideus</i> var. <i>traskiae</i> San Clemente Island lotus	SE	Apr 1982	FE	Aug 11,1977
<i>Lupinus citrinus</i> var. <i>deflexus</i> Mariposa lupine	ST	Jan 1990		
<i>Lupinus milo-bakeri</i> Milo Baker's lupine	ST	Jan 1987		
<i>Lupinus nipomensis</i> Nipomo Mesa lupine	SE	Jan 1987	FE	Mar 20,2000
<i>Lupinus padre-crowleyi</i> Father Crowley's lupine	SR	Aug 1981		
<i>Lupinus tidestromii</i> var. <i>tidestromii</i> (=L. <i>tidestromii</i>) Tidestrom's lupine	SE	Jan 1987	FE	Jun 22,1992
<i>Machaeranthera lagunensis</i> (see <i>Dieteria asteroides</i> var. <i>lagunensis</i>)				
<i>Mahonia sonnei</i> (= <i>Berberis sonnei</i>) Truckee barberry		Delisted April 2008	Delisted	Oct 1,2003
<i>Malacothamnus clementinus</i> San Clemente Island bush mallow	SE	Feb 1982	FE	Aug 11,1977
<i>Malacothamnus fasciculatus</i> var. <i>nesioticus</i> Santa Cruz Island bush mallow	SE	Nov 1979	FE	Jul 31,1997
<i>Malacothrix indecora</i> Santa Cruz Island malacothrix			FE	Jul 31,1997
<i>Malacothrix squalida</i> island malacothrix			FE	Jul 31,1997
<i>Monardella linoides</i> ssp. <i>viminea</i> (=M. <i>viminea</i>) willowy monardella	SE	Nov 1979	FE	Oct 13,1998
<i>Nasturtium gambellii</i> (= <i>Rorippa gambellii</i>) Gambel's water cress	ST	Feb 1990	FE	Aug 03,1993
<i>Navarretia fossalis</i> spreading navarretia			FT	Oct 13,1998
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i> few-flowered navarretia	ST	Jan 1990	FE	Jun 18,1997

State Designated Plants**Classification**

	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i> many-flowered navarretia	SE	Nov 1979	FE	Jun 18,1997
<i>Nemacladus twisselmannii</i> Twisselmann's nemacladus	SR	Jul 1982		
<i>Neostapfia colusana</i> Colusa grass	SE	Nov 1979	FT	Mar 26,1997
<i>Nitrophila mohavensis</i> Amargosa nitrophila	SE	Nov 1979	FE	May 20,1985
<i>Nolina interrata</i> Dehesa nolina	SE	Nov 1979		
<i>Oenothera californica</i> ssp. <i>eurekaensis</i> Eureka Dunes evening-primrose	SR	Nov 1978	FE	Apr 26,1978
<i>Oenothera deltoides</i> ssp. <i>howellii</i> Antioch Dunes evening-primrose	SE	Nov 1978	FE	Apr 26,1978
<i>Opuntia basilaris</i> var. <i>treleasei</i> Bakersfield cactus	SE	Jan 1990	FE	Jul 19,1990
<i>Orcuttia californica</i> California Orcutt grass	SE	Sep 1979	FE	Aug 03,1993
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	SE	Sep 1979	FT	Mar 26,1997
<i>Orcuttia pilosa</i> hairy Orcutt grass	SE	Sep 1979	FE	Mar 26,1997
<i>Orcuttia tenuis</i> slender Orcutt grass	SE	Sep 1979	FT	Mar 26,1997
<i>Orcuttia viscida</i> Sacramento Orcutt grass	SE	Jul 1979	FE	Mar 26,1997
<i>Ornithostaphylos oppositifolia</i> Baja California birdbush	SE	Apr 2001		
<i>Oxytheca parishii</i> var. <i>goodmaniana</i> (= <i>Acanthoscyphus parishii</i> var. <i>goodmaniana</i>) Cushenbury oxytheca			FE	Aug 24,1994
<i>Packera ganderi</i> (= <i>Senecio ganderi</i>) Gander's ragwort	SR	Jul 1982		
<i>Packera layneae</i> (= <i>Senecio layneae</i>) Layne's ragwort	SR	Nov 1979	FT	Oct 18,1996
<i>Parvisedum leiocarpum</i> (= <i>Sedella leiocarpa</i>) Lake County stonecrop	SE	Jan 1990	FE	Jun 18,1997
<i>Pedicularis dudleyi</i> Dudley's lousewort	SR	Sep 1979		
<i>Pentachaeta bellidiflora</i> white-rayed pentachaeta	SE	Jun 1992	FE	Feb 03,1995
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	SE	Jan 1990	FE	Jan 29,1997
<i>Phacelia insularis</i> ssp. <i>insularis</i> northern Channel Islands phacelia			FE	Jul 31,1997

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	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Phlox hirsuta</i> Yreka phlox	SE	Jan 1987	FE	Feb 3,2000
<i>Piperia yadonii</i> Yadon's rein orchid			FE	Aug 12,1998
<i>Plagiobothrys diffusus</i> San Francisco popcorn-flower	SE	Sep 1979		
<i>Plagiobothrys strictus</i> Calistoga popcorn-flower	ST	Jan 1990	FE	Oct 22,1997
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	ST	Dec 2002		
<i>Poa atropurpurea</i> San Bernardino blue grass			FE	Sep 14,1998
<i>Poa napensis</i> Napa blue grass	SE	Jul 1979	FE	Oct 22,1997
<i>Pogogyne abramsii</i> San Diego mesa mint	SE	Jul 1979	FE	Sep 28,1978
<i>Pogogyne clareana</i> Santa Lucia mint	SE	Nov 1979		
<i>Pogogyne nudiuscula</i> Otay Mesa mint	SE	Jan 1987	FE	Aug 03,1993
<i>Polygonum hickmanii</i> Scott's Valley polygonum	SE	May 2005	FE	Apr 8,2003
<i>Potentilla hickmanii</i> Hickman's cinquefoil	SE	Sep 1979	FE	Aug 12,1998
<i>Pseudobahia bahiifolia</i> Hartweg's golden sunburst	SE	Aug 1981	FE	Feb 06,1997
<i>Pseudobahia peirsonii</i> San Joaquin adobe sunburst	SE	Jan 1987	FT	Feb 06,1997
<i>Rorippa subumbellata</i> Tahoe yellow cress	SE	Apr 1982		
<i>Rosa minutifolia</i> small-leaved rose	SE	Oct 1989		
<i>Sanicula maritima</i> adobe sanicle	SR	Aug 1981		
<i>Sanicula saxatilis</i> rock sanicle	SR	Jul 1982		
<i>Sedella leiocarpa</i> (= <i>Parvisedum leiocarpum</i>) Lake County stonecrop	SE	Jan 1990	FE	Jun 18,1997
<i>Senecio ganderi</i> (see <i>Packera ganderi</i>)				
<i>Senecio layneae</i> (= <i>Packera layneae</i>)				
<i>Sibara filifolia</i> Santa Cruz Island rock cress			FE	Aug 08,1997
<i>Sidalcea covillei</i> Owens Valley checkerbloom	SE	Jul 1979		

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	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Sidalcea hickmanii</i> ssp. <i>anomala</i> Cuesta Pass checkerbloom	SR	Nov 1979		
<i>Sidalcea hickmanii</i> ssp. <i>parishii</i> Parish's checkerbloom	SR	Nov 1979	Removed as FC, 2006 Fed. Register	
<i>Sidalcea keckii</i> Keck's checker-mallow			FE	Feb 16,2000
<i>Sidalcea oregana</i> ssp. <i>valida</i> Kenwood Marsh checkerbloom	SE	Jan 1982	FE	Oct 22,1997
<i>Sidalcea pedata</i> bird-foot checkerbloom	SE	Jan 1982	FE	Aug 31,1984
<i>Sidalcea stipularis</i> Scadden Flat checkerbloom	SE	Jan 1982		
<i>Silene campanulata</i> ssp. <i>campanulata</i> Red Mountain catchfly	SE	Apr 1982		
<i>Streptanthus albidus</i> ssp. <i>albidus</i> Metcalf Canyon jewel-flower			FE	Feb 03,1995
<i>Streptanthus niger</i> Tiburon jewel-flower	SE	Feb 1990	FE	Feb 03,1995
<i>Suaeda californica</i> California seablite			FE	Dec 15,1994
<i>Swallenia alexandrae</i> Eureka Valley dune grass	SR	Aug 1981	FE	Apr 26,1978
<i>Taraxacum californicum</i> California dandelion			FE	Sep 14,1998
<i>Thelypodium stenopetalum</i> slender-petaled thelypodium	SE	Feb 1982	FE	Aug 31,1984
<i>Thermopsis macrophylla</i> var. <i>angina</i> (=T. <i>macrophylla</i>) Santa Ynez false lupine	SR	Aug 1981		
<i>Thlaspi californicum</i> Kneeland Prairie penny-cress			FE	Feb 9,2000
<i>Thysanocarpus conchuliferus</i> Santa Cruz Island fringedpod			FE	Jul 31,1997
<i>Trichostema austromontanum</i> ssp. <i>compactum</i> Hidden Lake bluecurls			FT	Sep 14,1998
<i>Trifolium amoenum</i> showy Indian clover			FE	Oct 22,1997
<i>Trifolium polyodon</i> Pacific Grove clover	SR	Sep 1979		
<i>Trifolium trichocalyx</i> Monterey clover	SE	Nov 1979	FE	Aug 12,1998
<i>Tuctoria greenei</i> Greene's tuctoria	SR	Sep 1979	FE	Mar 26,1997
<i>Tuctoria mucronata</i> Crampton's tuctoria	SE	Jul 1979	FE	Sep 28,1978
<i>Verbena californica</i> California vervain	ST	Aug 1994	FT	Sep 14,1998

State Designated Plants

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	<u>State</u>	<u>List Date</u>	<u>Federal</u>	<u>List Date</u>
<i>Verbesina dissita</i> Big-leaved crownbeard	ST	Jan 1990	FT	Oct 07,1996

APPENDIX D
AIR QUALITY CALCULATIONS

CALCULATION SHEET-COMBUSTION EMISSIONS-CONSTRUCTION

Assumptions for Combustion Emissions						
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs	
Water Truck	2	300	8	130	624000	
Diesel Road Compactors	1	100	8	15	12000	
Diesel Dump Truck	2	300	8	130	624000	
Diesel Excavator	2	300	8	60	288000	
Diesel Hole Trenchers	1	175	8	15	21000	
Diesel Bore/Drill Rigs	0	300	8	60	0	
Diesel Cement & Mortar Mixers	1	300	8	60	144000	
Diesel Cranes	0	175	8	130	0	
Diesel Graders	3	300	8	15	108000	
Diesel Tractors/Loaders/Backhoes	1	100	8	90	72000	
Diesel Bull Dozers	2	300	8	15	72000	
Diesel Front End Loaders	2	300	8	30	144000	
Diesel Fork Lifts	1	100	8	130	104000	
Diesel Generator Set	2	40	8	130	83200	

Type of Construction Equipment	Emission Factors ¹						
	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTION EMISSIONS-CONSTRUCTION

1. Emission factors (EF) were generated using USEPA's preferred model for nonroad sources, the NONROAD2008 model. Emissions were modeled for the 2007 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2008 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2008 model is based on the population in U.S. for the 2007 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.303	1.423	3.775	0.282	0.275	0.509	368.579
Diesel Road Paver	0.005	0.020	0.065	0.004	0.004	0.010	7.091
Diesel Dump Truck	0.303	1.423	3.775	0.282	0.275	0.509	368.579
Diesel Excavator	0.108	0.413	1.460	0.102	0.098	0.235	170.209
Diesel Hole Cleaners/Trenchers	0.012	0.056	0.134	0.011	0.010	0.017	12.399
Diesel Bore/Drill Rigs	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Cement & Mortar Mixers	0.097	0.368	1.155	0.076	0.075	0.116	84.057
Diesel Cranes	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Graders	0.042	0.162	0.563	0.039	0.038	0.088	63.828
Diesel Tractors/Loaders/Backhoes	0.147	0.651	0.573	0.109	0.106	0.075	54.835
Diesel Bull Dozers	0.029	0.109	0.378	0.026	0.025	0.059	42.552
Diesel Front End Loaders	0.060	0.246	0.793	0.056	0.054	0.117	85.089
Diesel Aerial Lifts	0.227	0.889	0.981	0.159	0.155	0.109	79.171
Diesel Generator Set	0.111	0.345	0.547	0.067	0.065	0.074	53.847
Total Emissions	1.442	6.106	14.200	1.213	1.180	1.918	1390.237

Conversion factors	
Grams to tons	1.102E-06

MOVES2010a MODEL ON-ROAD TRANSPORTATION AIR EMISSIONS-
DELIVERY MATERIALS AND COMMUTING DURING CONSTRUCTION ACTIVITIES

MOVES 2010a						
Source	Fuel type	Number of vehicles	Miles traveled per day	Days of travel per year	Miles traveled per year	
Passenger cars	Gasoline	20	60	260	312,000	
Passenger truck	Gasoline	20	60	260	312,000	
Light commercial truck	Diesel	2	60	260	31,200	
Short-haul truck	Diesel	4	130	260	135,200	
Long-haul truck	Diesel	1	130	260	33,800	

Emission Factors (MOVES 2010a Emission Rates) ¹							
Source	VOC (g/mile)	CO (g/mile)	NOx (g/mile)	PM-10 (g/mile)	PM-2.5 (g/mile)	SO ₂ (g/mile)	CO ₂ and CO ₂ Equivalents (g/mile)
Passenger cars	8.497	2.892	0.576	0.019	0.018	0.005	320
Passenger truck	3.645	5.449	1.168	0.027	0.025	0.007	439
Light commercial truck	4.460	2.158	2.986	0.164	0.190	0.005	609
Short-haul truck	2.438	2.273	6.095	0.270	0.313	0.007	929
Long-haul truck	2.519	3.610	14.776	0.625	0.726	0.016	2,020

Total Emission for On-Road Construction Activities (tons/year)							
Source	VOC	CO	NOx	PM-10	PM-2.5	SO ₂	CO ₂ and CO ₂ Equivalents
Passenger cars	2.921	0.994	0.198	0.007	0.006	0.002	110
Passenger truck	1.253	1.873	0.402	0.009	0.009	0.002	151
Light commercial truck	0.153	0.074	0.103	0.006	0.007	0.000	21
Short-haul truck	0.363	0.339	0.908	0.040	0.047	0.001	138
Long-haul truck	0.094	0.134	0.550	0.023	0.027	0.001	75
Total	4.785	3.415	2.161	0.085	0.095	0.006	496

Key:

Short-haul trucks category include trucks such as dump trucks and cement trucks.
Long-haul trucks category includes trucks such as semi-trailer (18 wheeler).

1. Emission factors were generated by USEPA preferred model MOVES2010a. MOVES simulates daily motor vehicle operations and produces emission rates. MOVES emission rates include sources from engine combustion, tire wear, brake wear, evaporative fuel permiation, vapor venting and leaking (running and parking), and crankcase loss. Emission rates are daily averages for each of the criteria pollutants. The averages from a combination of vehicle operations such as: stop and go, highway travel, acceleration at on-ramps, parking, start-up, extended idle, etc.

MOVES 2010a

Source	Fuel type	Number of vehicles	Miles traveled per day	Days of travel per year	Miles traveled per year
Passenger cars	Gasoline	-	0	365	-
Passenger truck	Gasoline	-	0	365	-
Light commercial truck	Diesel	-	0	365	-
Short-haul truck	Diesel	-	0	365	-
Long-haul truck	Diesel	-	0	365	-

Emission Factors (MOVES 2010a Emission Rates)¹

Source	VOC (g/mile)	CO (g/mile)	NOx (g/mile)	PM-10 (g/mile)	PM-2.5 (g/mile)	SO ₂ (g/mile)	CO ₂ and CO ₂ Equivalents (g/mile)
Passenger cars	8.497	2.892	0.576	0.019	0.018	0.005	320
Passenger truck	3.645	5.449	1.168	0.027	0.025	0.007	439
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Short-haul truck	2.438	2.273	6.095	0.270	0.313	0.007	929
Long-haul truck	2.519	3.610	14.776	0.625	0.726	0.016	2,020

Total Emission for On-Road Commuter Activities (tons/year)

Source	VOC	CO	NOx	PM-10	PM-2.5	SO ₂	CO ₂ and CO ₂ Equivalents
Passenger cars	0.00	0.00	0.00	0.00	0.00	0.00	-
Passenger truck	0.00	0.00	0.00	0.00	0.00	0.00	-
Light commercial truck	0.00	0.00	0.00	0.00	0.00	0.00	-
Short-haul truck	0.00	0.00	0.00	0.00	0.00	0.00	-
Long-haul truck	0.00	0.00	0.00	0.00	0.00	0.00	-
Total	0.00	0.00	0.00	0.00	0.00	0.00	-

Key:

Short-haul trucks category include trucks such as dump trucks and cement trucks.
 Long-haul trucks category includes trucks such as semi-trailer (18 wheeler).

1. Emission factors were generated by USEPA preferred model MOVES2010a. MOVES simulates daily motor vehicle operations and produces emission rates. MOVES emission rates include sources from engine combustion, tire wear, brake wear, evaporative fuel permiation, vapor venting and leaking (running and parking), and crankcase loss. Emission rates are daily averages for each of the criteria pollutants. The averages from a combination of vehicle operations such as: stop and go, highway travel, acceleration at on-ramps, parking, start-up, extended idle, etc.

CALCULATION SHEET-FUGITIVE DUST-CONSTRUCTION

Assumptions for Combustion Emissions

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19 ton PM10/acre-month		MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42 ton PM10/acre-month		MRI 1996; EPA 2001; EPA 2006

PM2.5 Emissions

PM2.5 Multiplier 0.10 (10% of PM10 emissions assumed to be PM2.5) EPA 2001; EPA 2006

Control Efficiency

0.50 (assume 50% control efficiency for PM10 and PM2.5 emissions) EPA 2001; EPA 2006

Project Assumptions

Construction Area (0.19 ton PM10/acre-month)	Conversion Factors
Duration of Soil Disturbance in Project 8 months	0.000022957 acres per feet
Length 2 miles	5280 feet per mile
Length (converted) 10560 feet	
Width 24 feet	
Area 5.82 acres	

Staging Areas

Duration of Construction Project 8 months
Length 2 miles
Length (converted) 10560 feet
Width 24 feet
Area 5.82 acres

	Project Emissions (tons/year)		
	PM10 uncontrolled	PM10 controlled	PM2.5 uncontrolled PM2.5 controlled
Construction Area (0.19 ton PM10/ac)	8.84	4.42	0.88
Staging Areas	0.38	0.19	0.04
Total	9.22	4.61	0.92 0.46

References:

- USEPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.
- USEPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.
- MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Assumptions for Fugitive Emissions

General Construction Activities Emission Factor

0.19 ton PM10/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM10/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM10/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions from Construction Operations, calculated the 0.19 ton PM10/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM10/acre-month) and 75% of the average emission factor (0.11 ton PM10/acre-month).

The 0.19 ton PM10/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM10/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particle (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District and the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM10/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM10/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM10/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM2.5 Multiplier 0.10

PM2.5 emissions are estimated by applying a particle size multiplier of 0.10 to PM10 emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM10 and PM2.5 0.50

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas. Wetting controls will be applied during project construction (EPA 2006).

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.
EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.
MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

CALCULATION SHEET-SUMMARY OF EMISSIONS

Assumptions for Combustion Emissions										
Emission Source	VOC	CO	NOx	PM-10	PM-2.5	SO2	CO2	CO2 Equivalents	Total CO2	
Combustion Emissions	1.44	6.11	14.20	1.21	1.18	1.92	1390.24	4,452	5,843	
Construction Site-Fugitive PM-10	NA	NA	NA	4.61	0.46	NA	NA	NA	NA	
Construction Workers Commuter & Trucking	4.78	3.42	2.16	0.08	0.09	0.01	NA	496	496	
Total emissions-CONSTRUCTION	6.23	9.52	16.36	5.91	1.74	1.92	1390	4,948	6,338	
De minimis Threshold (1)	100	100	100	70	100	100	NA	NA	25,000	

1. Note that Imperial County is in non-attainment for Ozone, PM-10 (serious), and PM 2.5 (USEPA 2010b and CARB 2012).

Carbon Equivalents	Conversion Factor
N2O or NOx	311
Methane or VOCs	25

Source: EPA 2010 Reference, Tables and Conversions, Inventory of U.S. Greenhouse Gas Emissions and Sinks; <http://www.epa.gov/climatechange/emissions/usinventoryreport.html>