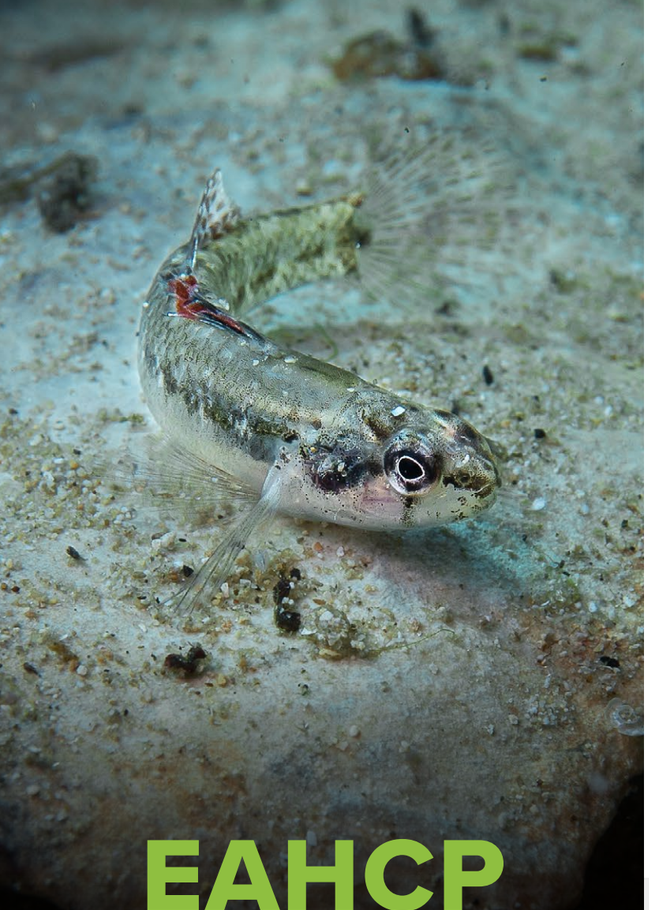


EAHCP 2025

ANNUAL REPORT SUMMARY

The Edwards Aquifer Habitat Conservation Plan (EAHCP) is a regional program that protects aquatic habitat for endangered species in the Comal and San Marcos springs systems while ensuring the sustainable, long-term use of the Edwards Aquifer for permitted users.

EAHCP
EDWARDS AQUIFER
HABITAT CONSERVATION PLAN

Overview of activities and accomplishments in 2025, the 13th year of EAHCP implementation.

What is the EAHCP?

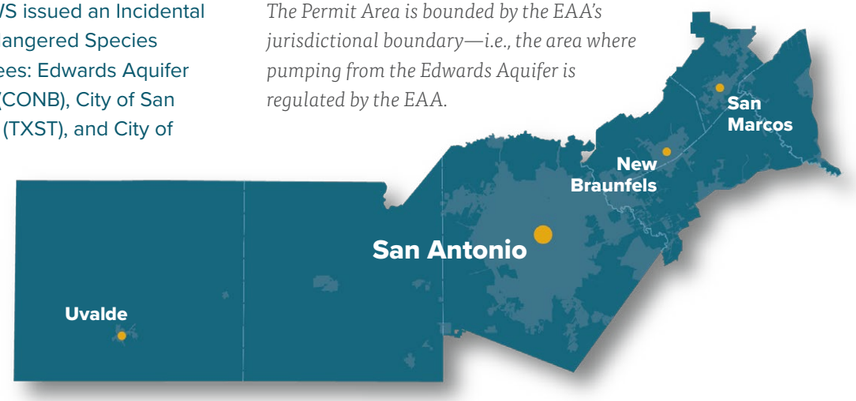
The ***Edwards Aquifer Recovery Implementation Program Habitat Conservation Plan*** **(EAHCP)** was approved by the U.S. Fish & Wildlife Service (USFWS) as a regional plan to protect eight federally listed and three non-listed species—termed Covered Species—associated with the Edwards Aquifer while helping to ensure its stability as a regional water supply.

After approval of the EAHCP, the USFWS issued an Incidental Take Permit (ITP) under the federal Endangered Species Act of 1973 to five cooperating Permittees: Edwards Aquifer Authority (EAA), City of New Braunfels (CONB), City of San Marcos (COSM), Texas State University (TXST), and City of San Antonio acting by and through its San Antonio Water System Board of Trustees (SAWS).

The EAHCP describes impacts that are likely to result from Covered Activities, identifies Conservation Measures to minimize and mitigate those impacts, and assures funding to implement those Conservation Measures and, more broadly, the EAHCP.

The area covered by the ITP (Permit Area) is bounded by EAA's jurisdictional boundary, which encompasses Uvalde, Medina, and Bexar counties and portions of Atascosa, Caldwell, Comal, Guadalupe, and Hays counties.

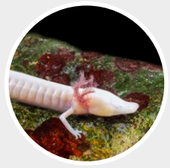
The Permit Area is bounded by the EAA's jurisdictional boundary—i.e., the area where pumping from the Edwards Aquifer is regulated by the EAA.



Covered Species

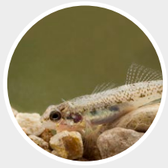
These eleven species are conserved and managed through the implementation of the EAHCP.

Texas Wild-Rice
Zizania texana
ENDANGERED

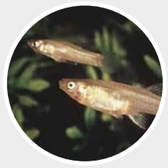


Texas Blind Salamander[1]
Eurycea rathbuni
ENDANGERED

San Marcos Salamander
Eurycea nana
THREATENED



Fountain Darter
Etheostoma fonticola
ENDANGERED

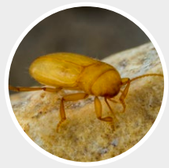


San Marcos Gambusia[2]
Gambusia georgei
EXTINCT

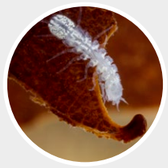
Comal Springs Dryopid Beetle
Stygoparnus comalensis
ENDANGERED

Comal Springs Riffle Beetle
Heterelmis comalensis
ENDANGERED

Peck's Cave Amphipod
Stygobromus pecki
ENDANGERED



Edwards Aquifer Diving Beetle[3]
Haideoporus texanus
NOT LISTED



Texas Troglobitic Water Slater[4]
Lirceolus smithii
NOT LISTED

Comal Springs Salamander[5]
Eurycea sp.
NOT LISTED

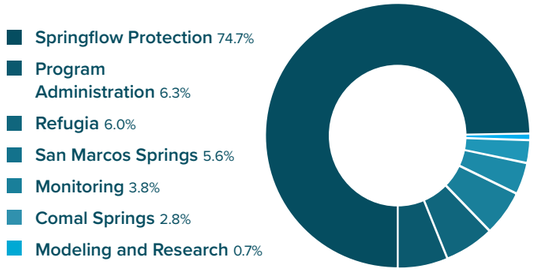
Note: All 11 Covered Species will remain on the EAHCP ITP through the permit's duration regardless of changes to species status as determined by the USFWS. **1.** The USFWS changed the scientific name for this species in 2021. **2.** The USFWS published a final rule on October 17, 2023, to delist this species due to extinction. Photo courtesy of Texas Parks & Wildlife Department. **3.** The USFWS published its finding on July 17, 2025, that this species is not warranted for listing. **4.** The USFWS published its finding on November 28, 2023, that this species is not warranted for listing. **5**. The petition to list this species was withdrawn in 2020.

EAHCP Implementation: Highlights of 2025

- 2025 marked the 13th year of EAHCP implementation. It also marked the third consecutive year of extreme drought, resulting in a **third year of VISPO implementation.**
- In 2025, the minimum daily Comal springflow was 48 cfs, and the **average was 84 cfs**; the minimum San Marcos springflow was 77 cfs, and the **average was 89 cfs.**
- The Uvalde pool was in Stage V all year. EAA declared Stage V conditions in the San Antonio Pool, May 23 to 29. During this time, the USFWS **salvaged hundreds of fountain darters in the Comal system;** the darters were reintroduced in November when conditions improved.
- Due to the **extreme drought conditions,** fountain darters and invertebrates in the Comal system had some of the **highest estimated take** since the start of the program.
- **Non-native Eurasian milfoil plant** and **one apple snail shell** were detected in the Comal system for the first time; milfoil was removed, and no additional apple snails were found.
- Texas wild-rice coverage in the San Marcos River was **12,586 m²** in August.
- San Marcos salamander densities **met long-term targets** in two of three monitoring reaches, despite drought conditions.
- In the San Marcos River, **new bryophyte patches were observed,** and fountain darter densities were highest in *Cabomba* vegetation.
- COSM enhanced **river recreation management measures,** including temporary fencing, monitored access points, and paid parking near City Park. TXST installed educational signage and permanent fencing near Spring Lake Dam to help control access and protect sensitive habitat.
- In May, the USFWS released its **Final Recovery Plan** for listed threatened and endangered EAHCP species.
- EAHCP Permit Renewal produced memoranda on **Conservation Measures, Take Assessment, and Monitoring and Adaptive Management;** progress was delayed by a temporary federal shutdown.

Fiscal Stability

2025 Program Budget $18,075,016



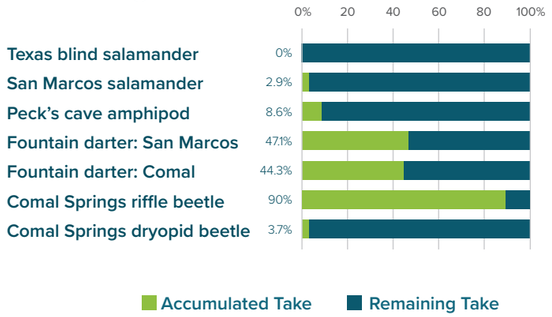
The current financial projections and cost estimates for the EAHCP indicate an overall fiscally stable Program with an adequate budget for Program implementation in fiscal year 2026. The Program is fiscally stable with a reserve balance of $8,220,770 and a $ $18,520,098 cash balance, as of December 31, 2025. There are adequate funds for the Program in fiscal year 2026.

Incidental Take

In the Comal Springs system, take totaled 167,448 fountain darters, 3,021 Comal Springs riffle beetles, 16 Comal Springs dryopid beetles, and 328 Peck's cave amphipods. The Comal fountain darter and invertebrate take was mostly due to severe drought conditions that reduced portions of occupied habitat.

In the San Marcos Springs system, take totaled 2,943 fountain darters, primarily due to severe drought conditions that reduced portions of occupied habitat. There was no take of San Marcos salamanders or Texas blind salamanders in 2025.

Covered Species Accumulated Take through 2025

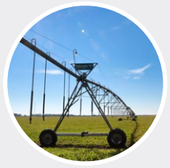


Implementation of Conservation Measures

Conservation Measures are activities carried out by the Permittees in the Permit Area as part of EAHCP implementation. These measures encompass springflow protection, habitat conservation, and various supporting activities such as research and biological monitoring.

The tables at right summarize progress toward fulfilling the Conservation Measures. Implementation efforts are highlighted for 2025. As the EAHCP enters its 14th year of implementation, most Conservation Measures have either been fulfilled or are in an ongoing or maintenance phase.

All efforts to implement the Conservation Measures were conducted in accordance with the Permittees' approved annual Work Plans.



SPRINGFLOW PROTECTION

HABITAT CONSERVATION

SUPPORTING ACTIVITIES

Status Key and Abbreviations

Implementation Status

W	Working toward fulfillment
✔	Fulfillment expected or partially achieved
■	Fulfillment achieved or implemented
M	Maintenance
O	Ongoing
I	Implemented when triggered
T	Triggered
–	No activity

Permittees

CONB	City of New Braunfels
COSM	City of San Marcos
EAA	Edwards Aquifer Authority
SAWS	San Antonio Water System
TXST	Texas State University

*2025 is the **13th year** of EAHCP implementation*

Springflow Protection Measures

		13	14	15	16	17	18	19	20	21	22	23	24	**25**	26	27
Aquifer Storage and Recovery Springflow Protection Program Enrollment	EAA	W	W	W	W	W	W	W	✔	■	■	■	■	■	✔	W
Aquifer Storage and Recovery Springflow Protection Program Storage	SAWS	W	W	W	W	W	W	W	■	I	I	I	I	I	I	I
Aquifer Storage and Recovery Springflow Protection Program Forbearance	SAWS	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Voluntary Irrigation Suspension Program Option Enrollment	EAA	W	W	■	■	■	■	W	W	■	■	■	■	■	✔	W
Voluntary Irrigation Suspension Program Option Implementation	EAA	I	T	■	I	I	I	I	I	I	T	✔ T	✔ T	✔ T	■	I
Regional Water Conservation	EAA	W	W	W	W	W	W	W	■	–	–	–	–	–	–	–
Stage 5 Critical Period Management (San Antonio Pool)	EAA	I	I	I	I	I	I	I	I	I	I	I	I	T	I	I
Stage 5 Critical Period Management (Uvalde Pool)	EAA	T	T	T	I	I	I	I	I	I	I	I	T	T	I	I

Habitat Conservation Measures

		13	14	15	16	17	18	19	20	21	22	23	24	**25**	26	27
Management of Public Recreation	CONB, COSM, TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Designation of Permanent Access Points/Bank Stabilization	COSM	W	■	M	M	M	–	–	–	–	–	–	–	–	–	–
Native Riparian Habitat Restoration	CONB, COSM, TXST	W	W	W	W	W	W	W	W	W	W	W	W	■	M	M
Native Riparian Habitat Restoration (Riffle Beetle)	CONB	W	W	W	W	W	W	W	■	M	M	M	M	M	M	M
Texas Wild-Rice Enhancement	COSM, TXST	W	W	W	W	W	W	W	W	W	W	W	W	■	M	M
Aquatic Vegetation Restoration and Maintenance	COSM, TXST	W	W	W	W	W	W	W	W	W	W	W	W	W	✔	M
Aquatic Vegetation Restoration and Maintenance	CONB	W	W	W	W	W	W	W	W	W	W	W	W	W	✔	M
Decaying Vegetation Removal and Dissolved Oxygen Management	CONB	T	T	T	T	I	I	I	I	I	T	T	T	T	I	I
Management of Floating Vegetation Mats and Litter	CONB, COSM, TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Reduction of Non-Native Species Introduction and Live Bait Prohibition	CONB	O	O	O	O	O	O	■	O	O	O	O	O	O	O	O
Monitoring and Reduction of Gill Parasites	CONB	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Non-Native Animal Species Control	CONB, COSM, TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Flow Split Management	CONB	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Diversion of Surface Water	TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Research Programs in Spring Lake	TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Diving Classes (Spring Lake) and Boating (Spring Lake and Sewell Park)	TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Management of Golf Course and Grounds	CONB, TXST	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Prohibition of Hazardous Material Transport Routes	CONB	W	W	W	■	–	–	–	–	–	–	–	–	–	–	–
Prohibition of Hazardous Material Transport Routes	COSM	W	W	W	W	W	W	W	W	W	W	W	W	W	✔	–
Management of Household Hazardous Waste	CONB, COSM	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Minimizing Impacts of Contaminated Runoff	COSM	W	W	W	W	W	W	W	■	–	–	–	–	–	–	–
Impervious Cover/Water Quality Protection	CONB, COSM	W	W	W	W	W	W	W	W	W	W	W	W	W	✔	–
Sessom Creek Sand Bar Removal	TXST	W	W	W	■	–	–	–	–	–	–	–	–	–	–	–
Sediment Management	COSM, TXST	W	W	W	W	■	–	–	–	–	–	–	–	–	–	–
Septic System Registration and Permitting Program	COSM	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Impervious Cover/Water Quality Protection: Coal Tar Sealant Ban	EAA	W	W	■	–	–	–	–	–	–	–	–	–	–	–	–

Supporting Measures

		13	14	15	16	17	18	19	20	21	22	23	24	**25**	26	27
Net Disturbance	EAA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Incidental Take	EAA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Refugia	EAA	O	O	O	O	O	O	O	O	O	O	O	O	T	O	O
Applied Research	EAA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Biological Monitoring	EAA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Water Quality Monitoring	EAA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Ecological Modeling	EAA	W	W	W	W	■	–	–	–	–	–	–	–	–	–	–
Groundwater Modeling	EAA	W	W	W	W	W	W	W	■	–	–	–	–	–	–	–