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MEMORANDUM OF AGREEMENT

and

IMPLEMENTATION PLAN

by and among

**THE U.S. FISH AND WILDLIFE SERVICE
THE CALIFORNIA DEPARTMENT OF FISH AND GAME
THE COUNTY OF SONOMA
THE CITY OF SANTA ROSA
THE CITY OF ROHNERT PARK
THE TOWN OF WINDSOR
and
THE CITY OF COTATI**

regarding

THE SANTA ROSA PLAIN CONSERVATION STRATEGY

Memorandum of Agreement

This Memorandum of Understanding (MOA) is entered into by and among the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), the County of Sonoma (County), the City of Santa Rosa, the City of Rohnert Park, the City of Cotati, and the Town of Windsor, for the purpose of implementing the *Santa Rosa Plain Conservation Strategy*, dated December 1, 2005 (Strategy).

The parties agree to implement the Strategy pursuant to the terms of the attached Implementation Plan (Plan). The Strategy and Plan are intended to conserve and protect the Sonoma County Distinct Population Segment of the California tiger salamander (CTS), listed as endangered under the federal Endangered Species Act (ESA), and four plant species (Burke's goldfields, Sonoma sunshine and Sebastopol meadowfoam, and the many flowered navarretia) listed as endangered under the ESA and the California Endangered Species Acts (CESA). Further, it is the intent of the parties that implementation of this Plan shall result in "take authorization" for covered activities in a manner consistent with both the federal and state Endangered Species Acts.

By executing this MOA, each of the parties hereto agrees to adhere to, follow, and carry out each and every provision of the Plan according to its terms, subject to the limitations, restrictions, and conditions set forth in the Plan.

Signatures

SANTA ROSA PLAIN CONSERVATION STRATEGY

IMPLEMENTATION PLAN

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Article 1. Purpose

§ 1.1. This Implementation Plan (Plan) is intended to implement the *Santa Rosa Plain Conservation Strategy* dated December 1, 2005 (the Strategy). The Strategy and this Plan are intended to address legal and regulatory issues relating to the listing of the Sonoma County distinct population segment of the California tiger salamander (CTS) as endangered under the federal Endangered Species Act (ESA), and the listing of four plant species (Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam, and the many flowered navarretia) under the ESA and the California Endangered Species Acts (CESA).

§ 1.2. The Plan will advance several regional conservation and economic objectives. The biological goals and objectives of the Strategy are summarized in Exhibit B attached to this Plan. The Plan provides an alternative to the existing piecemeal, project-by-project approach to ESA compliance by offering a

comprehensive conservation program that affords a substantial, net conservation benefit to the CTS and listed plants, while at the same time providing a more efficient and timely process for public and private project proponents to satisfy the requirements of the ESA and CESA.

§ 1.3. By identifying priority areas for conservation primarily outside the established urban growth boundaries (UGB) of the Local Jurisdictions, the Plan will provide much needed certainty in the land use and development process and help achieve a reasonable balance between species conservation and economic development in the region.

§ 1.4. Specifically, the overall objectives of the Plan are to:

- Provide for the long-term survival and contribute to the recovery of CTS and listed plant species through the preservation, restoration, management and monitoring of species habitat in a contiguous preserve system outside of areas planned for urban development;
- Provide for a predictable and streamlined process that substantially all public and private activities can utilize to achieve compliance with the ESA and CESA, including the provision of “take authorization” for covered activities;
- Accommodate planned growth and development within the Santa Rosa Plain, consistent with the general plans adopted by the Local Jurisdictions;
- Ensure that impacts to the CTS and listed plant species are appropriately minimized and mitigated consistent with the requirements of the ESA and CESA;
- Establish guidelines and appropriate practices to facilitate on-going operations and maintenance of existing and future infrastructure and public facilities;
- Maximize opportunities for the restoration and enhancement of degraded habitat areas;
- Ensure ongoing adaptive management and monitoring of habitat areas preserved under the Plan; and
- Monitor the effectiveness of the Plan and provide for enforcement of its terms in order to meet its objectives.

Article 2. Definitions

§ 2.1. When used in this Plan, the following terms have the following definitions:

“CDFG” means the California Department of Fish and Game.

“CESA” means the California Endangered Species Act, California Fish and Game Code §§2050 et seq.

“Conservation Area” has the meaning set forth in Section 5.1.1.

“CTS” means the Sonoma County distinct population segment of the California tiger salamander (*Ambystoma californiense*).

“Linear Project” means projects such as construction of roads, pipelines, trails, fences, utility lines, pedestrian pathways, roadside ditches and other similar facilities of a linear nature, or expansion or maintenance of these facilities.

“Listed plants” means Burke's goldfields (*Lasthenia burkei*); Sebastopol meadowfoam (*Limnanthes vinculans*); Baker's stickyseed (*Blennosperma bakeri*), also known as Sonoma sunshine; and the Many-flowered navarretia (*Navarretia leucocephala* ssp. *pliantha*).

“Local Jurisdictions” means the County of Sonoma, the City of Santa Rosa, the City of Rohnert Park, the Town of Windsor, and the City of Cotati.

“Covered Activities” means those activities described in Article 3 of this Plan.

“ESA” means the federal Endangered Species Act, 16 U.S.C. §§ 1531 et seq.

“Implementing Agencies” means the parties to this MOA and Plan.

“Discretionary Project” means any project or activity that (a) results in new permanent ground disturbance, (b) is either directly undertaken by a Local Jurisdiction or subject to issuance of a permit or approval by a Local Jurisdiction, and (c) does not fall within the definition of “Minor Project,” “Agricultural Conversion,” “Ongoing or Current Agricultural Operations,” or “Linear Project.”

“Minor Project” means any project or activity resulting in new permanent ground disturbance which, at the time of execution of the MOA and Plan, is either:

- i) A project that is considered “ministerial” within the meaning of Section 15369 of the CEQA Guidelines; or
- ii) A project that would be considered “ministerial” within the meaning of Section 15369 of the CEQA Guidelines but for the fact that it is subject to limited discretionary determinations or approvals (e.g., design review approval, zoning variance, etc.), provided that the project is also exempt from CEQA under a statutory or categorical exemption contained in Article 18 or Article 19 of the CEQA Guidelines.

“New permanent ground disturbance” means the construction or placement of buildings, hardscape (including pavement, swimming pools, and gravel driveways), and turf landscaping on undeveloped land. “New permanent ground disturbance” does not include non-turf landscaping, septic systems, or areas that are restored to pre-project condition at the completion of the project.

“Plan Area” means the area designated as the “Santa Rosa Plain Conservation Strategy Study Area” on the Strategy Map.

“Consenting Public Agency” means any state or local public agency that elects to comply with the mitigation requirements of the Conservation Strategy and this Implementation Plan with respect to a specific project or activity it is carrying out or intends to carry out, which project or activity is not subject to the permitting or regulatory authority of a Local Jurisdiction, as provided in § 3.3.1.

“Public project or activity” means any infrastructure, development project, or any other activity directly undertaken by one or more of the Local Jurisdictions or Consenting Public Agencies.

“Strategy” means the Santa Rosa Plain Conservation Strategy, dated December 1, 2005.

“Strategy Map” means the Santa Rosa Plain Conservation Strategy Map, originally attached as Figure 3 to the Strategy, as amended from time to time pursuant to Article 5 of this Plan.

“UGB” means the adopted urban growth boundaries of the Local Jurisdictions.

“USFWS” means the United States Fish and Wildlife Service.

Article 3. Covered Activities

Compliance with this Plan will address the impacts of, and provide “incidental take” coverage for, a broad range of activities within the Plan area.

§ 3.1. “Covered Activities” under the Plan include any private or public project or activity within the Plan Area that results in a permanent or temporary ground disturbance and that is carried out in conformance with the requirements of this Plan. Examples include but are not limited to:

- a. Private residential, commercial, and industrial development and construction that is subject to permitting and/or approval by one or more of the Local Jurisdictions.
- b. Public projects and activities (including but not limited to linear projects such as roads, trails, pipelines, recreation facilities, and other infrastructure).
- c. Agricultural activities, including conversion of existing agricultural land to a more intensive agricultural use, and ongoing agricultural operations.
- d. Operation and Maintenance of public facilities owned or operated by the Local Jurisdictions, including but not limited to operation and maintenance of linear facilities, recreational facilities, the Santa Rosa Subregional Wastewater System and the Sonoma County Water Agency Water Transmission System.

§ 3.2. Certain activities, while not included with the scope of Covered Activities, are recognized by USFWS and CDFG as having no or “de minimus” impact on the CTS and listed plants, and no mitigation or minimization measures are required for such activities under this Plan. These activities may or may not require a permit or approval from the Local Jurisdictions depending on each jurisdiction’s local land use regulations. These activities include:

- a. Activities that customarily, reasonably, and necessarily follow from development (e.g., traffic, actions of children and pets, etc.)

- b. Discretionary permits for activities not involving construction or land disturbance (e.g., use permits for new businesses within existing structures, etc.)
- c. Provision of general government services and programs not involving construction or land disturbance (e.g., sheriff's patrols, social services)
- d. Reasonable, customary, and ordinary use of, and non-construction activities on, residential or commercial property in accordance with existing land use regulations of the Local Jurisdictions
- e. Travel on public streets and roads

USFWS and CDFG agree that the likelihood of any such activities resulting in civil or criminal action under the ESA or CESA is practically nonexistent, and that such activities are presumed not to result in a take of listed species. In the event that a take resulting from such activities is confirmed, USFWS and CDFG agree that they will consult with the relevant private party and local jurisdiction on measures to mitigate any future take before filing any criminal, civil, or administrative proceeding arising from such activities.

§ 3.3. Covered Activities include projects and activities that require a federal permit or approval, even if they do not require or are exempt from Local Jurisdiction permit requirements. The provisions of this Plan shall apply in connection with consultations undertaken by USFWS under Section 7 of the ESA. Except as provided in § 3.3.1, projects or activities not requiring a permit or approval from a Local Jurisdiction or a federal permit or approval (which may include certain projects undertaken by public school districts, certain public utility projects, and projects undertaken by Indian tribes on tribal lands) are not Covered Activities.

3.3.1. Notwithstanding §3.3 above, Covered Activities include any public projects or activities carried out by a Consenting Public Agency, even if no permit or approval from a Local Jurisdiction or a federal agency is required for such project or activity, provided that (a) the Consenting Public Agency complies with the mitigation and other requirements of this Plan with respect to the specific project or activity it is carrying out or intends to carry out, (b) the Consenting Public Agency notifies USFWS, in writing, of its election to be covered by the requirements of this Plan with respect to a specific project or activity, and (c) the Consenting Public Agency complies with any reporting requirements imposed by USFWS in connection with the specific project or activity.

Article 4. Roles and Responsibilities of the Parties

§4.1. Overview. Because the activities covered by this Plan are subject to the permitting, approval, and regulatory authority of the Local Jurisdictions, CDFG, and USFWS, each of these agencies will have some responsibility for the ongoing implementation of this Plan. This Article provides a brief summary of the main roles and responsibilities of the Parties under this Plan.

§4.1.1. USFWS. The primary responsibilities of USFWS under this Plan are:

- Issuing the Biological Opinions that will form the basis for the issuance of “take authorization” under the ESA to public and private project proponents and Local Jurisdictions for Covered Activities (see Article 10)
- Evaluating the suitability of preserve land proposed as mitigation for impacts to CTS, and evaluating the suitability of proposed preserve management plans and endowment funding (see Article 9)
- Providing “no effect” determinations (§5.1.4) and reviewing mapping determinations, when requested (§5.1.5)
- Maintaining the Strategy Map and amending the Map to incorporate new information (§5.2)
- Proposing amendments to mitigation and other requirements of the Plan (§11.5)
- Reducing mitigation requirements of the Plan, if appropriate (§6.6)
- Making case-by-case determinations with respect to projects or activities as specified throughout the Plan, and with respect to Covered Activities that do not require a permit or approval from a Local Jurisdiction
- Providing reports required under the Plan (Article 11)
- Participating on the Adaptive Management Team (§11.2)
- Performing such other acts and determinations as are specified throughout the Plan.

§4.1.2. CDFG. The primary responsibilities of CDFG under this Plan are:

- Issuing the “Consistency Determination” that will form the basis for the issuance of “take authorization” under the CESA to public

and private project proponents and Local Jurisdictions for Covered Activities (see Article 10)

- Evaluating the suitability of preserve land proposed as mitigation for impacts to CTS, and evaluating the suitability of proposed preserve management plans and endowment funding, in coordination with USFWS (see Article 9)
- Maintaining the Strategy Map and amending the Map to incorporate new information, in coordination with USFWS (§5.2)
- Proposing amendments to mitigation and other requirements of the Plan, in coordination with USFWS (§11.5)
- Reducing mitigation requirements of the Plan, if appropriate, in coordination with USFWS (§6.6)
- Making case-by-case determinations with respect to projects or activities as specified throughout the Plan, and with respect to Covered Activities that do not require a permit or approval from a Local Jurisdiction, in coordination with USFWS
- Providing reports required under the Plan (Article 11)
- Participating on the Adaptive Management Team (§11.2)
- Performing such other acts and determinations as are specified throughout the Plan.

§4.1.3. The primary responsibilities of the Local Jurisdictions under this Plan are:

- Enacting and implementing ordinances to impose the mitigation requirements and other terms and requirements of the Strategy and this Plan on applicants seeking permits or approvals from Local Jurisdictions for Covered Activities
- Providing reports required under the Plan (Article 11 and § 6.3.6)
- Participating on the Adaptive Management Team and the Implementation Oversight Committee as needed (§ 11.2 and 11.4)
- Coordinating Plan implementation and other requirements with CEQA process (Article 14)

§4.1.4. In addition to the responsibilities set forth in § 4.1.3, the Cities of Santa Rosa, Rohnert Park, and Cotati and the Town of Windsor shall have the responsibility to make the payments to County required by Article 13, and the County shall have the obligation to commence a process to amend its General Plan as required by §12.2.

§4.2. Timeliness. The parties agree that they shall perform their responsibilities and obligations under this Plan in a timely manner. With respect to any determinations that must be made by USFWS or CDFG with respect to specific projects or activities, USFWS and CDFG shall have sufficient staff dedicated to implementation activities under this Plan so as to ensure that such determinations are made in a reasonably timely manner so as not to unduly delay final consideration of approval for such projects or activities.

Article 5. Areas in which Mitigation is Required

§ 5.1. Mitigation requirements are based upon the location of a Covered Activity. Under this Plan, four separate areas are designated with respect to mitigation requirements applicable to the CTS:

§ 5.1.1. Conservation Areas. These are areas that have been designated in the Strategy as potential preserve areas. Conservation Areas consist of those areas located within the current range of the CTS and listed plants that meet the biological criteria for suitable preserve areas. These areas are shown on the Strategy Map as “CTS Conservation Areas” and “Listed Plant Conservation Areas.” Designation of an individual property as being within a Conservation Area does not change that property’s land use designation or zoning, or otherwise restrict the use of that property, beyond restrictions that may otherwise exist due to the presence of listed species or their habitat.

§ 5.1.2. Primary Habitat Areas. These are areas shown on the Strategy Map as “Areas within 1.3 Miles of Known CTS Breeding.”

§ 5.1.3. Potential CTS Habitat Areas. Potential Habitat Areas are located outside the Conservation Areas and Primary Habitat Areas, but within the area where potential habitat for CTS may exist. Because of a lack of survey data or other information, little is known about the use of these areas by CTS; however, the habitat for the species may be present. These areas are shown on the Strategy Map as “Potential for Presence of CTS,” and “Potential for CTS and Listed Plants.”

§ 5.1.4. No Effect Areas. No Effect Areas may be located throughout the entire Plan Area and include areas covered by existing “no effect” determinations issued by USFWS and areas that meet criteria set forth below, as determined by USFWS. No mitigation or minimization measures are required for a project in a No Effect Area. A No Effect Area is defined as an area where a

project proponent can demonstrate that CTS is not likely to be present (e.g., no suitable habitat is present, site is small and isolated from other habitat), and includes hardscape (e.g., paved roads, parking lots), buildings and other structures, barriers, and floodplain. Only those portions of a site that contain the features providing the basis for the No Effect determination are affected by the determination. To qualify as a No Effect Area, features providing the basis for this determination must have been lawfully present on the property as of the effective date of this Plan. Any property owner or project proponent may request that USFWS designate one or more parcels (or portions of parcels) as “no effect” parcels or areas, notwithstanding their location within a Conservation Area, a Primary Habitat Area, or a Potential Habitat Area. USFWS shall designate parcels or portions of parcels as No Effect Areas if they meet the criteria set forth above. In addition, USFWS has previously issued letters pertaining to specific parcels stating that projects thereon are unlikely to affect CTS and that therefore no mitigation is required. The terms in any such letters issued before the effective date of this Implementation Plan shall continue to apply to such projects or activities.

§5.1.5. Review of Mapping Determinations. The designation of parcels by USFWS and CDFG into the categories described above was primarily based on a review of GIS data rather than an individualized evaluation of the parcels’ specific characteristics. Any project applicant or property owner may request a review by USFWS of the designation of any parcel as being in a “Conservation Area,” a “Primary Habitat Area,” or “Potential Habitat Area” by presenting evidence to USFWS that the parcel’s location and physical characteristics are such that the parcel is not suitable CTS habitat and that CTS presence on the parcel is unlikely. USFWS shall respond to such a request for review within thirty days. If USFWS determines, following a review of the evidence presented by the project applicant or property owner, that the parcel is not suitable CTS habitat and that CTS presence on the parcel is unlikely, USFWS shall remove the parcel from the respective designation. If after such review USFWS determines not to change the parcel’s designation, USFWS shall provide the project applicant or property owner with specific findings and conclusions upon which that determination is based.

§ 5.2. USFWS and CDFG, following consultation with the Adaptive Management Team (“AMT”) and the Conservation Strategy Implementation Oversight Committee, may amend the Strategy Map as necessary to incorporate new information about CTS and listed plant presence and habitat, new geographic features or jurisdictional boundaries, and new “no effect” or parcel

review determinations. If additional CTS breeding sites are found, the Strategy Map will be amended to include CTS habitat within a 1.3-mile radius of the breeding site(s) as a Primary Habitat Area where the mitigation requirements set forth in this Plan shall apply. Notwithstanding this provision, no new mitigation or minimization requirements or other obligations under this Plan shall be created as a result of any translocation of CTS or listed plants, except on the parcel to which the translocation has occurred.

§ 5.2.1. Proposed amendments to the Strategy Map shall be provided to the affected Local Jurisdictions and posted on USFWS and CDFG web sites. A Local Jurisdiction or the owner of any parcel affected by the proposed amendments may object to any proposed amendment by providing written notice of objection to USFWS and CDFG within forty-five (45) days of notification of the proposed amendment, and no amendment to which an objection has been filed shall be effective until such objection is resolved. The effective date of amendments to the Strategy Map shall be the later of (a) forty-five (45) days after the amended Strategy Map was provided to the Local Jurisdictions and posted on USFWS and CDFG web sites or (b) if objections to the proposed amendments were noticed, thirty (30) days after resolution of those objections. Mitigation requirements under this Plan shall apply prospectively to new areas on the amended Strategy Map as of the effective date of the amendments. Strategy Map amendments shall not result in the imposition of additional mitigation requirements on any Covered Activity that has been completed or that has received permits or regulatory approvals from the Local Jurisdictions, USFWS, or CDFG before effective date of the amendments.

Article 6 CTS Mitigation Requirements

§ 6.1. CTS Mitigation Generally. Two types of mitigation are required under this Plan. First, proponents of Covered Activities may be required to provide preserve property to replace CTS habitat, or, alternatively, to purchase equivalent credits in a mitigation bank. This requirement is referred to in this Plan as the “mitigation” requirement. Second, projects and activities may also be required to implement certain “minimization measures” and/or “best management practices” during the course of the project or activity in order to limit the impacts of the project or activity on CTS. This requirement is referred to in this Plan as the “minimization” requirement. The specific mitigation and minimization requirements applicable to a particular project or activity depend on the nature of the project and its location, as described below.

§ 6.2. CTS Mitigation Requirements for Discretionary Projects. Mitigation and minimization requirements for CTS for Discretionary Projects, except those projects and activities described in Section 6.3 (Minor Projects), Section 6.4 (Agricultural Projects and Activities), or Section 6.5 (Linear Projects), are:

§6.2.1. Discretionary projects within Conservation Areas and Primary Habitat Areas shall mitigate at a 2:1 ratio (i.e., preservation of two acres of mitigation land meeting the criteria in Article 12 for every one acre of new permanent ground disturbance), or the purchase of equivalent credits in a mitigation bank. The mitigation requirement for projects on parcels with existing hardscape will be reduced by the amount of hardscape present, unless the hardscape provides some recognizable benefit to the species as determined by USFWS. Project proponents may not avoid the mitigation requirements in Conservation Areas or Primary Habitat Areas by surveying the site to establish that no CTS exist on the site.

§6.2.2. Discretionary projects in Potential Habitat Areas shall mitigate at a 0.2:1 ratio (i.e., preservation of two-tenths of an acre of mitigation land for every one acre of new permanent ground disturbance), or the purchase of an equivalent amount of credits in a mitigation bank, or payment of an equivalent monetary contribution, in an amount determined by USFWS based upon current market values for CTS mitigation bank credits, to a species conservation fund overseen and approved by USFWS or CDFG. Alternatively, a project proponent may choose to survey the proposed development site for CTS using survey protocols acceptable to USFWS. If, as a result of such survey or other information, USFWS determines that the proposed project or activity will not impact CTS, no mitigation or fee would be required. If CTS are found, 2:1 mitigation would be required.

§6.2.3. The following minimization measures apply to Discretionary Projects in Conservation Areas, Primary Habitat Areas, and Potential Habitat Areas:

- a. For an activity or project that will remove or place fill within a CTS breeding site: Prior to issuance of a construction permit, a plan for translocating returning salamanders and/or CTS larvae shall be reviewed and approved by USFWS. Pursuant to such approved plan and prior to construction, all required translocation activities shall be completed. Translocation shall follow the guidelines presented in Article 11.

- b. For an activity or project that impacts CTS habitat outside of a breeding site (also known as “upland habitat”): Prior to construction, fencing shall be installed to exclude CTS from entering the project site. If determined necessary by USFWS, fences with ramps shall be required to allow any CTS onsite to move into an adjacent habitat offsite. In these instances translocation may occur as determined necessary by USFWS on a case-by-case basis.
- c. For an activity or project where wetlands are being restored or created for either listed plants, CTS breeding or for wetland mitigation: Prior to construction, fencing shall be installed to exclude CTS from entering the restoration site.
- d. USFWS may impose one or more of the following minimization measures, depending on the specific site situation. USFWS shall notify the project proponent in writing of the minimization measures to be followed:
 - i. A USFWS approved biological monitor will be on site each day during wetland restoration and construction, and during initial site grading of development sites where CTS have been found.
 - ii. The biological monitor will conduct a training session for all construction workers before work is started on the project.
 - iii. Before the start of work each morning, the biological monitor will check for animals under any equipment such as vehicles and stored pipes. The biological monitor will check all excavated steep-walled holes or trenches greater than one foot deep for any CTS. CTS will be removed by the biological monitor and translocated as described in Article 11.
 - iv. An erosion and sediment control plan will be implemented to prevent impacts of wetland restoration and construction on habitat outside the work areas.
 - v. Access routes and number and size of staging and work areas will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the roadwork will be clearly marked prior to initiating construction/grading.

- vi. All foods and food-related trash items will be enclosed in sealed trash containers at the end of each day, and removed completely from the site once every three days.
- vii. No pets will be allowed anywhere in the project site during construction.
- viii. A speed limit of 15 mph on dirt roads will be maintained.
- ix. All equipment will be maintained such that there will be no leaks of automotive fluids such as gasoline, oils, or solvents.
- x. Hazardous materials such as fuels, oils, solvents, etc., will be stored in sealable containers in a designated location that is at least 200 feet from aquatic habitats. All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 200 feet from any aquatic habitat.
- xi. Grading and clearing will typically be conducted between April 15 and October 15, of any given year, depending on the level of rainfall and/or site conditions.
- xii. Project areas temporarily disturbed by construction activities will be re-vegetated with native plants approved by USFWS and CDFG.

§ 6.3. CTS Mitigation Requirements for Minor Projects

§6.3.1 Minor Projects Generally. Examples of Minor Projects include, but are not limited to, construction of single family homes, accessory structures (garages, barns, shops, ground mounted solar panels, etc.), additions to structures, guest houses, grading permits not otherwise connected to a discretionary approval, septic systems, water wells, drainage improvements (culverts, drainage ditches, etc.), second dwelling units, farm family and farmworker housing, agricultural support services occupying less than ½ acre, produce stands, minor telecommunication facilities, and encroachment permits (e.g., new driveway connection to public road). The provisions of this Section shall not apply to any agricultural activity addressed under Article 8 of this Plan.

§6.3.2. Mitigation Requirements for Minor Projects.

- a. Minor Projects within Conservation Areas or Primary Habitat Areas, but more than 500 feet from a CTS breeding site, that result in new permanent ground disturbance of less than 5,000 square feet shall have no mitigation requirement.
- b. Minor Projects within Conservation Areas or Primary Habitat Areas, but more than 500 feet from a CTS breeding site, that result in new permanent ground disturbance of 5,000 square feet or more shall mitigate at a 2:1 ratio based upon the amount of new permanent ground disturbance in excess of 5,000 square feet.
- c. Minor Projects within 500 feet of a CTS breeding site shall mitigate at a 2:1 ratio, as follows:
 - i. Mitigation for projects on undeveloped parcels shall be based upon the total amount of new permanent ground disturbance.
 - ii. Mitigation for projects on parcels with prior development shall be based upon the amount of new permanent ground disturbance in excess of 5,000 square feet.
- d. The amount of “new permanent ground disturbance” for purposes of (b) and (c) is cumulative, that is, it includes all new permanent ground disturbance occurring after the date of Plan adoption.
- e. Minor Projects in Potential Habitat Areas will not be required to mitigate.
- f. Where mitigation is required for Minor Projects, it may be accomplished by acquiring mitigation bank credits (preferred method), paying an in-lieu fee based on the current cost of mitigation bank credits as determined by UWFWS, or by acquiring and preserving conservation land. Conservation land proposed as mitigation must be approved by USFWS and CDFG using the preserve criteria set forth in Article 9 of this Plan.

§6.3.3 Minimization Measures for Minor Projects. All Minor Projects shall implement the following Best Management Practices (BMPs) during construction:

- a. Before the start of work construction vehicles or other stored products will be inspected for CTS. Steep walled holes or trenches greater than one foot deep will also be inspected for any CTS prior to beginning work. If CTS are located, USFWS must be notified and CTS must be removed from the site by USFWS personnel or by a qualified biologist approved by USFWS.

- b. If the project will affect adjacent wetlands, an erosion and sediment control plan will be implemented to prevent impacts to adjacent wetlands.
- c. Access routes, number and size of staging areas, and work areas, will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the roadwork will be clearly marked prior to initiating construction/grading.
- d. All equipment will be maintained such that there will be no leaks of automotive fluids such as gasoline, oils, or solvents.
- e. Hazardous materials such as fuels, oils, solvents, etc., will be stored in sealable containers in a designated location that is at least 200 feet from aquatic habitats. All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 200 feet from any aquatic habitat.

§6.3.4 Additional BMP applicable to Minor Projects within 500 feet of CTS breeding pond: Prior to construction, fencing will be installed to exclude CTS from entering the project site. If CTS have been observed on the site, fences with ramps will be required to allow any CTS onsite to move into an adjacent habitat offsite. This fencing will not be required on parcels in the floodplain or parcels with over 50% hardscape.

§6.3.5. Any Minor Project applicant may also request a “no effect” determination from the USFWS as described in Section 5.1.4. If USFWS determines that a project has “no effect,” neither mitigation nor BMPs are required.

§6.3.6. Local Jurisdictions shall require applicants for Minor Projects to provide information on area of new permanent ground disturbance resulting from each Minor Project within Conservation Areas and Primary Habitat Areas. Local jurisdictions shall annually report to USFWS, CDFG, and the AMT the number, location and types of permits issued for Minor Projects and the area of new permanent ground disturbance for each project, as well as cumulative totals.

§ 6.4 Agricultural Projects and Activities

§6.4.1. General Provisions Relating to Agriculture. This Plan recognizes that certain agricultural activities may be beneficial or neutral to the conservation needs of the CTS. Agricultural activities shall be evaluated based on the specific agricultural practices employed rather than the agricultural product(s) that is produced.

§6.4.2. Ongoing and Current Agricultural Operations. For the purposes of this Section, “Ongoing and Current Agricultural Operations” means agricultural land use activities that meet both of the following criteria:

- a. The agricultural operation(s) shall have occurred during the five year period prior to the effective date of this Plan. Such operations need not have been continuous during the five year period (e.g., fields may be planted with different crops in different years, or left fallow or uncultivated during some years). An operation is considered an Ongoing and Current Agricultural Operation if it was routinely (though intermittently) carried out at any time during the five-year period.
- b. The operation(s) consists of any of the usual and customary activities needed for an economically viable and regulatory compliant agricultural operation associated with operation of dairies, vineyards, orchards, specialty vegetable farms, sod farms, hay farms, pasture management, silviculture, and other types of agricultural production. This also includes the usual and customary agricultural activities associated with operation of the Subregional Water Reclamation System, including crop planting and harvest, irrigation with groundwater and recycled water, pasture seeding and discing, grazing, animal feeding, and soil conditioning with manure and/or biosolids.

Ongoing and Current Agricultural Operations, including replacement/replanting of crops and pasture management, shall be allowed to continue at substantially the same intensity and in substantially the same location without imposition of any mitigation or minimization requirements. Agricultural operations in new locations or at an increased intensity are addressed in §6.4.3 below.

The maintenance, repair and in-kind replacement (including but not limited to the access to and actual work needed to assure the ongoing reliable function) of existing structures, equipment, pumps, pipelines, fencing, drainage structures, buried irrigation equipment, portable irrigation equipment, overhead irrigation equipment, monitoring equipment, stock watering, animal confinement facilities, animal feed facilities, trellising and other constructed items associated with agricultural operations, including agricultural operations of the Santa Rosa Subregional System, shall not require any mitigation or

minimization measures, so long as the maintenance, repair or replacement is substantially in the same place and of substantially the same size.

Replacement and/or replanting of crops may include a fallow period of up to three years to deal with pest management or soil nutrition needs. Periods longer than three years may be allowed if necessary for conservation purposes.

§6.4.3. Agricultural Conversions. "Agricultural Conversion" means any substantial increase in the intensity of agricultural activity on a parcel, including but not limited to conversion of uncultivated land to cultivation, and construction of barns, roads, drainage structures and other facilities incidental to the agricultural conversion. "Agricultural Conversion" shall not include a Current and Ongoing Agricultural Operation as defined above.

- a. Within Conservation Areas and Primary Habitat Areas, Agricultural Conversion shall be Covered Activity for the purpose of this Plan and no mitigation shall be required, provided that the following Best Management Practices (BMPs) are implemented to reduce impacts on the CTS:
 - i. BMP 1 – Operation of mechanical equipment (including mowing, discing and harvesting) shall avoid seasonal wetlands, vernal pools, ditches or swales as long as these habitats remain ponded or within 48 hours of rain in excess of 0.5 inches.
 - ii. BMP 2 – Discing shall be limited to the top 8 inches of soil.
 - iii. BMP 3 – Ripping of the soil shall be avoided within the defined watershed of seasonal wetlands, vernal pools, ditches or swales. Pools shall be field surveyed and a topographical map created that locates the vernal pool and the watershed for the vernal pool. This area shall not be ripped. Planting of vineyard within these watersheds may be allowed if planting involves solely digging holes for plants, stakes and posts not to exceed 2 feet deep and 2 feet in diameter. Outside of the defined watershed, ripping may be allowed no more frequently than once in 25 years.
 - iv. BMP 4 – Fumigation of soil shall be prohibited.
 - v. BMP 5 – Sediment-laden water shall not be allowed to enter vernal pools, other seasonal pools, or aquatic sites inhabited by California

tiger salamanders. Sediment-laden water should be pumped to settling ponds, settling tanks, or other holding facility on stable, flat ground outside of the creek channel or pumped to a grassy area where the water clears prior to flowing back to the stream. This measure is not intended to restrict the routine application of manure or biosolids at agronomic rates.

- vi. BMP 6 – Water contaminated with compounds potentially injurious to aquatic life should not be allowed to enter a vernal pool, other seasonal pool, creek or stock pond.
- vii. BMP 7 – Refueling of all equipment will be in areas at least 100 feet from aquatic features. Check all equipment daily for leaking fuel and fluids prior to working in or around vernal pools and other aquatic habitats. Do not use leaking equipment. Any refueling should be restricted to specific areas that are positioned such that any spilled material could not reach any nearby wetland or other aquatic habitat.
- viii. BMP 8 – The timing and density of livestock shall be maintained to avoid soil compaction and vegetation damage in and adjacent to existing ponded areas, aquatic sites, and burrows that may be used by California tiger salamanders.
- ix. BMP 9 – For vineyards, orchards and similar crops, permanent cover crops shall be maintained on a minimum of one half of the area devoted to planting.
- x. BMP 10 – During pipeline construction, exclusionary fencing shall be installed around open trenches when no construction activity is occurring (e.g. at night) if 1) construction is occurring within 500 feet of known breeding sites and 2) construction is occurring from December to May.
- xi. BMP 11 – Any rodent control activities shall not use any poisons.
- xii. BMP 12- Weed control in vineyards or orchards shall be limited to vine or orchard rows using herbicides with low toxicity for amphibians and the invertebrates that serve as food for developing larvae, e. g. Roundup® and Chateau®.

- b. Agricultural conversions within Conservation Areas and Primary Habitat Areas that do not comply with the BMPs described above must engage in further consultation with UFWFS in order to receive take coverage.
- c. Agricultural Conversions within Potential Habitat Areas are considered to be Covered Activities for the purposes of this Plan. The BMPs listed above are strongly encouraged but not required for Agricultural Conversions within Potential Habitat Areas.
- d. The total acreage for Agricultural Conversions within Conservation Areas shall not exceed the following acreage limits, either within individual Conservation Areas or total acreage, during the term of this Plan:

Conservation Area	Total Acres	Current Tilled Ag Acres	Potential Tilled Ag Expansion Acres
Alton	905	379	192
Wright	668	90	177
Kelly	662	50	183
Llano	1705	38	314
Stony Point	1684	32	397
NW Cotati	1309	108	480
SE Cotati	1114	16	273
SW Cotati	1647	tbd	tbd
SW Santa Rosa	0	??	??
Total	9694	713	2016

§ 6.5 CTS Mitigation for Linear Projects

§6.5.1. Linear Projects Generally. Linear Projects are differentiated from other types of development projects in that impacts to CTS can vary significantly depending on the nature and location of the project. Some linear projects (e.g., new roads) may have a permanent adverse impact on CTS by removing habitat or isolating upland habitat from breeding sites. Other linear projects (e.g., pipelines) may have only short-term, temporary impacts on CTS habitat. This Section applies to linear projects directly undertaken by the Local Jurisdictions or Consenting Agencies, as well as private linear projects that require a permit or

other approval from the Local Jurisdiction. This Section does not apply to private linear projects that do not require a permit or other approval from a Local Jurisdiction, unless they fall within the criteria of §6.5.2 below. (However, such private linear projects may qualify as “Minor Projects” if they meet the criteria in §§6.3 et seq.)

§6.5.2. Exempt Linear Projects. Certain linear projects are recognized by USFWS and CDFG as having no or “de minimus” impact on the CTS and listed plants, are presumed not to result in a “take” of listed species and no mitigation or minimization measures are required under this Plan. Examples of these projects include:

- a. Repaving and other in-kind replacement of hardscape, paving of existing compacted road shoulders for pedestrian or bicycle use, and installation or replacement of underground utilities where those utilities are under existing hardscape, provided that these projects do not include construction of curbs or other permanent barriers to CTS dispersal.
- b. Road projects that would not impact existing CTS or listed plant habitat (including but not limited to signage, signalization without widening, vertical and horizontal curve adjustments without widening or disturbance to the hydrology of the surrounding area).

§6.5.3. Impact Area for Mitigation Requirement. Linear projects often result in a limited area of permanent disturbance and a larger area of temporary construction disturbance. Therefore, where mitigation is required for linear projects, the impact area includes all areas disturbed by the construction operation, including area beyond that occupied by the facility after construction is complete.

§6.5.4. Mitigation Requirements for Road Projects. Except as described below, mitigation requirements for roads shall be the same as for discretionary projects as described in Section 6.2. However, road projects in Conservation Areas and Primary Habitat Areas may be subject to reduced mitigation requirements, as described below.

§6.5.4.1. Alternative Mitigation for Roads in Conservation Areas.

Segments of roads that are considered significant for future success of the Conservation Areas are designated as “Potential Improvement to Facilitate CTS Movement” on [Appendices 1 -10 of the Strategy Map]. Subject to approval by USFWS, a reduced CTS mitigation ratio of 1:1 shall be applied to road projects in on these designated segments that meet the following construction criteria:

- a. Exclusionary curbing along both sides of road for the total length of roadway within the Conservation Area
- b. Passageways/under-crossings for CTS located no more than 200 feet apart
- c. Lighting (if included in the project) designed to minimize off-road ground illumination
- d. Retain hydrologic characteristics of the surrounding area
- e. No fill placement within or alteration of breeding sites

§6.5.4.2. Alternative Mitigation for Roads in Primary Habitat

Areas. Road projects in Primary Habitat Areas may satisfy a portion of their mitigation requirement by retrofitting one or more existing road segments designated as “Potential Improvement to Facilitate CTS Movement” on [Appendices 1 -10 of the Strategy Map], subject to USFWS approval. Such retrofits shall meet the criteria described in § 6.5.4.1 above. The area of the existing road that is retrofitted shall provide no more than one-half of the mitigation area required for the new road project.

§6.5.5. Mitigation Requirements for Pipelines, Utility Lines, Fences, Ditches, Staging Areas. Projects that meet all of the following criteria shall have no mitigation requirements:

- a. disturbance is temporary, with habitat restoration over the entire area of disturbance within 1 year;
- b. no impact to any CTS breeding site;
- c. no permanent lighting installed;
- d. hydrologic characteristics of the surrounding area are retained;
- e. implementation of minimization measures set forth in §6.2.3;
- f. no specific additional ongoing hazards to CTS are created.

Projects that meet all of the above criteria, except that the temporary disturbance is more than one year but less than three years, shall mitigate as follows:

- a. Projects located in a Conservation Area or Primary Habitat Area shall mitigate at a 1:1 ratio in the same manner as road projects, including the mitigation alternatives described in §6.5.4.1 and §6.5.4.2;
- b. Projects located in a Potential Habitat Area shall mitigate at a 0.1:1 ratio through land preservation, purchase of equivalent credits in a mitigation bank, or payment of an equivalent contribution to a species conservation fund overseen and approved by USFWS or CDFG. Alternatively, a project proponent in a Potential Habitat Area may choose to survey the proposed linear project site for CTS using survey protocols acceptable to USFWS. If, as a result of such survey or other information, USFWS determines that the proposed linear project will not impact CTS, no mitigation is required. If CTS are found, 1:1 mitigation would be required as described in paragraph (a) above.

Projects that do not meet the criteria above shall have the same mitigation requirements as discretionary projects as described in Section 6.2.

§6.5.6. Mitigation for Recreational Pathways and Trails. Although construction of recreational pathways and trails results in new permanent ground disturbance, the extent of the disturbance and, more significantly, the impacts from use of such facilities is significantly less than is the case for roads. In addition, allowing limited low-impact forms of recreation on preserve lands in Conservation Areas will increase the desirability of those lands to public agencies who might acquire them for habitat preservation, open space, and recreation purposes. On the other hand, the proximity of trails to important CTS or listed plant habitat can have adverse impacts on the listed species.

Accordingly, mitigation requirements for recreational pathways and trails will be determined by USFWS and CDFG on a case-by-case basis, so as to protect the listed species while encouraging the preservation of land for both habitat protection and recreational purposes. However, mitigation requirements shall not exceed those provided for discretionary projects in Section 6.2.

§6.5.7. Maintenance of Linear Facilities. Maintenance of linear facilities may include street patching, sealing, or overlaying; pipeline cleaning; excavation to repair underground lines; and removing deposited sediment from roadside

ditches. Most of these maintenance activities unlikely to impact CTS and will fall under the definition of exempt linear projects in Section 6.5.2. In any case, no mitigation will be required for maintenance activities confined to existing hardscape areas. Maintenance of linear facilities that is not confined to existing hardscape, or is not otherwise exempt under Section 6.5.2 shall mitigate according to the requirements for new linear projects. Where mitigation is required, it shall only be necessary once for each segment of a linear facility. If mitigation is required at the time of linear facility construction, or in connection with a maintenance activity, no additional mitigation shall be required for any future maintenance activities.

§ 6.6. Revision of Mitigation Requirements. The mitigation and minimization requirements set forth in this Article may be reduced by USFWS and CDFG if the Biological Objectives and Assumptions of the Strategy described in Exhibit B are being sufficiently met. In particular, if preservation of land within Conservation Areas has been concentrated in contiguous, core areas as contemplated by the “Conservation Area Objectives” section in Exhibit ___, USFWS and CDFG shall reduce the total preserve acreage goals as set forth therein, and shall reduce the mitigation requirements of this Article 6 accordingly. USFWS and CDFG shall also reduce mitigation requirements of this Article 6 to account for the acquisition of preserve land in Conservation Areas by public agencies or private entities for conservation purposes.

Article 7 Listed Plant and Wetlands Mitigation Requirements

[to be added from programmatic B.O.]

Article 8 Translocation Requirements

§ 8.1. Translocation of CTS and Listed Plants. Translocation involves the collection and relocation of animals (CTS larvae or adults) or plant materials (seeds or seed bank) to suitable unoccupied habitat. Translocation will occur only to Conservation Areas. No new mitigation or minimization requirements or obligations on any other parcels shall be created as a result of any translocation of CTS or listed plants.

§ 8.1.1. CTS Translocation. CTS translocation will be required only for projects or activities that affect occupied breeding sites, unless this requirement is waived by USFWS and CDFG. Translocation of listed plants will be required in cases where listed plants are taken and no land occupied by the particular listed

species can be secured. In all cases where translocation occurs, authorization must be given by USFWS/CDFG. Translocation of CTS may also be undertaken for the following reasons:

(a) Where salvage of species is required as a permit condition by USFWS/CDFG when the removal of occupied habitat will occur (with performance criteria required for the salvage and translocation) and/or;

(b) To collect an approved number of individuals or seeds in order to establish a new population on an unoccupied preserve site where all the conditions are present (including a management and monitoring program) to achieve success of the new population. Such collections would be accomplished in a manner as to not endanger an existing population.

§ 8.1.2. CTS Translocation Guidelines and Requirements. The following guidelines apply to required CTS translocations, and translocations for the purpose of salvage:

- (a) CTS translocation shall be achieved through capture by appropriate means (e.g., drift nets and pitfall traps) of adult CTS returning to breeding sites, and/or the capture by appropriate means of adult or juvenile CTS in known breeding sites present within an area planned for development.
- (b) CTS translocation will only be to receptor sites that do not already support a CTS breeding population, unless, in the judgment of CDFG and USFWS, such translocation will not result in genetic or biological harm to any CTS population already inhabiting a receptor site.
- (c) Where possible, CTS will be translocated to receptor sites that are within the same conservation area as the donor site or, where this is not possible, to the nearest conservation area.
- (d) CTS will be translocated only to sites that contain seasonal wetlands, natural or created, that represent suitable CTS breeding habitat (i.e., pools that contain standing water continuously for at least twelve weeks, extending into April).
- (e) In addition, CTS should only be relocated to wetlands that a) are sufficient in size; b) contain shallow margins but also areas of sufficient depth to permit escape by CTS larvae from avian predators; c) are free of fish or bullfrogs; d) contain an adequate food base; and e) contain sufficient aquatic and emergent vegetation to serve as egg attachment sites and

escape cover for larvae. Generally, CTS larvae should not be translocated where resulting larval densities would exceed one per square meter.

- (f) CTS translocation will be required only for projects containing occupied breeding sites, unless this requirement is waived by USFWS and CDFG. The costs of translocation will be the responsibility of the project proponent. The costs of monitoring the success of the translocation will be the responsibility of the manager of the receptor site. Where translocation is a requirement of the project or will form the basis of CTS preservation credits at a mitigation bank, the costs of monitoring the success of the translocation will be the responsibility of the permittee or the bank operator.
- (g) Capture and translocation of CTS will generally be carried out from October 15 through March 15 prior to any development of a parcel or property planned in the following construction season.
- (h) The receptor site must be protected from future development via dedication of fee title or conservation easement held by an appropriate land management organization.
- (i) Translocation of CTS or listed plants will be permitted only where it will not result in adverse effects to the species being relocated, for example, dilution of the genetic distinctness between populations of CTS or plants located in different areas of the Plain.
- (j) Where translocation is not a mitigation requirement and is deemed appropriate by USFWS/CDFG, the organization managing the lands to which the CTS or plants are translocated (receptor site) need not conduct monitoring, at the discretion of that organization.

§ 8.1.3. Listed Plant Translocation Guidelines and Requirements. For projects and activities resulting in the loss of pools and known populations of listed plants, the project proponent will be responsible for translocation of the plants, where listed plants are taken and no land occupied by the particular listed species can be secured for use as mitigation land. The following guidelines apply to required listed plant translocations:

- (a) Because there are morphological differences in various portions of the range for the plants, translocations should be limited to receptor sites that are near the impact (or donor) site.
- (b) If a site is being restored or enhanced, it should mimic natural topography, soil conditions, and hydrology.

Article 9 Preserve Selection, Enhancement, and Management Criteria

§ 9.1. Requirements for Selection of Mitigation (Preserve) Land. Land provided for mitigation as required by Article 6 must generally be located within Conservation Areas, and must meet the requirements of this section. Determinations as to whether mitigation land meets the requirements of this section shall be made by USFWS and CDFG.

§9.1.1. Establishment of preserves can be accomplished by acquiring – by fee title or conservation easement – an appropriate site and undertaking any wetland restoration/creation and habitat enhancement required by USFWS and CDFG. Any preserve site will require an endowment or other mechanism for providing for long-term management and monitoring, which must be approved by USFWS and CDFG. Preserves can be established either through individual mitigation sites, mitigation banks, or dedication of public or private lands.

§9.1.2. Proposed preserves shall meet the following minimum requirements:

- (a) The land must meet the preserve evaluation criteria set forth in § 9.1.3 or § 9.1.4 and be of adequate size and location to assure long-term viability of CTS.
- (b) The site must be preserved in perpetuity for the benefit of the affected species through dedication of fee title or a conservation easement to an appropriate resource management agency or organization approved by USFWS and CDFG. Any retained activities must be compatible with this purpose, approved by USFWS and CDFG, and described in the deed or easement.
- (c) The site must have a wetlands plan, approved by USFWS and CDFG, if wetlands are to be created or restored on the site.
- (d) The site must have a habitat enhancement plan, approved by USFWS and DFG, if CTS or listed plant habitat is to be created or restored on the site.
- (e) The site must have a management and monitoring plan, approved by USFWS and CDFG, which plan shall include management actions necessary to manage, enhance, and protect the resources protected and created on the site, and monitoring actions to determine the success of created or restored wetlands and the status of the protected resources and

effectiveness of specified management actions.

- (f) The site must have a funding mechanism, approved by USFWS and CDFG, to assure long-term management and monitoring.

§9.1.3. The following preserve evaluation criteria will be used by CDFG and USFWS to approve both mitigation sites and mitigation banks. These criteria are to aid and help expedite the selection of preserves. To be considered acceptable as a preserve, a proposed property or properties must meet all the following criteria:

- (a) Be within the boundary of one of the Conservation Areas.
- (b) Contain known, occupied CTS breeding, upland, or dispersal habitat or a known population or populations of listed plants, or represent potential CTS or plant habitat. With respect to potential CTS or plant habitat, the site must exhibit, in the judgment of the USFWS and CDFG, reasonable potential for habitat restoration or enhancement.
- (c) Be free of excessive land surface features such as roads, parking lots, other hardened surfaces, buildings or other structures, or extensive hardscape that cause a significant portion of the site to be unsuitable as CTS or plant habitat. Generally, for purposes of this criterion, no more than 15% of the land surface of any potential preserve site may include or be covered by such features unless it is to be restored as part of the preservation action.
- (d) Not be isolated from other nearby CTS habitats (preserve or non-preserve) by incompatible land uses (e.g., hardscape) or other significant barriers to CTS movement and dispersal, such as Highway 101.
- (e) Not be inhabited by fish and bullfrogs or other non-native predatory species, unless, in the judgment of USFWS and CDFG, such species can be effectively removed or eradicated.
- (f) Not be located within the Laguna de Santa Rosa 100-year floodplain.
- (g) Exhibit no history or evidence of the presence (storage or use) of hazardous materials on the surface of the site, unless proof of removal or remediation can be provided.

§9.1.4. Establishment of preserves outside a Conservation Area will be allowed for the protection and enhancement of CTS or listed plant habitat, if USFWS and CDFG determine that such preserves would contribute to the preserve goals and enhance the preserve value of a specific Conservation Area. Preserve acreage occurring outside the Conservation Area boundaries must meet the following requirements:

- (a) The site meets the preserve evaluation criteria in Section 9.1.3 (except for criterion (a))
- (b) The site is immediately adjacent to a Conservation Area
- (c) The site is within 1.3 miles of a CTS breeding site
- (d) The site is within the potential range of the Sonoma County CTS
- (e) If a listed plant is impacted, mitigation will occur within its range on the Plain

USFWS and CDFG may waive one or more of the criteria in this Section 9.1.4 or the preserve selection requirement in Section 9.1.3 for any particular proposed site. The proposed preserve site may be deemed suitable by USFWS and CDFG if the site provides some specific unique conservation value which, although not identified in the above list, nevertheless contributes to the recovery of one or more listed species. USFWS and CDFG must provide biologically based justification for the waiver. Establishment of preserves outside conservation areas will be reviewed and tracked by the AMT. If approved by USFWS and CDFG, the site would become a part of the Conservation Areas.

§9.1.5. A management plan must be prepared for each preserve. Management plans for preserves must assure maintenance of habitat for CTS, listed plants, and wetlands. These plans must detail the activities that are necessary to maintain and enhance the plant communities and wetland habitats of the preserves. They must also provide for monitoring as set forth in the Sections 9.2 through 9.2.2 below. Activities that should be addressed are public access, vegetation management, fire management, mosquito abatement, monitoring, and reporting, including recommendations for changes in management as it pertains to the individual preserve. Management plans must be approved by USFWS and CDFG.

§9.1.6. Each preserve must have an endowment sufficient, in the opinion of USFWS and CDFG, (a) to maintain the preserve in a condition that optimizes habitat for the listed species and ensures that the preserve does not become a nuisance to adjacent properties; and (b) to assure long-term management and monitoring of the preserve as described in the management plan.

9.2. Criteria for Preserve Land Management and Monitoring. Management plans for preserves must assure maintenance of habitat for CTS, listed plants and wetlands. These plans must detail the activities that are necessary to maintain and enhance the plant communities and wetland habitats of the preserves. They

must also include monitoring. Activities that should be addressed are public access, vegetation management, fire management, mosquito abatement, monitoring, and reporting, including recommendations for changes in management as it pertains to the individual preserve. Annual work plans are required and will be provided to the Adaptive Management Team (AMT) (see Section 7) and/or the appropriate agencies by December 1 of each year. Appendix G provides a template for use in development of management plans.

Sufficient hydrology of the seasonal wetlands is necessary to support breeding for CTS. The depth, duration, and timing of the inundation of the pools are crucial for successful breeding to occur. Additionally, grassland habitats of sufficient quality, quantity, and juxtaposition must be available, preserved, managed, and maintained for upland habitat. Various techniques may be used to maintain, enhance, or restore these upland areas.

Management of the vegetation on the site may require numerous techniques to reduce or eliminate exotic, competing, or undesirable plant species. These techniques should be compatible with listed plants. These techniques will include an appropriate grazing regime or mowing. The preserve manager may also need to use various control techniques to reduce or eliminate populations of undesirable animals such as fish and crayfish.

Qualified biologists will conduct monitoring pursuant to established protocols to assess the condition of created and existing habitat, and viability of listed species. Management and monitoring tasks may be modified based on site conditions, new information, and changes in the surrounding environment. Appendix G provides the standardized management and monitoring reporting forms.

§9.2.1. Preserve Management Funding. Preserves must be actively managed and have sufficient endowments. Management is needed to maintain the preserves in a condition that optimizes habitat for the listed species and to ensure that preserves do not become a nuisance to adjacent properties. To assure long-term management, an ongoing funding mechanism must be provided. The amount of funding is based upon the annual and recurring capital expenses required to maintain, manage, and monitor the site as described in the management plan. Endowments are the most common funding mechanism for preserves established as mitigation. These are secure non-wasting accounts that provide a constant funding source for routine and non-routine management and monitoring.

9.2.2. Preserve Monitoring. Monitoring is required to determine the overall success of mitigation and management actions. For the Conservation Strategy, the following are the general actions that will be monitored: 1) wetland creation, 2) wetland restoration, 3) wetland and upland habitat enhancement, 4) preserve management, and 5) baseline for species and general trends of species populations and CTS breeding.

Monitoring of wetland establishment is normally required following construction and would include at a minimum the following: 1) vegetation establishment including percent cover and species composition, 2) hydrology, water depth and period of inundation and/or soil saturation of the wetlands, and 3) progress toward achieving success criteria established for the restoration efforts. Annual Reports are required which document the results of monitoring and identify management needs or any needed remediation efforts required to meet the success criteria. Reference sites within the vicinity of the restoration site will be monitored to evaluate the success of wetland being established. Monitoring of wetland and upland enhancement for CTS at a minimum includes a determination that any created/restored breeding sites have sufficient hydrology to support CTS and ultimately successful breeding occurs. Monitoring reports will include not only the level of success or failure but identify any needed remediation requirements.

Long-term monitoring of preserves will be required to assure that the goals and objectives of the preserve are being achieved. Long-term monitoring will be the responsibility of the agency or organization responsible for management of the site and will be funded by an endowment established as a part of the required mitigation. This type of monitoring is necessary to determine the effectiveness of long-term management actions specified in the Management Plan for the preserve in maintaining the biological values for which the preserve was established. The following types of information would be collected for each preserve: 1) status and trends of sensitive species on the preserve, 2) presence and status of invasive species, 3) effects of management actions, i.e. vegetation management, on the condition, function, and health of vegetation on the preserve, and 4) conflicts between preserve objectives and other allowed uses of the preserve site.

Article 10 Take Authorization

§ 10.1. All Covered Activities will receive incidental take authorization under the ESA and CESA. Take authorization will be conveyed to Covered Activities as follows:

§ 10.1.1. The USFWS shall complete a Section 7 consultation on the execution by USFWS of this MOA and Implementation Plan. The Section 7 consultation shall evaluate the impacts of implementation of the Strategy as set forth in this Implementation Plan on the CTS and listed plant species. The Section 7 consultation shall evaluate the impacts of the Strategy and the Implementation Plan as a whole, including the impacts of Covered Activities that have an independent federal nexus (such as projects impacting wetlands). The Biological Opinion shall be used by USFWS on a programmatic basis in connection with any separate individual biological opinions that are required for projects or activities that require a separate federal permit or approval, or receive federal funding. With respect to projects or activities that do not require a separate federal permit or approval, and do not receive federal funding, the Biological Opinion issued pursuant to the Section 7 consultation shall contain an incidental take statement sufficient to provide incidental take authority to all Covered Activities, conditioned on the implementation of all mitigation and minimization required by this Plan. As the basis for take authorization for Minor Projects, the Biological Opinion shall include the cumulative total acreage of new permanent ground disturbance in each Conservation Area that is anticipated due to Minor Project development over the term of the Plan. The incidental take authority contained in the Biological Opinion shall extend to both the project proponent(s) and to any Local Jurisdiction issuing a permit or approval with respect to a Covered Activity.

§ 10.1.2. The CDFG shall authorize take of state listed species by making a contemporaneous “consistency determination” under Fish and Game Code section 2080.1 that the take authorizations issued by USFWS as described above are consistent with the requirements of the CESA.

§ 10.1.3. The obligations of the Local Jurisdictions under the MOA and this Implementation Plan are contingent upon the effectiveness of the incidental take statement in the Biological Opinion to provide take authorization to Covered Activities under the ESA, and upon the ongoing ability of the “consistency determination” by CDFG to provide take authorization to Covered Activities under the CESA, as described in Sections 10.1.1 and 10.1.2 above. If for any reason such take authorization is not granted by the Biological Opinion issued by USFWS or by the consistency determination issued by CDFG, then the

MOA and this Implementation Plan shall immediately be terminated, and the Local Jurisdictions shall have no further obligations hereunder.

Article 11 Plan Monitoring and Adaptive Management

[Note: Additional details/edits may be provided by Adaptive Mgmt Subcommittee – Text below taken largely from Strategy]

§11.1 Monitoring of Strategy Objectives and Assumptions. The Strategy and this Plan are based on certain biological objectives and assumptions, which are set forth in Exhibit __ to this Plan. In order to monitor the extent to which these objectives and assumptions are being met during implementation of this Plan, the parties agree to take the following actions:

§11.1.1 Reporting of Impacts. The Local Jurisdictions agree that they will provide reports to USFWS, CDFG, and the AMT, no less than quarterly, containing information on all Covered Activities within Conservation Areas, Primary Habitat Areas, and Potential Habitat Areas (excluding No Effect Areas) for which a permit or approval has been sought from the Local Jurisdictions. Where possible, the reports shall be provided in electronic format. The reports shall contain, at a minimum, information about the location of the Covered Activities, the nature of the Covered Activities, the expected amount of permanent ground disturbance and temporary ground disturbance resulting from the Covered Activities, and the status of Local Jurisdictions' permit approval process with respect to the Covered Activities.

§11.1.2 Reporting of Mitigation/Preserve Land. USFWS and CDFG agree that they will provide reports to the Local Jurisdictions, not less than quarterly, containing information on all preserves or mitigation banks approved by USFWS or CDFG within the Plan Area.

§11.1.3 Reporting of Zoning Changes. The County agrees that it will provide reports to USFWS, CDFG, and the AMT, no less than quarterly, on any changes in zoning or land use regulations within Conservation Areas, Primary Habitat Areas, and Potential Habitat Areas.

§11.1.4 Maintenance of GIS Database. In connection with preparation of the Strategy, USFWS and CDFG developed a GIS database containing information on existing, known CTS and plant locations, land uses, jurisdictional boundaries, urban growth areas, expected areas of future development, and

other geographic features. CDFG will continually update this GIS database to incorporate all new information provided by the parties to this MOA and Plan, such as mitigation, project impacts, updated information on listed species and new preserves.

§11.2 Adaptive Management Team. The parties shall establish an Adaptive Management Team (AMT). The AMT shall be comprised of technical representatives (biologists, land use planners, or other technical experts) from USFWS, CDFG, the U.S. Environmental Protection Agency, the North Coast Regional Water Quality Control Board, the U.S. Army Corps of Engineers, the Local Jurisdictions who choose to participate on the AMT, and one representative from the environmental community, the private landowner community, the agricultural community, and preserve managers. Members of the AMT will be selected based on expertise in land use, biology, zoology, botany or ecology, with subspecialties in amphibians, vernal pool associated rare plants, conservation planning or wildlife population dynamics. Knowledge and experience in the Santa Rosa Plain is also desired. The AMT may create one or more specialty sub-teams as needed.

§11.2.1 Duties of Adaptive Management Team. The AMT will serve as technical advisors to USFWS, CDFG, and the Local Jurisdictions with respect to monitoring the effectiveness of the Plan and its implementation. The responsibilities of the AMT will be as follows:

- Evaluate and make recommendations to the implementing agencies concerning the effectiveness of the Strategy and its implementation.
- Review and propose research on the Plain that would increase knowledge needed to improve implementation of the Strategy.
- Review the results of monitoring of individual preserves.
- Evaluate the effectiveness of preserve management actions.
- Evaluate the progress of preserve establishment in meeting the Strategy objectives.
- Monitor the linkage of preserves.
- Review other pertinent technical information.
- Ensure that cumulative Minor Project development in each Conservation Area does not exceed the take authorization granted through the Section 7 consultation.

- Prepare an annual report describing the status of implementation and making recommendations to the Implementing Agencies on actions necessary to assure that the objectives of the Strategy are being achieved.
- Undertake other activities as requested by the Implementing Agencies.
- Work with the University of California Cooperative Extension and the Sonoma County Farm Bureau to communicate Plan requirements and information about BMPs to agricultural land owners and other interested parties.
- Monitor compliance with the BMPs set forth in Section 6.4.3(a).

11.2.2. Meetings of Adaptive Management Team. The USFWS will convene meetings of the AMT at least quarterly. The AMT meetings will be open to the public and allow for input from the public.

11.2.3. No AMT Authority to Amend Plan or Strategy. The AMT will have no independent authority to amend this Plan or the Strategy.

§11.3. Annual Review and Monitoring of Agricultural Conversions. The USFWS shall engage the Natural Resources Conservation Service (NRCS) to annually review aerial photographs to determine the acreage of Agricultural Conversions that have occurred. The results of this review shall be reported to USFWS, CDFG, the Local Jurisdictions, and the (AMT).

§11.3.1. When USFWS determines and notifies the Local Jurisdictions in writing that the cumulative total acreage of Agricultural Conversions, either in total or in any specific Conservation Area, exceeds percent of the acreage listed as “Potential Tilled Ag Expansion Acres” in the table in Section 6.4.3(d), no further Agricultural Conversions may occur within the relevant Conservation Area without further consultation with the USFWS.

§11.4 Implementation Oversight Committee. The Local Jurisdictions shall continue to participate on the “Santa Rosa Plain Conservation Strategy Implementation Committee” formed pursuant to the Planning Agreement between the Local Jurisdictions, USFWS, and CDFG, which shall, upon approval of this MOA and Plan by all parties, be called the “Santa Rosa Plain Conservation Strategy Implementation Oversight Committee.” The Implementation Oversight Committee shall meet no less than quarterly to discuss issues relating to the ongoing implementation of the Plan and the Strategy. The Implementation Oversight Committee shall consider and discuss any recommendations made by the AWT, and shall review and comment upon the annual report prepared by the AWT. The Implementation Oversight Committee will have no independent

authority to amend or change this Plan or the Strategy, but may make recommendations to the parties on proposed changes to the Plan.

§11.5 Amendments to Mitigation, Minimization, or Preserve Selection and Management Requirements. Any amendment proposed by USFWS or CDFG to any mitigation, minimization, or preserve selection or management requirement set forth in Articles 6, 8, or 9 that is claimed by USFWS or CDFG to be necessary as a result of the Plan not meeting the biological objectives and assumptions set forth in Exhibit __ must be approved by all parties to this MOA. Before requesting any amendment to any mitigation, minimization, or preserve selection or management requirement, USFWS and CDFG must consult with the AMT and the Implementation Oversight Committee regarding such amendment. The party proposing any such amendment must establish, by a preponderance of the evidence, that (a) one or more of the biological objectives and assumptions set forth in Exhibit ___ are not being met, (b) the failure of the Plan to meet such biological objections and assumptions has resulted or will result in adverse impacts to the listed species greater than those expected by the Biological Opinion issued pursuant to Article 10; and (c) in the absence of the proposed amendment, continued implementation of the Plan will jeopardize the continued existence or recovery of the listed species. If USFWS or CDFG makes such a showing, and if notwithstanding that showing, the parties to this MOA fail to approve the proposed amendment, then USFWS or CDFG may, in their sole discretion, terminate this MOA and Plan. If the parties approve amendments to any mitigation, minimization, or preserve selection or management requirement proposed by USFWS or CDFG, USFWS and CDFG shall provide incidental take authorization to all Covered Activities under the Plan as amended, as provided in Article 10. No amendment to any mitigation, minimization, or preserve selection or management requirement shall be applicable to any Covered Activity that has been completed or that has received permits or regulatory approvals from the Local Jurisdictions, and, where required by statute, from USFWS or CDFG before effective date of the amendment.

Article 12 Implementing Ordinances

§12.1. Local Ordinances. The Local Jurisdictions shall enact ordinances to impose the mitigation requirements and other requirements of the Strategy and this Plan on applicants seeking permits or approvals from Local Jurisdictions for Covered Activities. The ordinances to be adopted by the Local Jurisdictions shall be in substantially the form attached to this Plan as Exhibit A.

12.2. General Plan Changes. The County agrees to amend its General Plan and zoning ordinance to provide for development of mitigation banks and endangered species preserves on lands designated for agricultural use. Until such time as such General Plan and zoning ordinance amendments are adopted, the County shall not deny a permit or approval for work in connection with the creation of a mitigation bank or the enhancement of property approved by USFWS or CDFG as a CTS or listed plant mitigation site, based solely upon the zoning of the property as agricultural.

Article 13 Mitigation for Loss of County Tax Revenue

[Note: This is a proposal only, and is subject to change following negotiation]

13.1 County Revenue Loss Resulting from Plan. The Cities of Santa Rosa, Rohnert Park, and Cotati, and the Town of Windsor, recognize that the implementation of the Strategy and this Plan will have adverse financial impacts on the County of Sonoma. In particular, the conversion of land in the unincorporated area from its current use to use as a mitigation bank or a mitigation site results in the diminution in value of the property and a resulting permanent loss of tax revenues to the County from those properties.

§13.2 Mitigation for Loss of County Tax Revenue. To mitigate for this impact, the Cities of Santa Rosa, Rohnert Park, and Cotati, and the Town of Windsor shall pay the following amounts to the County:

§13.2.1. Upon approval of any permit that requires mitigation under this Plan resulting in the conversion of property in the unincorporated area to a mitigation site, the approving jurisdiction shall pay to the County an amount of money equal to the net present value of the future property tax revenue loss to the County caused by the conversion, in an amount to be agreed upon by the County and the approving jurisdiction.

13.2.2. Upon approval of any permit that results in the purchase of credits in an existing mitigation bank, the approving jurisdiction shall pay to the County an amount of money equal to the net present value of the future property tax revenue loss to the County resulting from the creation of the mitigation bank, times the ratio between the number of mitigation credits purchased and the total number of credits available at any time from the mitigation bank, in an amount to be agreed upon by the County and the approving jurisdiction.

§13.3 Reporting Requirements. By March 1 of each year, the Cities of Santa Rosa, Rohnert Park, and Cotati, and the Town of Windsor shall each provide to the County a report showing, for the prior calendar year, (a) the permits or approvals granted by it as to which the acquisition of preserve property or mitigation bank credits was required pursuant to Article 6, (b) the amount of preserve property or mitigation bank credits required, and (c) the location (by address or Assessor's parcel number) of the preserve property or mitigation bank.

§13.3.1. The County shall review the reports provided under §13.3 and shall, by May 1 of each year, provide to the Cities of Santa Rosa, Rohnert Park, and Cotati, and the Town of Windsor a calculation of the net present value of future property tax revenue loss to the County for each project, calculated pursuant to §13.2.

§13.3.2. By June 1 of each year, the Cities of Santa Rosa, Rohnert Park, and Cotati, and the Town of Windsor shall notify County as to whether they dispute the calculation provided under §13.3.1. If an calculated amount is disputed, the County and the disputing party shall meet and confer in good faith to resolve the dispute.

§13.3.3. By June 30 of each year, the Cities of Santa Rosa, Rohnert Park, and Cotati, and the Town of Windsor shall pay to the County (a) the amount calculated by County pursuant to §13.3.1, if undisputed; (b) the amount agreed upon during the meet and confer process in §13.3.2, if an agreement is reached; or (c) the amount the disputing party believes is owed to the County, if no agreement is reached.

§13.3.4. If payment is made under clause (c) in the § 13.3.3, the County shall retain its right to collect any additional amounts it believes are owing under this Article 13.

Article 14 Coordination with CEQA

§14.1. In connection with any analysis under the California Environmental Quality Act performed in connection with a Covered Activity, the Local Jurisdictions shall find and determine that the incorporation of the mitigation measures, minimization measures, and other applicable terms of this Plan by a project applicant will reduce the project's impacts on CTS and listed plant

species, and the cumulative impact of the project and other projects on the CTS and listed plant species, to a less-than-significant level.

Article 15 Assurances

§15.1. The Local Jurisdictions have entered into this Plan in express reliance upon representations by USFWS and CDFG that the mitigation and minimization requirements set forth in this Plan will not be increased in the future for reasons other than those contemplated by the adaptive management and monitoring process set forth in Article 11 of this Plan. Execution of this Plan by USFWS and CDFG constitutes an assurance by USFWS and CDFG to each of the Local Jurisdictions that the mitigation and minimization requirements applicable to CTS and listed plant species in Sonoma County will not be increased beyond those set forth in this Plan, other than as necessitated and contemplated by the adaptive management and monitoring process, and in accordance with the procedures set forth in §11.5. If USFWS or CDFG increases any mitigation or minimization requirement, other than as necessitated and contemplated by the adaptive management and monitoring process, and in accordance with the procedures set forth in §11.5, the parties agree that the MOA and this Plan shall be terminated and shall no longer be of any force and effect.

Article 16 Effective Date; Term; Termination

§16.1. This Plan shall become effective on the latest to occur of the following actions (the "Effective Date"): (a) adoption by all of the Local Jurisdictions of the ordinances contemplated by Section 12.1 above; (b) issuance by USFWS of a Biological Opinion under Section 7 of the ESA on the Plan and the Strategy, which contains an incidental take statement providing incidental take coverage under the ESA with respect to any take of Listed Species resulting from any Covered Activity, as contemplated by Article 10 above; (c) issuance by CDFG of a consistency determination under Section 2081 of the CESA, providing incidental take coverage under the CESA with respect to any take of Listed Species resulting from any Covered Activity, as contemplated by Article 10 above. This Plan shall be continue in effect until the earlier of (a) termination of the Plan in accordance with the provisions of this Plan or (b) fifteen (15) years after the Effective Date.

Article 17 Invalidation or Suspension of Plan or Take Authorization

§17.1 It is the intent of the parties to this MOA and Plan that the viability of the MOA, Plan, and Strategy depends upon the Strategy and the Plan functioning as a whole.

§17.2 In the event of any temporary judicial or administrative invalidation of all or any part of the MOA or the Plan, or of any action taken to implement the MOA or the Plan, that results in a temporary loss or impairment (by way of preliminary injunction or otherwise) of the incidental take authorization contemplated by this Plan with respect to any Covered Activity, the parties agree that the effectiveness of this MOA and this Plan, including any local ordinances adopted pursuant thereto, shall be temporarily suspended, and that the MOA and Plan shall no longer be used by any party for any purpose in connection with the approval, permitting, or funding of any Covered Activity, including those Covered Activities that require a federal permit, approval, or funding, during the period of suspension.

§17.3. In the event of any final judicial, legislative, or administrative invalidation of all or any part of the Strategy or the Plan, or of any action taken to implement the Strategy or the Plan, that results in a permanent loss or impairment of the incidental take authorization contemplated by this Plan with respect to any Covered Activity, the parties agree that the MOA and this Plan shall be terminated immediately and shall no longer be of any force and effect, and this the MOA and Plan shall no longer be used by any party for any purpose in connection with the approval, permitting, or funding of any Covered Activity, including those Covered Activities that require a federal permit, approval, or funding.

EXHIBIT A

Form of Implementing Ordinance

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SONOMA, IMPLEMENTING THE SANTA ROSA PLAIN CONSERVATION STRATEGY

The Board of Supervisors of the County of Sonoma, State of California, ordains as follows:

SECTION I.

(a) The Sonoma County DPS of the California tiger salamander (CTS) is listed as endangered under the federal Endangered Species Act (ESA), and four plant species (Burke's goldfields, Sonoma sunshine and Sebastopol meadowfoam, and the many flowered navarretia) are listed under the ESA and under the California Endangered Species Acts (CESA).

(b) The Board previously approved and executed the "Santa Rosa Plain Conservation Strategy Implementation Plan" (Plan) in order to implement the Santa Rosa Plain Conservation Strategy. The Plan and the Strategy are intended to conserve and ensure the future survival and recovery of the CTS and listed plant species, and to address legal and regulatory issues relating to the listing of the CTS and the plant species.

(c) The Plan contemplates that the Board will adopt an ordinance imposing the mitigation and minimization requirements set forth in the Strategy.

SECTION II.

Chapter 26E is added to the Sonoma County Code to read as follows:

CHAPTER 26E SANTA ROSA PLAIN CONSERVATION STRATEGY IMPLEMENTATION ORDINANCE

To come

Biological Goals and Objectives

The Conservation Strategy is based on the following biological goals and objectives to achieve conservation of CTS and the listed plants. The goals and objectives are based on available information on the distribution, ecology, and genetics of CTS and listed plants. They are also based on existing and planned land use patterns. It is expected that additional information on the species will become available, which will be considered in the adaptive management process.

(1) Establish and manage, in perpetuity, preserves within the eight CTS conservation areas distributed throughout the range of the Sonoma County population of the CTS:

- Develop preserves to be contiguous with each other to the maximum extent practicable
- Establish 3450 to 4250 total acres of preserves consisting of 350 to 900 acres within each conservation area
- Establish at least one preserve consisting of a minimum of 150 contiguous acres within each conservation area
- Establish a satellite preserve in Stony Point Conservation Area of a minimum of 100 contiguous acres
- Maintain compatible land uses between preserves to allow movement of CTS between preserves to maintain genetic diversity

(2) Establish listed plant preserves to maintain genetic diversity of listed plants throughout their known range on the Plain:

- Establish 75 to 150 acres of plant preserves of 25 to 100 acres each in the Windsor Plant Conservation Area,
- Maintain at least 10 occurrences of both Sonoma sunshine and Burke's goldfields throughout their known range on the Plain
- Preserve the one known population of many-flowered navarretia on the Plain

- (3) Expand the number of secure occurrences of each of the listed plant species:
- Protect at least 5 extant plant occurrences in each of the conservation areas where plants are known to occur
 - Establish 10 new self-sustaining plant populations of each of the listed plants within their known range on the Plain
- (4) Preserve interconnected CTS and listed plant habitat within the Southwest Santa Rosa Preserve System:
- Establish three CTS and listed plant preserves totaling 153 acres
 - Establish corridors between the preserves and adjacent conservation areas
 - Establish one new breeding site in each of the corridors
 - Maintain Sebastopol meadowfoam populations of 500 plants in at least 10 pools within the Preserve System
- (5) Secure and expand CTS breeding habitat within the conservation areas, with an emphasis on preserving existing breeding sites (not including ditches):
- Assure that each preserve has at least one created or existing breeding site or is adjacent to a preserve with a breeding site
 - Assure that there is one breeding site for every 50 acres of preserved upland habitat
 - Develop design criteria for created breeding sites to ensure proper hydrology in years of normal rainfall; monitor for success
- (6) Assure adequate management of preserves:
- Establish preserve management plans with adequate funding in perpetuity

- Assure adequate endowments for all preserves based on site specific management needs
 - Provide secure management funding for all public lands that contribute to the preserve objectives
- (7) Assure that preservation occurs in proportion to the effect of CTS and listed plant habitat loss:
- Apply interim mitigation requirements until the Conservation Strategy is implemented
 - Apply long-term mitigation requirements once the Conservation Strategy is implemented
 - Implement habitat preservation requirements of the Conservation Strategy
- (8) Establish an effective adaptive management process:
- Monitor establishment of preserves for consistency with the Conservation Strategy
 - Assess the effectiveness of preserve management
 - Propose research to inform future implementation of the Conservation Strategy
 - Monitor viability of CTS and listed plants

Assumptions

Development of the Conservation Strategy is based on the following assumptions about expected development in a ten-year time frame, the effect of that development on the species, how the preserves would offset those impacts, and the compatibility of existing land uses with CTS and listed species conservation.

- Either existing agricultural and rural land uses outside the UGBs will not change appreciably, or impacts of any changes will be adequately

analyzed and mitigated

- Urban development within the UGBs may occur based on general plans of the municipalities
- Limited urban development may occur outside of the UGBs based on the Sonoma County General Plan
- Voter-approved UGBs will remain in place for at least 10 years and will likely continue into the foreseeable future
- Based on aerial photography and site visits, potential habitat for CTS and listed plants exists in locations where surveys have not been conducted
- Urban development will eliminate some CTS and listed plant habitat
- Small preserves in an urban environment are difficult to manage, and will not likely sustain viable CTS populations

Conservation Area Objectives

The acreage goals for land preserved for CTS and listed plants in each Conservation Area is shown below:

Table 1 – Conservation Area and CTS Preserve Goals

Conservation Areas	Acreage of Habitat Minus Developed Land	Preserve Acreage Goal for CTS	Preserve Acreage Goal if Core Areas are Achieved	Acreage of Existing Preserved Land	Acreage of Pending Preserved Land	Acreage Goal to be Preserved	Acreage Goal if all Core Areas are Achieved
Alton	905.1	350	350	41	15	294	294
Wright	667.5	450	350	173	39	238	138
Kelly	661.7	450	350	0	0	450	350
Llano	1705.1	900	700	210	108	582	382
Stony Point	1684.4	750	650	73	248	429	329
NW Cotati	1309.1	450	350	0	0	450	350
SE Cotati	1114.4	450	350	0	0	450	350
SW Cotati	1647	450	350	0	0	450	350
Sub-total	9694.3	4250	3450	497	410	3343	2543
SWSR				101	52		

<i>Total</i>	9694.3	4250	3450	598	462	3343	2543
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The Strategy recognizes the need for core preserves ranging in size from 350 to 450 acres that are contiguous blocks of habitat for the eight CTS conservation areas. Contiguous is defined as not separated by a major road (such as Highway 101, Highway 116, Stony Point Road, and Highway 12), urban development, or the floodplain. If these core preserve acreages are achieved within a particular Conservation Area then the minimum conservation goal will be reduced as described above and in the Conservation Area description set forth in the Strategy. However, until these goals are achieved the habitat protection goal for each Conservation Area is as shown in Table 1 above.

Plant preserves should be a minimum of ten acres. Smaller plant preserves may be established to protect extant populations of Sonoma sunshine and Burke’s goldfield, where the site characteristics would assure long-term viability. Preserves on the plain currently range in size from 8 to 170 acres. From a management perspective, preserves should include the entire watershed of the pool(s) and swale(s) being protected, and the ratio of perimeter to area should be minimized. Given the limited number of known occurrences for Sonoma sunshine and Burke’s goldfields, small preserves (10 acres or less) have been approved to meet mitigation requirements for habitat preservation. Although this is not optimal, it has been important in achieving the goal of maintaining the existing plant populations throughout the range of the listed plants.