

**COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND:
HABITAT CONSERVATION PLAN (HCP) PLANNING ASSISTANCE
Fiscal Year: 2021
F21AS00171**

*Amending Williamson County Regional Habitat Conservation Plan
to Cover Six Additional Species*

Benefitting:

*Georgetown Salamander (Eurycea naufragia)
Salado Salamander (Eurycea chisholmensis)
Jollyville Plateau Salamander (Eurycea tonkawae)
Tooth Cave Spider (Tayshaneta myopica)
Dragonfly Cave Mold Beetle (Batrisodes cryptotexanus)
Monarch Butterfly (Danaus plexippus plexippus)*

Submitted by:

*Williamson County, Texas and
Williamson County Conservation Foundation*

To Revise:

HCP permit # TE-181840-1

PROJECT CONTACTS

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PROJECT NARRATIVE

This Project Narrative includes the information necessary to address the grant eligibility and evaluation, consistent with the requirements provided in the Notice of Funding Opportunity specific to the Cooperative Endangered Species Conservation Fund: HCP Planning Assistance, Fiscal Year 2021, Funding Opportunity Number F21AS00171 (Notice).

Attachments

The following attachments are included in support of this Proposal:

- Budget Detail Narrative spreadsheet, signed and dated February 26, 2021.
- Complete Standard Form (SF)-424 provided on Grants.Gov, signed and dated.
- Completed SF-424B, Assurances, signed and dated.
- Completed SF-424A, Budget Information, signed and dated.
- Eligibility information provided by Texas Parks and Wildlife Department: (1) evidence of TX Cooperative Agreement, and (2) the information necessary for the annual renewal (reconfirmation) of the Cooperative Agreement.
- Letter from Williamson County Conservation Foundation, dated February 22, 2021, regarding non-federal cost-share commitment.

A. Project Title

Amending Williamson County Regional Habitat Conservation Plan to Cover Six Additional Species.

B. Statement of Need

1. *Need for the proposed project relates to the purposes of the HCP Program*

Williamson County, Texas (County) and the Williamson County Conservation Foundation (Foundation) (collectively, Permittees) seek \$750,000 in federal grant funds from the Fiscal Year 2021 Cooperative Endangered Species Conservation Fund Nontraditional HCP Assistance to fund scientific research, administrative, and public outreach efforts to add five listed species—the Georgetown salamander (*Eurycea naufragia*), Salado salamander (*Eurycea chisholmensis*), Jollyville Plateau salamander (*Eurycea tonkawae*), Tooth Cave spider (*Tayshaneta myopica*), and Dragonfly Cave mold beetle (*Batrisesodes cryptotexanus*); and one candidate species, the Monarch butterfly (*Danaus plexippus plexippus*) (collectively, Proposed Species)—as covered species under the existing Williamson County Regional Habitat Conservation Plan (RHCP) (the Amendment).¹ Consistent with the purposes of the HCP Program, the Permittees are in need of federal grant funding to support efforts to amend to their existing RHCP and incidental take permit to provide for the conservation of additional federally listed and candidate species and regulatory certainty for land use activities. Amending the RHCP to include six additional species would provide for coordinated, regional conservation planning for the species, and would reduce the workload of the U.S. Fish and Wildlife Service (USFWS) by reducing the volume of Endangered Species Act (ESA) permitting and coordination required in Williamson County.

In May 2008, the Permittees submitted the RHCP in support of an incidental take permit application.² In October 2008, the USFWS issued Permit No. TE-181840-0 (Permit) to the Permittees,³ and subsequently authorized an amendment to the Permit in 2013,⁴ pursuant to section 10(a)(1)(B) of the ESA.⁵ The Permit authorizes take of four listed species: the golden-cheeked warbler (*Setophaga chrysoparia*); black-capped vireo (*Vireo atricapilla*);⁶ Bone Cave harvestman (*Texella reyesi*); and Coffin Cave mold beetle⁷ (*Batrisesodes texanus*) (collectively, Covered

¹ The Williamson County RHCP, dated August 15, 2008, is publically available at: https://www.wilco.org/Portals/0/Departments/ConservationFoundation/WilCo_RHCP_08-08-08_Opt.pdf.

² Notice of Availability: Final Environmental Impact Statement and Final Regional Habitat Conservation Plan, 73 Fed. Reg. 53,440 (Sept. 16, 2008).

³ Incidental Take Permit No. TE-181840-0, issued Oct. 2008, is publically available at: https://ecos.fws.gov/docs/plan_documents/fdoc/fdoc_2420.pdf.

⁴ Incidental Take Permit No. TE-181840-1, issued Oct. 2013 is publically available at: https://ecos.fws.gov/docs/plan_documents/fdoc/fdoc_2421.pdf.

⁵ RHCP at 1-2.

⁶ The black-capped vireo was de-listed on May 16, 2018. 83 Fed. Reg. 16228 (Apr. 16, 2018).

⁷ The Inner Space Caverns mold beetle (*Batrisesodes texanus*) was known as the Coffin Cave mold beetle at the time of listing (58 Fed. Reg. 43818-43820 [August 18, 1993]). Since that time, the species found in Coffin Cave has been identified as *Batrisesodes cryptotexanus*, which is known as the Dragonfly Cave mold beetle (Chandler and Reddell 2001, Chandler et al. 2009). It is *Batrisesodes texanus* which is authorized for take by the Permit.

Species). The RHCP already provides some degree of conservation benefits to the Proposed Species but does not provide incidental take coverage. Adding the Proposed Species to the RHCP and amending the associated Permit would ensure coordinated conservation of the Proposed Species and provide incidental take coverage for public and private activities throughout the County for the duration of the Permit. This Proposal meets the highest general program funding priorities because it will have a direct effect on the recovery of the Proposed Species and their habitats; the County and the Foundation are ready to implement the Proposal; and the funding would not only be used for scientific research and community education and outreach concerning the Amendment, but also for the development of specific conservation actions in the RHCP to be implemented by the Permittees, including measures furthering the potential for recovery of listed karst invertebrates, as outlined in the Recovery Plan for Endangered Karst Invertebrates in Travis and Williamson Counties, Texas (USFWS 1994).⁸

2. Conservation issue, problem, or opportunity to be addressed by the planning effort as well as the species to benefit

Situated on the Edwards Plateau west of the Balcones Escarpment, the County ranks among the fastest-growing counties in the United States, with population estimates indicating that 120 people move to the County each day (Torre 2019). To accommodate this increase in growth, the County regularly undertakes needed transportation infrastructure improvements, such as road building, that may affect federally listed species and their habitats. Additionally, the County must serve the needs of its ever-growing constituency for responsible economic development, sufficient public infrastructure, and open space recreational and educational opportunities. Devitt et al. (2019) indicate the County currently is home to three recognized salamander species listed as threatened (*Eurycea naufragia*, *Eurycea chisholmensis*, and *Eurycea tonkawae*) (collectively, Salamander Species). SWCA et al. (2008) indicate at least three endangered karst invertebrates (*Texella reyesi*, *Batrissodes texanus*, and Tooth Cave ground beetle [*Rhadine persephone*]); one bird species listed as endangered (*Setophaga chrysoparia*); other rare animal and plant species, including the Dragonfly Cave mold beetle (*Batrissodes cryptotexanus*); and a wide diversity of common species. USFWS (2018) indicates that *Tayshaneta myopica* is documented to inhabit the County as well. Monarch butterfly (*Danaus plexippus plexippus*) populations east of the Rocky Mountains use several migratory pathways through Canada and the United States that all merge in central Texas, including the County, before the populations continue to their overwintering grounds in Mexico (U.S. Forest Service [USFS]). Recognizing the need to sustainably accommodate its growing population while ensuring efficient and effective compliance with the ESA, the Permittees developed the RHCP and obtained the Permit in 2008, which authorizes take of the Covered Species through the associated Permit.

At the time the RHCP was approved in 2008, no salamanders occurring in the County were listed under the ESA (SWCA et al. 2008), *Tayshaneta myopica* was not thought to occur within the County (SWCA et al. 2008), and the Monarch butterfly (Monarch) had not been petitioned for

⁸ USFWS published a notice of availability of a draft recovery plan amendment which would amend the recovery criteria in the the 1994 Recovery Plan for Endangered Karst Invertebrates in Travis and Williamson Counties, Texas on January 31, 2019. 84 Fed. Reg. 790. (Jan. 31, 2019).

listing. Nevertheless, *Eurycea naufragia* received special treatment under the RHCP as an “additional species.” Pursuant to the RHCP, the Permittees have funded significant conservation, research, and educational measures benefitting *Eurycea naufragia*, with additional benefits provided to *Eurycea chisholmensis* and *Eurycea tonkawae* (collectively, the Salamander Species). Almost all of the peer-reviewed and published natural history literature for *Eurycea naufragia* and *Eurycea chisholmensis* has been funded by the Foundation (see Pierce et al. 2010, 2014; Biagas et al. 2012; McEntire and Pierce 2015; Gutierrez et al. 2018; Pierce and Gonzalez 2019; Wall et al. 2020; Jones et al. *in review*) with additional research funded for *Eurycea tonkawae* (see Adcock et al. 2016; *in review a, b*).

Since USFWS’s issuance of the Permit, the Salamander Species have been listed as threatened species under the ESA. At the time of this Proposal, the Monarch is not listed under the ESA; however, in December 2020, USFWS found that listing the Monarch under the ESA was warranted, but precluded by higher priority actions.⁹ Separately, on April 3, 2020, USFWS approved a candidate conservation agreement with assurances for the Monarch, covering certain activities such as those relating to transportation and energy infrastructure, and setting forth conservation measures providing a net conservation benefit to the species (“Monarch CCAA”) (Cardno. Inc. 2020).

Adding the Proposed Species as Covered Species under the RHCP and to the Permit will assist the Permittees in complying with ESA sections 7 and 9, 16 U.S.C. §§ 1536 and 1538, and support more effective, coordinated conservation of the Proposed Species as tremendous growth in the County continues. Additionally, adding the Proposed Species as Covered Species will conserve USFWS resources and allow the agency to focus on species and activities that have not already been addressed in a comprehensive manner.

Proceeds of the requested HCP Planning Assistance grant would initially be used to evaluate the needs, costs, and benefits of the Amendment and develop a recommendation for a locally appropriate solution for the Proposed Species and, particularly, for the Salamander Species and Monarch. Proceeds would also be used to evaluate whether to add other rare species to the RHCP as species of concern; for vetting the analysis and recommended conservation strategies with stakeholders; seeking additional biological review; developing a complete RHCP; and assisting in the preparation of National Environmental Policy Act (NEPA) documentation, if desired by USFWS. The application package would be submitted with an application for an amendment to the Permit to cover the Proposed Species.¹⁰

The Amendment would provide for the conservation of the Proposed Species in the County. For example, the Amendment would provide an efficient compliance mechanism for landowners and public entities to deal with complex endangered species issues, thereby providing greater options and certainty about future land uses. The existing RHCP has been extraordinarily successful for the currently Covered Species, has resulted in the preservation of over 900 acres of Covered

⁹ Endangered and Threatened Wildlife and Plants; 12-Month Finding for the Monarch Butterfly, 85 Fed. Reg. 81,813 (Dec. 17, 2020). In January 2021, the Center for Biological Diversity and others provided a notice of intent to sue USFWS over the agency’s failure to list the Monarch under the ESA.

¹⁰ Habitat Conservation Plans may cover non-listed species that might become listed during the term of the incidental take permit, such as the Monarch (USFWS and National Marine Fisheries Service [NMFS] 2016).

Species habitat since 2008 (Van Kampen-Lewis and White 2019), and has saved USFWS countless hours of detailed review time, due to the programmatic nature of the Permit.

3. *The negative result of taking no action*

Taking no action to amend the RHCP means that the Permittees would not receive federal grant monies in connection with the Amendment. While Permittees are committed to moving forward with an Amendment irrespective of whether they receive ESA section 6 grant monies, lack of such funds could have the following negative results. First, lack of funding could result in an Amendment that may not cover all six of the Proposed Species due to a lack of Foundation resources available to cover the costs of investigation, study, drafting, and public processes necessary to add all six species. Second, even if the Foundation were still able to cover the costs of adding all six Proposed Species, any such amendment process is likely to be slower – done at the pace at which Foundation resources become available – and could result in both piecemeal compliance with the ESA throughout the County, but also piecemeal conservation for those species until an amendment could be completed by the Permittees and processed by the Service. Piecemeal compliance with the ESA benefits neither the species nor the USFWS, which would be tasked with reviewing and approving more individual section 10(a)(1)(B) permit applications and potentially more consultations under ESA section 7. It is also possible that a slower timeframe for the Amendment would result in the loss of some conservation opportunities as the County continues to experience rapid growth.

C. Purpose

The purpose of this Proposal is to streamline regulatory approvals and provide coordinated conservation actions for the Proposed Species. Specifically, including the Proposed Species as Covered Species under the RHCP will ensure coordinated ESA compliance with respect to activities that may result in take of those species; reduce the administrative burden on the County, USFWS, project proponents, and other federal, state, and local agencies required to ensure against unauthorized take of the Proposed Species and against jeopardizing the continued existence of said species; and reduce the economic burden to individual landowners by allowing them to obtain take coverage under the County and Foundation's Permit through participation in the RHCP. Meanwhile, the RHCP will provide important scientific and conservation benefits to the Proposed Species and their habitats, including providing coordinated conservation and monitoring for the Monarch.

D. Objective

To develop and submit by October 2024 the Amendment and prepare associated NEPA documentation, if such documentation is required, necessary to amend the Permit to cover the Proposed Species. Amending the Permit and RHCP would authorize take of the Proposed Species, while providing conservation benefits to the Proposed Species and potentially others.

The proposed period of performance is January 3, 2022, through December 2024. The specific outcomes to be accomplished during the proposed period of performance are specified under the Timetable section below. *See* Section H of the Project Narrative.

E. Methods/Approach

The funding will be used for coordination among relevant public agencies and stakeholders, baseline data collection (e.g., available habitat and resources), effects analyses, stakeholder outreach, including any required under Chapter 83, preparation of the draft RHCP amendment, and coordination with USFWS to process the RHCP amendment and amendment to the Permit. Relying on the expertise of the County, Foundation, and its RHCP team, the approach to amending the RHCP and applying for a Permit amendment specifically will include at least the following tasks:¹¹

- Working with USFWS and TPWD, develop a specific scope for development of the Amendment and NEPA documentation;
- Identify and review existing scientific information about the Proposed Species' distribution, occurrence, ecology, and ongoing conservation efforts, including the Monarch CCAA, and identify conservation strategies to meet the needs of the Proposed Species and the goals of the Permittees;
- Develop a process for public input and, to the extent required by Chapter 83, establish a Citizens Advisory Committee (CAC) that would include representative interests from the community and other stakeholders, including owners of undeveloped land within the County and representatives from one or more public or private entities, potentially including, but not limited to: TPWD, Texas Department of Transportation, the County, the City of Georgetown, one or more school districts within the County, the City of Round Rock, the Master Naturalist, and others;
- Develop a process for scientific input and, to the extent required under Chapter 83, establish a Biological Advisory Team (BAT) that would include experts on the Proposed Species and conservation biology, including one member appointed by TWPD, one member appointed by landowner members of the CAC, and other local technical experts;
- Review initial results of the Amendment development process (i.e., goals, objectives, opportunities, and recommendations) and solicit comments from the CAC and BAT, if applicable;
- Particularly with respect to the Salamander Species, identify and describe actions within the County a) that are likely to result in incidental take and b) that are reasonably certain to occur

¹¹ The Permittees note that with respect to the karst invertebrates included as Proposed Species, the existing RHCP framework likely will make development of the take estimates and conservation program, including minimization and mitigation measures, significantly more efficient than development of a take and conservation framework for the Salamander Species. Similarly, the framework established under the Monarch CCAA may make development of a conservation program for the Monarch significantly more efficient. While the bulleted tasks set forth in this section do not differentiate between the Salamander Species, Monarch, or karst invertebrate species included as Proposed Species, the Permittees anticipate that some of the tasks may ultimately focus primarily on the Salamander Species and Monarch.

over the life of the Permit, and develop support for a method of assessing take of Proposed Species, including but not limited to developing appropriate surrogates where expressing the number of individual species taken is not practicable;

- With respect to the Monarch, identify and describe existing and potential habitat and consider appropriate minimization and mitigation strategies to benefit the species, including conservation measures potentially similar to those described in the Monarch CCAA, and consider establishing an appropriate surrogate and limit for take of individual Monarchs;
- With assistance from USFWS, the BAT, and CAC, as applicable, develop a mitigation program that will minimize and mitigate impacts of the take of Proposed Species to the maximum extent practicable;
- Incorporate CAC and BAT comments, if applicable, on the various components of the Amendment, and establish the general framework for the same, including covered area, solidification of list of Proposed Species, goals and objectives, likely conservation strategies, monitoring and reporting, and funding;
- In coordination with USFWS, begin the NEPA process;
- Introduce the concept of the Amendment and present the framework to the general public with public meetings and notices through local media, and solicit additional comments;
- Fine-tune Amendment framework and prepare a first draft of the Amendment, with the assistance of the CAC and BAT, as appropriate, for initial review and comment by USFWS;
- If requested, prepare the preliminary draft of NEPA document for initial USFWS review and comment;
- Prepare the second draft of Amendment and NEPA documentation addressing USFWS comments, with guidance from the CAC and BAT, if applicable;
- Hold second round of public meetings and update public notices to describe the conservation program, answer questions, and gather comments;
- Finalize the Amendment and draft NEPA document, complete the Application for Permit amendment, and submit the package of materials to USFWS for coordination and processing; and
- Provide a final report to TPWD within 30 days after completion of the last grant segment.

F. Description of Entities Undertaking the Project

The Foundation will be the primary entity responsible for carrying out the objectives, methods, and approaches described above, including working closely with the RHCP team in connection with developing the Amendment.

G. Anticipated Outcomes/Expected Results and Benefits

Amending the RHCP would likely involve the formulation of multiple approaches to the conservation of the Proposed Species, including but not limited to avoidance and minimization (e.g., through proven and defined best management practices); mitigation of potential take of the Proposed Species through preservation (including habitat preservation and potentially restoration, and/or enhancement measures); and implementation and compliance monitoring. Project success will constitute the development and submittal of an amendment to the RHCP and associated NEPA documentation, if required, by October 2024. To accomplish the project objectives, Section 6 funds will be used to:

- Develop a strategy for calculating and monitoring the potential amount of incidental take that would be authorized under the Amendment;
- Develop a strategy for avoiding and minimizing impacts to the Proposed Species and their habitats within the RHCP area, including without limitation protecting water quality for the Salamander Species to be included in the Amendment and developing measures to reduce impacts to the Monarch associated with habitat modification;
- Develop strategies for mitigating impacts of authorized take of the Proposed Species to be included in the Amendment;
- Develop a program for monitoring and reporting and adaptive management strategies specific to the Proposed Species;
- Prepare and furnish Interim and Final Reports to TPWD describing the status of the project and various aspects of the activities above as applicable, including, but not limited to, study methodology, any field research procedures and sites, a comparison of the actual accomplishments during each grant segment with the objectives of the grant as written in the proposal/scope of work; and
- Achieve compliance with the requirements for the development of regional habitat conservation plans by governmental entities pursuant to Chapter 83 of the Texas Parks and Wildlife Code (Chapter 83), as described in more detail in Section I, below.

Amending the RHCP to include the Proposed Species as Covered Species would provide a significant benefit to the Proposed Species, to ecosystem conservation, to USFWS from an administrative perspective, and to the County and its constituents, including the following:

- Providing a more holistic ecosystem-based approach to conserving the Northern Edwards Aquifer by extending conservation and management activities to both aquifer discharge and recharge features as necessary to conserve the added Salamander Species, which are spring-dwelling (this could potentially include working with one or more entities outside Williamson County to promote cooperative conservation measures applicable to the *Eurycea* spp. rangewide);
- Providing a coordinated approach to Monarch conservation, including conservation of habitat, as the County undertakes expansion of its transportation infrastructure and otherwise experiences urban growth;

- Collecting and making available to USFWS and TPWD scientific information gathered through the RHCP’s monitoring and reporting programs pertaining to the status of the Proposed Species and the effectiveness of Proposed Species conservation measures;
- Providing more coordinated, long-term conservation of the Proposed Species than would otherwise be possible through a piecemeal approach, and address the identified threats to the Proposed Species through locally appropriate solutions;
- Reducing the administrative burden on USFWS by reducing the number of individual projects that must go to USFWS for project-specific review and approval;
- Reducing the burden of ESA compliance on private individuals and entities, as well as public institutions, by creating a streamlined permitting process for the Proposed Species; and
- Continuing a structure that could incorporate other community open space goals, such as compatible recreation opportunities, scenic and cultural values, and protection of water quality and quantity.

H. Timetable

Development of the RHCP amendment will be completed and a Permit application submitted to USFWS by October 2024. A schedule of project milestones that are associated with the tasks described in this grant proposal, assuming that the grant is awarded on or about June 30, 2021, are listed below.

Month/Year	Project Milestone
Jan. 2022 - Mar. 2022	Grant awarded; finalize grant contract; start work PHASE I
Mar. 2021	Task 1: With assistance from USFWS and TWPD, develop specific project scope
Mar. 2021 - May 2021	Task 2: Identify and review existing scientific information relevant to Amendment; evaluate the potential of various conservation strategies to meet County and Foundation’s goals, including identifying and analyzing opportunities for protection of habitat-related resources
May 2021	Task 3: Based on Task 2, develop recommendations for initial Amendment framework
May 2021 - Jun. 2021	Task 4: Develop process for public input, convene CAC if necessary
May 2021- Jun. 2021	Task 5: Develop process for scientific input, convene BAT if necessary

July 2022 – Jan. 2023	<p>Task 6: With assistance from USFWS, TPWD, and CAC and BAT, if applicable, identify and describe actions likely to result in incidental take of Proposed Species and are reasonably certain to occur over life of the Permit, estimate take anticipated under Amendment, and develop conservation program</p> <p>Task 7: Review initial results of RHCP amendment development process and solicit comments from CAC and BAT on general framework for Amendment</p> <p>Task 8: Incorporate BAT and CAC comments, if applicable, on various components of RHCP, as well establishing other components of Amendment, including monitoring, reporting, and funding</p>
Feb. 2023 - July 2023	Task 9: Prepare initial and complete draft Amendment; provide to USFWS for review
July 2023	Task 10: Begin NEPA process; potential public meeting
Oct. 2023	Task 11: First draft of NEPA document to USFWS for review
Oct. 2023 – Jan. 2024	Task 12: Receive and incorporate comments from USFWS on first draft Amendment and NEPA document; prepare second draft of each document
Feb. 2024	Task 13: Provide second draft Amendment and NEPA document to USFWS for review
Apr. 2024	Task 14: Receive and incorporate comments from USFWS on second draft Amendment and NEPA document
May 2024 – Nov. 2024	Task 15: Potential additional public meetings and/or NEPA process; incorporate any additional comments into final draft RHCP and NEPA document
	PHASE 2
Oct. 2024	Task 16: Final draft of RHCP and NEPA documents and permit application submitted to USFWS
Dec. 2024	Task 17: Final TPWD grant report

While the Permittees have not undertaken specific steps in connection with a potential Amendment to the RHCP, the Permittees nevertheless have gathered significant data concerning the Proposed Species through RHCP-related monitoring and reporting. The Permittees anticipate that data collected from past efforts in connection with their implementation of the existing RHCP will be utilized in connection with the Amendment and activities funded through this grant, if awarded.

I. Project Location/Maps

The Amendment would cover the entirety of Williamson County, Texas (30°39'20"N, 97°35'02"W). Williamson County, Texas (30°39'20"N, 97°35'02"W), in the 31st Texas Congressional District. Field work to implement the Proposal will occur County-wide. Administrative/office activities will occur at the Foundation's offices at 219 Perry Mayfield, Leander, Texas 7864.

Below, we provide a description of the Proposed Species' ecosystem and habitat types.

1. Salamander Species Ecosystem and Habitat Types.

During rulemakings concerning the Salamander Species' listing status in 2013 and 2020, the USFWS described the Salamander Species' ecosystem, watershed characterization, and critical habitat types. In its 2013 listing rule for the Jollyville Plateau salamander (*Eurycea tonkawae*), the USFWS characterized the species as strictly aquatic, inhabiting surface and subsurface habitats.¹² The surface and subsurface aquatic habitats include springs and groundwater from the Trinity Aquifer, Northern Segment of the Edwards Aquifer, and local alluvial aquifers.¹³ These surface habitat types include rocky substrate with interstitial spaces and subterranean aquifers.¹⁴ As for subsurface habitats, voids between rocks underground provide cover, shelter, and foraging habitat.¹⁵ In its September 2020 listing rule for the Georgetown salamander (*Eurycea naufragia*) and Salado salamander (*Eurycea chisholmensis*), the USFWS described the ecosystem, watershed characterization, and habitat types in the agency's proposed rule of the critical habitat designation for the Georgetown and Salado salamanders.¹⁶ According to the USFWS, Georgetown and Salado salamanders occur in spring and stream ecosystems in surface and subsurface areas.¹⁷ These surface habitat types include water from the northern segment of the Edwards Aquifer, rocky substrate with interstitial spaces, the spring environment, and subterranean aquifers.¹⁸ Subsurface habitats also include water from the northern segment of the Edwards Aquifer, and subsurface spaces. For additional information on the Salamander Species, please refer to the species' final listing rules and the final critical habitat designation for the Jollyville Plateau salamander (*Eurycea tonkawae*).

2. Monarch Butterfly ecosystem and habitat types.

On December 17, 2020, the USFWS issued 12-month finding on a petition to list the Monarch.¹⁹ The finding describes the Monarch's habitat as overwintering sites with nectar and clean water sources located nearby.²⁰ The Monarch (*Danaus plexippus*) Species Status Assessment Report (SSA) indicates that in southwestern states, migrating monarchs tend to occur more frequently near water sources such as rivers, creeks, roadside ditches, and irrigated gardens. Additional information on the species' ecosystem and habitat needs may be found in the SSA.

¹² Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Austin Blind and Jollyville Plateau Salamanders, 78 Fed. Reg. 51327, 51342 (Sept. 19, 2013) (codified at 50 C.F.R. § 17.11(h)).

¹³ *Id.* at 51342.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Georgetown and Salado Salamanders, 85 Fed. Reg. 57578 (proposed Sept. 15, 2020).

¹⁷ *Id.* at 57584-57586.

¹⁸ *Id.*

¹⁹ Endangered and Threatened Wildlife and Plants; 12-Month Finding for the Monarch Butterfly, 85 Fed. Reg. 81813 (Dec. 17, 2020).

²⁰ *Id.* at 81814.

3. *Tooth Cave Spider ecosystem and habitat types.*

The hydrogeological evolution of the Edwards Aquifer occurred contemporaneously with the biological evolution of a diverse community of troglobitic species within caves in the aquifer outcrop. Humid cave environments with stable temperatures were exploited by populations of surface invertebrates that did not require sunlight to complete their lifecycles. Isolation of these populations, commonly due to climate change at the surface, lead to endemic species with troglomorphic characteristics including elongated appendages, loss or reduction of eyes, and metabolic adaptations to life with a lean diet. As obligate cave-dwellers they cannot leave the cave environmental and depend on the introduction of nutrients from the surface. Nutrients can enter the deep cave environment in the form of plant roots, leaf litter and other organic debris washed into the cave, or actively in the form of trogloneic organisms that forage or shelter in caves such as small mammals, cave crickets, and bats. Cave habitat depends on continued infiltration of undegraded surface water into the cave. As extensions of surface ecology cave ecosystems also rely on the health of the surface plant and animal communities. The Tooth Cave spider presumably preys on microarthropods (USFWS 2011).

4. *Dragonfly Cave Mold Beetle ecosystem and habitat types.*

The hydrogeological evolution of the Edwards Aquifer occurred contemporaneously with the biological evolution of a diverse community of troglobitic species within caves in the aquifer outcrop (USFWS 2011). Humid cave environments with stable temperatures were exploited by populations of surface invertebrates that did not require sunlight to complete their lifecycles. Isolation of these populations, commonly due to climate change at the surface, lead to endemic species with troglomorphic characteristics including elongated appendages, loss or reduction of eyes, and metabolic adaptations to life with a lean diet. As obligate cave-dwellers they cannot leave the cave environmental and depend on the introduction of nutrients from the surface. Nutrients can enter the deep cave environment in the form of plant roots, leaf litter and other organic debris washed into the cave, or actively in the form of trogloneic organisms that forage or shelter in caves such as small mammals, cave crickets, and bats. Cave habitat depends on continued infiltration of undegraded surface water into the cave. As extensions of surface ecology cave ecosystems also rely on the health of the surface plant and animal communities. The Tooth Cave Spider presumably preys on microarthropods. The Dragonfly Cave mold beetle presumably scavenges on decaying organic matter.

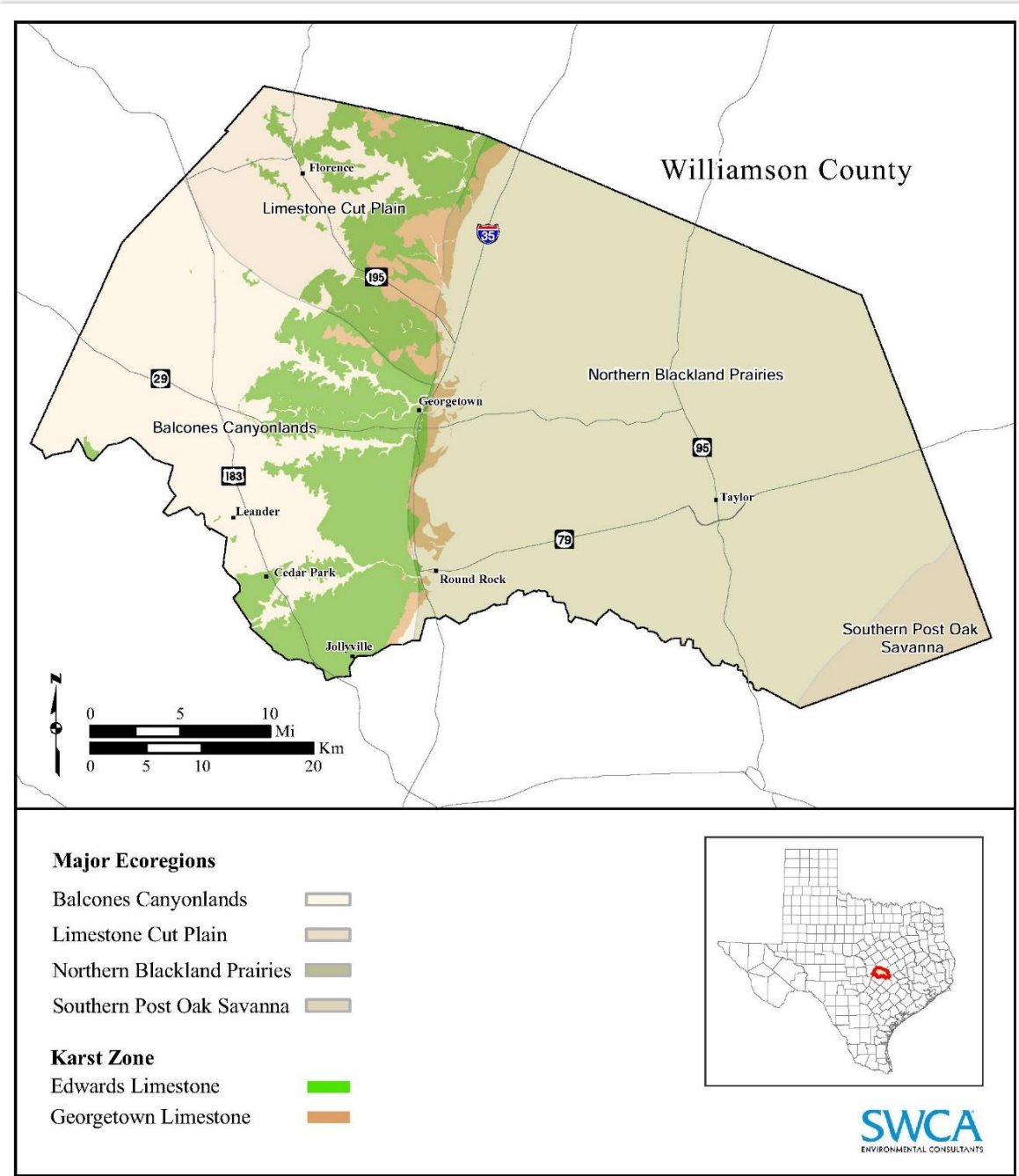


Figure 1-1. The Williamson County permit area including the major ecoregions and Karst Zone, the primary focus of the RHCP.

J. Information to support environmental compliance review requirements

In order to assist the Service in evaluating this Proposal, Permittees provide the following information relevant to compliance with NEPA, ESA, and the National Historic Preservation Act (NHPA).

- **NEPA Compliance.**

In 2009, USFWS evaluated its proposed issuance of the Permit to Permittees pursuant to environmental impact statement (EIS) under NEPA.²¹ USFWS concluded that review and issued a record of decision on April 14, 2009.²² Permittees anticipate that the EIS previously prepared by USFWS will be useful to the agency as it prepares NEPA documentation in connection with the Amendment.

- **ESA Compliance.**

Federally-listed endangered and threatened species will not be affected by the development of an RHCP amendment or submission of an application for a Permit amendment; however, should USFWS ultimately grant the Permit amendment, take of listed species would be authorized under such amendment. The Permittees expect USFWS to engage in an intra-agency consultation (formal or informal) pursuant to ESA section 7 in connection with its review and potential action on the Permittees' Application for a Permit amendment.

Permittees note that the RHCP and Permit (TE-181840-1) currently are in good standing, and have resulted in significant benefits to Covered Species and other species addressed by the RHCP. Additionally, Permittees have for years enjoyed a positive working relationship with the local USFWS office and look forward to continuing on in such a relationship.

- **National Historic Preservation Act (NHPA) Compliance.**

Permittees would seek to coordinate with USFWS to assist in complying with the NHPA in connection with the Amendment.

- **Other Federal Permits.**

There are no other federal permits required in order to apply for or be granted an Amendment.

Because this project comprises of developing an RHCP amendment in support of a Permit amendment, work under this grant is not anticipated to involve ground-disturbing activities or to affect water quality or wetlands, or air quality. Nevertheless, the Permittees are committed to obtaining all necessary authorizations from the relevant federal agencies for impacts to listed species and other federal resources that may occur under the amended Permit, should the amendment be granted.

RELATIONSHIP WITH OTHER GRANTS

²¹ Regional Habitat Conservation Plan, Williamson County, TX, 74 Fed. Reg. 17211 (Apr. 14, 2009).

²² 74 Fed. Reg. 17,211 (April 14, 2009).

The Foundation has previously received several non-traditional Section 6 grants for conservation of the Species and other listed species covered under the existing RHCP. The RHCP was developed using ESA section 6 Habitat Conservation Planning Assistance grants (\$200,000 in FY 2003 and \$1,005,000 in FY 2004), for the benefit of the Covered Species, along with 24 additional rare, endemic, and/or listed species, including *Eurycea naufragia*, *Eurycea chisholmensis*, *Eurycea tonkawae*, and *Rhadine persephone*. The Foundation acquired a 42-acre tract (Beck Preserve) for the conservation of one or more karst invertebrate species, including *Texella reyesi*, using a section 6 Habitat Conservation Plan Land Acquisition grant awarded in FY 2004. In 2007, the Foundation acquired by conservation easement approximately 64.4 acres (Northern Cobb Preserve) of the northern portion of Cobb Ranch for the benefit of *Texella reyesi*, *Batrisodes texanus*, four other rare karst invertebrates, *Vireo atricapilla*, *Setophaga chrysoparia*, and *Eurycea naufragia*, through the use of FY 2005 section 6 Recovery Land Acquisition grant funds.

EVALUATION CRITERIA

Consistent with Sections D2 and E1 of the Notice, this Proposal addresses and organizes the criteria specified in Section E1 to facilitate application review and scoring.²³ Furthermore, this Proposal includes information on species as defined under Section A of the Notice.²⁴

1. Number of Listed and Candidate Species Benefited.

This Application proposes to benefit six species—five of which are currently listed and one that is currently a candidate species:

- Georgetown Salamander (*Eurycea naufragia*)
- Salado Salamander (*Eurycea chisholmensis*)
- Jollyville Plateau Salamander (*Eurycea tonkawae*)
- Tooth Cave Spider (*Tayshaneta myopica*)
- Dragonfly Cave mold beetle (*Batrisodes cryptotexanus*)
- Monarch butterfly (*Danaus plexippus plexippus*)²⁵

2. Number of At-Risk Species Benefited.

This Application does not currently propose to address at-risk species.

3. Magnitude of Conservation Benefit.

²³ Notice at 8, 16-19.

²⁴ *Id.* at 8.

²⁵ Consistent with the Notice's definition for a candidate species, the monarch butterfly (*Danaus plexippus plexippus*) qualifies as a "candidate species." Notice at 3. On December 17, 2020, the USFWS issued a notice finding that listing the Monard "as an endangered or threatened species is warranted but precluded by higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants." Endangered and Threatened Wildlife and Plants; 12-Month Finding for the Monarch Butterfly, 85 Fed. Reg. 81813 (Dec. 17, 2020). Although the current list of candidate species does not include the Monarch, USFWS notes that it "will be added to the candidate list[.]" 85 Fed. Reg. at 81819.

This Application to amend the RHCP will result in a major benefit to several of the Proposed Species. The table below describes the anticipated benefits to each Proposed Species.

Covered Species	Expected Benefits	Degree of Benefit (low, medium, high)	Justification**
Georgetown Salamander	Preservation, monitoring, and management of multiple known sites for the species; continued funding of research to better understand species' life-cycle; continued coordination of Permittees with governments and private entities on measures to reduce impacts to species across its range.	High	<p>One hundred percent of the species' known range would be covered by the Amendment as depicted in the range shown by Devitt et al. (2019).</p> <p>Alternatively, all three <i>Eurycea</i> species proposed for coverage in the Amendment occupy the unconfined zone of the Northern Segment of the Edwards Aquifer as shown by the Texas Water Development Board (TWDB 2021), approximately 64% of which occurs within the Plan Area.</p>
Salado Salamander	Preservation, monitoring, and management of multiple known sites for the species; continued funding of research to better understand species' life-cycle; continued coordination of Permittees with governments and private entities on measures to reduce impacts to species across its range.	High	<p>Approximately 86 percent of the species' known range would be covered by the Amendment as depicted in the range shown by Devitt et al. (2019).</p> <p>Alternatively, all three <i>Eurycea</i> species proposed for coverage in the Amendment occupy the unconfined zone of the Northern Segment of the Edwards Aquifer as shown by the TWDB (2021), approximately 64% of which occurs within the Plan Area.</p>
Jollyville Plateau Salamander	Preservation, monitoring, and management of multiple known sites for	Medium	Approximately 64% percent of the species' known range would be covered by the Amendment

Covered Species	Expected Benefits	Degree of Benefit (low, medium, high)	Justification**
	the species; continued funding of research to better understand species' life-cycle; continued coordination of Permittees with governments and private entities on measures to reduce impacts to species across its range.		as depicted in the range shown by Devitt et al. (2019). Alternatively, all three <i>Eurycea</i> species proposed for coverage in the Amendment occupy the unconfined zone of the Northern Segment of the Edwards Aquifer as shown by the TWDB (2021), approximately 64% of which occurs within the Plan Area.
Tooth Cave Spider	Preservation, monitoring, and management of multiple known sites for the species; continued funding of research to better understand species' life-cycle; continued coordination of Permittees with governments and private entities on measures to reduce impacts to species across its range.	Low	Approximately 5% percent of the species' known range would be covered by the Amendment as depicted in the range considered by USFWS (2018a).
Dragonfly Cave mold beetle	Preservation, monitoring, and management of many known sites for the species; continued funding of research to better understand species' life-cycle; continued coordination of Permittees with governments and private entities on measures to reduce impacts to species across its range.	High	One hundred percent of the species' known range would be covered by the Amendment as depicted in the range considered by USFWS (2018a).
Monarch Butterfly	Preservation, participation, monitoring, and management of habitat areas within the county;	Low	Monarchs within the County will experience benefits from measures taken in connection with Amendment; however,

Covered Species	Expected Benefits	Degree of Benefit (low, medium, high)	Justification**
	coordination with governments and private entities on measures to reduce impacts to species within the County.		because the species' range encompasses a substantial portion of the United States, the benefit as defined by the NFO would be "low."

4. Size of Plan Area.

This Application proposes to cover a plan area of approximately 725,800 acres—the entirety of Williamson County, Texas.

5. Stakeholder Participation.

Permittees anticipate a number of individuals and entities will contribute to the development of the Amendment. At this time, Permittees anticipate approximately five entities or groups of individuals would offer significant contribution to the Amendment. Pursuant to state law, Permittees would convene a citizens' advisory committee and biological advisory team made up of multiple individuals from within and outside the County. Members of the biological advisory team would include experts on the species as well as a representative from TPWD. Permittees anticipate that the biological advisory team would consist of at least three members, but likely would include five or more. Additionally, Permittees would convene a citizens' advisory committee made up of landowners from within the County. Permittees anticipate there would be no fewer than seven members of the citizens' advisory committee. Consistent with Section E.1.5. of the Notice, this Application identifies the specific contribution to the HCP development for each stakeholder or stakeholder group. Notice at 18. At this time, Permittees anticipate they will be responsible for the entirety of the 25 percent non-federal cost share.

Stakeholder/Partner Name	Contribution to Plan Preparation
TPWD ²⁶	<p>In accordance with Chapter 83 of the Texas Parks and Wildlife Code, serve as a voting member on the Citizens Advisory Committee (CAC) (described in greater detail below).</p> <p>In accordance with Chapter 83 of the Texas Parks and Wildlife Code, serve as presiding officer for the Biological Advisory Team (BAT) (described in greater detail below).</p> <p>Serve as grant administrator.</p>

²⁶ The Foundation understands that under the criteria set forth in section E.1.5 of the Notice, TPWD normally would not qualify as a stakeholder for the purpose of the Application. However, the Foundation felt it important to highlight the role TPWD must take in developing the Amendment pursuant to state law.

City of Georgetown, TX	Participate in public processes and advise Permittees in connection with RHCP amendments, particularly as it concerns the Georgetown salamander and other species occurring within City limits.
Texas Department of Transportation	Participate in public processes and advise Permittees in connection with RHCP amendments, particularly as it concerns transportation planning and interfacing with RHCP.
Other cities within Williamson County	Permittees anticipate that one or more additional cities from within Williamson County would advise Permittees in connection with the Amendment, including on aspects relating to future transportation and infrastructure needs, as well as available conservation opportunities. These cities could include, but are not limited to, the City of Cedar Park and the City of Leander.
Citizens Advisory Committee members (likely to include seven or more members)	In accordance with Chapter 83 of the Texas Parks and Wildlife Code, advise permittees with respect to landowner and policy issues relevant to the Amendment.
Biological Advisory Team (likely to include five or more members)	In accordance with Chapter 83 of the Texas Parks and Wildlife Code, assist in calculation of potential take of Covered Species and size and configuration of any Covered Species preserves.

6. Initiation or Completion of a Planning Effort.

This Application has been submitted in support of initiating the Amendment. Under Section E.2.6. of the Notice, applications to support the initiation or completion of an HCP amendment will be prioritized. Notice at 18. The Amendment has not been previously funded, including within the previous fiscal year; although, as described above, the development of the RHCP itself was funded partially through ESA section 6 monies.

7. Readiness of State to Proceed.

Please refer to the project timetable provided above under Section H of the Project Narrative. In accordance with Section E.2.7. of the Notice, the Permittee requests a period of performance that is greater than two years. Notice at 19.

8. Voluntary non-federal cost-share commitment.

This Application includes a non-Federal cost-share greater than 25 percent, as reflected in the budget included in this Proposal. A letter of commitment is attached hereto, which provides additional details concerning the amount of matching funds and services to be contributed to this Amendment within the project timeframe, including estimates of salary costs.

9. Data management and sharing.

The Permittees will continue to coordinate with USFWS on the monitoring and recovery efforts on the existing RHCP and will continue to share data and results with USFWS. Permittees have a long history of close coordination with USFWS on myriad ESA issues within the County. As they do under the existing RHCP, Permittees would continue to share the results of surveys and monitoring efforts with USFWS, and will also, from time to time, publish such results in peer reviewed literature. Indeed, since the Georgetown and Salado salamanders were first described in 2000, the Foundation has funded eight of the nine peer-reviewed publications on the ecology and conservation of the species. Permittees also anticipate they would continue to assist USFWS in maintaining accurate databases regarding species' taxonomy and other issues. For example, Permittees have provided voucher species to USFWS, including specimens for genetic studies on listed karst invertebrates. Permittees have also allowed USFWS and others access to caves maintained by Permittees to assist in ensuring that USFWS maintains best available data for the species.

The coordinated approach in managing and sharing data and scientific information will help inform future decision-making to preserve and conserve the Proposed Species.

10. Secretarial Priorities for Federal Financial Assistance

This Application demonstrates alignment with the Secretarial Priorities to (1) restore trust with local communities and (2) strike a regulatory balance. Notice at 3-4.

Restoring trust with local communities. Local communities in Central Texas have been impacted by restrictions placed on development because of the presence of ESA-listed species or listed species habitat. Without streamlined permitting and ESA compliance options, important transportation, infrastructure, and other projects often experience delays and significant increases in cost. As a result, local communities sometimes hold a negative view of the purpose and impact of the ESA. It has been Permittees' experience that the RHCP has assisted landowners and others within Williamson County in understanding the importance of the ESA. Importantly, Permittees believe that the availability of a streamlined ESA permitting mechanism—and one that is run locally—has increased ESA compliance beyond that which may have occurred otherwise. Under the RHCP, the Permittees have also increased community awareness of the ESA through educational and other programs. Permittees are proud of all educational and other programs associated with the RHCP, but two results are of particular note: the high RHCP participation rate and the successful development and implementation of a 4(d) rule relating to the Georgetown and Salado salamanders. When Permittees were developing the RHCP, they anticipated a participation rate from the regulated community of approximately 10 percent. In practice, this rate has been between 30 and 40 percent—a significant portion of development within the County. In response to the pending listing of the Georgetown and Salado salamanders, Permittees worked closely with the City of Georgetown and USFWS to find a framework for salamander preservation that would also allow reliable ESA compliance options for those within the City of Georgetown and its ETJ. This framework ultimately was given approval via the Final 4(d) Rule for the Georgetown Salamander.²⁷

Striking a regulatory balance. The availability of a locally focused, streamlined mechanism for ESA permitting encourages landowners and others to comply with the ESA. Under the existing RHCP, project proponents in Williamson County may obtain ESA section 10 coverage in a matter of weeks, whereas obtaining an individual permit from USFWS often can take a year or more. Additionally, because of the potential reduction in individual ESA section 10 permit applications, the workload of the local USFWS is reduced, allowing local staff to focus on other permitting and compliance efforts within the region.

The Amendment will also serve to increase scientific knowledge of the Proposed Species. To “ensure that ESA decisions are based on strong science and thorough analysis,” the Permittees propose to identify and review existing scientific information about the Proposed Species' distribution, occurrence, ecology, conservation strategies, and ongoing conservation efforts to benefit the Proposed Species. *See* Notice at 4. As noted in the “Methods/Approach” Section above, the Permittees seek to develop scientific input from USFWS, the BAT, experts on the Proposed Species and conservation biology, and other local technical experts. This scientific information

²⁷ 80 Fed. Reg. 47,418 (Aug. 7, 2015).

will help guide decisions concerning species preservation, minimization of impacts to the species, public outreach, and other aspects of species conservation.

BUDGET NARRATIVE

The following Budget Detail narrative for the Proposal demonstrates the connection between costs and the proposed project activities. Permittees anticipate that the budget's primary portion will be expended on preparing and processing the Permit amendment application package and would include the cost of biological consultants and other professionals assisting on the Application package. Project personnel costs, including baseline salaries and estimated salary adjustments, are directly charged. No equipment will be purchased using grant funds.

Additional information on the budget may be found below. The County and Foundation propose to provide a 28.79% applicant cost-share, or \$287,854 for the cost of completing the Amendment, Permit amendment application, and NEPA documentation, with the federal government providing no more than 75% in grant funds or \$712,146.

<u>Budget.</u>	<u>Narrative (summary)</u>	Amount
1.	Prepare and process complete Permit amendment application package, including RHCP amendment, Permit amendment application, and implementing Agreement, if required.	\$ 751,667.00
2.	Prepare and process NEPA document, including any required public scoping or public meetings, review and incorporate public comments, and process through finalization of NEPA process.	\$ 168,867.00
3.	Complete section 7 consultation.	\$ <u>79,466.00</u>
	Total Project Cost	\$ 1,000,000
	Federal Share	\$ 712,146 (71.21%)
	Non-federal Share	\$ 287,854 (28.79%)

Partial funding is not practicable for this Proposal to amend the Williamson County RHCP to cover six additional species.

Consistent with 2 C.F.R. § 200.306 and the “object class categories” provided in SF-424A, the following are the cost category anticipated as part of the Permittee’s shared costs or matching funds:

- Personnel; and

- Contractual.

Please see the attached Budget Detail Narrative spreadsheet, signed and dated February 26, 2021, for more information.

INDIRECT COST STATEMENT: ORGANIZATIONS

We are a “local government,” as defined under 2 C.F.R. § 200.64, that will charge all costs directly.

CONFLICT OF INTEREST DISCLOSURE

Permittees have identified no conflicts of interest as of the time of this Application.

SINGLE AUDIT REPORTING STATEMENT

The Applicant was not required to submit a Single Audit report for the most recently closed fiscal year.

CERTIFICATION REGARDING LOBBYING

Pursuant to 43 C.F.R. Appendix A to Part 18, the undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

OVERLAP OR DUPLICATION OF EFFORT STATEMENT

There are no overlaps or duplication between this Application and any of our other Federal applications or funded projects, including in regards to activities, costs, or time commitment of key personnel.

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