



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Marine Region
1933 Cliff Drive, Suite 9
Santa Barbara, CA 93109
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



May 5, 2023

Governor's Office of Planning & Research

California State Lands Commission
Attention: Afifa Awan
100 Howe Ave., Suite 100-South
Sacramento, CA 95825-8202
CEQA.comments@slc.ca.gov

May 05 2023
STATE CLEARINGHOUSE

Dear Ms. Awan:

San Francisco Bay Fiber Optic Cables Project (Project)
Initial Study/Draft Mitigated Negative Declaration (ISMND)
SCH# 2023040125

The California Department of Fish and Wildlife (Department) received an ISMND from the California State Lands Commission (CSLC) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that the Department, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

The Department is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state. (Fish & G. Code, Section 711.7, subd. (a) & 1802; Pub. Resources Code, Section 21070; CEQA Guidelines Section 15386, subd. (a).) The Department, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, Section 1802.) Similarly for purposes of CEQA, the Department is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. The Department is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California, and ensuring fisheries are sustainably managed under the Marine Life Management Act.

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

The Department is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) The Department expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, implementation of the Project may result in “take” as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Bandwidth Infrastructure Group, LLC

Objective: The proposed Project would lay down two parallel and close together fiber optic cables between Brisbane and San Leandro. The Project is intended to improve capacity and speed of telecommunication data within the San Francisco Bay Area.

Location: The path of the cables will cross San Francisco Bay, north of the San Mateo Bridge and exit within cities of Brisbane and San Leandro (San Mateo and Alameda Counties).

Timeframe: The Project is anticipated to begin construction in summer or fall of 2023. Construction is anticipated to take approximately 3 months.

MARINE BIOLOGICAL SIGNIFICANCE

The San Francisco Bay-Delta is the second largest estuary in the United States and supports numerous aquatic habitats and biological communities. It encompasses 479 square miles, including shallow mudflats. This ecologically significant ecosystem supports both state and federally threatened and endangered species and sustains important commercial and recreational fisheries.

STATE AND FEDERALLY LISTED AND COMMERCIAL/RECREATIONALLY IMPORTANT SPECIES

Protected species under the State and Federal Endangered Species Acts that could potentially be present near Project activities include:

- Chinook salmon (*Oncorhynchus tshawytscha*), state and federally threatened (Central Valley Spring-run), state and federally endangered (Sacramento River Winter-run)
- Longfin smelt (*Spirinchus thaleichthys*), state-threatened
- Steelhead (*Oncorhynchus mykiss*), federally-threatened (Central California Coast and Central Valley ESUs)
- Green sturgeon (*Acipenser medirostris*), federally-threatened (southern DPS)

- White sturgeon (*Acipenser transmontanus*), state species of special concern
- Brown pelican (*Pelecanus occidentalis californicus*), state fully protected

Several species with important commercial and recreational fisheries value that could potentially be impacted by Project activities include:

- Dungeness crab (*Cancer magister*)
- Pacific herring (*Clupea pallasii*)
- Surfperches (*Embiotocidae*)
- California halibut (*Paralichthys californicus*)

COMMENTS AND RECOMMENDATIONS

The Department offers the comments and recommendations below to assist the Waterboard in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Marine Project Level Impacts and Other Considerations

Longfin Smelt

Comment: The ISMND has correctly identified Longfin smelt as potentially being present within the Project area. However, the ISMND incorrectly listed an in-water work window of June 1 through November 30 for Longfin smelt. Although there are likely times of the year that fewer Longfin smelt may be present in the Project area, the Department has determined that the avoidance of Longfin smelt in San Francisco Bay is not possible using a work window because of the various life stages that inhabit San Francisco Bay throughout the year. This work window, however, is appropriate for protection of Pacific herring and federally listed Steelhead trout.

Recommendation: The Department recommends removing the reference to a work window for Longfin smelt in Mitigation Measure (MM) BIO-6.

MM BIO-7: Fish Screen on the Jet Sled Intake

Comment: MM BIO-7 describes the potential of fish being entrained into the jet sled intake necessitating the need to install a protective fish screen. Although the installation of a screen is a measure to avoid and/or minimize potential take of fish species, there is still the potential for impacts to state listed species. Longfin smelt, specifically, would be of the most concern and are the most vulnerable given the preference to inhabit the lower portions of the water column.

Recommendation: Given the potential for take of the state listed Longfin smelt, the Department recommends Bandwidth Infrastructure Group, LLC consult with the Department regarding the potential for a 2081(b) Incidental Take Permit and that this permit be added to Table 1.7-1. Anticipate Agencies with Review or Approval over Project Activities within the ISMND.

Comment: The Department does not agree with the screen conditions described within the MM. Given the potential of smaller life stages of longfin smelt being present, a slotted screen opening should be constructed with the smallest recommended size of 1.75 millimeters (mm) defined in the Department Fish Screen Criteria (attachment 1).

Recommendation: The Department recommends that the bullet point in MM BIO-7 (lines 1-5 on p. 3-58) describing the screen opening sizes be amended to read:

The screen surface will have a minimum open area of 27 percent, but open areas of 40 percent or greater are recommended. Round openings will not exceed 5/32 inch (3.96 millimeter). Square openings will not exceed 5/32 inch (3.96 millimeters) diagonally. ~~Slotted openings will not exceed 3/32 inch (2.38 millimeters)~~ **Slotted openings will not exceed 0.0689 inches (1.75mm).**

White Sturgeon

Comment: White sturgeon are a state species of special concern (SSC). Although the SSC designation does not have a formal legal status, species are designated to bring additional attention to conservation, research, and recovery of species that have previously been subject to population declines or are generally rare. SSCs should be considered during the environmental review process. CEQA (California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from "projects" in the State. Section 15380 of the CEQA Guidelines indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

Recommendation: The Department recommends that the ISMND include analysis of potential impacts to White sturgeon from Project activities.

Recommendation: The Department recommends the ISMND add White sturgeon to Appendix D Table 2-1: Special-status Species and Critical Habitat Potentially Occurring or Known to Occur in the Action Area.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/SubmittingData#44524420-pdf-field-survey-form>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by the Department. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

The Department appreciates the opportunity to comment on the ISMND to assist the CSLC in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Arn Aarreberg, Environmental Scientist, at (707) 791-4195 or Arn.Aarreberg@wildlife.ca.gov.

Sincerely,



Craig Shuman, D. Env
Marine Regional Manager

Attachment 1: California Department of Fish and Wildlife Fish Screen Criteria

ec: Becky Ota, Program Manager
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State.clearinghouse@opr.ca.gov

EXHIBIT A
DEPARTMENT OF FISH AND GAME
FISH SCREENING CRITERIA
June 19, 2000

1. STRUCTURE PLACEMENT

A. Streams And Rivers (flowing water): The screen face shall be parallel to the flow and adjacent bankline (water's edge), with the screen face at or streamward of a line defined by the annual low-flow water's edge.

The upstream and downstream transitions to the screen structure shall be designed and constructed to match the bankline, minimizing eddies upstream of, in front of, and downstream of, the screen.

Where feasible, this "on-stream" fish screen structure placement is preferred by the California Department of Fish and Game.

B. In Canals (flowing water): The screen structure shall be located as close to the river source as practical, in an effort to minimize the approach channel length and the fish return bypass length. This "in canal" fish screen location shall only be used where an "on-stream" screen design is not feasible. This situation is most common at existing diversion dams with headgate structures.

The National Marine Fisheries Service - Southwest Region "Fish Screening Criteria for Anadromous Salmonids, January 1997" shall be used for these types of installations.

C. Small Pumped Diversions: Small pumped diversions (less than 40 cubic-feet per second) which are screened using "manufactured, self-contained" screens shall conform to the National Marine Fisheries Service - Southwest Region "Fish Screening Criteria for Anadromous Salmonids, January 1997."

D. Non-Flowing Waters (tidal areas, lakes and reservoirs): The preferred location for the diversion intake structure shall be offshore, in deep water, to minimize fish contact with the diversion. Other configurations will be considered as exceptions to the screening criteria as described in Section 5.F. below.

2. APPROACH VELOCITY (Local velocity component perpendicular to the screen face)

A. Flow Uniformity: The design of the screen shall distribute the approach velocity uniformly across the face of the screen. Provisions shall be made in the design of the screen to allow for adjustment of flow patterns. The intent is to ensure uniform flow distribution through the entire face of the screen as it is constructed and operated.

B. Self-Cleaning Screens:¹

The U.S. Fish and Wildlife Service has selected a 0.2 feet per second approach velocity for use in waters where the Delta smelt is found. Thus, fish screens in the Sacramento-San Joaquin Delta and San Francisco Estuary should use this criterion for design purposes. In addition:

1. Streams and Rivers (flowing waters) - exposure to the fish screen shall not exceed fifteen minutes.

¹ Approach velocities in the June 19, 2000 Fish Screening Criteria that are inapplicable if delta smelt are present are omitted.

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2. In Canals (flowing waters) - a bypass entrance shall be located every one-minute of travel time along the screen face.

3. Non-Flowing Waters (tidal areas, lakes and reservoirs) - The specific screen approach velocity shall be determined for each installation, based on the delta smelt life stage being protected. Velocities which exceed those described above will require a variance to these criteria (see Section 5.F. below).

C. Screens Which Are Not Self-Cleaning: The screens shall be designed with an approach velocity one-fourth that outlined in Section B. above. The screen shall be cleaned before the approach velocity exceeds the criteria described in Section B.

D. Frequency Of Cleaning: Fish screens shall be cleaned as frequently as necessary to prevent flow impedance and violation of the approach velocity criteria. A cleaning cycle once every 5 minutes is deemed to meet this standard.

E. Screen Area Calculation: The required wetted screen area (square feet), excluding the area affected by structural components (i.e., pore space or open area), is calculated by dividing the maximum diverted flow (cubic-feet per second) by the allowable approach velocity (feet per second). Example:

1.0 cubic-feet per second / 0.2 feet per second = 5.0 square feet of pore space

Unless otherwise specifically agreed to, this calculation shall be done at the minimum stream stage.

3. SWEEPING VELOCITY (Velocity component parallel to screen face)

A. In Streams And Rivers: The sweeping velocity should be at least two times the allowable approach velocity.

B. In Canals: The sweeping velocity shall exceed the allowable approach velocity. Experience has shown that sweeping velocities of 2.0 feet per second (or greater) are preferable.

C. Design Considerations: Screen faces shall be designed flush with any adjacent screen bay piers or walls, to allow an unimpeded flow of water parallel to the screen face.

4. SCREEN OPENINGS

A. Porosity: The screen surface shall have a minimum open area of 27 percent. We recommend the maximum possible open area consistent with the availability of appropriate material, and structural design considerations.

The use of open areas less than 40 percent shall include consideration of increasing the screen surface area, to reduce slot velocities, assisting in both fish protection and screen cleaning.

B. Round Openings: Round openings in the screening shall not exceed 3.96mm (5/32in). In waters where steelhead rainbow trout fry are present, this dimension shall not exceed 2.38mm (3/32in).

C. Square Openings: Square openings in screening shall not exceed 3.96mm (5/32in) measured diagonally. In waters where steelhead rainbow trout fry are present, this dimension shall not exceed 2.38mm (3/32in) measured diagonally.

D. Slotted Openings: Slotted openings shall not exceed 2.38mm (3/32in) in width. In waters where steelhead rainbow trout fry are present, this dimension shall not exceed 1.75mm (0.0689in).

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5. SCREEN CONSTRUCTION

A. Material Selection: Screens may be constructed of any rigid material, perforated, woven, or slotted that provides water passage while physically excluding fish. The largest possible screen open area which is consistent with other project requirements should be used. Reducing the screen slot velocity is desirable both to protect fish and to ease cleaning requirements. Care should be taken to avoid the use of materials with sharp edges or projections which could harm fish.

B. Corrosion and Fouling Protection: Stainless steel or other corrosion-resistant material is the screen material recommended to reduce clogging due to corrosion. The use of both active and passive corrosion protection systems should be considered. Consideration should be given to anti-fouling material choices, to reduce biological fouling problems. Care should be taken not to use materials deemed deleterious to fish and other wildlife.

C. Project Review and Approval: Plans and design calculations, which show that all the applicable screening criteria have been met, shall be provided to the Department before written approval can be granted by the Regional Manager, Bay Delta Region.

The approval shall be documented in writing to the project sponsor, with a copy to the Deputy Director, Resource Management and Policy Division. Such approval may include a requirement for post-construction evaluation, monitoring and reporting.

D. Assurances: All fish screens constructed after the effective date of these criteria shall be designed and constructed to satisfy the current criteria. Owners of existing screens, approved by the Department prior to the effective date of these criteria, shall not be required to upgrade their facilities to satisfy the current criteria unless:

1. The controlling screen components deteriorate and require replacement (i.e., change the opening size or opening orientation when the screen panels or rotary drum screen coverings need replacing),
2. Relocation, modification or reconstruction (i.e., a change of screen alignment or an increase in the intake size to satisfy diversion requirements) of the intake facilities, or
3. The owner proposes to increase the rate of diversion which would result in violation of the criteria without additional modifications.

E. Supplemental Criteria: Supplemental criteria may be issued by the Department for a project, to accommodate new fish screening technology or to address species-specific or site-specific circumstances.

F. Variances: Written variances to these criteria may be granted with the approval of the Regional Manager, Bay Delta Region and concurrence from the Deputy Director, Resource Management and Policy Division. At a minimum, the rationale for the variance must be described and justified in the request. Evaluation and monitoring may be required as a condition of any variance, to ensure that the requested variance does not result in a reduced level of protection for the aquatic resources.

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It is the responsibility of the project sponsor to obtain the most current version of the appropriate fish screen criteria. Project sponsors should contact the Department of Fish and Game and the U.S. Fish and Wildlife Service (for projects in anadromous and fresh waters) for guidance.

Copies of the current criteria are available from the Department of Fish and Game Bay Delta Region; 7329 Silverado Trail/P.O. Box 46, Yountville, CA 94599, (707) 944-5500.

Technical assistance can be obtained directly from the Habitat Conservation Branch; 1416 Ninth Street, Sacramento, CA 95814 - (916) 653-1070.

The National Marine Fisheries Service Southwest Region "Fish Screening Criteria for Anadromous Salmonids, January 1997" is available at: <http://swr.ucsd.edu/hcd/fishscrn.htm> and from their Southwest Region, 777 Sonoma Avenue, Room 325, Santa Rosa, CA 95402 - (707) 575-6050.

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Where feasible, this "on-stream" fish screen structure placement is preferred by the California Department of Fish and Game.

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D. Non-Flowing Waters (tidal areas, lakes and reservoirs): The preferred location for the diversion intake structure shall be offshore, in deep water, to minimize fish contact with the diversion. Other configurations will be considered as exceptions to the screening criteria as described in Section 5.F. below.

2. APPROACH VELOCITY (Local velocity component perpendicular to the screen face)

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2. In Canals (flowing waters) - a bypass entrance shall be located every one-minute of travel time along the screen face.

3. Non-Flowing Waters (tidal areas, lakes and reservoirs) - The specific screen approach velocity shall be determined for each installation, based on the delta smelt life stage being protected. Velocities which exceed those described above will require a variance to these criteria (see Section 5.F. below).

C. Screens Which Are Not Self-Cleaning: The screens shall be designed with an approach velocity one-fourth that outlined in Section B. above. The screen shall be cleaned before the approach velocity exceeds the criteria described in Section B.

D. Frequency Of Cleaning: Fish screens shall be cleaned as frequently as necessary to prevent flow impedance and violation of the approach velocity criteria. A cleaning cycle once every 5 minutes is deemed to meet this standard.

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C. Screens Which Are Not Self-Cleaning: The screens shall be designed with an approach velocity one-fourth that outlined in Section B. above. The screen shall be cleaned before the approach velocity exceeds the criteria described in Section B.

D. Frequency Of Cleaning: Fish screens shall be cleaned as frequently as necessary to prevent flow impedance and violation of the approach velocity criteria. A cleaning cycle once every 5 minutes is deemed to meet this standard.

E. Screen Area Calculation: The required wetted screen area (square feet), excluding the area affected by structural components (i.e., pore space or open area), is calculated by dividing the maximum diverted flow (cubic-feet per second) by the allowable approach velocity (feet per second). Example:

1.0 cubic-feet per second / 0.2 feet per second = 5.0 square feet of pore space

Unless otherwise specifically agreed to, this calculation shall be done at the minimum stream stage.

3. SWEEPING VELOCITY (Velocity component parallel to screen face)

A. In Streams And Rivers: The sweeping velocity should be at least two times the allowable approach velocity.

B. In Canals: The sweeping velocity shall exceed the allowable approach velocity. Experience has shown that sweeping velocities of 2.0 feet per second (or greater) are preferable.

C. Design Considerations: Screen faces shall be designed flush with any adjacent screen bay piers or walls, to allow an unimpeded flow of water parallel to the screen face.

4. SCREEN OPENINGS

A. Porosity: The screen surface shall have a minimum open area of 27 percent. We recommend the maximum possible open area consistent with the availability of appropriate material, and structural design considerations.

The use of open areas less than 40 percent shall include consideration of increasing the screen surface area, to reduce slot velocities, assisting in both fish protection and screen cleaning.

B. Round Openings: Round openings in the screening shall not exceed 3.96mm (5/32in). In waters where steelhead rainbow trout fry are present, this dimension shall not exceed 2.38mm (3/32in).

C. Square Openings: Square openings in screening shall not exceed 3.96mm (5/32in) measured diagonally. In waters where steelhead rainbow trout fry are present, this dimension shall not exceed 2.38mm (3/32in) measured diagonally.

D. Slotted Openings: Slotted openings shall not exceed 2.38mm (3/32in) in width. In waters where steelhead rainbow trout fry are present, this dimension shall not exceed 1.75mm (0.0689in).

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5. SCREEN CONSTRUCTION

A. Material Selection: Screens may be constructed of any rigid material, perforated, woven, or slotted that provides water passage while physically excluding fish. The largest possible screen open area which is consistent with other project requirements should be used. Reducing the screen slot velocity is desirable both to protect fish and to ease cleaning requirements. Care should be taken to avoid the use of materials with sharp edges or projections which could harm fish.

B. Corrosion and Fouling Protection: Stainless steel or other corrosion-resistant material is the screen material recommended to reduce clogging due to corrosion. The use of both active and passive corrosion protection systems should be considered. Consideration should be given to anti-fouling material choices, to reduce biological fouling problems. Care should be taken not to use materials deemed deleterious to fish and other wildlife.

C. Project Review and Approval: Plans and design calculations, which show that all the applicable screening criteria have been met, shall be provided to the Department before written approval can be granted by the Regional Manager, Bay Delta Region.

The approval shall be documented in writing to the project sponsor, with a copy to the Deputy Director, Resource Management and Policy Division. Such approval may include a requirement for post-construction evaluation, monitoring and reporting.

D. Assurances: All fish screens constructed after the effective date of these criteria shall be designed and constructed to satisfy the current criteria. Owners of existing screens, approved by the Department prior to the effective date of these criteria, shall not be required to upgrade their facilities to satisfy the current criteria unless:

1. The controlling screen components deteriorate and require replacement (i.e., change the opening size or opening orientation when the screen panels or rotary drum screen coverings need replacing),
2. Relocation, modification or reconstruction (i.e., a change of screen alignment or an increase in the intake size to satisfy diversion requirements) of the intake facilities, or
3. The owner proposes to increase the rate of diversion which would result in violation of the criteria without additional modifications.

E. Supplemental Criteria: Supplemental criteria may be issued by the Department for a project, to accommodate new fish screening technology or to address species-specific or site-specific circumstances.

F. Variances: Written variances to these criteria may be granted with the approval of the Regional Manager, Bay Delta Region and concurrence from the Deputy Director, Resource Management and Policy Division. At a minimum, the rationale for the variance must be described and justified in the request. Evaluation and monitoring may be required as a condition of any variance, to ensure that the requested variance does not result in a reduced level of protection for the aquatic resources.

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It is the responsibility of the project sponsor to obtain the most current version of the appropriate fish screen criteria. Project sponsors should contact the Department of Fish and Game and the U.S. Fish and Wildlife Service (for projects in anadromous and fresh waters) for guidance.

Copies of the current criteria are available from the Department of Fish and Game Bay Delta Region; 7329 Silverado Trail/P.O. Box 46, Yountville, CA 94599, (707) 944-5500.

Technical assistance can be obtained directly from the Habitat Conservation Branch; 1416 Ninth Street, Sacramento, CA 95814 - (916) 653-1070.

The National Marine Fisheries Service Southwest Region "Fish Screening Criteria for Anadromous Salmonids, January 1997" is available at: <http://swr.ucsd.edu/hcd/fishscrn.htm> and from their Southwest Region, 777 Sonoma Avenue, Room 325, Santa Rosa, CA 95402 - (707) 575-6050.