

SOUTHERN EDWARDS PLATEAU HABITAT CONSERVATION PLAN
ENDANGERED SPECIES ACT
INCIDENTAL TAKE PERMIT ANNUAL REPORT
FOR FY 2022 – 2023
PERMIT NUMBER TE-48571B-0

June 14, 2024

U.S. Fish and Wildlife Service
Austin Ecological Services Field Office
10711 Burnet Road, Suite 200
Austin, Texas 78758

U.S. Fish and Wildlife Service, Region 2
Branch of Environmental Review
P.O. Box 1306, Room 6034
Albuquerque, New Mexico 87103

RE: Annual Report for 2022 - 2023 Fiscal Year required by Endangered Species Act Incidental Take Permit TE-48571B-0 for the Southern Edwards Plateau Habitat Conservation Plan (SEP-HCP)

To whom it may concern:

This letter comprises the annual permit report for the 2022 - 2023 Fiscal Year (October 1, 2022 through September 30, 2023) for the Southern Edwards Plateau Habitat Conservation Plan (SEP-HCP), as required by Box 12. Reporting Requirements and Box 13. ANNUAL REPORT of permit number TE-48571B-0. *“An annual report will describe the previous calendar year’s activities in compliance with this permit and Section 12 of the SEP-HCP. Annual reports will be submitted each year for the duration of this permit area.”* SEP-HCP Section 12.1 requires the submission of an annual report *“to document progress towards achieving the goals and objectives of the SEP-HCP and demonstrate compliance with the terms and conditions of the Permit.”*

This report was prepared by Blair Wildlife Consulting, LLC (BWC) on behalf of Bexar County, Texas and the City of San Antonio (the Permittees) and describes compliance with the permit between October 1, 2022 (permit effective date) and September 30, 2023.

In accordance with SEP-HCP Section 12.1, activities for the 2022 - 2023 Fiscal Year (October 1, 2022 through September 30, 2023) are reported below in the following sections and any required supporting information is included as attachments to this letter.

Although the Permit was issued February 5, 2016 and effective as of January 18, 2016, official acceptance and execution of the Permit by the Permittees occurred on April 18, 2017.

1. SEP-HCP PARTICIPANTS AND ENROLLED PROPERTIES

A summary of participation in the SEP-HCP, including a list of Participants and Enrolled Properties and the corresponding acreages covered for incidental take for each of the Covered Species is included below.

A total of nine Participants / Enrolled Properties occurred during the 2022 - 2023 Fiscal Year. The complete list of Participants and Enrolled Properties is included in **Attachment A**. An exhibit depicting the locations of each of the Enrolled Properties within the Permit Area is also included as part of **Attachment A**. Copies of all Participation Agreements and Participation Certificates for Participants and Enrolled Properties that occurred during the 2022 - 2023 Fiscal Year can be provided to the Service upon request.

Two Participants / Enrolled Properties reported occurrences of previously undiscovered voids or other karst features that were encountered during implementation of covered activities by the Participants/Enrolled Properties during the 2022 - 2023 Fiscal Year. A summary of the Participants / Enrolled Properties in which previously undiscovered voids or other karst features were encountered during implementation of covered activities during the 2022 - 2023 Fiscal Year is included in **Attachment E**. Additional information, documentation, and coordination are included in the SEP-HCP program files and can be provided upon request.

2. SEP-HCP PRESERVE SYSTEM

No GCW or BCV preserves were established during the 2022 - 2023 Fiscal Year.

As part of the initial conservation actions required prior to beginning enrollment of participants in the SEP-HCP for the Covered Karst Invertebrates, the SEP-HCP established six (6) karst fauna areas (KFA) within Government Canyon State Natural Area (GCSNA) during the 2016 – 2017 Fiscal Year. Two additional KFAs, the Northern Preserve and Panther Springs Park Preserve, were established during the 2017 – 2018 Fiscal Year. The Crane Bat Cave Preserve KFA was established during the 2022-2023 Fiscal Year. The total preserve acres, the acres of suitable habitat for each of the Covered Species, and current status of the Conservation Baseline for the Covered Karst Invertebrates is included in **Attachment B**.

The Permittee's request that the Service provide an update of all other conservation actions completed by other sponsors in order to evaluate the current status towards achievement of the Conservation Baselines¹ as well as any information on new localities for the Covered Karst Invertebrates. The SEP-HCP may provide incidental take authorization for Covered Activities conducted within an Occupied Cave Zone only after certain baseline levels of conservation have been achieved for the Covered Karst Invertebrates that occur in the associated karst feature.

The Conservation Baselines are based on the downlisting criteria described in the Bexar County Karst Invertebrates Recovery Plan (USFWS 2011b). Achievement of the Conservation Baselines will be evaluated and determined on a species-by-species and region-by-region (i.e., by Karst Fauna Regions or "KFRs") basis. All qualifying conservation actions² that have been implemented for the Covered Karst Invertebrates will be considered in the determination, regardless of the sponsor of the conservation action. All karst preserves that the Service deems as contributing towards recovery of the Covered Karst Invertebrates will contribute to the karst Conservation Baseline, even if the preserves were protected by an entity or effort other than the SEP-HCP.

3. SEP-HCP PRESERVATION CREDITS LEDGER

The conservation ledger documenting Preservation Credits generated and deducted for the GCW for the 2022 - 2023 Fiscal Year is included in **Attachment C**.

No BCV Preservation Credits were generated or deducted during the 2022 - 2023 Fiscal Year, as the species was delisted by the Service.

4. SEP-HCP FINANCIAL STATUS

A summary of the financial status of the SEP-HCP, including the balance and performance of the non-wasting management endowment is included below and a copy of the financial statement is included in **Attachment D**.

The Interlocal Agreement executed by the Permittees on February 24, 2017 identifies the annual allocations and responsibilities of each Permittee and was provided to the Service upon execution and was included as part of the 2016 – 2017 Fiscal Year Annual Report.

The non-wasting management endowment was established during the 2017 – 2018 Fiscal Year as the SEP-HCP established two new preserves for the Covered Karst Invertebrates during the reporting period. All contributions were made in accordance with the SEP-HCP endowment requirements.

¹ The Conservation Baselines are the minimum requirements needed for each of the Covered Karst Invertebrates within each KFR based on the downlisting criteria described in the Bexar County Karst Invertebrates Recovery Plan (USFWS 2011b).

² Qualifying conservation actions would be any other activity outside of preserve acquisition, which would be considered and approved by the Service as contributing to the conservation baseline for the Covered Species. Examples of qualifying conservation actions could include, but are not limited to: surveying for new localities for the Covered Karst Invertebrates; establishing additional protections to currently known Covered Karst Invertebrate-occupied features; establishing protection of the areas surrounding a feature in the event that additional protective measures cannot be placed on the features entrance, or implementing protective measures necessary to improve the long-term viability of the occupied feature.

5. MANAGEMENT ACTIVITIES ON PRESERVE LANDS AND PRESERVE MANAGEMENT PLAN UPDATES

Management activities conducted on SEP-HCP preserve lands were conducted in accordance with the Government Canyon State Natural Area Karst Fauna Areas Management and Monitoring Plan dated February 6, 2017, Northern Preserve Karst Fauna Area Management and Monitoring Plan dated June 27, 2017, Panther Springs Park Preserve Karst Fauna Area Management and Monitoring Plan dated September 14, 2018, and the Crane Bat Cave Preserve Karst Fauna Area Management and Monitoring Plan dated August 10, 2023.

No updates to any Preserve Management Plans were completed during the 2022 - 2023 Fiscal Year.

6. BIOLOGICAL MONITORING ACTIVITIES ON PRESERVE LANDS AND OTHER SURVEYS OF THE COVERED SPECIES AND THEIR HABITATS

Biological monitoring activities were completed as part of the establishment and management of the Government Canyon State Natural Area Karst Fauna Areas, Northern Preserve, Panther Springs Park Preserve, and Crane Bat Cave Preserve. All results of the activities were reported as part of the annual reporting requirements for work conducted under Endangered Species Act Section 10[A][1][a] permit TE85077A-1.

7. COMMUNITY EDUCATION AND OUTREACH PROGRAMS AND RESEARCH

The SEP-HCP conducts numerous education and outreach events, meetings, and notifications to inform potential applicants of the SEP-HCP program annually. Specific examples include Habitat Compliance Form reviews and coordination regarding development projects and option for participation in the SEP-HCP, meetings with potential applicants, meetings with staff, other departments, advisory boards, leadership, and elected officials regarding the SEP-HCP and implementation progress. The Permittees also continue to maintain an additional website that contains all necessary information on how to participate in the SEP-HCP; background information on the SEP-HCP, and its administration: <https://www.sanantonio.gov/DSD/Constructing/SEP-HCP>.

Per condition T of the ITP TE48571B-1 and Section 4.5.3 of the SEP-HCP, Karst Participation Certificates will not be offered until the Permittees had secured some level of up-front mitigation for all of the Covered Karst Invertebrate Species. The level and type of mitigation obtained for each species will likely vary. The Permittees worked with the Service in determining when the appropriate level of up-front mitigation had occurred. For species like *C. venii*, with only two known but heavily impacted localities, options remained limited to satisfy the SEP-HCPs up-front mitigation requirements. Therefore, other conservation measures and/or recovery efforts which provide for some increased level of conservation were the only options to help satisfy up-front mitigation requirements. The SEP-HCP Permittees contracted with Dr. Marshal Hedin of San Diego State University to conduct a genetics study of the *Cicurina* spiders of Bexar County, Texas.

The research proposal and supporting information documented the conservation value of the proposed initial conservation action and proposed an initial conservation action for the Covered Karst Invertebrates within the *Cicurina* genus, more particularly for *Cicurina venii*, that was consistent with the terms and conditions of the SEP-HCP and accompanying ITP. As summarized in the research proposal, the Permittees request the approval of this initial conservation action as the required up-front mitigation for *Cicurina venii*. Additionally, approval of this initial conservation action also contributes to further understanding of the *Cicurina* genus within Bexar County, Texas, including *Cicurina madla* and *Cicurina vespera* (SEP-HCP Covered Karst Invertebrates), as well as *Cicurina baronia* and *Cicurina loftini*, which although not included as a SEP-HCP Covered Species or Voluntarily Conserved Species, also benefit from the upfront mitigation action.

The Service approved the proposed up-front mitigation action and the Permittees initiated and fully funded the *Cicurina* research study on August 17, 2016. The funding and initiation of the *Cicurina* research study satisfied the SEP-HCP's up-front mitigation actions for *Cicurina venii*, as well as benefited *Cicurina madla* and *Cicurina vespera*.

A copy of the research proposal was provided to and approved by the Service, prior to the initiation of the research program. As of June 25, 2018, the research program was completed and findings of the research project published in Hedin, M., S. Derkarabetian, J. Blair, and P. Paquin. 2018. Sequence capture phylogenomics of eyeless *Cicurina* spiders from Texas caves, with emphasis on US federally-endangered species from Bexar County (Araneae, Hahniidae). ZooKeys 769: 49-76. <https://doi.org/10.3897/zookeys.769.25814>.

The paper established new taxonomic synonymies and range extensions for listed and non-listed *Cicurina* species in Bexar County as follows:

I. Species Synonymies

- » *Cicurina venii* Gertsch, 1992 = *Cicurina madla* Gertsch, 1992 - The Braken Bat Cave meshweaver (*Cicurina venii*) is no longer a distinct taxonomic entity with specimens now assigned to Madla's Cave meshweaver (*Cicurina madla*). The former was a single site endemic and Madla's Cave meshweaver would now occupy that location.
- » *Cicurina loftini* Cokendolpher, 2004 = *Cicurina vespera* Gertsch, 1992 - *Cicurina loftini* (no common name) is no longer a distinct taxonomic entity with specimens now assigned to the Government Canyon Bat Cave meshweaver (*Cicurina vespera*). The latter was a single site endemic but with revised taxonomy it subsumes all locations previously assigned to *C. loftini* in northwestern Bexar County.

II. Range Extensions

- » Madla's Cave meshweaver, *C. madla*: Based on revised taxonomy this species now occurs in the Culebra Anticline Karst Fauna Region.
- » Government Canyon Bat Cave meshweaver, *C. vespera*: Based on revised taxonomy its range is extended to 10-15 caves, formerly assigned to *C. loftini* in the Culebra Anticline Karst Fauna Region. This species has also now been documented to co-occur with Madla's Cave meshweaver in two caves. It was originally believed that blind *Cicurinas* did not co-occur.

In 2020, the SEP-HCP Permittees contracted with Dr. Marshal Hedin of San Diego State University to conduct additional genetics studies of the remaining *Cicurina* spider specimens available from locations within the SEP-HCP Permit Area, as well as new specimens collected since the original 2018 publication to better understand the distribution and potential for sympatry within the SEP-HCP Permit Area. The first results from this research was accepted for publication in Conservation Genetics on August 13, 2023. Azevedo, GHF, J Blair, and M. Hedin. 2023. See *Evaluating possible anthropogenic impacts on gene flow and loss of genetic diversity in endangered Madla Cave Meshweaver spiders (Hahniidae, Cicurina madla)*. Conservation Genetics (<https://doi.org/10.1007/s10592-023-01561-y>). The abstract is included below.

Karst systems have great ecological, cultural and economic importance, but are constantly threatened by human development. Northwestern Bexar County, Texas (USA), is an example of a region where urbanization threatens an essential karst landscape. Many studies have provided substantial contributions to the understanding and conservation of biodiversity in this area, including the delineation of Karst Fauna Regions (KFRs). However, no study has evaluated fundamentally important measures of genetic diversity, changes in population sizes, and gene flow for listed regional species. Here we used population genomic data derived from the sequence capture of ultraconserved elements (UCEs) to describe patterns of structure and connectivity among cave populations of Cicurina madla, and to estimate demographic and phylogeographic processes underlying those patterns. In addition, we evaluated if population genetic processes could have been influenced by human activities. Although there is weak phylogenomic differentiation between populations, the distribution of genetic diversity and patterns of gene flow within and between areas suggest important differences in population dynamics among KFRs. Our genomic data show that populations of C. madla in Bexar County currently carry comparatively low levels of heterozygosity and nucleotide diversity, and that these might have been influenced by human activities. Ultimately, we present genomic evidence for declining cave spider population sizes perhaps coincident with increases in an expanding human population and discuss implications of our findings for conservation.

The Permittees will provide an update to the Service as soon as any further results and publications are provided.

8. ADAPTIVE MANAGEMENT RECOMMENDATIONS AND CHANGED CIRCUMSTANCES

No modifications to Preserve Management Plans or the SEP-HCPs conservation programs occurred during the 2022 - 2023 Fiscal Year via the adaptive management process or changed circumstances.

9. COMPLIANCE-RELATED ISSUES AND ACTIONS

Two participants (17-006A and 23-001) had breaches to the terms and conditions of their participation agreements during the 2022 – 2023 Fiscal Year. Both breaches were associated with vegetation clearing and removal activities

being conducted during the GCWA breeding season. The SEP-HCP notified the Participants and the Service of the breach in terms. As a result of the breaches to the Agreements, the SEP-HCP Administrator implemented the following curative process to which the two Participants were bound to fully perform or risk termination of the Agreement.

- » All construction activities were ceased and no construction activities were able to recommence until such time as written approval was received from the Administrator and the Service, or August 1, 2023, whichever occurred sooner.
- » Assessed penalty fines.

As a result of the two Participants breaching the terms and conditions of the Participation Agreement within a matter of days of each other, the SEP-HCP Administrators revised Exhibit C to the Participation Agreement. These revisions were made so that going forward, all Participant's were informed upfront on the penalties and fines to be assessed in the event of a breach to the terms and conditions of the Participation Agreement. To further ensure that future breaches to Participation Agreements would be avoided, the SEP-HCP Administrator also instituted an additional step in the enrollment process. This additional step requires all participants to attend a conference call to over the terms and conditions of the Participation Agreement and associated repercussions in the event of a breach to the terms and conditions, prior to the Participation Agreement being recorded, Participation Certificate being issued and Enrollment in the SEP-HCP completed.

No other compliance-related issues or actions involving Participants, Enrolled Properties, or preserves (including conservation easements) occurred during the 2022 - 2023 Fiscal Year and no issues occurred within any of the Government Canyon State Natural Area Karst Fauna Areas, Northern Preserve KFA, Panther Springs Park KFA or Crane Bat Cave Preserve KFA.

10. OTHER INFORMATION OR RECOMMENDATIONS

No other pertinent information or recommendations, as appropriate occurred during the 2022 - 2023 Fiscal Year.

This report summarizes the development, conservation activities, and biological monitoring surveys conducted by the SEP-HCP for the 2022 - 2023 Fiscal Year reporting period. Please contact either myself at 512-415-9772 or Logan Sparrow at 210-207-8691 if you have any questions or require any additional information.

Sincerely,



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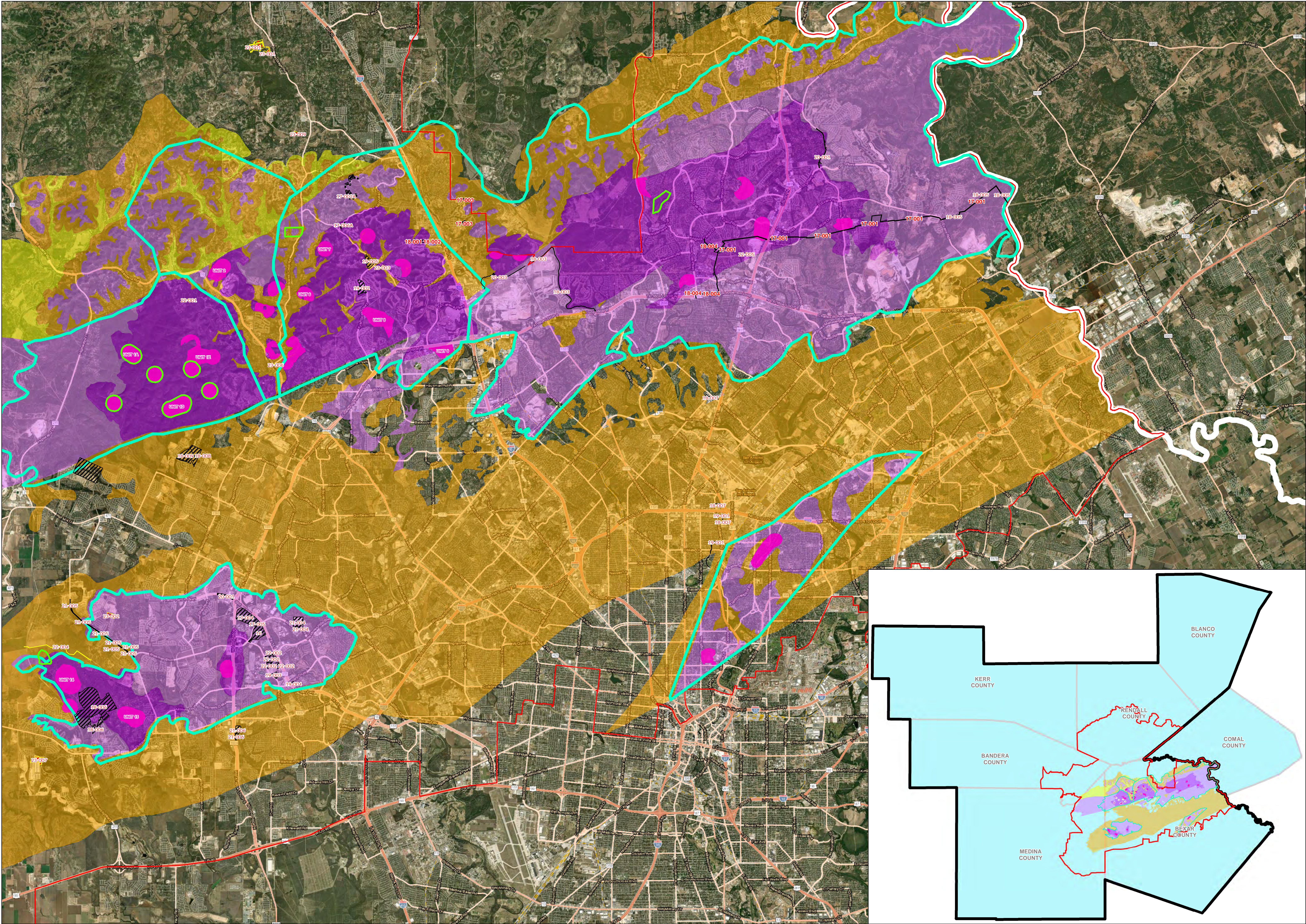
ATTACHMENT A

SEP-HCP PARTICIPANTS AND ENROLLED PROPERTIES

SEP-HCP ENROLLED PROPERTY IMPACTS BY SPECIES AND TYPE.

COVERED SPECIES & INCIDENTAL TAKE AUTHORIZATIONS																					
APPLICATION NO.	APPLICANT NAME	ACRES COVERED FOR INCIDENTAL TAKE	DATE ENROLLED	GCW DIRECT IMPACTS ACRES	GCW INDIRECT IMPACTS ACRES	TOTAL GCW ACRES	BCV DIRECT IMPACTS ACRES	BCV INDIRECT IMPACTS ACRES	TOTAL BCV ACRES	KARST ZONE 1	KARST ZONE 2	KARST ZONES 1 & 2 TOTAL	KARST ZONE 3	KARST ZONE 4	KARST ZONES 3 & 4 TOTAL	BATRODUS VENTRI	SCURIA MADLA (SCURIA VENT)	SCURIA VESPERA (SCURIA LOFTN)	RHADNE EXUS	RHADNE INFERNALIS	NEOLEPTONETA MACRIPS
	FY 17-18 TOTAL	128.50		20.99	46.59	67.58	0.00	0.00	0.00	59.48	56.31	115.79	12.71	0.00	12.71	0.00	0.00	0.00	0.00	0.00	0.00
	FY 18-19 TOTAL	842.11		147.49	181.60	329.09	0.00	0.00	0.00	415.52	266.59	682.11	150.15	0.00	150.15	0.00	0.00	0.00	0.00	0.00	0.00
	FY 19-20 TOTAL	120.25		42.20	46.10	88.30	0.00	0.00	0.00	11.99	75.97	87.96	32.30	0.00	32.30	0.00	0.00	0.00	0.00	0.00	0.00
	FY 20-21 TOTAL	310.12		38.36	57.37	95.73	0.00	0.00	0.00	57.45	31.12	88.57	62.95	0.00	62.95	0.00	0.00	0.00	0.00	0.00	0.00
	FY 21-22 TOTAL	150.75		0.00	0.00	0.00	0.00	0.00	0.00	0.00	106.05	106.05	44.80	0.00	44.80	0.00	0.00	0.00	0.00	0.00	0.00
SEP-HCP FY 22-23 (OCT. 1, 2022 - SEPT. 30, 2023) PARTICIPANTS AND ENROLLED PROPERTIES																					
COVERED SPECIES & INCIDENTAL TAKE AUTHORIZATIONS																					
APPLICATION NO.	APPLICANT NAME	ACRES COVERED FOR INCIDENTAL TAKE	DATE ENROLLED	GCW DIRECT IMPACTS ACRES	GCW INDIRECT IMPACTS ACRES	TOTAL GCW ACRES	BCV DIRECT IMPACTS ACRES	BCV INDIRECT IMPACTS ACRES	TOTAL BCV ACRES	KARST ZONE 1	KARST ZONE 2	KARST ZONES 1 & 2 TOTAL	KARST ZONE 3	KARST ZONE 4	KARST ZONES 3 & 4 TOTAL	BATRODUS VENTRI	SCURIA MADLA (SCURIA VENT)	SCURIA VESPERA (SCURIA LOFTN)	RHADNE EXUS	RHADNE INFERNALIS	NEOLEPTONETA MACRIPS
22-001	SAWS Ranch Town No. 2	1.53	20221104	1.00	12.50	13.50	0.0	0.0	0.0	1.53	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-004	Medina Revitalization Initiative, LLC	8.80	20230116	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	8.80	0.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00
22-005	Classen-Steuering Sewer Line	0.64	20230817	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.64	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-001	Chesmar Homes, LLC	52.56	20230224	42.50	75.90	118.40	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-002	VILLAGE AT WESTPOINTE WEST ELEMENTARY SCHOOL	17.89	20230711	0.00	0.00	0.00	0.0	0.0	0.0	0.00	17.89	17.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-003	Hixon Properties Incorporated	2.88	20230919	1.40	11.10	12.50	0.0	0.0	0.0	1.97	0.00	1.97	0.91	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00
23-006	QT SOUTH, LLC	2.37	20230810	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	2.37	0.00	2.37	0.00	0.00	0.00	0.00	0.00	0.00
23-007	MICROSOFT CORPORATION SAT40 TRP	22.46	20230726	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-009	CPS ENERGY	7.24	20230919	5.91	11.01	16.92	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FY 22-23 TOTAL	116.37		50.81	110.51	161.32	0.00	0.00	0.00	3.50	18.53	22.03	12.08	0.00	12.08	0.00	0.00	0.00	0.00	0.00	0.00
PLAN TO DATE (FY 17-23) TOTAL		1668.10		299.85	442.17	742.02	0.00	0.00	0.00	547.94	554.57	1102.51	314.99	0.00	314.99	0.00	0.00	0.00	0.00	0.00	0.00

GIS shapefile location data for each of the SEP-HCP Enrolled Properties has been submitted as part of the annual report.



FY 22-23 SEP-HCP PARTICIPANTS / ENROLLED PROPERTIES

FY 17-22 SEP-HCP PARTICIPANTS / ENROLLED PROPERTIES

SEP-HCP GOVERNMENT CANYON STATE NATURAL AREA KFAS

SEP-HCP PANTHER SPRINGS PRESERVE KFA

SEP-HCP NORTHERN PRESERVE KFA

BEXAR COUNTY KARST FAUNA REGIONS

USFWS BEXAR COUNTY KARST INVERTEBRATES CRITICAL HABITAT UNITS

SEP-HCP INITIAL ENROLLMENT AREA

SEP-HCP PERMIT AREA

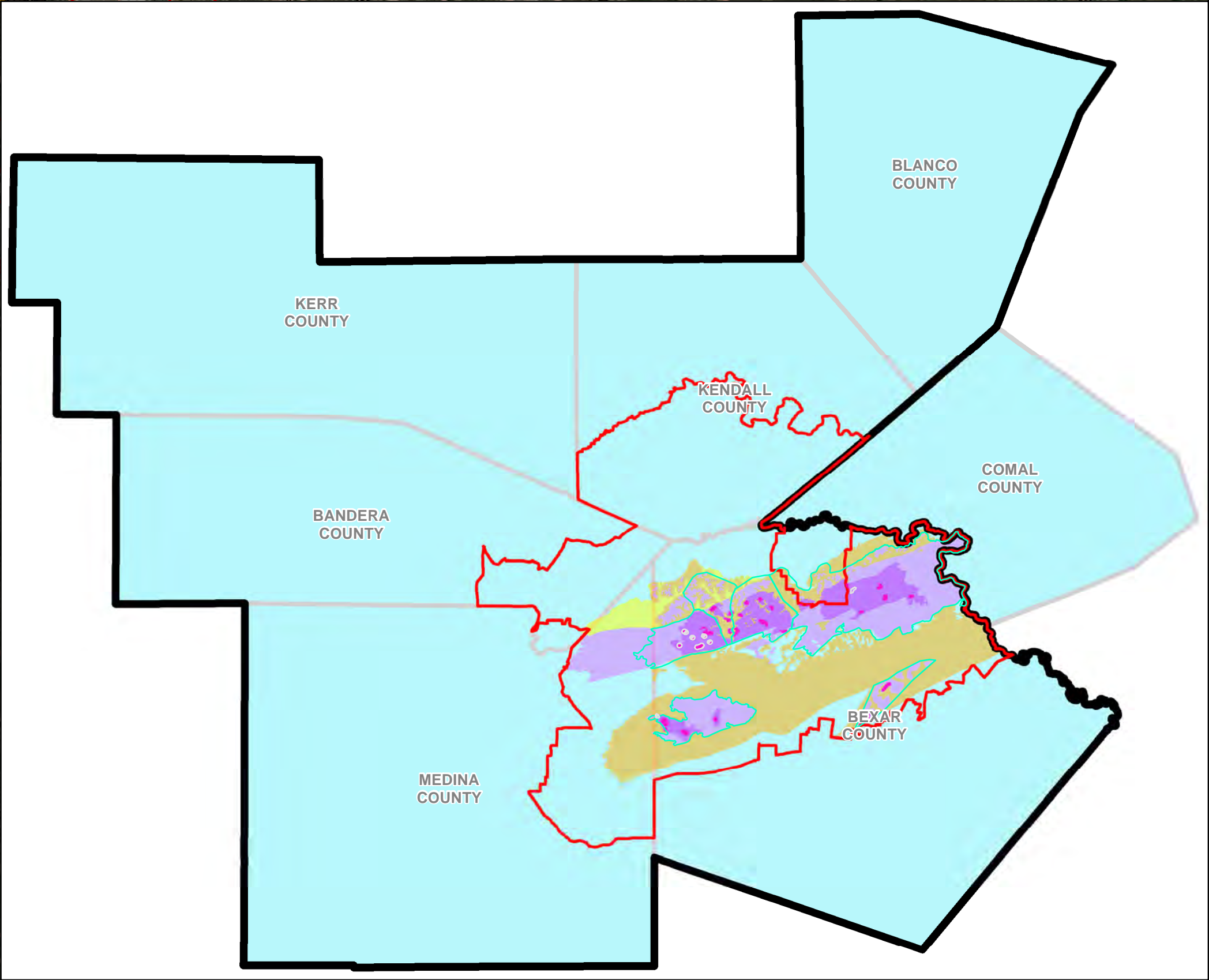
BEXAR COUNTY KARST ZONES

KARST ZONE 1

KARST ZONE 2

KARST ZONE 3

KARST ZONE 4



ATTACHMENT B

SEP-HCP PRESERVE SYSTEM SUMMARY

Summary of the Lands and Habitats Included in the SEP-HCP Preserve System, Including the Total Preserve Acres and the Acres of Suitable Habitat for Each of the Covered Species.

SEP-HCP PRESERVE	COVERED SPECIES	KFR	TOTAL ACRES	ACRES OF SUITABLE HABITAT	CRITICAL HABITAT UNIT	PRESERVE TYPE
Surprise Sink and Bone Pile Cave KFA	<i>Rhadine exilis</i> <i>Rhadine infernalis</i> <i>Cicurina madla</i> <i>Neoleptoneta microps</i>	Government Canyon	144	144	1a	High Quality
Government Canyon Bat Cave KFA	<i>Cicurina vespera</i> <i>Neoleptoneta microps</i> <i>Rhadine exilis</i> <i>Rhadine infernalis</i>	Government Canyon	100	100	1b	High Quality
Lost Pothole KFA	<i>Cicurina madla</i>	Government Canyon	100	100	1c	High Quality
Lithic Ridge, Dancing Rattler, and Hackberry Sink KFA	<i>Cicurina madla</i> <i>Rhadine infernalis</i> <i>Rhadine exilis</i> <i>Batrisodes ventyivi</i>	Government Canyon	224	224	1d	High Quality
Tight KFA	<i>Rhadine exilis</i> <i>Rhadine infernalis</i> <i>Batrisodes ventyivi</i> <i>Cicurina madla</i>	Government Canyon	105	416	1e	High Quality
10K KFA	<i>Cicurina madla</i> <i>Rhadine infernalis</i> <i>Rhadine exilis</i> <i>Batrisodes ventyivi</i>	Government Canyon	100	100	1f	High Quality
Northern Preserve KFA	<i>Cicurina vespera</i> <i>Rhadine infernalis</i>	Culebra Anticline	66.31	66.31	-	Medium Quality
Panther Springs Park Preserve KFA	<i>Cicurina madla</i> <i>Rhadine exilis</i>	Stone Oak	91	91	-	Medium Quality
Crane Bat Cave Preserve KFA	<i>Cicurina madla</i>	UTSA	75.29	75.29	-	Medium Quality

Conservation Baselines needed for the Covered Karst Invertebrates based on current knowledge of species distribution and establishment of KFAs within the SEP-HCP Permit Area.

Species	Number of KFRs Where Species is Currently Known To Occur	Minimum Configuration of Preserves Needed in Each KFR ¹					Total Number of Preserves Needed			Current Knowledge of Species Distribution					Current Status of Preserves in Each KFR					Current Status of Conservation Baseline and Minimum Configuration of Preserves Needed to Reach Conservation Baseline in Each KFR				
		KFR #1	KFR #2	KFR #3	KFR #4	KFR #5	High Quality	Medium Quality	Total	Govmt Canyon KFR	Helotes KFR	UTSA KFR	Stone Oak KFR	Culebra Anticline KFR	Govmt Canyon KFR	Helotes KFR	UTSA KFR	Stone Oak KFR	Culebra Anticline KFR	Govmt Canyon KFR	Helotes KFR	UTSA KFR	Stone Oak KFR	Culebra Anticline KFR
<i>Rhadine exilis</i>	5	1H +2M	1H +2M	1H +2M	1H +2M	1H + 2M	5	10	15	Y	Y	Y	Y	Y	6H	0	0	1M ^c	1M ^d	Achieved	1H + 2M	1H + 2M	1H + 1M	1H + 1M
<i>Rhadine infernalis</i>	5	1H + 2M	1H + 2M	1H + 2M	1H + 2M	1H + 2M	5	10	15	Y	Y	Y	Y	Y	6H	0	0	0	1H + 1M ^c	Achieved	1H + 2M	1H + 2M	1H + 2M	1M
<i>Batrisesodes venyivi</i>	2 ^a	2H + 1M	1H + 2M	-	-	-	3	3	6	Y	Y	Y ^a	N	N	3H + 1M	0	0	0	0	Achieved	1H + 2M	1H + 2M	-	-
<i>Neoleptoneta microps</i>	1	3H + 3M	-	-	-	-	3	3	6	Y	N	N	N	N	2H	0	0	0	0	1H + 3M	-	-	-	-
<i>Cicurina madla</i> / <i>Cicurina venii</i>	5 ^b	1H + 2M	1H + 2M	1H + 2M	1H + 2M	1H + 2M	5	10	15	Y	Y	Y	Y	Y ^b	6H	0	1M ^e	1M ^c	0	Achieved	1H + 2M	1H + 1M	1H + 1M	1H + 2M
<i>Cicurina vespera</i> / <i>Cicurina loftini</i>	2 ^b	2H + 1M	1H + 2M	-	-	-	3	3	6	Y	N	N	N	Y	1H	0	0	0	1H + 2M ^{c, d}	1H + 1M	-	-	-	Achieved

¹ H = High Quality Preserve; M = Medium Quality Preserve

^a While the Service has records of this species being known from the UTSA KFR, there is not confirmation of the cave location, therefore at this time; the Service only recognizes this species as occurring in 2 KFRs, and does not recognize the UTSA KFR as having the species.

^b Updated based on Hedin et al. 2018 and correspondence from the Service to the SEP-HCP Permittees dated 8/29/2018 accepting the findings of Hedin, et al. 2018 for the Bexar County Cicurinas as published: Hedin, M., S. Derkarabetian, J. Blair, and P. Paquin. 2018. Sequence capture phylogenomics of eyeless Cicurina spiders from Texas caves, with emphasis on US federally-endangered species from Bexar County (Araneae, Hahniidae). ZooKeys 769: 49-76. <https://doi.org/10.3897/zookeys.769.25814>).

The paper establishes new taxonomic synonymies and range extensions for listed and non-listed Cicurina species in Bexar County as follows:

I. Species Synonymies

- Cicurina venii Gertsch, 1992 = Cicurina madla Gertsch, 1992 - The Braken Bat Cave meshweaver (Cicurina venii) is no longer a distinct taxonomic entity with specimens now assigned to Madla’s Cave meshweaver (Cicurina madla). The former was a single site endemic and Madla’s Cave meshweaver would now occupy that location.
- Cicurina loftini Cokendolpher, 2004 = Cicurina vespera Gertsch, 1992 - Cicurina loftini (no common name) is no longer a distinct taxonomic entity with specimens now assigned to the Government Canyon Bat Cave meshweaver (Cicurina vespera). The latter was a single site endemic but with revised taxonomy it subsumes all locations previously assigned to C. loftini in northwestern Bexar County.

II. Range Extensions

- Madla's Cave meshweaver, C. madla: Based on revised taxonomy this species now occurs in the Culebra Anticline Karst Fauna Region.
- Government Canyon Bat Cave meshweaver, C. vespera: Based on revised taxonomy its range is extended to 10-15 caves, formerly assigned its C. loftini in the Culebra Anticline Karst Fauna Region. This species has also now been documented to co-occur with Madla's Cave meshweaver in two caves. It was originally believed that blind Cicurinas did not co-occur.

^c Northern Preserve KFA (Cluebra Anticline KFR) contains both *C. vespera* and *R. infernalis*; Panther Springs Park Preserve KFA (Stone Oak KFR) contains both *C. madla* and *R. exilis*; the Stevens Ranch Karst Preserve contains *C. vespera* and *R. infernalis*

^d The SAWS APS Karst Preserve contains *C. vespera* & *R. exilis*.

^e The Crane Bat Cave Preserve KFA (UTSA KFR) contains *C. madla*

ATTACHMENT C

SEP-HCP PRESERVATION CREDITS LEDGER

SEP-HCP GCW PRESERVATION CREDIT LEDGER

DATE	DESCRIPTION	REFERENCE #	DEBIT	CREDIT	BALANCE	COMMENTS
FY 17-18						
8/10/2018	BCCB GCW Credit Transfer to SEP-HCP on behalf of 18-005-Comal ISD Waterline	18-005	0.00	9.50	9.50	Credits transferred from BCCB to SEP-HCP on behalf of 18-005 on 8/10/2018 Transaction reflected in RIBITS
9/6/2018	BCCB GCW Credit Transfer to SEP-HCP on behalf of 17-003 INTOCO Dominion - Hilltop & Howell North	17-003	0.00	32.25	41.75	Credits transferred from BCCB to SEP-HCP on behalf of 17-003 on 9/6/2018 Transaction reflected in RIBITS
9/6/2018	SEP-HCP Application 17-003 INTOCO Dominion - Hilltop & Howell North	17-003	32.25	0.00	9.50	Participation Agreement executed on 9/6/2018; Participation Certificate Issued and Enrollment Completed on 9/7/2018
9/17/2018	BCCB GCW Credit Transfer to SEP-HCP on behalf of 18-002 - Cresta Bella Unit 4B	18-002	0.00	13.25	22.75	Credits transferred from BCCB to SEP-HCP on behalf of 18-002 on 9/17/2018 Transaction reflected in RIBITS
9/20/2018	BCCB GCW Credit Transfer to SEP-HCP on behalf of 18-001 - 123 Heuermann Road Tract	18-001	0.00	19.25	42.00	Credits transferred from BCCB to SEP-HCP on behalf of 18-001 on 9/20/2018 Transaction reflected in RIBITS
9/25/2018	SEP-HCP Application 18-001 - 123 Heuermann Road Tract	18-001	19.25	0.00	22.75	Participation Agreement executed on 9/20/2018; Participation Certificate Issued and Enrollment Completed on 9/25/2018
10/2/2018	SEP-HCP Application 18-005 Comal ISD Waterline	18-005	9.50	0.00	13.25	Participation Agreement executed on 10/2/2018; Participation Certificate Issued and Enrollment Completed on 10/2/2018
FY 18-19						
10/2/2018	SEP-HCP Application 18-002 - Cresta Bella Unit 4B	18-002	13.25	0.00	0.00	Participation Agreement executed on 10/2/2018; Participation Certificate Issued and Enrollment Completed on 10/2/2018
12/6/2018	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 18-008 - Davis Ranch Take 2	18-008	0.00	156.25	156.25	Credits transferred from BCCB to SEP-HCP on behalf of 18-008 on 12/6/2018 Transaction reflected in RIBITS
12/7/2018	SEP-HCP Application 18-008 - Davis Ranch Take 2	18-008	156.25	0.00	0.00	Participation Agreement executed on 12/6/2018; Participation Certificate Issued and Enrollment Completed on 12/7/2018
1/31/2019	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 18-009 - Heartwood Davis Ranch	18-009	0.00	131.50	131.50	Credits transferred from BCCB to SEP-HCP on behalf of 18-009 on 1/31/2019 Transaction reflected in RIBITS
2/6/2019	SEP-HCP Application 18-009 - Heartwood Davis Ranch	18-009	131.50	0.00	0.00	Participation Agreement executed on 2/6/2019; Participation Certificate Issued and Enrollment Completed on 2/7/2019
3/19/2019	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 17-002A - Deer Canyon Phase IA	17-002A	0.00	89.00	89.00	Credits transferred from BCCB to SEP-HCP on behalf of 17-002A on 3/19/2019 Transaction reflected in RIBITS
3/19/2019	SEP-HCP Application 17-002A - Deer Canyon Phase IA	17-002A	89.00	0.00	0.00	Participation Agreement executed on 3/26/2019; Participation Certificate Issued and Enrollment Completed on 3/26/2019
FY 19-20						
1/29/2020	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 19-005 SA BigHaus	19-005	0.00	81.00	81.00	Credits transferred from BCCB to SEP-HCP on behalf of 19-005 on 1/29/2020 Transaction reflected in RIBITS
1/29/2020	SEP-HCP Application 19-005 - SA BigHaus	19-005	81.00	0.00	0.00	Participation Agreement executed on 1/30/2020; Participation Certificate Issued and Enrollment Completed on 1/30/2020
3/5/2020	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 17-006A - 20.53 Acre Babcock Road, LLC Phase A	17-006A	0.00	26.50	26.50	Credits transferred from BCCB to SEP-HCP on behalf of 17-006A on 3/5/2020 Transaction reflected in RIBITS
9/25/2020	SEP-HCP Application 17-006A - 20.53 Acre Babcock Road, LLC Phase A	17-006A	26.50	0.00	0.00	Participation Agreement executed on 9/22/2020; Participation Certificate Issued and Enrollment Completed on 9/25/2020
FY 20-21						
3/22/2021	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 19-002- Sonoma Verde SPE, L.P.	19-002	0.00	77.00	77.00	Credits transferred from BCCB to SEP-HCP on behalf of 19-002 on 3/22/2021 Transaction reflected in RIBITS
3/22/2021	SEP-HCP Application 19-002- Sonoma Verde SPE, L.P.	19-002	77.00	0.00	0.00	Participation Agreement executed on 4/22/2021; Participation Certificate Issued and Enrollment Completed on 5/4/2021
9/16/2021	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 21-001 PHSA-NW315, LLC	21-001	0.00	28.50	28.50	Credits transferred from BCCB to SEP-HCP on behalf of 21-001 on 9/16/2021 Transaction reflected in RIBITS
9/16/2021	SEP-HCP Application 21-001 PHSA-NW315, LLC	21-001	28.50	0.00	0.00	Participation Agreement executed on 9/27/2021; Participation Certificate Issued and Enrollment Completed on 9/27/2021
FY 21-22						
9/15/2022	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 22-001 SAWS	22-001	0.00	8.50	8.50	Credits transferred from BCCB to SEP-HCP on behalf of 22-001 on 9/15/2022 Transaction reflected in RIBITS
FY 22-23						
10/24/2022	SEP-HCP Application 22-001 SAWS	22-001	8.50	0.00	0.00	Participation Agreement executed on 10/24/2022; Participation Certificate Issued and Enrollment Completed on 11/4/2022
2/17/2023	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 23-001 CHESMAR HOMES	23-001	0.00	123.00	123.00	Credits transferred from BCCB to SEP-HCP on behalf of 23-001 on 2/17/2023 Transaction reflected in RIBITS
2/24/2023	SEP-HCP Application 23-001 CHESMAR HOMES	23-001	123.00	0.00	0.00	Participation Agreement executed on 2/24/2023; Participation Certificate Issued and Enrollment Completed on 2/24/2023
9/9/2023	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 23-003 HPI BABCOCK STORAGE LLC	23-003	0.00	8.50	8.50	Credits transferred from BCCB to SEP-HCP on behalf of 23-009 on 8/25/2023 Transaction reflected in RIBITS
9/9/2023	SEP-HCP Application 23-003 HPI BABCOCK STORAGE LLC	23-003	8.50	0.00	0.00	Participation Agreement executed on 9/9/2023; Participation Certificate Issued and Enrollment Completed on 9/9/2023
9/8/2023	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 23-009 CPS Energy	23-009	0.00	17.50	17.50	Credits transferred from BCCB to SEP-HCP on behalf of 23-009 on 9/8/2023 Transaction reflected in RIBITS
9/19/2023	SEP-HCP Application 23-009 CPS Energy	23-009	17.50	0.00	0.00	Participation Agreement executed on 9/19/2023; Participation Certificate Issued and Enrollment Completed on 9/19/2023

SEP-HCP KARST ZONE 1 & 2 ENROLLMENT ACRES NORTHERN PRESERVE LEDGER

			KARST ZONE 1	KARST ZONE 2	KARST ZONE 3	KARST ZONE 4	TOTAL KARST ZONE 1 & 2	TOTAL KARST ZONE 3 & 4	KARST ENROLLMENT ACRES RESERVED	DEBIT (ENROLLMENT ACRES)	CREDIT (ENROLLMENT ACRES)	BALANCE (ENROLLMENT ACRES)	
DATE	DESCRIPTION	REFERENCE #	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES					COMMENTS
FY 17-18													
6/22/2018	Northern Preserve KFA Establishment	-	-	-	-	-	-	-	-	0.00	678.52	678.52	USFWS approval of KFA and award of 678.52 karst enrollment acres received on June 30, 2017
6/22/2018	Stevens Ranch - Karst Enrollment Acres - RESERVED	-	-	-	-	-	-	-	494.52	0.00	0.00	184.00	Per Northern Preserve Donation Agreement executed 4/24/2018
8/16/2018	SEP-HCP Application 17-001 - Vista Ridge Pipeline	17-001	41.73	49.53	0.00	0.00	91.26	0.00	494.52	91.26	0.00	92.74	Participation Agreement Recorded 8/16/2018; Participation Certificate Issued & Enrollment completed 8/17/2018
9/6/2018	SEP-HCP Application 17-003 INTOCO Dominion - Hilltop & Howell North	17-003	0.00	0.00	12.71	0.00	0.00	12.71	494.52	0.00	0.00	92.74	Participation Agreement Recorded 9/17/2018; Participation Certificate Issued & Enrollment completed 9/17/2018
9/17/2018	SEP-HCP Application 18-004 SAWS CWIP North Segement	18-004	6.92	6.78	0.00	0.00	13.70	0.00	494.52	13.70	0.00	79.04	Participation Agreement Recorded 9/17/2018; Participation Certificate Issued & Enrollment completed 9/17/2018
FY 18-19													
10/2/2018	SEP-HCP Application 18-005 Comal ISD Waterline	18-005	0.00	0.00	0.00	0.00	0.00	0.00	494.52	0.00	0.00	79.04	Enrollment Area is same as 17-001; karst participation not required.
12/21/2018	SEP-HCP Application 18-004 SAWS CWIP North Segement - additional area	18-004B	0.05	0.306	0.306	0.00	0.356	0.306	494.52	0.356	0.00	78.68	Participation Agreement Recorded 12/21/2018; Participation Certificate Issued & Enrollment completed 12/21/2018
3/26/2019	SEP-HCP Application 17-002A - Deer Canyon Phase IA	17-002A	0.00	32.84	4.70	0.00	32.84	4.70	494.52	32.84	0.00	45.84	Participation Agreement Recorded 3/26/2019; Participation Certificate Issued & Enrollment completed 3/26/2019
9/13/2019	SEP-HCP Application 18-006 - Stevens Ranch 494.52 Acres	18-006	410.71	83.81	0.00	0.00	494.52	0.00	0.00	494.52	494.52	45.84	Per Northern Preserve Donation Agreement executed 4/24/2018 Participation Agreement Recorded 9/12/2019; Participation Certificate Issued & Enrollment completed 9/13/2019
FY 19-20													
9/5/2020	SEP-HCP Application 17-006A - 20.53 Acre Balcock Road, LLC Phase A	17-006A	6.70	0.00	0.00	0.00	6.70	0.00	0.00	6.70	0.00	39.14	Participation Agreement Recorded 9/25/2020; Participation Certificate Issued & Enrollment completed 9/25/2020
FY 20-21													
11/12/2020	SEP-HCP Application 20-002 - TxDOT Alamo Ranch Parkway	20-002	0.00	15.10	0.00	0.00	15.10	0.00	0.00	15.10	0.00	24.04	MOA Executed & Enrollment completed 11/12/2020
11/24/2020	SEP-HCP Application 20-001 - TxDOT/Bexar County - Bulverde Road	20-001	14.19	2.28	0.00	0.00	16.47	0.00	0.00	16.47	0.00	7.57	MOA Executed & Enrollment completed 11/24/2020
9/27/2021	SEP-HCP Application 21-001 - PSHA-NW315, LLC	21-001	0.00	6.72	51.51	0.00	6.72	51.51	0.00	6.72	0.00	0.85	Participation Agreement Recorded 9/27/2021; Participation Certificate Issued & Enrollment completed 9/27/2021

SEP-HCP KARST ZONE 1 & 2 ENROLLMENT ACRES PANTHER SPRINGS PRESERVE LEDGER

		KARST ZONE 1		KARST ZONE 2		KARST ZONE 3		KARST ZONE 4		TOTAL KARST ZONE 1 & 2 ENROLLMENT		TOTAL KARST ZONE 3 & 4 ENROLLMENT		KARST ENROLLMENT ACRES RESERVED	DEBIT (ENROLLMENT ACRES)	CREDIT (ENROLLMENT ACRES)	BALANCE (ENROLLMENT ACRES)	
DATE	DESCRIPTION	REFERENCE #	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES					COMMENTS
FY 17-18																		
9/19/2018	Panther Springs Preserve KFA Establishment	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00	471.00	471.00	USFWS approval of KFA and award of 471 karst enrollment acres received on September 19, 2018
9/19/2018	Panther Springs Preserve KFA - Karst Enrollment Acres - RESERVED FOR COSA PARD PROJECTS	-	-	-	-	-	-	-	-	-	-	-	-	90.00	0.00	0.00	381.00	Per Panther Springs Approval by Parks Board 7/23/2018
9/25/2018	SEP-HCP Application 18-001 123 Heuermann Road Tract	18-001	6.17	0.00	0.00	0.00	0.00	6.17	0.00	0.00	6.17	0.00	90.00	6.17	0.00	0.00	374.83	Participation Agreement Recorded 9/24/2018; Participation Certificate Issued & Enrollment completed 9/25/2018
10/2/2018	SEP-HCP Application 18-002 - Cresta Bella Unit 4B	18-002	4.66	0.00	0.00	0.00	0.00	4.66	0.00	0.00	4.66	0.00	90.00	4.66	0.00	0.00	370.17	Participation Agreement Recorded 10/2/2018; Participation Certificate Issued & Enrollment completed 10/2/2018
FY 18-19																		
12/6/2018	SEP-HCP Application 18-003 - COSA PARD Salado Creek Greenway Trail Project	18-003	4.81	6.93	0.00	0.00	0.00	11.74	0.00	0.00	11.74	0.00	78.26	11.74	11.74	0.00	370.17	Participation Agreement Recorded 12/5/2018; Participation Certificate Issued & Enrollment completed 12/6/2018
12/7/2018	SEP-HCP Application 18-008 Pulte Davis Ranch	18-008	0.00	0.00	75.65	0.00	0.00	0.00	75.65	0.00	0.00	75.65	78.26	0.00	0.00	0.00	370.17	Participation Agreement Recorded 12/6/2018; Participation Certificate Issued & Enrollment completed 12/7/2018
12/17/2018	SEP-HCP Application 17-004 Wells Fargo Parcel 1	17-004	0.00	111.90	0.00	0.00	0.00	111.90	0.00	0.00	111.90	0.00	78.26	111.90	0.00	0.00	258.27	Participation Agreement Recorded 12/17/2018; Participation Certificate Issued & Enrollment completed 12/17/2018
12/17/2018	SEP-HCP Application 17-005 Wells Fargo Parcel 2	17-005	0.00	10.00	0.00	0.00	0.00	10.00	0.00	0.00	10.00	0.00	78.26	10.00	0.00	0.00	248.27	Participation Agreement Recorded 12/17/2018; Participation Certificate Issued & Enrollment completed 12/17/2018
12/21/2018	SEP-HCP Application 18-007 SAWS - CWIP - Bitters, Maltzberger, Pipeline Segment 5-3, and PRV's 2-3	18-007	0.00	0.00	7.60	0.00	0.00	0.00	7.60	0.00	0.00	7.60	78.26	0.00	0.00	0.00	248.27	Participation Agreement Recorded 12/21/2018; Participation Certificate Issued & Enrollment completed 12/21/2018
2/7/2019	SEP-HCP Application 18-009 Heartwood Davis Ranch	18-009	0.00	0.00	58.51	0.00	0.00	0.00	58.51	0.00	0.00	58.51	78.26	0.00	0.00	0.00	248.27	Participation Agreement Recorded 2/6/2019; Participation Certificate Issued & Enrollment completed 2/7/2019
4/23/2019	SEP-HCP Application 19-001 SAWS Segment 5-4 & Halm Blvd	19-001	0.00	0.00	3.70	0.00	0.00	0.00	3.70	0.00	0.00	3.70	78.26	0.00	0.00	0.00	248.27	Participation Agreement Recorded 4/23/2019; Participation Certificate Issued & Enrollment completed 4/23/2019
6/21/2019	SEP-HCP Application 19-003 Vantage at Westover Hills	19-003	0.00	16.11	0.00	0.00	0.00	16.11	0.00	0.00	16.11	0.00	78.26	16.11	0.00	0.00	232.16	Participation Agreement Recorded 6/19/2019; Participation Certificate Issued & Enrollment completed 6/21/2019
7/2/2019	SEP-HCP Application 19-004 QT Store No 4062	19-004	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	5.00	0.00	78.26	5.00	0.00	0.00	227.16	Participation Agreement Recorded 7/2/2019; Participation Certificate Issued & Enrollment completed 7/2/2019
FY 19-20																		
1/30/2020	SEP-HCP Application 19-005 SA BigHaus	19-005	5.29	0.00	32.30	0.00	0.00	5.29	32.30	0.00	5.29	32.30	78.26	5.29	0.00	0.00	221.87	Participation Agreement Recorded 1/30/2020; Participation Certificate Issued & Enrollment completed 1/30/2020
9/28/2020	SEP-HCP Application 20-004 SRP LTD	20-004	0.00	75.96	0.00	0.00	0.00	75.96	0.00	0.00	75.96	0.00	78.26	75.96	0.00	0.00	145.91	Participation Agreement Recorded 9/28/2020; Participation Certificate Issued & Enrollment completed 9/28/2020
FY 20-21																		
10/23/2020	SEP-HCP Application 20-003 COSA PARD Howard Creek Greenway Trail Project - Eisenhower Segment	20-003	5.62	7.02	11.44	0.00	0.00	12.64	11.44	0.00	12.64	11.44	65.62	12.64	12.64	0.00	145.91	Participation Agreement Recorded 10/21/2020; Participation Certificate Issued & Enrollment completed 10/23/2020
5/24/2021	SEP-HCP Application 19-002 Sonoma Verde Tract 2	19-002	37.64	0.00	0.00	0.00	0.00	37.64	0.00	0.00	37.64	0.00	65.62	37.64	0.00	0.00	108.27	Participation Agreement Recorded 4/22/2021; Participation Certificate Issued & Enrollment completed 5/4/2021
FY 21-22																		
12/23/2021	SEP-HCP Application 21-004 Microsoft	21-004	0.00	33.55	0.00	0.00	0.00	33.55	0.00	0.00	33.55	0.00	65.62	33.55	0.00	0.00	74.72	Participation Agreement Recorded 12/23/2021; Participation Certificate Issued & Enrollment completed 12/23/2021
5/12/2022	SEP-HCP Application 22-002 - SRP LTD	22-002	0.00	60.60	0.00	0.00	0.00	60.60	0.00	0.00	60.60	0.00	65.62	60.60	0.00	0.00	14.12	Participation Agreement Recorded 5/4/2022; Participation Certificate Issued & Enrollment completed 5/12/2022
6/9/2022	SEP-HCP Application 21-006 Santikos Raw Land	21-006	0.00	0.00	5.57	0.00	0.00	0.00	5.57	0.00	0.00	5.57	65.62	0.00	0.00	0.00	14.12	Participation Agreement recorded on 6/7/2022. Participation Certificate issued & Enrollment completed 6/9/2022.
6/16/2022	SEP-HCP Application 21-006 San Antonio Housing Corporation	21-006	0.00	0.00	20.93	0.00	0.00	0.00	20.93	0.00	0.00	20.93	65.62	0.00	0.00	0.00	14.12	Participation Agreement recorded on 6/15/2022. Participation Certificate issued & Enrollment completed 6/16/2022.
9/12/2022	SEP-HCP Application 21-005 Bexar County Talley Road Improvements	21-005	0.00	11.90	18.30	0.00	0.00	11.90	18.30	0.00	11.90	18.30	65.62	11.90	0.00	0.00	2.22	MOU executed on 9/12/2022. & Enrollment completed 9/12/2022.
FY 22-23																		
11/4/2022	SEP-HCP Application 22-001 SAWS Ranch Town No. 2	22-001	1.53	0.00	0.00	0.00	0.00	1.53	0.00	0.00	1.53	0.00	65.62	1.53	0.00	0.00	0.69	Participation Agreement recorded on 10/24/2022. Participation Certificate issued & Enrollment completed 11/4/2022.
1/13/2023	SEP-HCP Application 22-004 MEDINA REVITALIZATION INITIATIVE, LLC	22-004	0.00	0.00	8.80	0.00	0.00	0.00	8.80	0.00	0.00	8.80	65.62	0.00	0.00	0.00	0.69	Participation Agreement recorded on 1/13/2023. Participation Certificate issued & Enrollment completed 1/17/2023.
2/24/2023	SEP-HCP Application 23-001 CHESMAR HOMES, LLC	23-001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.62	0.00	0.00	0.00	0.69	Participation Agreement recorded on 2/24/2023. Participation Certificate issued & Enrollment completed 2/24/2023.
6/30/2023	Panther Springs Preserve KFA - Karst Enrollment Acres - RESERVED FOR COSA PARD PROJECTS	-	-	-	-	-	-	-	-	-	-	-	0.00	0.00	65.62	66.31	COSA PARD approval of the release of their reserved enrollment acres for use by other pending projects. The remaining 65.62 enrollment acres reserved for COSA PARD will be transferred over to Crane Bat Cave as reserved enrollment acres upon establishment of the Crane Bat Cave KFA in order to be able to close out the Panther Springs Ledger.	
7/11/2023	SEP-HCP Application 23-002 VILLAGE AT WESTPONTE WEST ELEMENTARY SCHOOL	23-002	0.00	17.89	0.00	0.00	0.00	17.89	0.00	0.00	17.89	0.00	0.00	17.89	0.00	0.00	48.42	Participation Agreement recorded on 7/11/2023. Participation Certificate issued & Enrollment completed 7/11/2023.
7/26/2023	SEP-HCP Application 23-007 SAT40 TRP	23-007	0.00	0.00	22.46	0.00	0.00	0.00	22.46	0.00	0.00	22.46	0.00	0.00	0.00	0.00	48.42	Participation Agreement recorded on 7/26/2023. Participation Certificate issued & Enrollment completed 7/26/2023.
8/9/2023	SEP-HCP Application 23-006 - QT SOUTH LLC	23-006	0.00	0.00	1.97	0.00	0.00	0.00	1.97	0.00	0.00	1.97	0.00	0.00	0.00	0.00	48.42	Participation Agreement recorded on 8/9/2023. Participation Certificate issued & Enrollment completed 8/10/2023.
8/16/2023	SEP-HCP Application 22-005 SAWS CLASSEN-STUEBING WW LINE	22-005	0.64	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.64	0.00	0.00	0.64	0.00	0.00	47.78	Participation Agreement recorded on 8/16/2023. Participation Certificate issued & Enrollment completed 8/17/2023.
9/19/2023	SEP-HCP Application 23-003 HPI BABCOCK STORAGE LLC	23-003	1.98	0.00	0.91	0.00	0.00	1.98	0.91	0.00	1.98	0.91	0.00	1.98	0.00	0.00	45.81	Participation Agreement recorded on 9/15/2023. Participation Certificate issued & Enrollment completed 9/19/2023.
9/19/2023	SEP-HCP Application 23-009 CPS ENERGY	23-009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.81	Participation Agreement recorded on 9/19/2023. Participation Certificate issued 9/19/2023

SEP-HCP KARST ZONE 1 & 2 ENROLLMENT ACRES CRANE BAT CAVE PRESERVE - TXDOT LEDGER

DATE	DESCRIPTION	REFERENCE #	KARST ZONE 1	KARST ZONE 2	KARST ZONE 3	KARST ZONE 4	TOTAL KARST ZONE 1 & 2	TOTAL KARST ZONE 3 & 4	KARST ENROLLMENT	DEBIT	CREDIT	BALANCE	COMMENTS
			ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ENROLLMENT ACRES	ACRES RESERVED	(ENROLLMENT ACRES)	(ENROLLMENT ACRES)	(ENROLLMENT ACRES)	
8/23/2023	Crane Bat Cave Preserve KFA Establishment - TxDOT	-	-	-	-	-	-	-	-	0.00	40.00	40.00	USFWS approval of KFA and assignment of 40 acres of the KFA for the TxDOT Loop 1604 project received on August 23, 2023
8/23/2023	TxDOT Loop 1604 Project MOU	21-002	-	-	-	-	-	-	40.00	0.00	0.00	0.00	MOU approved by coordinating committee October 12, 2021
8/23/2023	TxDOT Loop 1604 Project MOU	21-002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00	40.00	0.00	USFWS approval of KFA and allocation of 40 acres of the KFA to TxDOT in accordance with the 10/12/2021 MOU - SEP-HCP obligation to establish and assign 40 acres of the KFA to TxDOT for the Loop 1604 project completed.

SEP-HCP KARST ZONE 1 & 2 ENROLLMENT ACRES CRANE BAT CAVE PRESERVE LEDGEF

		REFERENCE	KARST ZONE 1	KARST ZONE 2	KARST ZONE 3	KARST ZONE 4	TOTAL KARST ZONE 1	TOTAL KARST ZONE 3	KARST	DEBIT	CREDIT	BALANCE	
DATE	DESCRIPTION	#	ENROLLMENT	ENROLLMENT	ENROLLMENT	ENROLLMENT	& 2 ENROLLMENT	& 4 ENROLLMENT	ENROLLMENT	(ENROLLMENT	(ENROLLMENT	(ENROLLMENT	(ENROLLMENT
			ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES RESERVED	ACRES)	ACRES)	ACRES)	ACRES)
FY 22-23													
8/23/2023	Crane Bat Cave Preserve KFA Establishment	-	-	-	-	-	-	-	-	0.00	361.26	361.26	USFWS approval of KFA and award of 361.26 karst enrollment acres received on August 23, 2023
8/23/2023	COSA PARD - Panther Springs Karst Enrollment Acres Release & Transfer - RESERVED	-	-	-	-	-	-	-	65.62	0.00	0.00	295.64	Transfer of reserved enrollment acres from Panther Springs to Crane Bat Cave in order to close out the Panther Springs Preserve Ledger. Original reservation of enrollment acres was established per the Panther Springs KFA Approval by Parks Board on 7/23/2018. See 6/30/2023 ledger entry on the Panther Springs Preserve ledger for release of the remaining 65.62 enrollment acres reserved for COSA PARD use.

ATTACHMENT D

SEP-HCP FINANCIAL STATUS

SEP-HCP Account Balance - As of 9/30/23

SEP-HCP General Program Administration									
Fiscal Year									
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	Cumulative Fund Balance**
4406300	Application Fee - \$2.5K	7,500	22,500	17,518	12,500	4,982	20,000	22,500	107,500
4406301	Plan Admin Fee - 10% Tot Mitig Fees	9,126	34,698	232,846	56,516	55,821	937,138	67,215	1,393,361
4406305	Karst Habitat - \$1K per acre	68,445	36,165	252,284	103,117	106,055	8,588,968	59,722	9,214,757
4502280	Contributions from other Agencies	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	869	3,959	22,284	16,953	2,694	47,389	183,757	277,905
4902700	Net Increase in Fair Value of Investment*	(13)	(112)	1,379	66	(1,289)	(113,751)	113,802	82
5201040	Fees to Professional Contractors***	-	(52,358)	(107,682)	(113,016)	(124,356)	(87,870)	(127,365)	(612,647)
6101100	Interfund Transfers In	141,750	141,750	141,750	141,750	-	50,000	50,000	667,000
6102100	Interfund Transfers Out	-	-	-	-	-	(50,000)	(2,159,144)	(2,209,144)
Grand Total		227,676	186,602	560,379	217,886	43,907	9,391,874	(1,789,512)	8,838,813

Endowment Fund - Government Canyon									
Fiscal Year									
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	-	-	30,103	6,389	12,519	12,271	6,825	68,106
4502280	Contributions from other Agencies	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	-	784	2,518	2,371	396	2,909	4,540	13,518
4902700	Net Increase in Fair Value of Investment*	-	(20)	149	36	(193)	(7,749)	7,757	(20)
6101100	Interfund Transfers In	33,250	33,250	33,250	33,250	-	-	-	133,000
Grand Total		33,250	34,014	66,020	42,046	12,723	7,431	19,121	214,604

Endowment Fund - Crane Bat Cave									
Fiscal Year									
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	-	-	-	-	-	-	712,500	712,500
4502280	Contributions from other agencies	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	-	-	-	-	-	-	6,833	6,833
4902700	Net Increase in Fair Value of Investment*	-	-	-	-	-	-	-	-
Grand Total		-	-	-	-	-	-	719,333	719,333

Endowment Fund - Northern Preserve									
Fiscal Year									
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	22,815	3,425	8,210	89	9,641	17,139	-	61,319
4502280	Contributions from other agencies	-	165,750	-	-	-	-	-	165,750
4901301	Interest on Pooled Investments-Operating	-	2,263	4,537	3,305	482	1,302	4,604	16,493
4902700	Net Increase in Fair Value of Investment*	-	(59)	245	(16)	(237)	(3,337)	3,346	(59)
Grand Total		22,815	171,379	12,991	3,378	9,887	15,103	7,950	243,503

Endowment Fund - Panther Springs Preserve									
Fiscal Year									
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	-	8,630	35,943	25,765	8,800	719,003	(701,693)	96,447
4502280	Contributions from other agencies	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	-	102	570	725	149	3,720	8,491	13,757
4902700	Net Increase in Fair Value of Investment*	-	(3)	40	14	(57)	(8,968)	8,972	(3)
Grand Total		-	8,729	36,552	26,504	8,892	713,755	(684,231)	110,201
Total of All Fund Balances									10,126,454.25

*Denotes loss/depreciation of investments in various markets

**Actual cash in and cash out and does not include value of environmental credits

*** Bexar County Contribution is equal to City contribution

Revenues	10,410,595
Interest	328,506
Expenses	(612,647)
Total of All Fund Balances	10,126,454.25

ATTACHMENT E

**SEP-HCP PARTICIPANTS / ENROLLED PROPERTIES IN WHICH PREVIOUSLY
UNDISCOVERED VOIDS OR OTHER KARST FEATURES WERE ENCOUNTERED DURING
IMPLEMENTATION OF COVERED ACTIVITIES**

Two Participants / Enrolled Properties reported occurrences of previously undiscovered voids or other karst features that were encountered during implementation of covered activities by the Participants/Enrolled Properties during the 2022 – 2023 Fiscal Year. A summary of the Participants / Enrolled Properties in which previously undiscovered voids or other karst features were encountered during implementation of covered activities during the 2022 – 2023 Fiscal Year is included below. Additional information, documentation, and coordination are included in the SEP-HCP program files and can be provided upon request.

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
22-005	12/8/2023	12/8/2023	<p>Construction workers encountered the feature during the grading work for construction of the Classes-Steubing New Bore Alignment project site. The feature was evaluated by a permitted biologist on 12/8/23 as soon as notification was received. Construction was stopped within 50 feet of the feature and the feature covered to prevent desiccation. On December 8, 2023 a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated one karst void encountered. The evaluation was conducted to examine the extent of the void and to determine if the presence of potential endangered karst invertebrate habitat existed within the encountered feature. The evaluation was conducted in accordance with the United States Fish and Wildlife Service (USFWS) Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Presence/Absence Surveys for Endangered Karst Invertebrates in Central Texas (USFWS 2022). This feature exhibited no surface expression prior to being discovered during construction. R-1 was encountered during grading activities roughly 9 feet below the original ground surface (top of void). The opening was measured to be 13 feet by 3.6 feet with a depth of 9.9 feet. The opening traverses downward into a small room with walls covered in calcite speleothems and a floor composed of breakdown. Observations from within the feature did not indicate the presence of any additional passageway, air flow, nor the presence of troglobitic or troglophile species. After reviewing page 8 of 24 of the USFWS 2022 karst protocols, this feature would likely meet the characteristics of karst features not likely to contain suitable habitat for endangered karst invertebrates (USFWS 2022). This conclusion was supported by a review of the GoPro footage taken within the void, photos gathered by the response team, visual observations made from within R-1, and 2022 USFWS karst protocols. To preserve void space and comply with the recommendations provided in the Participation Agreement recorded for this project, the Classen-Steubing project team will fill the bottom of the feature with large rocks of at least 3 inches in diameter that are irregularly shaped to mimic natural mesocaverns, and flowable fill from the immediate vicinity that are grouted together with a brick-mortar substance or comparable substance pursuant to TCEQ 2007. The participant will adhere to the "Special Conditions for Karst Participation" written in the Participation Agreement.</p>
23-002	7/12/2023	7/13/2023	<p>The potential presence of potential karst features was reported in conjunction with the installation of select small-diameter pilot holes that were being installed at the NEISD project site to evaluate rock conditions below planned grade-beam structures for the elementary school building. The pilot holes were 6 inches in diameter and extended to depths of 15 feet below existing ground surface. RKI visited the SITE on 7/12/23 to meet with the construction team and evaluate the presence of karst features within the pilot holes using a downhole camera system. As the result of our assessment, a total of 3 small karst features were confirmed to be present:</p> <ul style="list-style-type: none"> » PH #142/143: Small horizontal cave formed along a limestone bedding contact. Top of the cave is at approximately 10 feet and bottom is at 16 feet relative to existing surface grade. » PH #198: Small horizontal/vertical solution cavity containing speleothems. Feature is present at approximately 13.5 to 15 feet. » PH #310: Small horizontal/vertical solution cavity containing speleothems. Feature is present at approximately 10 to 11.5 feet. <p>The pilot-hole opening were covered and protected in accordance with SEP-HCP requirements and construction activities within 50 feet of these locations was suspended.</p> <p>On 14 July 2023, two permitted biologists with Zara Environmental LLC, Aubri Jensen and Jimmy MacMillan (US Fish and Wildlife Service [USFWS] permit ESPER0003024), conducted karst habitat assessments for three non-enterable voids encountered in pilot holes drilled. All three voids (PH 142-143, PH 198, and PH 310) met USFWS criteria for potential karst invertebrate habitat. Work was halted within 50 feet of each void and openings were covered with black plastic sheeting and plywood to maintain subterranean climate conditions. Per direction of the (SEP HCP) administrators, each void received one passive biological survey by trapping for a minimum of 48 hours. Traps were set on 14 July 2023 and were retrieved on 17 July 2023. Results of habitat assessments and biological surveys and detailed</p>

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
23-002	8/4/2023	8/4/2023	<p>geologic descriptions of each void were provided to the SEP-HCP. A void closure plan was developed in accordance with the "Special Conditions for Karst Participation" written in the Participation Agreement.</p> <p>The presence of the karst feature (vertical solution cavity) was reported in conjunction with the installation of a grade beam trench being installed at the NEISD site to facilitate construction of the elementary school building. RKI visited the site on 8/4/23 to meet with the construction team and evaluate the presence of karst feature using a downhole camera system. TF-1: was a vertical solution cavity encountered at the base of a grade-beam trench. The top of the feature (opening) is at approximately 5 feet below existing grade. The feature is approximately 3+ feet wide along subsurface bedding surfaces, but is generally on the order of 1-2 feet wide. The feature extends to depth of approximately 9.5 feet below the base of the trench. The feature opening was covered and protected in accordance with SEP-HCP requirements and construction activities within 50 feet suspended. On 04 August 2023, two biologists with Zara Environmental LLC, Jimmy MacMillan (US Fish and Wildlife Service [USFWS] permit ESPE0003024) and Ethan Perrine, conducted a karst habitat assessment for one non-enterable void encountered during trenching activities. The void (TF-1) met USFWS criteria for potential karst invertebrate habitat. Per direction of the SEP-HCP administrators, the void received one passive biological survey by trapping for a minimum of 48 hours. Traps were set on 04 August 2023 and were retrieved on 07 August 2023. Results of the habitat assessment and biological survey and detailed geologic description of the void were provided to the SEP-HCP. A void closure plan was developed in accordance with the "Special Conditions for Karst Participation" written in the Participation Agreement</p>