6.0 PLAN IMPLEMENTATION

Section 6.0 describes how the HCP will be implemented and the persons and entities responsible for its implementation.

6.1 PLAN PARTICIPANTS

6.1.1 Stanford University -- Permittee

Stanford University has been in existence for nearly 120 years, which is longer than many Bay Area cities, and consistent with the Founding Grant, intends to be a permanent academic institution. Over the last century, a city-sized academic campus has been established on Stanford lands, as well as several commercial and retail businesses that financially support the University. The campus also includes thousands of acres of open space lands, some of which are leased for agriculture, horticulture, grazing, and equestrian uses.

6.1.2 Subpermittees

Much of the land south of Junipero Serra Boulevard is leased for equestrian- and grazing-related uses. These are considered interim uses to generate income for the University, while preserving these lands for future academic uses. Most of the agricultural leases are short-term and can be terminated annually, although some of the leases are for longer terms. The HCP will regulate some of the lease holders' activities, and Stanford, through the Conservation Program Manager, will require the lease holders' compliance with the terms of the HCP and related permits. The lease holders will be covered by the incidental take permits, and Stanford may issue Certificates of Inclusion making the lease holders subpermittees under the HCP.

Several entities, including Pacific Gas and Electric Company (PG&E), the San Francisco Public Utilities Commission (SFPUC), and the Santa Clara Valley Water District (SCVWD) own or operate utilities and other facilities located throughout the University. These facilities provide Stanford and the surrounding community with public utility, and other, services. Operation and maintenance of these facilities may be covered by the incidental take permits through Certificates of Inclusion, and Stanford may issue a Certificate of Inclusion to any entity that owns or operates facilities on Stanford's lands if the entity agrees to comply with the terms of the HCP and related permit. These entities would be considered subpermittees under the HCP.

Stanford will be responsible for requiring the subpermittees' compliance with the HCP, take permit, Implementing Agreement (IA), and Certificates of Inclusion. Stanford, as a condition of the Certificates of Inclusion and any future leases, will require the subpermittees to take remedial measures in the event the terms of the HCP, Certificates of Inclusion, incidental take permit, or IA are not adhered to by a subpermittee. Stanford, as the primary permittee under the incidental take permit, will be responsible for ensuring any and all necessary remedial measures are taken, and will undertake any required remedial measures if the subpermittees fail to do so.

¹ The three equestrian and grazing leases comprise approximately 940 acres in the following categories: one equestrian facility and two multiple-use ranches that include cattle grazing.

6.1.3 Wildlife Agency

The Service has the authority to issue Section 10(a)(1)(B) incidental take permit under the ESA and are responsible for enforcing the provisions of the HCP and permit issued under the HCP subject to Stanford's responsibility for enforcing the provisions of the HCP, permit, and IA against its lease holders, and for reviewing annual status reports and responding to requests for amendments. The Service also will maintain and provide information regarding current survey protocols.

Once the Service has issued an incidental take permit, primary responsibility for implementing the HCP will rest with Stanford. However, the Service will receive reports concerning the HCP's implementation and will provide input on Stanford's implementation of the HCP's conservation program, and guidance on how to respond to changed circumstances (described below).

6.2 TERM OF PERMIT

Stanford is seeking an incidental take permit from the Service with a term of 50 years. The incidental take permit issued under Section 10(a)(1)(B) of the ESA and the associated HCP would each be in effect for a period of 50 years from the date of issuance of the permit. Upon expiration of the incidental take permit, Stanford will not have take authorization under the ESA. However, prior to permit expiration, Stanford may apply to renew the incidental take permit and associated HCP, and rollover its unused credits. Stanford anticipates that it may seek renewals of up to 10 years, subject to mutual review and agreement by the parties. To give the parties adequate time to review and process permit renewals, the parties will initiate the permit renewal review 5 years prior to the expiration of the initial 50-year period, and 1 year prior to the expiration of any renewal.

In choosing an appropriate permit term, Stanford considered several factors consistent with the "five-point policy" described in Section 1.2.3, including the duration of the covered activities, the effects to species, and the relationship between the permit duration and the HCP's conservation program. Fifty years was chosen as the permit duration because it is a reasonable timeframe for Stanford to forecast its operational and infrastructure needs, as well as to anticipate future development that could affect Covered Species habitat. As discussed in Section 1.1, Stanford has more than 120 years of hindsight and experience in operating the University, and forecasting its future needs. Many of Stanford's operational, maintenance, and academic activities have changed very little during this time, and will continue for at least the next 50 years. Major infrastructure, such as domestic water pipelines, roads, and bridges, are relatively permanent, and the maintenance and operation of these facilities does not typically change over time. Likewise, Stanford will have to continue to engage in fire and public safety actions, such as maintaining fire breaks and removing debris from the creeks that could result in flooding of urbanized areas. The 50-year timeframe is also expected to be necessary to use up the credits that Stanford will earn from its initial preservation of 90 acres of habitat and other habitat enhancements. A 50-year time frame also provides a reasonable conservation planning horizon, and will allow Stanford to achieve important conservation measures, particularly the goal of stabilizing its tiger salamander population by reducing the tiger salamander's reliance on

Lagunita and transitioning the population to more appropriate, newly created habitat in the foothills.

6.3 ESTABLISHMENT OF IMPLEMENTATION ENTITIES

6.3.1 HCP Authorities and **Responsibilities**

The University's Board of Trustees (BoT) establishes land use policy and will ultimately approve the HCP and authorize the President or Vice President for Land Buildings and Real Estate (VPLB&RE)² to apply for an incidental take permit from the Service, to sign the IA, and grant the permanent conservation easements described in Section 4.3 of the HCP. Likewise, the VPLB&RE will obtain funding from the University to implement the HCP, and when the BoT approves the HCP, it will commit to authorize annual funding for the HCP.

When the BoT approves the HCP, Stanford will establish an HCP Conservation Program Manager position to oversee the day-to-day implementation of the HCP. The Conservation Program Manager will also communicate directly with the Service as needed. More information about the Conservation Program Manager position is provided in Section 6.3.2, below.

A separate, non-profit land trust organization will be formed pursuant to Section 815 of the California Civil Code to hold the Matadero/Deer Easement and any subsequent conservation easements granted in accordance with Section 4.3 of the HCP. More information about the land trust is provided in Section 6.3.3, below.

6.3.2 Conservation Program Manager

As described above, Stanford will create and fund a Conservation Program Manager position for the life of this HCP. The Conservation Program Manager will have the day-to-day implementation responsibilities for Stanford University's HCP. Generally, these responsibilities fall into five areas.

The conservation program described in Section 4.0 identifies many Minimization Measures that require involvement by the Conservation Program Manager. Generally, these measures have the following requirements for the Conservation Program Manager:

- Develop a protocol for submission of any plans or activities that require consultation with or review by the Conservation Program Manager that ensures the Conservation Program Manager:
 - o Reviews the Covered Activities in Zones 1 and 2 (and 3 where applicable) (and proposed new development in Zone 1, 2, 3 and areas of Zone 4 located within 100 yards of Zone 1), which is also addressed through the

² The Covered Activities are conducted or overseen by departments under the direction of the VPLB&RE (e.g., Department of Project Management, Building & Grounds Maintenance, Sustainability & Energy Management, University Architect/Campus Planning & Design, Land Use & Environmental Planning, and Real Estate).

- Conservation Program Manager's "Input on University's Future Development"),
- Assesses habitat value (e.g., by identifying the Zone it is located in) and determines the actual loss or conversion of habitat as required under Section 4.4, which includes an assessment of any secondary effects beyond the actual footprint of the activity, and
- Identifies design or operational alterations and specifies the applicable Minimization Measures identified in Section 4.2 to reduce the potentially adverse effects of the Covered Activities on the Covered Species.

In addition, the Conservation Program Manager will be consulted when existing operations require relocation, so that such relocation can be beneficial to the Covered Species.

Protocol for Conservation Program Manager Review of Covered Activities

To ensure appropriate review, assessment of the effects (including loss of habitat), and application of the Minimization Measures identified in Section 4.2 (including design or operational changes to the activity) are implemented in connection with the Covered Activities, the following protocol will be implemented:

- The LB&RE project manager will notify the Conservation Program Manager when a proposal to conduct a Covered Activity is received and a copy of the proposal, including a site map and written description of the activity, will be provided to the Conservation Program Manager.
- The Conservation Program Manager will review the proposed Covered Activity and determine in which Zone the activity would occur. If the proposed activity will occur in Zones 1 or 2, the Conservation Program Manager will notify the project manager and the project manager will flag the site. If requested by the Conservation Program Manager, the project manager also will provide additional information regarding the proposed activity. The level of detail necessary to evaluate the activity and identify the appropriate Minimization Measures will vary depending upon the nature of the activity and its location. At a minimum, the geographic extent of the activity, timing/length of time it will take to complete the activity, nature of the construction methods, and subsequent use or operations associated with the activity, and any other information the Conservation Program Manager deems necessary to determine the effects of the activity on Covered Species and the applicable Minimization Measures will be provided.
- The Conservation Program Manager will review the file data available on the site (such as prior survey results) and conduct a site visit of the proposed location. During the site visit, the Conservation Program Manager will evaluate the site for the presence of Covered Species and habitat features that could support Covered Species, such as unimproved grasslands, the presence of burrows, creek channels, rocks or woody debris, native vegetation, riparian habitat, existing improvements

or other barriers, etc. If species or habitat features are present, the Conservation Program Manager will identify modifications to the proposal, such as alternate locations, additional setbacks, or a reduced footprint, to avoid or lessen the effect.

- Following the site visit, and any modifications to the proposed activity if applicable, the Conservation Program Manager will assess whether the Covered Activity with the applicable Minimization Measures is consistent with the HCP and the authorized level of take, which is described in Section 5.3.
- If the Conservation Program Manager concludes the Covered Activity is
 consistent with the HCP, written notice with the applicable Minimization
 Measures will be provided to the project manager. The Conservation Program
 Manager will coordinate any preconstruction Minimization Measures, such as
 contractor/employee education programs and preconstruction surveys, with the
 project manager.
- If the Minimization Measures require post-activity revegetation or other restoration (e.g., replacing topsoil), the Conservation Program Manager will conduct a site visit following the conclusion of the activity to ensure the post activity Minimization Measures have been implemented.
- During the course of any Covered Activity, the Conservation Program Manager may require status updates and/or conduct site visits to verify compliance with the Minimization Measures.

Input on University's Future Development

Many factors are considered when the University sites a new academic facility. The most important factor is the intended use of the building and its relationship to other buildings. In a university setting, the adjacency of related buildings can greatly affect the success of programs housed within those buildings. Once several potentially suitable sites have been identified, other factors such as existing infrastructure, environmental impacts, and cost are used to select the final site.

The Conservation Program Manager will be involved in the University's site selection process, identifying potential impacts to the Covered Species at each of the alternative sites. If the University selects a site that would result in loss of habitat in Zones 1, 2, or 3, the Conservation Program Manager will identify the mitigation requirements of the development (e.g., how many mitigation credits would need to be deducted from which account, and whether Stanford would have to earn more credits to offset the impacts), and the protocol for reviewing Covered Activities described above will be implemented.

Coordination with the Service and CDFW

Stanford will seek guidance from the Service and CDFW regarding the implementation of the HCP. The Conservation Program Manager will seek guidance from the Service, and CDFW concerning California tiger salamander, regarding:

- The location of future conservation easement areas:
- Habitat enhancements;
- Any bank stabilization structures;
- Appropriate remedial or restoration efforts to address changed circumstances;
- Methods for addressing invasive species if current methods prove ineffective;
- The cause of any downward species population trends that are inconsistent with normal population variations and appropriate adaptive management techniques;
- Other changes to the conservation program made as a result of the adaptive management process.

General Biological Activities

In addition, the Conservation Program Manager will have general biological responsibilities, which include:

- Coordinate and review biological enhancement activities;
- Coordinate the management and monitoring activities described in this HCP;
- Collect and analyze data gathered during the implementation of this HCP;
- Coordinate the adaptive management and biological monitoring efforts described in this HCP;
- Keep abreast of current scientific methods and concepts;
- Communicate with other scientists at Stanford and external scientists, including wildlife agency staff.

Administrative Activities

The Conservation Program Manager will be responsible for the ongoing administrative tasks that will be required in order to implement the HCP. They include:

- Coordinate implementation of the HCP;
- Coordinate the preparation and submission of the Annual Report (Section 6.4) to the Service and CDFW;
- Develop an annual budget to ensure adequate funding on an annual basis;

- Monitor compliance with the HCP and any plans or programs that are developed under the HCP; and
- Develop, review, and approve, as required, all plans or programs Stanford or its lease holders are required to develop under the Conservation Program.

To ensure the Conservation Program Manager is qualified for the position and able to effectively implement this HCP, the person holding this position will have been awarded no less than a Masters of Science in a field related to conservation biology, and will be familiar with the habitat needs of the Covered Species. Other biologists and staff may assist the Conservation Program Manager in carrying out the activities that the Conservation Program Manager is responsible for under this HCP. The Conservation Program Manager and other biologists that might handle Covered Species will comply with the appropriate federal and state regulations.

6.3.3 Entity to Hold Conservation Easements (Land Trust)

Stanford will be responsible for implementing the HCP, including the implementation of the Matadero/Deer Easement Monitoring and Management Plan, CTS Reserve Monitoring and Management Plan, Central Campus CTS Monitoring and Management Plan, and any subsequent perpetual monitoring and management plans. As described above, Stanford will form a non-profit land trust organization that is qualified under Section 815 of the California Civil Code to hold the conservation easements that the University will grant in accordance with Section 4.3 of the HCP.

The land trust will consist of a board of directors, with no less than five and no more than seven directors; and a non-voting *ex officio* member of the board who will provide administrative support to the board of directors.³ At least two members of the board of directors will be selected from the public at large. The public-at-large members will be individuals who are or have been associated with environmental organizations focused on habitat, species, and land conservation purposes (for example, the Peninsula Open Space Trust, the California Council of Land Trusts, the California Nature Conservancy, and others). The President of Stanford will appoint the initial board of directors to a 2-year term. Future members of the board of directors will be selected as follows: The two public-at-large members will be selected by the board, and Stanford's President will appoint the remaining members of the board of directors.

The permanent conservation easements that Stanford grants pursuant to this HCP will give the land trust the right to enforce the terms and conditions of the conservation easement deeds (and these terms and conditions shall be reviewed and approved by the Service, and CDFW for California tiger salamander easements, prior to recordation) and the HCP's Monitoring and Management Plans. The Service will be a third-party beneficiary of the conservation easements and CDFW will be a third-party beneficiary of the California tiger salamander conservation easements. As a third-party beneficiaries, the Service and CDFW also will be able to enforce the terms of the conservation easements.

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³ The board of directors may include a non-voting *ex officio* member that provides administrative support, or the land trust may hire staff or rely on Stanford staff, as needed, to provide administrative support.

In addition to holding the conservation easement deeds, the land trust will monitor Stanford's compliance with the HCP's Monitoring and Management Plans and the terms of the conservation easement deeds granted pursuant to the HCP. During the term of the HCP and associated permits, the Service will have primary responsibility for determining whether Stanford is complying with the terms of the HCP and the conservation easement deeds dedicated pursuant to the HCP, and CDFW will have joint and independent authority in determining whether Stanford is complying with the terms of the California tiger salamander conservation easement deeds. If Stanford is not in compliance, the Service will have the authority to suspend, revoke, and enforce the terms of the HCP and the associated permit in accordance with the IA and federal law. As such, if, during the term of the HCP and permit, the land trust determines that Stanford is not in compliance with the conservation easement deed or the HCP's Monitoring and Management Plans and the Service or CDFW finds that Stanford is in compliance, the finding by the Service or CDFW will prevail and the land trust will have no further recourse against Stanford, the Service, or CDFW, except as otherwise provided for in the conservation easement deeds. Following the expiration of the HCP and permits, the land trust entity will have primary responsibility for enforcing the terms of the conservation easements and the associated long-term monitoring and management plans, and the land trust will have the authority to legally enforce the terms of the easements. As third-party beneficiaries of the conservation easement deeds, the Service and CDFW also will have the ability to enforce the terms and conditions of the conservation easement deeds after the permits expire.

Stanford will provide the land trust with copies of the Annual Report described in Section 6.4. In addition, the Conservation Program Manager will provide the board of directors for the land trust with a mid-year written status report. This report will be provided to the board of directors at a regularly scheduled meeting, and will describe (i) the land conservation, monitoring, management, enhancement or other actions that have occurred within the easement areas since the most recently submitted Annual Report; (ii) monitoring, management, enhancement or other actions Stanford plans to take before the end of the annual reporting period; and (iii) Stanford's plans to conserve additional lands. At least once a year, Stanford will give the land trust the opportunity to visit the easement areas and thoroughly monitor compliance with the terms of the easement deeds.

6.4 ANNUAL REPORTING

Every year beginning after the first full year of the HCP's implementation, Stanford will submit an Annual Report to the Service and CDFW that documents permit compliance (including impacts, land preservation and enhancements, and studies), management actions, monitoring results, and any changed or unforeseen circumstances that occurred. Annual Reports will include synthesis of data and reporting on important trends such as changes in habitat conditions⁴ and the distribution and abundance of the Covered Species. The Annual Report will describe any enhancements planned for the upcoming year, any plans Stanford has to preserve additional land during the upcoming year,⁵ any anticipated changes in management techniques that Stanford plans to make and an explanation of why those changes are needed, confirmation that

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⁴ For example, drought conditions could result in habitat changes, and any actions taken in response to drought conditions will be described in the Annual Report.

⁵ Stanford may, at any time, preserve additional lands or make habitat enhancements even if the preservation or enhancement was not anticipated by the Annual Report.

funding has been committed for the next year, and disclose any difficulties Stanford encountered in implementing the HCP.

The Annual Report is due on October 1, or the first business day in October if the first day of the month falls on a non-business day, each calendar year, or portion of a calendar year, during which the permits will be in effect. If Stanford cannot provide the Annual Report by the first business day in October, it can request an extension. The Service and CDFW will provide Stanford with comments on the Annual Report within 60 days of receipt of the report. If the Service or CDFW cannot respond within the 60-day period, it can request an extension. At the end of the comment period, Stanford and the Service or CDFW will confer about any comments. Stanford will incorporate, to the extent feasible, agency comments into the Annual Report at the time they are received.

Every 5 years Stanford will prepare an overview report that describes trends in Covered Species' distribution and abundance, and habitat quality. The 5-year report will synthesize data provided in the previous Annual Reports (and any relevant data from the previous biological monitoring results that was not specifically included in an Annual Report) and include data about regional changes, such as climate change, flood control activities, urban development, major wildfires, floods, and droughts, that have affected the Covered Species.

6.4.1 Accounting of Mitigation Land

The HCP establishes the Matadero/Deer Riparian Account and CTS Account to account for the benefits to the Covered Species. The Riparian Account will initially be "funded" by the preservation of large portions of land that provide habitat for the red-legged frog and garter snake (Section 4.3). The Conservation Program includes measures to ensure the Matadero/Deer Easement and CTS Reserve are established in a timely fashion, and to ensure that Stanford always maintains a sufficient number of credits in the Matadero/Deer Riparian Account and CTS Account. (The CTS Reserve and Matadero/Deer easements are referred to collectively in this Chapter as the Preserved Areas.)

In the Annual Report, Stanford will include an accounting of all lands contained within habitat Zones 1 through 3 that have been subject to permanent conversion along with the acreage, location, and management status of lands required to be set aside as mitigation for the conversion. Specifically the report will include:

- (1) Conversion: The annual incremental and cumulative area converted to urban development in Zones 1, 2, and 3.
- (2) Mitigation: The annual incremental and cumulative area of mitigation lands preserved, and a description of which of the lands constitute Zones 1 and 2 habitats.
- (3) Net Acreage: The overall acreage of preserved land and a breakdown of acreage in the:
 - i. Matadero/Deer Easement
 - ii. CTS Reserve

- iii. Other or newly created easement or preservation area
- (4) Net Credits: The annual incremental and cumulative number of credits in the accounts, and an explanation of how any new credits were earned (e.g., by land preservation or enhancement activity as defined by Table 4-2). This will include a breakdown of the current number of credits in the:
 - i. Matadero/Deer Riparian Account
 - ii. CTS Account
 - iii. Other or newly created account

6.5 FUNDING ASSURANCES

Stanford is responsible for ongoing habitat conservation, monitoring, and management as described in the HCP for the life of the permits. Stanford University is financially solid and derives income from rents, financial investments, tuitions, and private contributions. Stanford has sufficient revenue to cover the cost of implementing the measures proposed in the HCP. By resolution, Stanford's Board of Trustees will approve the HCP and the IA, which will bind the University to carrying out the terms and conditions and funding requirements of the HCP.

Under the HCP, Stanford will manage 405 acres of habitat within the Preserved Areas, and an additional 95 acres will be managed under the Central Campus CTS Management Plan. In addition, Stanford may preserve and manage additional habitat for the benefit of the Covered Species during the life of the HCP. Implementation costs for the central campus area and Preserved Areas, and additional habitat enhancements for the Covered Species are estimated to be \$300,000 - \$500,000 per year. These estimates were derived from a review of current open space and habitat management expenditures in other comparable areas, and include:

- Salary for the Conservation Program Manager and other support staff;
- Field work staff, including graduate students and consultants;
- Support equipment such as vehicles and storage facilities;
- Enhancement projects such as new ponds or restoration, with budgets likely accrued annually and conducted periodically;
- Ongoing management of the Preserved Areas that includes non-native species management and removal; and
- Monitoring and preparation of annual reports.

Land acquisition costs are unnecessary because Stanford owns the land that is included in the HCP. As a result, the annual funded amount identified above also does not include the fair market value of the land permanently dedicated to conservation.

Based on these cost estimates, Stanford will commit to the following: (1) including a line item for HCP implementation into its annual operating budget for the life of the HCP. That budget item will be sufficient for all aspects of the HCP implementation with the exception of activities referenced in (2) below, and will include but not be limited to funding of the Conservation Program Manager position (or a similar entity responsible for Plan implementation); and (2) establishing a perpetually self-sustaining fund of \$300,000, segregated from but invested in conjunction with Stanford's endowment, to support the long term monitoring and management of conserved areas within the CTS Reserve.

In accordance with the Conservation Program, Stanford will prepare long-term monitoring and management plans for the habitat that is protected through a conservation easement deed pursuant to the HCP. These monitoring and management plans, which will be subject to review and approval by the Service, and by CDFW for the CTS easement long-term monitoring and management plan, will survive the expiration of the incidental take permit and this HCP, and Stanford will be responsible for ensuring that the long-term easement-related management and monitoring actions are funded after the HCP and associated incidental take permit expires. Funding for these future monitoring and management actions will therefore also be addressed in the long-term monitoring and management plans.

6.6 CHANGED AND UNFORESEEN CIRCUMSTANCES

Federal regulations define the concepts of "changed and unforeseen circumstances" and describe potential future responsibilities based on whether changes in circumstances could have reasonably been foreseen and whether they have been addressed by the HCP. This section of the HCP addresses changed and unforeseen circumstances in accordance with the regulations.

Generally, a changed circumstance is a change in the circumstances affecting a Covered Species that can be reasonably anticipated, which allows a plan to be developed in advance to accommodate the change. Changed circumstances include relatively predictable, but unplanned events, such as fires, flooding, and other natural occurrences such as an invasion of pests or non-native plants. It also includes occurrences such as an illegal or accidental spill of toxic materials. The Service is required to ensure changed circumstances are identified and planned for in the HCP. Anticipating and addressing these changed circumstances adds to the conservation value of the HCP by reducing the potential risks associated with the changed circumstance. It also provides the Service with additional assurance that Stanford will take certain actions if such an event occurs, and it gives Stanford the assurance that it will not be held accountable to fully compensate for impacts of natural events or events that are outside of its control. Changed circumstances are identified and addressed in Section 6.6.2.

In the event that a Preserved Area is threatened by fire, flood, or similar emergency, the HCP will not prohibit access by emergency response personnel, and all emergency personnel shall have access to the Preserved Areas. In the event that disturbance of a Preserved Area is necessary to protect life or to prevent the catastrophic loss of property, emergency personnel shall, where time permits, attempt to contact the Service for input on how best to respond to the emergency to maximize preservation of plant, fish, and wildlife values while preserving life and preventing the catastrophic loss of property. If time does not permit such consultation, Stanford

is authorized to permit emergency personnel to disturb the Preserved Areas as necessary to preserve life and prevent the catastrophic loss of property.

After the emergency relief process begins, Stanford will meet and consult with the Service in accordance with Sections 6.6.1 and 6.6.2 below to determine the need for and schedule for rehabilitating the Preserved Area(s).

Unforeseen circumstances, on the other hand, are events that could not be reasonably anticipated during the development of the HCP and response measures are therefore not included in the HCP. Unforeseen circumstances are addressed under the "No Surprises" rule, which is described in Section 6.6.1, below.

The difference between an unforeseen and a changed circumstance may depend upon the severity of the event. For example, a flooding event up to a 100-year event may qualify as changed circumstances whereas an even larger storm would be an unforeseen circumstance. Likewise, a small fire that affects only a few or tens of acres could be a changed circumstance, but a large fire that destroys hundreds or thousands of acres, would be considered unforeseen. To the extent practicable, the difference between a changed and unforeseen circumstance is identified.

6.6.1 <u>Unforeseen Circumstances</u>

Unforeseen circumstances are events affecting a species or geographic area covered by the HCP that could not reasonably have been anticipated by the participants during the development of the HCP, and that result in a substantial and adverse change in the status of a Covered Species.

If additional conservation and mitigation measures are deemed necessary to respond to unforeseen circumstances, the Service may require additional measures where the HCP is being properly implemented; but, such additional measures are limited to modifications within the Easement Areas or to the Conservation Program for the affected species. The original terms of the HCP will be maintained to the maximum extent possible.

Additional conservation and mitigation measures will not involve the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources otherwise available for development or use under the original terms of the HCP without Stanford's consent. 50 CFR 17.22(b)(5)(iii)(B)(C), and 50 CFR 222.308(g)(3).

The Service will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. A finding of unforeseen circumstances must be clearly documented considering certain specific factors.⁶ If such a finding is made and

⁶ These factors include the following: size of the current range of the affected species; percentage of the range adversely affected; percentage of the range conserved by the HCP; ecological significance of that portion of the range; level of knowledge about the affected species and the degree of specificity of the species' conservation program under the HCP; whether the HCP was originally designed to provide an overall net benefit; and whether the failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

additional measures are required, Stanford will work with the Service to appropriately redirect resources to address the unforeseen circumstances.

No Surprises Rule. The No Surprises rule (50 CFR Part 17, 1998) provides that once an incidental take permit has been issued pursuant to an HCP, and its terms and conditions are being fully implemented, the federal government will not require additional conservation or mitigation measures, including land, water, money, or restrictions on land. If the status of a species addressed under an HCP unexpectedly declines, the primary obligation for undertaking additional conservation measures rests with the federal government, other government agencies, or other non-federal landowners who have not yet developed an HCP.

6.6.2 Changed Circumstances

The term "changed circumstances" is defined by the regulations as "changes in circumstances affecting a species or geographic area covered by a conservation plan that can reasonably be anticipated by plan developers and the Service and that can be planned for (e.g., the listing of a new species, or a fire or other natural catastrophic event in areas prone to such events)." Natural phenomena such as wildfires, floods, and prolonged drought, which depend to a large extent on Stanford's location and the history of such events in the region, and the listing of new species, were identified by Stanford and the Service as the most relevant changed circumstances. In addition, the HCP identifies other, less likely occurrences such as invasive pests and toxic contamination.

Fire. Certain areas of Stanford contain highly flammable vegetation, and although fire management will reduce the risk of catastrophic fires, there is still a possibility that a major fire could occur. A fire that consumes less than half of any Preserved Area or if more than one Preserved Area is affected, less than 30 percent of the total amount of the Preserved Areas identified in the last Annual Report, would be considered changed circumstances. In the event of a major fire, Stanford will notify the Service by telephone and email within 48 hours. Stanford will prepare a damage assessment report that assesses the extent of the damage to the Covered Species and the Preserved Area(s) and any known or suspected effects on the Covered Species occupying such lands, and identifies appropriate remedial measures, which would include active or passive habitat restoration measures for the affected Preserved Area(s) to facilitate native revegetation. This report will be submitted to the Service for review within 60 days after the fire. The Service will then have 45 days to comment on the report, and if Stanford does not concur with the Service's recommendations, Stanford and the Service will confer to develop a mutually agreeable solution. Stanford may begin implementing remedial measures before submitting a report to the Service or receiving comments on the report to prevent further loss of habitat. Stanford will be responsible for funding and implementing any remedial measures.

If 50 percent or more of a Preserved Area, or 30 percent or more of the Preserved Areas cumulatively, are consumed by a fire, it will be treated as an unforeseen circumstance and addressed in accordance with Section 6.6.1, above.

<u>Floods</u>. The effect of a flood or prolonged periods of heavy rainfall on the Covered Species and on the Preserved Areas depends on several factors, including the severity of the flood event, its duration, and the type of habitat affected. Overall, the adverse effects of flood events on the

Covered Species could be substantial. For example, floods in Matadero or Deer creeks could adversely affect California red-legged frog reproduction by destroying larvae. Thus, flooding in successive years could have a long-term effect on California red-legged frog populations. Moreover, in some cases flood damage could be significant, and could include pond damage, sedimentation, downed trees and shrubs, deposits of debris into creeks, bank de-stabilization, etc. Alternatively, because much of the Preserved Areas are riparian corridors, wetlands, and some grasslands and woodlands that naturally experience periodic flooding, these areas may be capable of absorbing the effects of flooding with minimal or transient damage.

If flooding adversely affects the Covered Species, Preserved Areas, or any facilities in a Preserved Area in a manner that requires an expenditure of funds in excess of those required for normal maintenance and management activities, or a 100-year flood event occurs, Stanford will notify the Service by telephone and email within 48 hours. Stanford will prepare a damage assessment report that assesses the extent of the damage to the Covered Species and the Preserved Area(s) and any known or suspected effects on the Covered Species occupying such lands, and identifies appropriate remedial measures. Appropriate remedial measures would include active or passive habitat restoration measures for the affected Preserved Area(s) to facilitate native revegetation, repair or replacement of no less than 50 percent of any damaged or destroyed California tiger salamander ponds, and creek bank stabilization measures. This report will be submitted to the Service for review within 60 days of the cessation of the flooding. The Service will then have 30 days to comment on the report, and if Stanford does not concur with the Service's recommendations, Stanford and the Service will confer to develop a mutually agreeable solution. Stanford may begin implementing remedial measures before submitting a report to the Service or receiving comments on the report to prevent further loss of habitat or other adverse effects to the Covered Species. Stanford will be responsible for funding and implementing any remedial measures.

The potential damage from a storm event larger than a 100-year event is not foreseeable or predictable. Therefore, a flood and the damage resulting from an event greater than a 100-year event is considered an unforeseen circumstance and would be addressed in accordance with Section 6.6.1.

Drought. Defining when a drought occurs is difficult because there is no universal definition of the conditions that constitute a drought. A generic definition might be a "persistent and abnormal moisture deficiency having adverse impacts on vegetation, animals, or people." A drought is generally perceived as a serious departure from normal water conditions. The California Department of Water Resources (DWR) has used two primary criteria to evaluate the occurrence of a drought: runoff and reservoir storage. A drought threshold is considered to be runoff for a single year or multiple years in the lowest 10 percent of the historical range and reservoir storage for the same time period at less than 70 percent of average. However, even with these criteria, conditions often vary from region to region, or within a region, and potential changes in rainfall conditions due to climate change are still unknown. For purposes of this HCP, a drought of less than 6 years is a changed circumstance, and a drought of 6 years or longer is an unforeseen circumstance and would be addressed in accordance with Section 6.6.1.

Stanford will prepare a damage assessment report that assesses the effects on the Covered Species and the Preserved Area(s) (including the California tiger salamander ponds) and any

known or suspected effects on the Covered Species occupying such lands, and identifies appropriate remedial measures. Remedial measures for the effects of drought are difficult to identify. Remedial measures may include temporary artificial water sources to sustain the California tiger salamander ponds.⁷ Adaptive management would be employed after drought conditions subside to facilitate breeding in ponds or creeks that were adversely affected by a drought.

If DWR declares 5 consecutive drought years, Stanford will prepare a damage assessment report. The damage assessment report will be submitted to the Service within 90 days of the declaration of 5 years of consecutive drought. The Service will then have 30 days to comment on the report, and if Stanford does not concur with the Service's recommendations, Stanford and the Service will confer to develop a mutually agreeable solution. Stanford may begin implementing remedial measures before submitting a report to the Service or receiving comments on the report to prevent further loss of habitat or other adverse effects to the Covered Species. Stanford will be responsible for funding and implementing any remedial measures.

Droughts are not uncommon and historically have occurred about once every 30 years. Drought conditions may become more frequent due to changes in climate, although some predictions expect increased rainfall as a result of global climate change. As such, an increase or decrease in future drought conditions cannot be predicted at this time, and the potential damage from a prolonged drought is not foreseeable or predictable. Therefore, a drought and the damage resulting from a drought lasting 6 years or longer is considered an unforeseen circumstance and would be addressed in accordance with Section 6.6.1.

Non-Native Invasive Species. The Monitoring and Management Plans for the Preserved Areas are designed to control non-native plant and animal species that could harm the Covered Species or their habitat within the Preserved Areas, and Stanford will regularly monitor for any changes in invasive plant or animal species. The Preserved Areas could become infested with non-native plant or animal species that adversely affect the Covered Species or the quality of their habitat. For example, an uncontrollable infestation of fast-growing weed species could severely restrict water movement in the California tiger salamander ponds and reduce habitat quality. Large infestations of weedy species can become extremely expensive to control and could impose a financial burden on Stanford beyond that contemplated for the HCP. Similarly, there may be an invasion of non-native animal species that either prey on the Covered Species or degrade their habitat. A control program to eliminate the problem species also can be expensive.

If a non-native plant or animal infestation that adversely affects the Covered Species, Preserved Areas, or facilities within a Preserved Area requires an expenditure of funds in excess of those required for normal maintenance and management activities, or an infestation by any plant that is listed in the federal noxious weed list or California Department of Food and Agricultural noxious weed list occurs in the Preserved Areas, Stanford will prepare a damage assessment report that assesses the extent of the damage to the Covered Species and the Preserved Area(s) and any

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⁷ In the event of a drought, Stanford would assess which of the California tiger salamander ponds would benefit most from temporary artificial sources of water. In the case of a drought, where water resources may be limited, Stanford would not artificially sustain all of the ponds, but would choose at least one pond in consultation with the Service to artificially sustain, provided a water source is available.

known or suspected effects on the Covered Species occupying such lands, and identifies appropriate remedial measures, which would include control/removal of the invasive species and active or passive habitat restoration measures for the affected Preserved Area(s) to facilitate native revegetation. This report will be submitted to the Service for review within 60 days of discovering the infestation. The Service will then have 45 days to comment on the report, and if Stanford does not concur with the Service's recommendations, Stanford and the Service will confer to develop a mutually agreeable solution. Stanford may begin implementing remedial measures before submitting a report to the Service or receiving comments on the report to prevent further loss of habitat or other adverse effects to the Covered Species. In the event Stanford finds a previously undocumented invasive species, such as fire ants, quagga mussels, or snapping turtles, that is having or could have an immediate significant adverse impact on the Covered Species, Stanford will notify the Service by telephone and email within 48 hours.

If the cost of controlling invasive species exceeds 10 percent of the average annual conservation budget for 3 consecutive years, it will be treated as an unforeseen circumstance and addressed in accordance with Section 6.6.1, above.

<u>Disease</u>. The Monitoring and Management Plans for the Preserved Areas are designed to control and identify plant and wildlife diseases that could harm the Covered Species or their habitat within the Preserved Areas. Sudden oak death has been found at Stanford and has contributed to the death of several oak trees. Sudden oak death is also located on properties adjacent to Stanford lands. At this time, sudden oak death is not adversely affecting the Covered Species or their habitat, and the presence of sudden oak death on Stanford lands is considered minimal. However, many more oak and other trees may become infected with sudden oak death. There also may be an infestation of other pathogens, such as chytrid fungus, which could affect both California red-legged frogs and California tiger salamanders.

If Stanford finds that the spread of sudden oak death or a new disease in the Preserved Areas is adversely affecting the Covered Species or their habitat, or could adversely affect the Covered Species in the immediate future, Stanford will prepare a damage assessment report that assesses the extent of the damage to the Covered Species and the Preserved Area(s) and any known or suspected effects on the Covered Species occupying such lands, and identifies appropriate remedial measures, which would include control of the disease or removal of diseased species or plants, and active or passive habitat restoration measures for the affected Preserved Area(s). This report will be submitted to the Service for review within 60 days of discovering the infestation or spread of sudden oak death or new disease. The Service will then have 45 days to comment on the report, and if Stanford does not concur with the Service's recommendations, Stanford and the Service will confer to develop a mutually agreeable solution. Stanford may begin implementing remedial measures before submitting a report to the Service or receiving comments on the report to prevent further loss of habitat or other adverse effects to the Covered Species. If Stanford finds a previously undocumented disease that is having or could have immediate significant adverse impacts on the Covered Species, Stanford will notify the Service by telephone and email within 48 hours.

If an infestation by a new disease affects more than 25 percent of the Covered Species or their habitat within a Preserved Area, or more than 15 percent of the Covered Species or their habitat within the Preserved Areas cumulatively, it will be treated as an unforeseen circumstance and

addressed in accordance with Section 6.6.1. Likewise, if the spread of sudden oak death affects more than 25 percent of the trees in a Preserved Area (not including trees that are already affected by sudden oak death) or more than 15 percent of the trees in the Preserved Areas cumulatively, it will be treated as an unforeseen circumstance and addressed in accordance with Section 6.6.1.

<u>Toxic Substance Release and Illegal Dumping</u>. Stanford employs best management practices that substantially reduce the chance of a toxic substance release and security precautions in the main campus to prevent trespassing. However, toxic substance releases and illegal dumping may occur on Stanford lands. Undeveloped open space areas that are not fenced and are not regularly patrolled by the University are particularly vulnerable to illegal dumping. The release or dumping may directly or indirectly affect the Covered Species and their habitat.

Household garbage, construction materials from residential remodeling, and personal electronic equipment such as computers and printers are sometimes illegally dumped on Stanford lands. The dumping of these kinds of items in the Preserved Areas is therefore considered reasonably likely to occur during the permit term and is considered a changed circumstance.

Toxic substances, even in very small quantities, can be extremely expensive to remediate and responsible parties are often difficult to identify. If a toxic substance is found in a Preserved Area, or the Conservation Program Manager determines that a toxic substance located elsewhere is adversely affecting the Covered Species within a Preserved Area, Stanford will notify the Service by telephone and email within 24 hours and prepare and submit to the Service a damage assessment report within 45 days. The damage assessment report will identify the party responsible for releasing the toxic substance, if known; appropriate remedial measures, including ways in which future toxic releases can be prevented; the extent of the damage to the Covered Species and the Preserved Area(s); and any known or suspected effects on the Covered Species occupying such lands. The Service will have 30 days to comment on the report, and if Stanford does not concur with the Service's recommendations, Stanford and the Service will confer to develop a mutually agreeable solution. Stanford may begin implementing remedial measures before submitting a report to the Service or receiving comments on the report to control the toxic substance or prevent further damage.

If the toxic substance was released by any person or entity other than Stanford, and it costs no more than \$200,000 to remediate (in 2009 dollars, adjusted for inflation), it will be treated as a changed circumstance that Stanford is responsible for remediating. If the toxic substance release costs in excess of \$200,000 to remediate, it will be treated as an unforeseen circumstance and addressed in accordance with Section 6.6.1.

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⁸ "Toxic" substances or materials include all "hazardous materials" defined by 42 U.S.C. §9601(14) and the regulations promulgated pursuant to 42 U.S.C. §9601 *et seq*.

If Stanford released the toxic substance that adversely affects the Covered Species, then Stanford is responsible for remediating all of the damage to the affected Preserved Area(s). As such, any release of a toxic substance by Stanford is considered a changed circumstance.

<u>Listing of New Species</u>. Currently unlisted species that are not Covered Species in the HCP will not be included in the incidental take permit and therefore will not automatically be covered if listed. The HCP, IA, and incidental take permit may be amended, in accordance with Section 6.7.1 below to include any unlisted species that is not a Covered Species under the HCP.

Take Authorization for Additional Species. If a currently listed species, such as the Bay checkerspot butterfly, or newly listed species that is not addressed in the HCP is found at Stanford, and Stanford or the Service determines that Stanford is engaging in activities that will result in the take of the listed species (that has not otherwise been permitted), the HCP, IA and incidental take permit may be amended in accordance with Section 6.7.1. Although portions of the Jasper Ridge Biological Preserve at Stanford provide Critical Habitat for the Bay checkerspot butterfly, the species has not been documented at Stanford for more than a decade, and is therefore not included as a Covered Species. If the Bay checkerspot butterfly or other listed species is found at Stanford, the occurrence will be reported in the Annual Report, and if take of the species has not already been permitted by the Service, the Conservation Program Manager will assess whether Stanford's activities are likely to affect the species. The Service will have 30 days following receipt of the Annual Report to comment on the documented occurrence and on whether an amendment to the HCP, IA and incidental take permit is warranted. If Stanford concludes that its activities may affect the listed species, Stanford may initiate an amendment in accordance with Section 6.7.1 at any time.

6.7 AMENDMENTS AND MINOR MODIFICATIONS

Amendment of a Section 10(a)(1)(B) permit is required when the permittee wishes to significantly modify an activity or a conservation program described in the original HCP. Such modifications may include the addition of a species to the permit that was not addressed in the original HCP, significant adjustments to the HCP necessitated by unforeseen circumstances, or alterations in funding. A permit amendment generally requires the permittee to follow the same process as the original permit application, and requires an amendment to the HCP addressing the new circumstances. However, the documentation required, especially for compliance with the National Environmental Policy Act (NEPA), is generally much less for a permit amendment than for the original application. (See 40 C.F.R. 1502.20.)

Alternatively, some amendments commonly needed over the life of an HCP are minor and can be done in an expedited fashion, without public notice and review. This includes certain modifications to the HCP, such as adaptive management changes discussed above. The process for both formal amendments and minor modifications are addressed below.

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⁹ Stanford's responsibility for the release of a toxic substance extends to any Stanford employee that releases a toxic substance during the course of performing his or her job, but does not include contractors, subcontractors, lessees, or others who are not employees of Stanford University.

6.7.1 Amendments

Amendments to Stanford's incidental take permit, HCP, or the IA may be proposed by Stanford or the Service. The party proposing the amendment shall provide the other party with a written statement of the reasons for the amendment and an analysis of the effect of the amendment on the environment, Covered Species, and the implementation of the HCP. The permit may be amended in accordance with all applicable legal requirements, including, but not limited to, the ESA, NEPA, and regulations issued by the Service in effect at the time of the proposed amendment.

6.7.2 Minor Modifications

Minor modifications may be made to the incidental take permit, HCP, or IA by Stanford or the Service. Minor modifications may include, but are not limited to, the following: 1) correction of typographic, grammatical, and similar editing errors that do not change the intended meaning, 2) correction of any maps or exhibits to correct errors in mapping or to reflect previously approved changes, 3) minor changes to survey, monitoring, or reporting protocols and similar revisions, 4) the addition of new Covered Activities provided the activity will not result in an adverse effect on the environment that is new or significantly different from those analyzed in connection with the original HCP, or result in the additional take of a Covered Species, and (5) the addition of CDFW as a reviewing, consulting, participating, or approving party for any action that could result in take of a Covered Species, or benefit a Covered Species, listed as threatened or endangered under CESA. All minor modifications must be approved by Stanford and the Service

The Service will not approve a minor modification if it determines that such modification would: 1) result in operations under the HCP that are significantly different from those analyzed in connection with the original HCP, 2) result in adverse effects on the environment that are new or significantly different from those analyzed in connection with the original HCP, or 3) allow significant additional take not analyzed in connection with the original HCP. Stanford will not approve a minor modification if it determines the modification would: 1) affect the cost of implementing the HCP, incidental take permit, or IA, 2) restrict development of Stanford lands beyond the restrictions imposed by the original HCP, incidental take permit, or IA, or 3) result in operations under the HCP that are significantly different from those permitted by the original HCP.

The party proposing a minor modification shall provide the other party with a statement of the reasons for the proposed modification and an analysis of its environmental effects, its effects on the implementation of the HCP and on the Covered Species. The party must respond to proposed modifications within 45 days of receipt of such notice. Proposed minor modifications will become effective upon the written approval of the other party, or upon expiration of the 45-day time period if no written objection is made by the other party. If a receiving party objects to a proposed minor modification within the 45-day time period, the proposed modification must be processed as an amendment pursuant to Section 6.7.1.

6.7.3 Land Use Changes

During the life of the HCP, the County of Santa Clara and the City of Palo Alto may adopt or amend their general plans, specific plans, community plans, zoning ordinances, and similar land use regulations, and may grant Stanford land use entitlements pursuant to these land use regulations. Such land use matters are within the sole discretion of these counties and cities, and shall not require amendments to the HCP or IA or require the approval of the Service. However, any land use entitlement granted to Stanford must be implemented in a manner that is consistent with the HCP, IA, and incidental take permit, or they must be modified to be consistent.

6.8 ENFORCEMENT OF SECTION 10(a)(1)(B) PERMITS

The provisions of the HCP are enforceable through the terms and conditions of the Section 10(a)(1)(B) permit issued by the Service and the IA.

6.8.1 Suspension/Revocation

The Service may suspend or revoke the permit if Stanford fails to implement the HCP in accordance with the terms and conditions of the permit or if suspension or revocation is otherwise required by federal law. Suspension or revocation of a Section 10(a)(1)(B) permit, in whole or in part, must be in accordance with 50 CFR 13.27-29, 17.22 (b)(8), and 17.32 (b)(8) and the IA.

6.8.2 Certificates of Inclusion

Take authorization may be provided to Stanford's subpermittees by the issuance of Certificates of Inclusion. Stanford may issue Certificates of Inclusion to each subpermittee only after:

- Stanford enters into a contract with the subpermittee binding the subpermittee to the relevant terms of the HCP;
- Stanford finds that the subpermittee's proposed activity complies with all terms and requirements of the HCP, permit, and the IA;
- The impacts of the proposed activity fall within those analyzed in the HCP in general type, magnitude, and effects; and
- The subpermittee has implemented all of the relevant Minimization Measures, and any additional Best Management Practices the Conservation Program Manager deems necessary.

Take authorization also may be provided to entities such as PG&E, SFPUC, and the Santa Clara Valley Water Department that own facilities on Stanford's lands. Certificates of Inclusion will be issued only to those entities that agree to abide by the provisions of the HCP, IA, and incidental take permit. In the event that the Service suspends or revokes a permit issued to Stanford, the take authorizations afforded subpermittees holding Certificates of Inclusion will remain in effect provided the subpermittee(s) continues to comply with the terms and conditions of the permit. If the Conservation Program Manager determines a subpermittee is not in

compliance with the HCP, IA, or incidental take permit, the Conservation Program Manager or the Service may revoke the Certificate of Inclusion. The revocation of such Certificate of Inclusion shall not affect Stanford's take authorization provided Stanford continues to comply with the terms and conditions of the permit and undertakes any remedial actions necessary to remediate any violation by the holder of the Certificate of Inclusion.

6.8.3 Notice

Any notice required under the HCP or IA must be given in writing and delivered by personal delivery or certified mail/return receipt requested, unless the HCP specifically authorizes an alternative form of delivery (such as electronic mail delivery).

6.9 RELATIONSHIP OF THE HCP TO OTHER ESA POLICIES AND REQUIREMENTS

6.9.1 Relationship of HCP to Future Section 7 Consultations

The Service will evaluate the direct, indirect, and cumulative effects of the activities covered by the HCP in its internal Biological Opinion issued in connection with the HCP and the issuance of Section 10(a)(1)(B) permit. The HCP is not intended to alter the obligation of a federal agency to consult the Service pursuant to Section 7 of the ESA. However, if Stanford undertakes a project after issuance of the Section 10(a) permit under the HCP, such as an enhancement measure, that involves a federal action subject to Section 7 of the ESA concerning a Covered Species, the Service shall ensure to the extent permitted by law that the Biological Opinion issued in connection with the proposed project is consistent with the Biological Opinion for the HCP. The proposed project must be consistent with the terms and conditions of the HCP, IA and permit. Any reasonable and prudent measures included under the terms and conditions of a Biological Opinion issued subsequent of the effective date of the HCP shall be consistent with the implementation of the HCP, IA, and permit unless otherwise required by law or regulation. Subject to the laws and regulations then in effect, if the measures required under the HCP, IA, and permit will adequately ensure the proposed project will not jeopardize the continued existence of the Covered Species affected by the project, only those measures will be imposed as reasonable and prudent measures under the Biological Opinion, and unless otherwise required by law or regulation, the Service will not impose measures beyond those required under the HCP, IA, or permit. Before completing a Section 7 consultation for a Covered Activity in which the Service proposes to require a measure in excess of the requirements of the IA, HCP, or permit, the Service will meet and confer with Stanford to discuss alternatives to the imposition of the measures that would meet the applicable legal or regulatory requirements.

Based on the information processed during the preparation of this HCP, the Service has concluded that the approval of the HCP and IA and issuance of incidental take permit are not likely to jeopardize the continued existence of the Covered Species or result in adverse modification of any Critical Habitat. Moreover, these approvals would not jeopardize the continued existence of any other species or plants listed as threatened or endangered under the ESA.

6.9.2 Relationship to Other HCPs and Non-Stanford Related Activities

Several public agencies, including the City of Palo Alto, County of Santa Clara, and the Santa Clara Valley Water District, have facilities and easements on Stanford lands. For example, the City of Palo Alto maintains utilities that are located in Matadero Creek. As discussed in other portions of the HCP, Stanford has no control over the activities of these public agencies, and their activities are not covered under the HCP. Some of the facilities owned by these agencies are located on Stanford's lands and have been identified under the Covered Activities section of the HCP. The presence of the facilities is covered under the HCP. One or more of these public agencies may seek permits from the Service and to include facilities or activities located on Stanford's lands in such permit or HCP. Any measures included under the terms and conditions of any subsequent permit or HCP developed pursuant to such permit that affects Stanford's lands shall be consistent with the implementation of this HCP and IA. The Service will not impose measures on Stanford beyond those required under this HCP.

6.9.3 Critical Habitat

Critical Habitat identifies specific areas, both occupied and unoccupied, that are essential to the conservation of a listed species and that may require special management considerations or protection. Pursuant to federal regulations, the Service issued final rules designating Critical Habitat for the California tiger salamanderand California red-legged frog. None of Stanford's lands were designated as Critical Habitat for the California tiger salamander (70 Fed. Reg. 41183-41186 (August 23, 2005)), or California red-legged frog (71 Fed. Reg. 19244-19346 (April 13, 2006)) and the Covered Activities will therefore not result in the destruction or adverse modification of Critical Habitat for these species. The Service has not designated Critical Habitat for the San Francisco garter snake, and the HCP will therefore not affect any San Francisco garter snake Critical Habitat. Part of the Jasper Ridge Biological Preserve is Critical Habitat for the Bay checkerspot butterfly. 73 Fed. Reg. 50405-50452 (August 26, 2008). Implementation of the HCP will not adversely affect Critical Habitat within the Preserve. The National Oceanic and Atmospheric Administration, National Marine Fisheries Service has designated Critical Habitat for the Central California Coast steelhead. San Francisquito Creek, Bear Creek and Los Trancos Creek, including the portions of the creeks that flow through Stanford's lands were designated as Critical Habitat for steelhead. 70 Fed. Reg. 52488, 52563 (September 2, 2005). Implementation of the HCP will not adversely affect Critical Habitat in the creeks.

6.9.4 Recovery Plans

Recovery plans under the ESA identify actions deemed necessary to recover a federally listed species. The HCP is consistent with the provisions of the California Red-Legged Frog Recovery Plan, and the Recovery Plan for Serpentine Grassland Species in the Bay Area. However, recovery plans do not obligate permittees to undertake specific tasks.

At the time of approval of the HCP, a recovery plan had not been adopted by the Service for the California tiger salamander. However, during the life of the HCP, recovery plans may be adopted for these Covered Species. The Adaptive Management Provision allows for revisions to management strategies to incorporate new management strategies, such as those included in

recovery plans. However, it is necessary to define the scope of such revisions with respect to the HCP's purpose and goals. A specific purpose of the HCP is to establish a conservation program that minimizes and mitigates the effects of projected urban and other development on the Covered Species, and provides the Covered Species with a net benefit. With respect to the recovery of the Covered Species, it is the intent of the HCP to contribute to such recovery to the maximum extent feasible consistent with the HCP's other goals and purposes. It is the intent of the HCP not to preclude or undermine recovery efforts for any of the Covered Species.

Therefore, the HCP will incorporate recommendations contained in future recovery plans when such recommendations:

- Are expected to increase the effectiveness of the HCP's conservation and mitigation programs by identifying relevant new information, approaches, techniques, or species protection needs,
- Can be achieved without any greater cost to Stanford, and
- Fit within the overall intent, framework, and funding levels of the HCP.

All such recovery plan revisions will be subject to the Adaptive Management Provision described in Section 4.5, and Minor Modifications process described in Section 6.7.2.