

**SOUTHERN EDWARDS PLATEAU HABITAT CONSERVATION PLAN**  
**ENDANGERED SPECIES ACT**  
**INCIDENTAL TAKE PERMIT ANNUAL REPORT**  
**FOR FY 2023 – 2024**  
**PERMIT NUMBER TE-48571B-0**

**June 5, 2025**

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 2023 – 2024 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 2023 – 2024 Fiscal Year (October 1, 2023 through September 30, 2024) 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, 2023 (permit effective date) and September 30, 2024.

In accordance with SEP-HCP Section 12.1, activities for the 2023 – 2024 Fiscal Year (October 1, 2023 through September 30, 2024) 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 seven Participants / Enrolled Properties occurred during the 2023 – 2024 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 2023 – 2024 Fiscal Year can be provided to the Service upon request.

Four 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 2023 – 2024 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 2023 – 2024 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 2023 – 2024 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 Baselines<sup>1</sup> 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 actions<sup>2</sup> 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 2023 – 2024 Fiscal Year is included in **Attachment C**.

No BCV Preservation Credits were generated or deducted during the 2023 – 2024 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.

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<sup>1</sup> 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).

<sup>2</sup> 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 2023 – 2024 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 2023 – 2024 Fiscal Year via the adaptive management process or changed circumstances.

## 9. COMPLIANCE-RELATED ISSUES AND ACTIONS

No participants had breaches to the terms and conditions of their participation agreements during the 2023 – 2024 Fiscal Year. No other compliance-related issues or actions involving Participants, Enrolled Properties, or preserves

(including conservation easements) occurred during the 2023 – 2024 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 2023 – 2024 Fiscal Year.

This report summarizes the development, conservation activities, and biological monitoring surveys conducted by the SEP-HCP for the 2023 – 2024 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	BAT/SCODES (VEN/IV)	CICURINA MADLA (CICURINA VENI)	CICURINA VESPERA (CICURINA LOFTNI)	RHADINE EXILIS	RHADINE INFERNALIS	NEOLITOMETA MICROPS
	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
	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

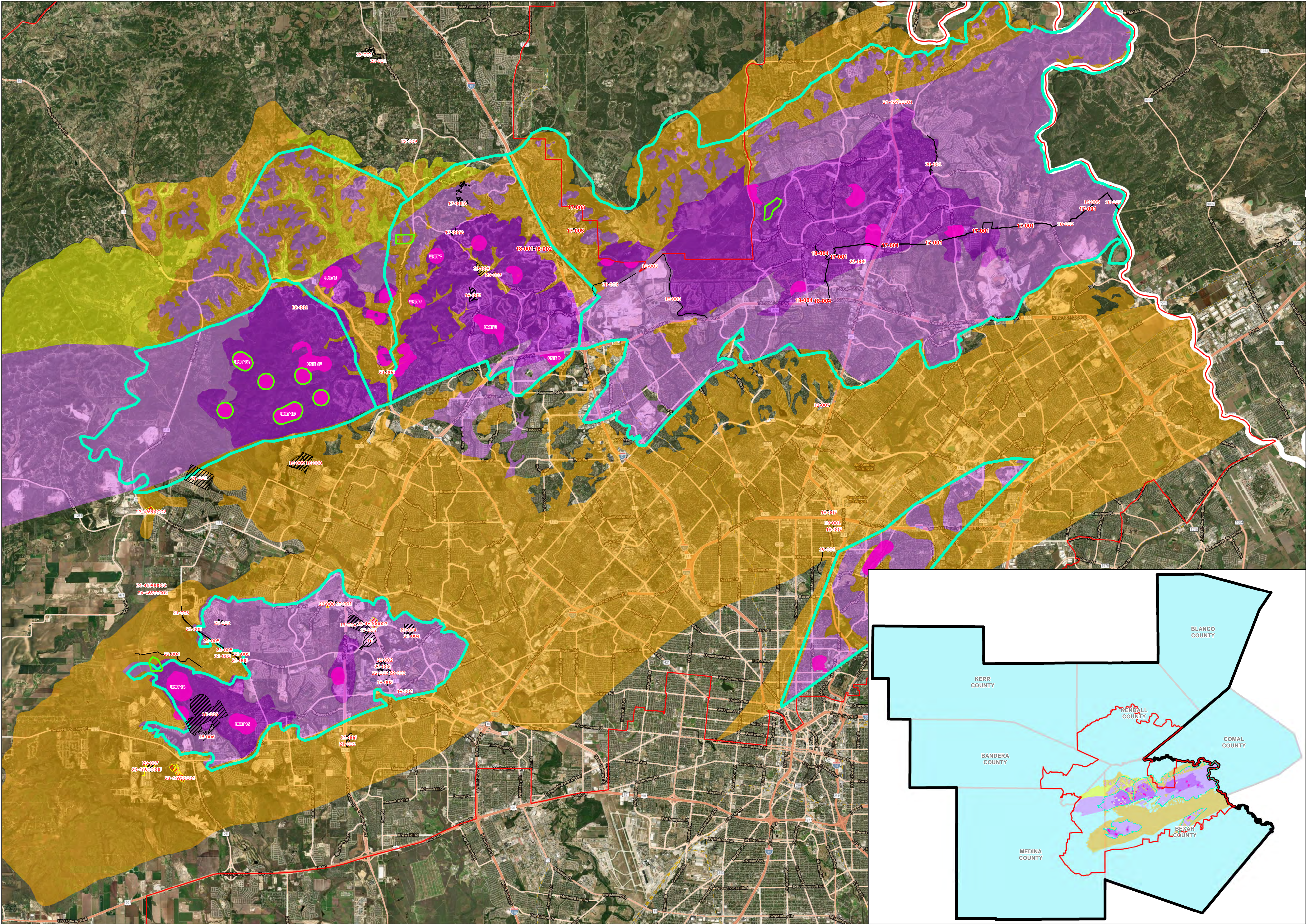
SEP-HCP FY 23-24 (OCT. 1, 2023 - SEPT. 30, 2024) PARTICIPANTS AND ENROLLED PROPERTIES

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	BAT/SCODES (VEN/IV)	CICURINA MADLA (CICURINA VENI)	CICURINA VESPERA (CICURINA LOFTNI)	RHADINE EXILIS	RHADINE INFERNALIS	NEOLITOMETA MICROPS
23-008	Eenhoom, LLC	8.85	20231024	0.00	0.00	0.00	0.0	0.0	0.0	0.00	8.85	8.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-46900002	H-E-B, LP, A LIMITED PARTNERSHIP	28.64	20240419	24.50	10.60	35.10	0.00	0.0	0.0	0.00	0.00	0.00	28.64	0.00	28.64	0.00	0.00	0.00	0.00	0.00	0.00
23-46900003	VANTAGE DATA CENTERS TX2, LLC	31.03	20231220	0.00	0.00	0.00	0.00	0.0	0.0	0.00	31.03	31.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-46900004	VANTAGE DATA CENTERS TX1, LLC	50.08	20231222	0.00	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	50.08	0.00	50.08	0.00	0.00	0.00	0.00	0.00	0.00
23-46900005	MICROSOFT SAT40 TRP 11.9 AC	11.90	20240729	0.00	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	11.90	0.00	11.90	0.00	0.00	0.00	0.00	0.00	0.00
24-46900001	HPI Bulverde Road Storage, L.L.C.	5.63	20240409	0.00	0.00	0.00	0.00	0.0	0.0	0.00	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-46900002	TALLEY EXTENSION REVITALIZATION INITIATIVE, LLC	0.30	20240510	0.00	0.00	0.00	0.00	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 23-24 TOTAL	136.43		24.50	10.60	35.10	0.00	0.00	0.00	0.00	45.52	45.52	90.62	0.00	90.62	0.00	0.00	0.00	0.00	0.00	0.00
	PLAN TO DATE (FY 17-24) 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

\* INCIDENTAL TAKE FOR R. EXILIS AND R. INFERNALIS COVERED THROUGH USFWS SECTION 7 CONSULTATION; ALL GCW IMPACTS MITIGATED SEPARATELY THROUGH SECTION 7 CONSULTATION PROCESS.

\* \*SAME ENROLLMENT AREA AS 17-001

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



# **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>Batrisesodes ventyivi</i>	Government Canyon	224	224	1d	High Quality
Tight KFA	<i>Rhadine exilis</i> <i>Rhadine infernalis</i> <i>Batrisesodes 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>Batrisesodes 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 <sup>1</sup>					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 <sup>c</sup>	1M <sup>d</sup>	<b>Achieved</b>	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 <sup>c</sup>	<b>Achieved</b>	1H + 2M	1H + 2M	1H + 2M	1M
<i>Batrisesodes venyivi</i>	2 <sup>a</sup>	2H + 1M	1H + 2M	-	-	-	3	3	6	Y	Y	Y <sup>a</sup>	N	N	3H + 1M	0	0	0	0	<b>Achieved</b>	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 <sup>b</sup>	1H + 2M	1H + 2M	1H + 2M	1H + 2M	1H + 2M	5	10	15	Y	Y	Y	Y	Y <sup>b</sup>	6H	0	1M <sup>e</sup>	1M <sup>c</sup>	0	<b>Achieved</b>	1H + 2M	1H + 1M	1H + 1M	1H + 2M
<i>Cicurina vespera</i> / <i>Cicurina loftini</i>	2 <sup>b</sup>	2H + 1M	1H + 2M	-	-	-	3	3	6	Y	N	N	N	Y	1H	0	0	0	1H + 2M <sup>c d</sup>	1H + 1M	-	-	-	<b>Achieved</b>

<sup>1</sup> H = High Quality Preserve; M = Medium Quality Preserve

<sup>a</sup> 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.

<sup>b</sup> 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.

<sup>c</sup> 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*

<sup>d</sup> The SAWS APS Karst Preserve contains *C. vespera* & *R. exilis*.

<sup>e</sup> The Crane Bat Cave Preserve KFA (UTSA KFR) contains *C. madla*

# **ATTACHMENT C**

## **SEP-HCP PRESERVATION CREDITS LEDGERS**

**SEP-HCP GCW PRESERVATION CREDIT LEDGER**

DATE	DESCRIPTION	REFERENCE #	DEBIT	CREDIT	BALANCE	COMMENTS
<b>FY 17-18</b>						
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
<b>FY 18-19</b>						
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
<b>FY 19-20</b>						
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
<b>FY 20-21</b>						
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
<b>FY 21-22</b>						
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
<b>FY 22-23</b>						
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
<b>FY 23-24</b>						
3/19/2024	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 24-46900004, CPS Energy	24-46900004	0.00	101.00	101.00	Credits transferred from BCCB to SEP-HCP on behalf of 24-46900004 on 3/19/2024 Transaction reflected in RIBITS
3/20/2024	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 23-46900002, HEB, LP	23-46900002	0.00	54.50	155.50	Credits transferred from BCCB to SEP-HCP on behalf of 23-46900002 on 3/20/2024 Transaction reflected in RIBITS
4/19/2024	SEP-HCP Application 23-46900002, HEB, LP	23-46900002	54.50	0.00	101.00	Participation Agreement executed on 4/17/2024; Participation Certificate Issued and Enrollment Completed on 4/19/2024
9/30/2024	BCCB GCW Credit Transfer to SEP-HCP on behalf of SEP-HCP Application 24-46900005, Grey Forest Development, LLC – Kyle Seale Parkway Extension	24-46900005	0.00	9.50	110.50	Credits transferred from BCCB to SEP-HCP on behalf of 24-46900005 on 9/30/2024 Transaction reflected in RIBITS

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		TOTAL KARST ZONE 3 & 4		KARST ENROLLMENT ACRES RESERVED		DEBIT (ENROLLMENT ACRES)		CREDIT (ENROLLMENT ACRES)		BALANCE (ENROLLMENT ACRES)			
DATE	DESCRIPTION	REFERENCE #	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	ACRES	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	0.00	90.00	6.17	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	0.00	90.00	4.66	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	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	75.65	0.00	78.26	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	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	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	7.60	0.00	78.26	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	58.51	0.00	78.26	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	3.70	0.00	78.26	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	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	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	32.30	0.00	78.26	5.29	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	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	11.44	0.00	65.62	12.64	12.64	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	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	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	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	5.57	0.00	65.62	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	20.93	0.00	65.62	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	18.30	0.00	65.62	11.90	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	0.69	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	8.80	0.00	65.62	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	0.69	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 WESTPOINTE 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	0.00	17.89	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	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	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-STEUBING 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	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	0.00	0.91	0.00	1.98	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	45.81	Participation Agreement recorded on 9/19/2023. Participation Certificate issued 9/19/2023						
FY 23-24																							
10/24/2023	SEP-HCP Application 23-008 Eenhoorn, LLC	23-008	0.00	8.85	0.00	0.00	0.00	8.85	0.00	0.00	8.85	0.00	0.00	8.85	0.00	36.96	Participation Agreement recorded on 10/24/2023. Participation Certificate issued & Enrollment completed 10/24/2023.						
45280	SEP-HCP Application 23-46900003 VANTAGE DATA CENTERS TX2, LLC	23-46900003	0	31.03	0	0	0	31.03	0	0	31.03	0	0	31.03	0.00	5.93	Participation Agreement recorded on 12/20/2023. Participation Certificate issued & Enrollment completed 12/20/2023.						
45282	SEP-HCP Application 23-46900004 VANTAGE DATA CENTERS TX1, LLC	23-46900001	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	5.93	Participation Agreement recorded on 12/22/2023. Participation Certificate issued 12/22/2023						
45391	SEP-HCP Application 24-46900001 HPI BULVERDE ROAD STORAGE LLC	24-46900001	0	5.63	0	0	0	5.63	0	0	5.63	0	0	5.63	0.00	0.30	Participation Agreement recorded on 4/5/2024. Participation Certificate issued 4/9/2024						
45401	SEP-HCP Application 23-46900002 H-E-B, LP, A LIMITED PARTNERSHIP	23-46900002	0	0	28.64	0	0	0	28.64	0	28.64	0	0	0.00	0.00	0.30	Participation Agreement recorded on 4/17/2024. Participation Certificate issued & Enrollment completed 4/19/2024						
45422	SEP-HCP Application 24-46900002 TALLEY EXTENSION REVITALIZATION INITIATIVE, LLC	24-46900002	0	0	0	0	0	0	0.00	0	0.00	0	0	0.00	0.00	0.30	Participation Agreement recorded on 5/10/2024. Participation Certificate issued 5/10/2024						
45502	SEP-HCP Application 23-46900005 MICROSOFT SAT40 TRP 11.9 AC	23-46900005	0	0	11.9	0	0	0	11.9	0	11.9	0	0	0.00	0.00	0.30	Participation Agreement recorded on 7/29/2024. Participation Certificate issued 7/29/2024						

**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 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.

**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.

# **ATTACHMENT D**

## **SEP-HCP FINANCIAL STATUS**

SEP-HCP ESA ITP ANNUAL REPORT FOR FY 2023-2024  
PERMIT NUMBER TE-48571B-0

SEP-HCP General Program Administration										
Fiscal Year										
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	2024	Cumulative Fund Balance**
4406300	Application Fee - \$2.5K	7,500	22,500	17,518	12,500	4,982	20,000	22,500	37,510	145,010
4406301	Plan Admin Fee - 10% Tot Mitig Fees	9,126	34,698	232,846	56,516	55,821	937,138	67,220	135,920	1,529,285
4406305	Karst Habitat - \$1K per acre	68,445	36,165	252,284	103,117	106,055	8,588,968	59,289	530,127	9,744,451
4502280	Contributions from other Agencies	-	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	869	3,959	22,284	16,953	2,694	47,389	288,806	306,066	689,020
4902700	Net Increase in Fair Value of Investment*	(13)	(112)	1,379	66	(1,289)	(113,751)	18,703	140,869	45,851
5201040	Fees to Professional Contractors***	-	(52,358)	(107,682)	(113,016)	(124,356)	(87,870)	(127,365)	(113,863)	(726,510)
6101100	Interfund Transfers In	141,750	141,750	141,750	141,750	-	50,000	50,000	50,000	717,000
6102100	Interfund Transfers Out	-	-	-	-	-	(50,000)	(2,159,144)	(100,000)	(2,309,144)
<b>Grand Total</b>		<b>227,676</b>	<b>186,602</b>	<b>560,379</b>	<b>217,886</b>	<b>43,907</b>	<b>9,391,874</b>	<b>(1,779,991)</b>	<b>986,629</b>	<b>9,834,963</b>

Endowment Fund - Government Canyon										
Fiscal Year										
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	2024	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	-	-	30,103	6,389	12,519	12,271	5,052	-	66,333
4502280	Contributions from other Agencies	-	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	-	784	2,518	2,371	396	2,909	7,179	7,498	23,656
4902700	Net Increase in Fair Value of Investment*	-	(20)	149	36	(193)	(7,749)	5,222	3,642	1,087
6101100	Interfund Transfers In	33,250	33,250	33,250	33,250	-	-	-	-	133,000
<b>Grand Total</b>		<b>33,250</b>	<b>34,014</b>	<b>66,020</b>	<b>42,046</b>	<b>12,723</b>	<b>7,431</b>	<b>17,453</b>	<b>11,140</b>	<b>224,075</b>

Endowment Fund - Crane Bat Cave										
Fiscal Year										
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	2024	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	-	-	-	-	-	-	712,500	-	712,500
4502280	Contributions from other agencies	-	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	-	-	-	-	-	-	13,530	23,307	36,837
4902700	Net Increase in Fair Value of Investment*	-	-	-	-	-	-	(5,545)	9,212	3,667
<b>Grand Total</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>720,485</b>	<b>32,519</b>	<b>753,004</b>

Endowment Fund - Northern Preserve										
Fiscal Year										
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	2024	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	7,362	8,315	27,566
4902700	Net Increase in Fair Value of Investment*	-	(59)	245	(16)	(237)	(3,337)	882	3,710	1,187
<b>Grand Total</b>		<b>22,815</b>	<b>171,379</b>	<b>12,991</b>	<b>3,378</b>	<b>9,887</b>	<b>15,103</b>	<b>8,244</b>	<b>12,025</b>	<b>255,822</b>

Endowment Fund - Panther Springs Preserve										
Fiscal Year										
Account Number	Account Name	2017	2018	2019	2020	2021	2022	2023	2024	Cumulative Fund Balance**
4406305	Karst Habitat - \$1K per acre	-	8,630	35,943	25,765	8,800	719,003	(699,491)	-	98,649
4502280	Contributions from other agencies	-	-	-	-	-	-	-	-	-
4901301	Interest on Pooled Investments-Operating	-	102	570	725	149	3,720	11,190	4,719	21,175
4902700	Net Increase in Fair Value of Investment*	-	(3)	40	14	(57)	(8,968)	6,120	3,399	544
<b>Grand Total</b>		<b>-</b>	<b>8,729</b>	<b>36,552</b>	<b>26,504</b>	<b>8,892</b>	<b>713,755</b>	<b>(682,182)</b>	<b>8,118</b>	<b>120,368</b>
<b>Total of All Fund Balances</b>										<b>11,188,232.47</b>

\*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 & Transfers		11,064,153
Interest		850,590
Expenses		(726,510)
<b>Total of All Fund Balances</b>		<b>11,188,232.47</b>

# **ATTACHMENT E**

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

Four 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 2023 – 2024 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 2023 – 2024 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
20-004	9/19/2023	9/20/2023	On September 20, September 21, and September 25, 2023, Pape-Dawson Consulting Engineers, LLC (Pape- Dawson) permitted biologist evaluated a total of five voids encountered in 6-inch diameter pilot holes (PH) on the Microsoft SAT 15 site. 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).
	9/20/2023	9/21/2023	
	9/21/2023	9/21/2023	
	9/25/2023	9/25/2023	
	9/26/2023	9/27/2023	
	9/27/2023	9/27/2023	<p><b>*PH-1</b> – This feature was encountered in PH-1 and is located roughly 22 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 33 feet below the ground surface. The feature opened into a small room with breakdown observed on the floor of the feature. Based on a review of the GoPro footage taken within the void, PH-1 would likely be considered potential habitat for listed karst invertebrate species.</p> <p><b>*PH-2</b> – This feature was encountered in PH-2 and is located roughly 24 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 32 feet below the ground surface. The spacing between the first and second pilot holes is approximately 17 feet. The feature opened into a small room with breakdown observed on the floor of the feature. Based on a review of the GoPro footage taken within the void, PH-1 and PH-2 are not connected, with PH-2 also considered as potential habitat for USFWS listed karst invertebrate species.</p> <p><b>PH-3</b> – The feature was encountered at a depth of approximately 28 feet below the ground surface, with the bottom of the feature measured at 32 feet. Review of the GoPro footage from within the feature indicates that PH-3 is smaller in size than the first two features discussed above and likely does not have potential for containing suitable habitat for USFWS listed karst invertebrate species given the visual observations of the features interior.</p> <p><b>PH-4</b> – The anomaly within PH-4 was encountered at a depth of approximately 13 feet below the ground surface. Review of the GoPro footage within PH-4 indicates that the interior of PH-4 lacks sufficient void space to be considered a feature. The anomaly was likely formed along a joint and would not likely be considered to contain potential habitat for listed karst invertebrate species.</p> <p><b>*PH-5</b> - This feature was encountered in PH-5 and is located roughly 22 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 24 feet below the ground surface. The feature opened into a small room with breakdown observed on the floor of the feature. Based on a review of the GoPro footage taken within the void, PH-5 would likely be considered potential habitat for listed karst invertebrate species.</p> <p><b>*Note:</b> Given the diameter of the pilot hole, the inability to enter and assess the full extent of the void space within PH-1, PH-2, and PH-5 in conjunction with a limited view provided by the GoPro footage of the interior of each feature, must be taken into consideration when evaluating features encountered of this nature.</p> <p>Based on the footage collected within each of the pilot holes investigated by a USFWS permitted karst biologist, features (PH-1, PH-2, PH-5) would likely be considered to contain suitable habitat for endangered karst invertebrates. To preserve void space and comply with the recommendations provided in the Participation Agreement recorded on September 28, 2020, the SAT 15 Team will fill the bottom of each 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 recorded on September 28, 2020.</p>
	10/2/2023	10/3/2023	
	10/3/2023	10/3/2023	
	4/19/2024	4/19/2024	
	6/25/2024	6/25/2024	
			On September 27, 2023, a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated two voids (PH-6 & PH-7) encountered in 6-inch diameter pilot holes (PH) on the Microsoft SAT 15 site. One of the voids (PH-6) did not meet the USFWS size criteria to be considered a karst feature, which is

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
			<p>described in the Participation Agreement recorded on September 28, 2020. This defines a karst feature as a subsurface void that is approximately three feet or more in length and at least three feet deep. Since PH-6 did not exhibit any void space, it will not be discussed further in this assessment.</p> <p><b>*PH-7</b> – This feature was encountered in PH-7 and is located roughly 25 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 29 feet below the ground surface. A large opening within PH-7 appears to lead to additional passageway. The feature opened into a room with breakdown observed on the floor of the feature with some calcite speleothems observed on a section of wall. Based on a review of the GoPro footage taken within the void, PH-7 would likely be considered potential habitat for USFWS listed karst invertebrate species.</p> <p><b>*Note:</b> Given the diameter of the pilot hole, the inability to enter and assess the full extent of the void space within PH-7 in conjunction with a limited view provided by the GoPro footage of the interior of each feature, must be taken into consideration when evaluating features encountered of this nature.</p> <p>Based on the footage collected within PH-7 investigated by a USFWS permitted karst biologist, the habitat assessment is inconclusive in determining the presence of endangered karst invertebrates. Surveying or baiting the feature to confirm if it is occupied by endangered karst invertebrates is not possible since PH-7 is only accessible by a narrow pilot hole and proper placement of a trap into the furthest reaches of the feature cannot be achieved. To preserve void space and comply with the recommendations provided in the Participation Agreement recorded on September 28, 2020, the SAT 15 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 recorded on September 28, 2020.</p> <p>On October 3, 2023, a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated four voids (PH-8 to PH-11) encountered in 6-inch diameter pilot holes (PH) on the Microsoft SAT 15 site. Two of the voids (PH-8 &amp; PH-11) did not meet the USFWS size criteria to be considered a karst feature, which is described in the Participation Agreement recorded on September 28, 2020. This defines a karst feature as a subsurface void that is approximately three feet or more in length and at least three feet deep.</p> <p><b>*PH-9</b> – This feature was encountered in PH-9 and is located roughly 32 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 33 feet below the ground surface. The feature opened into a small room with some breakdown observed on the floor of the feature. Based on the footage collected within PH-9 investigated by a USFWS permitted karst biologist, the habitat assessment is inconclusive in determining the presence of endangered karst invertebrates. Surveying or baiting the feature to confirm if it is occupied by endangered karst invertebrates is not possible since PH-9 is only accessible by a narrow pilot hole and proper placement of a trap into the furthest reaches of the feature cannot be achieved.</p> <p><b>*PH-10</b> – This feature was encountered in PH-10 and is located roughly 45 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 47 feet below the ground surface. The feature opened into a room with breakdown observed on the floor of the feature. Based on the footage collected within PH-10 investigated by a USFWS permitted karst biologist, the habitat assessment is inconclusive in determining the presence of endangered karst invertebrates. Surveying or baiting the feature to confirm if it is occupied by endangered karst invertebrates is not possible since PH-10 is only accessible by a narrow pilot hole and proper placement of a trap into the furthest reaches of the feature cannot be achieved.</p> <p><b>*Note:</b> Given the diameter of the pilot hole, the inability to enter and assess the full extent of the void space within PH-9 and PH-10 in conjunction with a limited view provided by the GoPro footage of the interior of each feature, must be taken into consideration when evaluating features encountered of this nature.</p> <p>Based on the footage collected within each of the pilot holes investigated by a USFWS permitted karst biologist, features PH-10 and PH-11 would likely be considered to contain suitable habitat for endangered karst invertebrates. However, surveying or baiting the features to confirm if they are occupied by endangered karst invertebrates is not possible since they are only accessible by a narrow pilot hole and proper placement of a trap into the furthest reaches of the feature cannot be achieved. To preserve void space and comply with the recommendations provided in the Participation Agreement recorded on September 28, 2020, the SAT 15 Team will fill the bottom of each feature with large rocks of at least 3 inches in diameter</p>

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
			<p>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 recorded on September 28, 2020.</p> <p>On April 19, 2024, a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated one void encountered in a utility trench on the Microsoft SAT 15 site.</p> <p><b>SC-12</b> – This feature was encountered in a utility trench and is located roughly 4.3 feet below the ground surface (top of the void), with the bottom of the feature measured at approximately 6.5-7 feet below the top of the void opening. The opening of the void was measured to be approximately 9 inches in length by 12 inches in width. The feature was evaluated using a GoPro to determine if additional void space or passageway was present within the feature. Upon review of the GoPro footage, the bottom of the feature was observed to be covered with cobbles and surface material associated with trenching activities. No additional void space or passageway was observed within the feature based on the GoPro footage. No air flow was detected coming from within the feature and no biota were observed during the inspection. It should be noted that the feature did not exhibit surface expression prior to being discovered during construction and was encountered after trenching activities occurred on the site.</p> <p>Based on the footage collected within SC-12 investigated by a USFWS permitted karst biologist, potential endangered karst invertebrate habitat may be present. To preserve void space and comply with the recommendations provided in the Participation agreement recorded on September 28, 2020, the SAT 15 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 recorded on September 28, 2020.</p> <p>On June 25, 2024, a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated one void encountered in a utility trench on the Microsoft SAT 15 site.</p> <p><b>SC-13</b> – This feature was encountered in a utility trench and is located roughly four feet below the ground surface (top of the void), with the bottom of the feature measured at approximately five feet below the top of the void opening. The opening of the void was measured to be approximately 41 inches in length by 21 inches in width. The feature was evaluated using a GoPro to determine if additional void space or passageway was present within the feature. Upon review of the GoPro footage, the bottom of the feature was observed to be filled with limestone rock, surface material associated with trenching activities, and debris. Some speleothems were observed along the walls of the feature. No additional void spaces, passageways, or leads were observed within the feature based on the GoPro footage. No air flow was detected coming from within the feature and no biota was observed during the inspection). It should be noted that the feature did not exhibit surface expression prior to being discovered during construction and was encountered after trenching activities occurred on the site.</p> <p>Based on the footage collected within SC-13 investigated by a USFWS permitted karst biologist, potential endangered karst invertebrate habitat is not present. Such conclusion was supported by the presence of speleothems along the walls of the feature, the lack of noticeable airflow or evidence of additional voids, and the absence of biota. To preserve void space and comply with the recommendations provided in the Participation agreement recorded on September 28, 2020, the SAT 15 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 recorded on September 28, 2020.</p>
22-005	12/8/2023	12/8/2023	<p>On December 8, 2023 a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated one karst void encountered during site grading on the Classes-Steubing New Bore Alignment project site. 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</p>

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
			<p>Presence/Absence Surveys for Endangered Karst Invertebrates in Central Texas (USFWS 2022).</p> <p><b>R-1</b> – 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 <i>characteristics of karst features not likely to contain suitable habitat for endangered karst invertebrates (USFWS 2022)</i>. This conclusion is 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 each 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 recorded on September 28, 2020.</p>
23-46900003	2/15/2024	2/15/2024	<p>Results from the 2/15/2024 and 3/28/2024 investigations indicated that the voids do not meet the requirements to be reported as a karst feature. The bottom of the features are visible from the surface with no additional passageway observed within the voids. The voids will be closed in compliance with TCEQ requirements.</p> <p>On June 14, 2024 a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated one void (SC-01) that was discovered after heavy rains on the Vantage TX-21 site. The evaluation was conducted to examine the extent of the void(s) and to determine if the presence of potential endangered karst invertebrate habitat existed within the encountered feature(s). 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).</p> <p><b>SC-01</b> – This feature can be described as a zone of solution cavities, with two cavities observed as having a connection to one another, and a third lacking a connection to the other two based on visual observations. The main opening was measured to be approximately 13 inches by 9.5 inches that extended 80 inches below the ground surface to the bottom of the feature. The bottom of the feature can be described as a bell-shaped room. Just below the opening to the room, a pile of infilling approximately 0.5 ft. thick was observed. The floor of the feature was composed of cobbles and infilling derived from the surface. Walls of the room were composed of solid intact limestone dotted with calcite speleothems. A review of the GoPro footage taken from within the room doesn't appear to portray any lateral extents or additional passageway that may suggest that the feature continues beyond the documented limits. No airflow or biota were observed within the feature during the inspection. It should be noted that the feature did not exhibit surface expression prior to being discovered during construction and was only encountered after heavy rains a week prior. Based on the footage collected within SC-01 investigated by a USFWS permitted karst biologist, potential endangered karst invertebrate habitat may be present since the feature opens into a small room that may contain habitat for listed invertebrates. To preserve void space and comply with the recommendations provided in the Participation Agreement recorded on December 20, 2023, the Vantage TX-21 team will fill 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 recorded on December 20, 2023.</p>
	3/28/2024	3/28/2024	
	6/14/2024	6/14/2024	
23-46900004	3/12/2024	3/12/2024	<p>On March 12, 2024, a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated three voids (C-02, SC-01, SC-02) encountered during site grading on the Vantage TX-11 site. The evaluation was conducted to examine the extent of the voids and to determine if the presence of potential endangered karst invertebrate habitat existed within the encountered features. 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</p>
	7/26/2024	7/26/2024	

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
			<p>Presence/Absence Surveys for Endangered Karst Invertebrates in Central Texas (USFWS 2022).</p> <p><b>C-02</b> – This feature was classified as a cave since it appears enterable. The feature opening was 2.1 feet by 2.25 feet with a depth of 7.6 feet. The feature opened into a small room with some breakdown observed on the floor of the feature and some calcite observed on the walls. No airflow was observed in the feature, but cave crickets (<i>Ceuthophilus</i> sp.) were observed around the cave's entrance. Based on the footage collected within C-02 investigated by a USFWS permitted karst biologist, potential endangered karst invertebrate habitat is present since the feature opens into a small room and additional void space may be present.</p> <p><b>SC-01</b> – This feature was classified as a solution cavity since it was not enterable. The feature opening was 0.6 feet by 0.7 feet, and the feature extended vertically for approximately 6 feet. The feature opened into a room with breakdown observed on the floor of the feature and roots lining the walls. Additionally, no airflow or biota was observed. Based on the footage collected within SC-01 investigated by a USFWS permitted karst biologist, potential endangered karst invertebrate habitat is present since additional void space may be present in the feature, which was difficult to assess due to the roots.</p> <p><b>SC-02</b> – This feature was classified as a solution cavity because it was not enterable. The feature opening was 0.8 feet by 0.6 feet, and the feature extended vertically for approximately 3.5 feet. Breakdown and some root material was observed in the feature. Additionally, no airflow or biota was observed. Based on the footage collected within SC-02 investigated by a USFWS permitted karst biologist, potential karst invertebrate habitat within the feature is not likely since the feature does not contain sufficient dark zone and no additional leads were detected.</p> <p>Based on the footage collected within each of the pilot holes investigated by a USFWS permitted karst biologist, features C-02 and SC-01 would likely be considered to contain suitable habitat for endangered karst invertebrates. To preserve void space and comply with the recommendations provided in the Participation Agreement recorded on December 22, 2023, the Vantage TX-11 team will fill the bottom of each 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 recorded on December 22, 2023.</p> <p>On July 26, 2024, a Pape-Dawson Consulting Engineers, LLC (Pape-Dawson) permitted biologist evaluated one void (SC-03) encountered during site grading on the Vantage TX-11 site. The evaluation was conducted to examine the extent of the voids and to determine if the presence of potential endangered karst invertebrate habitat existed within the encountered features. 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 2024). In June of 2024, the USFWS released a revision to the San Antonio Area Karst Zones and Karst Fauna Regions.</p> <p>Prior to the revision of the San Antonio Area Karst zones the project site was located within Karst Zone 3. However, the assessed feature now occurs within USFWS Karst Zone 2, areas having a high probability of suitable habitat for endangered or other terrestrial karst invertebrates (Veni et. al 2024).</p> <p><b>SC-03</b> – This feature was classified as a solution cavity because it was not enterable. The feature consisted of two openings. The larger opening was measured at 1.1 feet by 1.75 feet with a vertical depth of approximately 5.25 feet below the existing ground surface. This first opening appeared to connect with the second opening but breakdown and debris within the feature did not allow for a connecting lead to be observed. The smaller second opening was measured at 0.83 feet by 0.62 feet with a vertical depth of approximately 10.7 feet below the existing ground surface. The second opening appeared to be a vertical shaft that had a lateral offshoot going off for an unknown distance. The lower walls within the feature were mostly covered in popcorn. The feature appeared to be absent of non-listed troglobites or troglaphiles which suggests conditions are unsuitable for listed troglobites. The walls of SC-03 were covered with calcite speleothems which may block the species and nutrients for the species from entering the feature. Additionally, there was an absence of discernible airflow emanating from within the encountered void. It should be noted that SC-03 did not exhibit any surface expression prior to being discovered during construction.</p> <p>Based on the footage collected within each of the pilot holes investigated by a USFWS permitted karst biologist, features SC-03 would likely be considered to not contain suitable habitat for endangered karst invertebrates. To preserve void space and comply with the recommendations provided in the Participation Agreement</p>

PARTICIPANT	DISCOVERY DATE	NOTIFICATION DATE	SUMMARY
			recorded on December 22, 2023, the Vantage TX-11 team will fill the bottom of each 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 recorded on December 22, 2023.