



Education Outreach Center

Interpretive Master Plan

2019 - 2025



Table of Contents

Interpretive Master Plan Summary	4
Considering COVID-19	4
Introduction	4
EAA Mission	8
Core Values	8
Background of the EAA Education Program and the Education Outreach Center	10
Interpretive Goals and Objectives	11
Stakeholder Groups and Target Audience Profiles	16
Target Audience Characteristics	17
Interpretive Themes/ Messages	19
Aspirational Behavioral Changes ~ Take Away Messages	26
Curriculum Resources	29
Strengths, Weaknesses, Opportunities and Threats Analysis	30
Considerations for Exhibits and Activities Responding to COVID-19	32
Ongoing Evaluation	34
Phased Implementation and Staffing	36
Conclusion	38
Appendix	39
Potential Collaborators & Program Ideas	41

Summary

Interpretation is a communication strategy that is specifically designed to meaningfully engage visitors in exploration, investigation and learning through first-hand involvement with an object, a landscape, a natural feature, or a site. Interpretation helps people to connect intellectually, emotionally, or spiritually with concepts and ideas, and beliefs and values of a time and place.

The EAA Education Outreach Center Interpretive Master Plan is guided by the mission and vision of the EAA. The Plan includes an outreach and communication mission that supports the overall EAA mission and EOC goals, objectives, outcomes, and recommendations for implementation and staffing in phased increments. The Plan identifies collaborative opportunities and ties to community initiatives to assist in the alignment of regional resources and support the success of the EOC as a physical location to educate constituents about water management and the conservation of the Edwards Aquifer.

The development of the Plan was led by the EAA STEM Educator and consultants who conducted meetings and work sessions with key stakeholders including MW Camp staff, the EAA EOC project team, and EAA scientists to gather information and research, and to develop ideas and themes. This groundwork was followed by constituent surveys, online engagement events and phone interviews to gather input and feedback. The resulting interpretive planning tools include target audience profiles, interpretive themes/messages, potential partnerships, program ideas and aspirational behavioral changes by regional constituents.

CONSIDERING COVID-19

In the early part of 2020 the worldwide pandemic, known as COVID-19, affected and changed all aspects of what we then knew as normal life. The urgency and unprecedented measures to understand the virus, its incubation, prevention of exposure and spread, and the impact to public spaces, particularly interactive spaces, challenges previous standards and assumptions in interpretive exhibit design. The development and implementation of exhibits and programs for the EAA EOC must consider and evolve with guidelines and best practices to ensure the public has the trust and confidence to participate.



Introduction

The Edwards Aquifer is one of the most abundant artesian aquifers in the world. It supplies water to over two million people and thousands of farmers in the region. Spread underneath the land of South-Central Texas, the Edwards Aquifer charges the seven largest springs in the state and several major rivers. Compared to other aquifers, the Edwards' karst limestone allows for greater recharge and sustainability than any aquifer in the region. The sweet, clear artesian spring water that comes from the Edwards is some of the best-tasting water anywhere. It is a miracle of our natural world.

Edwards Aquifer serves as the main water supply for more than two million south central Texans. The Texas Legislature reacted to the decision by creating the EAA as the regulatory agency overseeing groundwater in the Edwards Aquifer. Pumping limits were written into the law designating the conservation and reclamation district, a first for Texas.

The Edwards Aquifer Authority (EAA) was created by the Texas Legislature in 1993. A ruling earlier that year ordered the U.S. Fish & Wildlife Service to set minimum spring flow standards for Comal and San Marcos springs, the two largest springs in the southwestern United States. Endangered species that relied on those springs for their survival must be protected as the Edwards Aquifer serves as the main water supply for more than two million south central Texans.

The EAA is a steward for the Aquifer. Without oversight and management, the water supply cannot be protected. Monitoring the Edwards Aquifer is a tool for capturing data critical to measuring the effectiveness of managing, enhancing and protecting the aquifer. Monitoring and research together help with long-term planning and policy decisions that affect industry, municipalities, groundwater permitting, and environmental and recreational users.





About the EAA

EAA Mission

Manage, Enhance and Protect the Edwards Aquifer System.

Core Values

Respect: regard another or to be regarded with deference, esteem, and dignity. We respect all our stakeholders, external and internal customers, treating them the way we would want to be treated, recognizing that actions express values.

Collaboration: working together and communicating to ensure information is shared equally throughout the organization and the community we serve.

Integrity: adherence to a code or standard of values. Integrity is what we do, what we say, and what we say we do.

Stewardship: through our core value of stewardship, the EAA manages, enhances, protects, and studies the Edwards Aquifer system to ensure the long-term sustainability of the resource for our communities and the environment.

Professionalism: having an interest in and a desire to do a job well, showing competence, skill, and a positive attitude towards both the profession and the workplace.

Science: the fundamental tool used to understand the natural systems of the Edwards Aquifer and is the cornerstone in all our efforts. Sound scientific principles and practices provide a foundation for





Visitors learn how limestone is formed.

Background of the EAA Education Program & the Education Outreach Center

The EAA Education Program began with the printing of a Teacher’s Guide: Water, Water Conservation and the Edwards Aquifer in 1981. Since then, the EAA Education Program has been in classrooms across the region. Whether it is through lesson plans, curriculum, classroom presentations or costumed characters, the EAA has been an integral part of the water story in South-Central Texas for over 30 years.

Interpretive Goals and Objectives

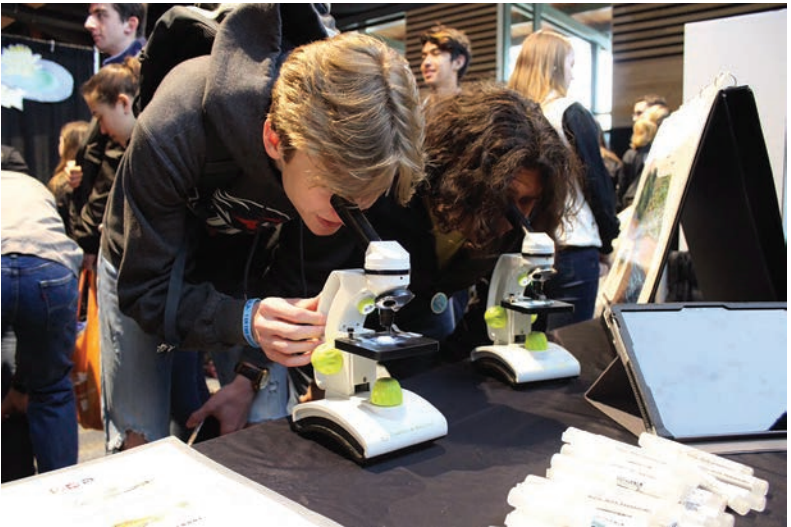
The Interpretive Plan was developed to support the EAA mission and core values and the outreach and communications mission of the EOC. The plan outline identifies goals and objectives, themes for development, target audience opportunities, program goals and strategies, and an evaluation outline to strengthen the outreach and communication mission.

Audience research, administrative and staff leadership, community engagement events and constituent surveys have reinforced the development of the following interpretive goals and objectives.

GOAL 1: Create a unique identity for the EAA and its role in water management through the education outreach and communications program.

Objectives:

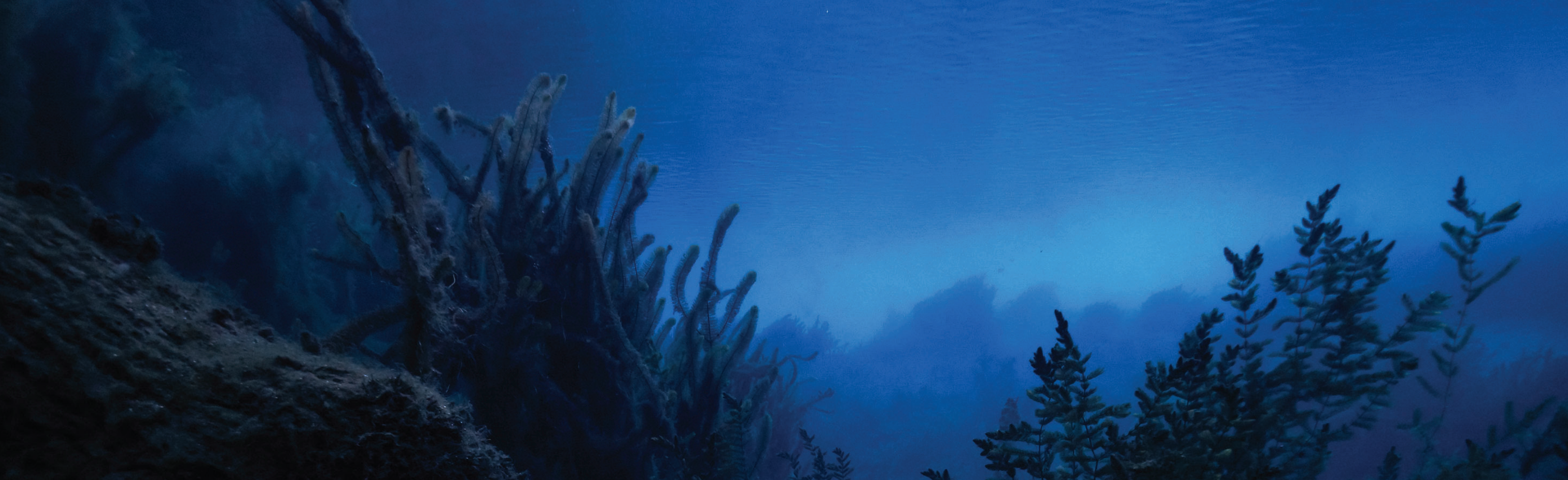
- Communicate the critical importance of water in the community and the role of the EAA in promoting conservation
- Communicate, using a variety of media and live interactions, the critical importance of water in the community and what the EAA role is in connecting community to and through water (Stewardship)
- Share events, educational activities, and field research on social media and other media avenues to communicate the responsibility and role of stewardship and to elevate the profile of the EAA EOC
- Develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the EOC as a premiere recreation/Aquifer education destination in cooperation with MW Camp, as appropriate



Microscopes give a up close view of freshwater microinvertebrates.



Children listen to the story of the Edwards Aquifer.



- Use branded swag including tokens, badges, and coins to reinforce brand recognition and educational messaging about the Edwards Aquifer and MW Camp through an app, programs and activities (offer options at the MW Camp Store)
- Create a media tool kit for the EAA Education Outreach Center
- Create a media plan for the Education Outreach Center (digital advertising and print, digital media, social media, outdoors, and transit benches and buses) Develop the media plan in cooperation with MW Camp as appropriate
- Develop messaging, content and a presence in media for specific target audiences (such as Alamo City Mom Blogs, home-schooled, and other non-traditional family and special needs audiences)
- Use in-house technology as a part of the plan to position the EAA as the coordinating entity for water education in the region including American Sign Language (ASL), closed captioning, and Spanish
- Develop exhibits, and inside and outdoor experiences for the EOC that deliver key messages on managing, enhancing, conserving and protecting the Edwards Aquifer resource
- Develop exhibit and experience content that reinforces EAA mission and key messaging
- Create pre- and post-visit materials for each educational program and workshop, making them as accessible as possible (American Sign Language, closed captioning, and Spanish, posting online etc.)
- Integrate information and delivery systems with MW Camp programming
- Create programs that encourage local and regional participation
- Create EAA focused presentation(s) targeted towards regional Home School populations for on-site day and multi-day trips
- Develop a comprehensive evaluation plan and consistently implement the plan for all activities and programs of the EOC and its cooperative programs with the MW Camp to facilitate planning and budgeting, educational, and outreach and communications goals
- Develop experiences and curriculum in cooperation with MW Camp, as appropriate

GOAL 2: Effect innovative, accessible experiences for EAA programs and activities.

Objectives:

- Develop and provide outreach activities aligned with the mission of the EAA within and outside the immediate region. Integrate information and delivery systems with MW Camp programming
- Use technology to position the EAA as the coordinating entity for accessible water education in the region including American Sign Language (ASL), closed captioning, and Spanish
- Develop, offer and circulate relevant orientation and content videos on what to expect regarding water management, conservation and preservation experiences and activities that build personal confidence, highlight content connections, develop character and foster community resource stewardship
- Develop broadly focused, content driven, hands-on, staffed and un-staffed presentations and workshops for implementation on-site at the EOC or MW Camp facilities and off-site around the region
- Recruit, train and evaluate university students and volunteers with an interest in science, community planning, resource management, teaching, technology and other related fields (Ambassador program)
- Work with universities to incorporate field experiences and programs for university students into the EOC offerings

GOAL 3: Education outreach center programs and activities position the EAA as the coordinating entity for water education in the region.

Objectives:

- Develop and provide outreach activities aligned with the mission of the EAA within and outside the immediate region
 - Integrate information and delivery systems with MW Camp programming
 - Use technology to position the EAA as the coordinating entity for accessible water education in the region
 - Develop broadly focused, content driven, hands-on, staffed and un-staffed presentations and workshops for implementation on-site at the EOC or MW Camp facilities and off-site around the region
 - Recruit, train and evaluate university students and volunteers with an interest in science, community planning, resource management, teaching, technology and other related fields (Ambassador program)
 - Work with universities to incorporate field experiences and programs for university students into the EOC offerings
 - Develop a comprehensive evaluation plan and consistently implement the plan for all activities and programs of the EOC and its cooperative programs with the MW Camp to facilitate planning and budgeting, educational, and outreach and communications goals
- The following objectives are the same as in Goal 2:
- Develop, offer and circulate relevant orientation and content videos on what to expect regarding water management, conservation and preservation experiences and activities that build personal confidence, highlight content connections, develop character and foster community resource stewardship



Stakeholder Groups & Target Audience Profiles

Community Engagement is an essential characteristic of the ongoing interpretive program process. To inform this Plan, the EAA STEM Educator and consultants identified and engaged key stakeholder groups, then gathered and analyzed the collected information and ideas to develop concepts and provide feedback for direction and planning. The input portion of the process included two online constituent surveys and three online events. Participants included teachers, business representatives, informal education institutions, members of the community, and EAA Board members. The input was critical to identifying themes and messages.

- Over 60% of community participants identify science, nature and outdoor activities with hands-on components as their top desire for the EOC
- Participants articulated a strong preference for outdoor parks and trails near, or in association with, water features for ecology-themed outings
- Over 70% of participants feel a personal commitment to water conservation through lifestyle choices at home (e.g., full laundry and dishwasher loads, shorter showers, maintenance of leaky toilets)
- Over 60% of the participants want to know more about the three zones of the Edwards Aquifer, more about watersheds, and about contaminants in the water
- Approximately 70% of the participants indicated that they feel endangered species are indicators of the health of the aquifer and are part of the ecosystem

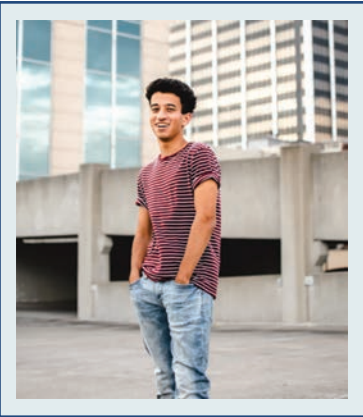
To keep ahead of the changing landscape and long-term environmental conditions, the EAA should plan for ongoing community engagement as a regular part of its interpretive and public program.

Target Audience Characteristics

The target audience characteristics were developed using information from previous EAA program participants, Morgan’s Wonderland audience characteristics, and projected MW Camp audiences. The profiles are to assist in planning for participants likely to engage with the EOC exhibits and programs.

TEACHER ~ “Andie”

- Female
- 25-35 years of age
- Middle class background
- Stressed out
- Working in New Braunfels, San Marcos, D’Hanis, Medina, Uvalde or San Antonio
- Teaches social studies and science
- Might be bilingual
- Computer and social media savvy



STUDENTS ~ “Marie and Hector”

- Phase 1 implementation-4th – 8th grade
- Hands-on and visual learning with tactile experiences are preferred experiences
- Not good listeners
- YouTube, Snapchat, Instagram, TikTok savvy
- Jaded, too cool for group experiences
- From Title I schools, with mixed school population
- Smart phone access
- Might be bilingual



SOUTH TEXAS FAMILY ~ “Johnson Morales Family”

- Diverse cultural heritage
- Comfortable as a part of a diverse population
- Middle class to affluent
- Toddler to high age
- May be a blended family that includes multi-generations
- Religious association to ecumenical views
- Some college to college educated parents
- Looks for low-cost activities, or scholarships for activities

Interpretive Themes / Messages

Themes identify and organize the most important stories and messages. Interpretation must accomplish the following goals: relate to the experiences of the visitor, reveal as well as inform, provoke and instruct, and address the whole, and not just a part of the story. The following are the key themes and messages identified by constituents, EAA staff and consultants.

UNDERSTAND ~ MANAGE

Understand the dynamic, prolific, and vulnerable nature behind our regional underground water source, the Edwards Aquifer. Explain the story of water using examples from our regional underground water source to illustrate the story.

- Water Cycle: a closed and finite system from rain to drain (Hydrologic System)
- Weather: climate affects the aquifer and environment over time
- Introduce watershed (habitat, aquatic, terrestrial) and explain how watershed protection is tied to land use which is tied to water use (closed system)



FAMILY SCOUTS, MW CAMP SOCIALSERVICE PARTNERS ~ “MW Campers”

- 3rd to 8th grade target with adults (can be family or caregivers/ chaperones)
- Variety of social, cognitive, emotional and physical disabilities

- Introduce the Edwards Aquifer - a unique Karst aquifer system - and what that means for water quantity and quality.
- Introduce the zones of the Edwards Aquifer and their functions: Contributing Zone (drainage/ groundwater story), Recharge Zone, Artesian Zone

- The Edwards Aquifer is a part of a chain of regional water systems
- We are all connected; water goes into the ground and discharges as spring flow in San Marcos and Comal, the largest springs systems in Texas
- Visual size of aquifer: Provide a visual of how large it is, in relation to other bodies of water or geographical points of interest

- Introduce the threatened and endangered species that live in the aquifer ecosystems
- Indicator/Sentinel species, and keys to sustainability
- As new technology, methodology and data become available, our understanding evolves
- The health of the aquifer species, as well as the quantity and quality of the water, are dependent on stakeholder (agricultural, municipal, recreational) knowledge and action

IDEAS TO EXPLORE:

- Establish baseline knowledge and understanding of the aquifer as part of a system
 - Focus on the way the Edwards Aquifer system functions
 - Explain the three zones of the Edwards Aquifer and how they are connected to surface water
 - Illustrate the flow of rainwater into the contributing zone, recharge zone and then out of the artesian zone.
 - Represent the Edwards Aquifer’s unique karst limestone using actual exposed limestone
- Exhibit idea:
- Introduce EAA endangered species on the wraparound porch of the building using graphics that attract and excite visitors to explore the exhibits

CONSERVE ~ A COMPONENT OF ENHANCEMENT

Make informed daily choices to help conserve the Edwards Aquifer ecosystem

- Protect water quantity and quality for present and future generations
- Conservation and management are long-term endeavors
- My behavior matters: my daily water use choices impact aquifer health

Home --

- On average each person uses 100 gallons of water per day. Most of the water people use is for their lawns in the summer and this collectively has an impact on the Aquifer
- For lawns: sprinklers with timers, consider native and drought tolerant plantings, Xeriscape style gardening
- Tooth brushing (turn off the water), showers (less than 5 min)
- Drip Detective: find and fix leaks around homes

Away --

- Land use and management is a major component of the Aquifer health
- Conservation Management and best practices for landowners
- Spring flow indicates the health and wellness of the Aquifer
- Endangered Species are the indicator species of aquifer health
- Invasive plants and animals are devastating to the environment
- Removing invasive non-native plants (e.g. Chinaberry Tree) and animals (e.g. Fire Ants) from the land is important because of shade, toxicity, and water demand

IDEAS TO EXPLORE:

What actions can I take to help save water? (Appendix 20)

- Include conservation measures such as xeriscaping and gardening practices that the visitor can use at home, including berm and swale and demonstration areas/plots
- Explore the latest science and techniques for homeowners and well owners



EXHIBIT IDEAS:

- Display the amount of water that is being used or conserved utilizing the best management practices
- High touch-low tech exhibit idea: create an interactive watershed map/diorama that shows people living in various situations over the aquifer. Visitors will interact with STEAM-based levers and gears to illustrate conservation and protection. For example, various interactive elements can illustrate water quality and quantity learning points:
 - An actual sink handle that is turned to show the effects of turning off water while brushing your teeth – action needs to have an effect that is visible to the user.
 - Pulling a paint can opener dumps paint into a water main – and the impact is immediately shown to the user.

PROTECT - THE EDWARDS AQUIFER SYSTEM

- Water quality is just as important as water quantity: the aquifer needs protection from contamination.
 - Water quality depends on water quantity
 - Conserving and protecting water is a long-term lifestyle
 - The Edwards Aquifer is dynamic; it responds to recharge and withdrawal faster than other aquifers (e.g., funnel/leaking bucket analogy)
 - We can save water and keep water clean with our daily choices





- Our aquifer has limited ability to clean the water coming into it (contributing/recharge zones)
- It is important to make sure the water going into the Aquifer is as clean as possible
- What you put on the land affects water everywhere: all water is inter-connected. Prevention of contamination is important — advocate for aquifer health by acting responsibly:

- No dumping of oil or chemicals in storm drains, only rainwater down the storm drain
- Keep litter out of the storm drains
- Practice proper use of yard and home chemicals
- Pick up dog waste and don't allow it to contaminate storm drains
- Limit impervious cover
- Wash cars in designated places and be conscious of drainage/runoff
- Don't dump aquarium fish and animals/invasive species into the environment
- Maintain septic systems in good condition

IDEAS TO EXPLORE

- What actions can I avoid or engage in to help keep the aquifer safe?
- Include point source and non-point source pollution best practices (dumping motor oil or paint, failing to pick up dog poop, improperly using yard or bug chemicals)
- Demonstrate various types of aquifers, showing how the Edwards is unique in having no sand or filtration layers emphasizing urgency for protection



EXHIBIT IDEA:

- Walking meditation trail with signs to encourage visitors to use their senses to explore the environment and can include small, permanently installed pollution education opportunities (e.g., a spilled bottle of oil)

Aspirational Behavioral Changes - Take Away Messages

- My actions matter
- I believe my actions and behavior matter; I will choose wisely
- I will strive to build connections, act with confidence, develop character, and foster community through my behavior and actions

EXHIBIT ELEMENTS AND EDUCATIONAL RESOURCES

Based on the success and demand of previously implemented programs, the EAA has determined that the EOC must include the following:

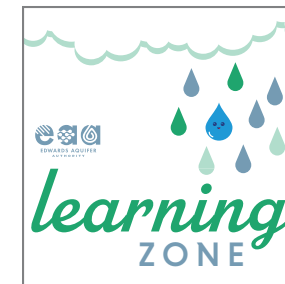
- 3-D Cave theater for 10 – 50 people (reassess based on COVID-19)
- Live specimen aquarium(s) and back of house support for endangered species
- Storage for supplies and equipment for demonstrations and programs
- Flexible classroom for presentations (reassess based on COVID-19)
- Sound system for films, presentations, and ambient sounds
- Flexible work/office space for one full-time and one part-time staff person
- All-access restrooms
- Ultra Accessible™ accommodations for programs and experiences (Appendix 12)

Since 1996 EAA education activities have focused on outreach to schools and at community events. Educators developed curriculum units and guides for both lower-elementary, upper elementary and middle school students, as well as a high school curriculum. The materials span the subject areas of biology, ecology, hydrology, art, social studies, and language arts. All STEM and education materials and activities are correlated to the mandated Texas Essential Knowledge and Skills (TEKS). The learning experiences that tie into the TEKS continue to be an EAA education priority. The itemized TEKS correlations for each EAA activity support leadership in the water education field (see details in Appendix 10)



Curriculum Resources

Over the years EAA has developed portable exhibits, demonstrations, classroom games and toolkits such as an EAA Lotería (Mexican BINGO). Downloadable resources for formal and informal learning include worksheets and hands-on activities that are available on the EAA website through the EAA website education portal, Learning Zone. The portal is designed for quick informal content experiences and hosts downloadable hands-on activities, simple science-based activities, content videos, high-resolution slideshows, and other multi-media resources.



All curriculum resources are tied to the TEKS guidelines.

The Learning Zone was developed in concert with the planning for the EOC and offers the opportunity to build online and on-demand learning through the portal. The audiences for the online resources include parents, teachers, students, and interested adults. The COVID-19 pandemic accelerated the opportunity to develop, test and evaluate these online offerings prior to the EOC opening.

Some existing resources are being revised to align with goals and objectives. One example is the interdisciplinary Aquifer Agents program, a Project Based Learning unit (PBL), that allows the EAA to combine and repackage existing units in math, science, language, and visual arts. By completing this unit, students are given a chance to apply real-world learning in a student-centered experience (Appendix 9).

Strengths, Weaknesses, Opportunities & Threats Analysis

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. A SWOT Analysis is a technique for assessing these four aspects of a business or program. The EAA EOC SWOT Analysis should be used to make the most of the team’s skills and experiences. The EOC team can add skill sets, training and operational procedures to ensure success and reduce the chances of failure by understanding what the team is lacking and eliminating hazards that can catch the team unaware.

Strengths

- Leadership and staff resources for collaboration
- Existing and proven curriculum resources
- Access to staff scientists
- Education staff willing to try new ideas and programming
- Site near/ on EA recharge zone
- Customizable building
- Cordial working relationship with MW Camp

Weaknesses

- Communication among the team and EAA staff
- Small program/ education staff
- Project team with limited project planning experience
- Limited experience with exhibit concept development
- Lack of communication and cooperative planning with MW Camp staff
- EAA staff has little experience with special needs populations

Opportunities

- Staff development and mentoring
- Planning and developing a new facility and programming
- Exhibits tailored for the site and facility
- Rich opportunities for collaborative partnerships
- New ways to involve science/research staff
- New ways to incorporate data collection
- Creative program development and delivery to position EAA as a regional resource
- Co-branding, resource-sharing with MW Camp
- Logistical and operational integration with MW Camp
- New paradigm for operations and delivering programming on and off-site

Threats

- No track record for EAA site-specific exhibits and programming
- Previously promised, non-negotiable exhibit elements
- Weak interdepartmental communication and coordination
- Lack of communication, planning, coordination and integration with MW Camp
- Timeline for implementation/opening is truncated
- Pressure to identify final product, costs without enough planning time
- Lack of comprehensive and coordinated marketing, social media and public relations plan
- Evolving landscape due to changes resulting from COVID-19

Considerations for Exhibits & Activities Responding to COVID-19

As of May 2020, the following guidelines were developed in coordination with expert epidemiologists and are being circulated to assist in planning to protect facility guests and staff members from potential exposure to COVID-19.

- Institute timed tickets (even for free admission) or other means of enforcing limits on the number of people in the facility at any one time.
- Make all doors (interior and exterior) hands-free entry and exit
- Decide to require visitors and staff to wear masks. Have a stock of free masks to be distributed, as needed, to visitors lacking their own
- Install hand sanitizer stations at frequent intervals
- Consider how to best accommodate keeping backpack, lunch and coat storage and social distancing
- Create signage about appropriate distancing and sanitation behavior. Some of that signage might establish one-way flow through the building/ exhibits, to facilitate distancing.
- Consider creating six-foot grids on the floor, to provide visual cues for spacing.
- Place limits on the number of people in any one area
- Consider how to implement hands-free interactives and experiences
- Develop audio/visual/ tactile guides that can be accessed via Smartphones
- Any tables and seats will need to be appropriately distanced
- Shift cleaning and sanitation from an after-hours chore to something conducted in a highly visible and reassuring manner throughout the day

CDC recommendations for cleaning and disinfecting facilities:

<https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility-H.pdf>



Ongoing Evaluation

Evaluation plays a critical role in the development of interpretive elements and programs. In addition to gauging the impact of existing services, evaluation is a part of every step of the process. Consistent and strategic evaluation shapes projects and programs and assists in resource management for successful outcomes. There are specific stages of evaluation in the development of a project: front end, formative and summative.

FRONT END EVALUATION occurs before development even begins. The process aims to discover what potential audiences actually know, and what they would like to know more about. (Initial Planning)

FORMATIVE EVALUATION occurs during development. Potential audience members provide feedback on program and service prototypes, mockups, and test runs. The results of formative evaluation are used to revise and fine tune the final product. (Beta Testing)

SUMMATIVE EVALUATION occurs after the exhibits, programs or services are in place. The goal is to identify elements that work and those that need improvement. (Remedial and Ongoing)

From the beginning the EOC project team gathered Front End Evaluation information on demographics and content information on existing audiences and what they want to know more about. The project team has strongly aligned the EOC Interpretive Plan with the EAA’s mission and core values.

Through the thorough Formative Evaluation phase, the outreach and communications goals and objectives, interpretive themes/messaging, content ideas, potential collaborative relationships, alignment of curriculum resources, and the Interpretive Plan were developed. The EOC project team continues to be active and transparent and will engage constituents as it cultivates partnerships, develops ideas into physical and virtual exhibits, and conducts beta tests and dry runs and the facility becomes operational. Some examples of the expected elements for formative evaluation are:

- Booking and reservation plan
- MW Camp/ EOC integrated experience menu, logistics and walk-through
- Integrated experience and food menu pricing and logistics
- Overall indoor exhibits and outdoor experience
- Experiences for people and families not coming together in groups
- Effective communication of the content messaging and aspirational behavioral changes

Summative Evaluation is an ongoing commitment and is expected to be incorporated into annual planning and budgeting. To be effective the EOC team should:

- Develop tools and protocols for ongoing data collection and analysis
- Measure experiences and outcomes against the goals matrix
- Incorporate an annual review of evaluation results and analysis and incorporate results into goals planning
- Prioritize and budget for operational and programmatic changes
- Make appropriate changes to overall planning and implementation based on evaluation data (qualitative and quantitative)

Phased Implementation & Staffing

The MW Camp and the EOC are both new learning attractions. Resource allocation and staffing are based on programming goals and operational projections. Using the Interpretive Plan as the guide, programming and staffing will be implemented in phases using a combination of full and part-time staff, and consultants to augment staff skill sets.

PHASE 1 2019-2020

Milestones

- Development and approval of an Interpretive Plan for the EAA EOC
- Research and establish baseline data for ongoing resource planning and staffing
- Engage exhibit development firm and design, fabricate and install exhibits
- Develop, beta-test and adjust exhibits and programs for public opening
- Open the EOC (soft opening)
- Develop and implement the regional marketing and media plan for the EOC
- Projected Staffing
- One full-time, on-site project coordinator/educator
- One to two part-time staff to deliver programs and staff after hours and weekend programs and activities
- Contract consultants to assist with data collection and analysis, program development and summative evaluation plan

PHASE 2 2021-2023

Milestones

- Open the EOC to the public (2021)
- Develop co-branded curriculum, programming and experiences for the EOC with MW Camp
- Implement a comprehensive and ongoing evaluation plan
- Expand regional awareness of the EOC
- Add high school curriculum and university course work to regular program menu
- Develop and implement university intern and volunteer programs to support EOC programs
- Projected Staffing
- One full-time, on-site project coordinator/educator
- Two part-time or one full-time staff to deliver programs, manage intern and volunteer programs, and staff after-hours and weekend programs and activities

PHASE 3 2024-2025

Milestones

- Undertake a comprehensive evaluation of the implementation of the Interpretive Plan
- Update the Interpretive Plan
- Assess and prioritize changes and updates to exhibits, experiences and programs
- Evaluate the EAA EOC relationship with MW Camp and programming and adjust as needed
- Projected Staffing
- One full-time, on-site project coordinator/ educator
- Two part-time or one full-time staff to deliver programs, manage intern and volunteer programs, and staff after-hours and weekend programs and activities
- Outside consultant to conduct assessments and facilitate Interpretive Plan revision

Conclusion

The Edwards Aquifer Authority Education Outreach Center is a bold and exciting departure from the traditional classroom outreach previously offered by the EAA. The Interpretive Plan articulates the EOC communications and outreach goals and serves as a touchstone and guide for the development of exhibits, programs and collaborations. The new informal learning initiative, physical destination, and online portal provide opportunities to directly engage the public with the EAA mission. Access to science staff and real time data create a dynamic learning environment on the Recharge Zone of the Edwards Aquifer. While other local and regional institutions can develop exhibits and activities to interpret the Edwards Aquifer, the EAA is the only site-specific field opportunity offered to the public. Additionally, the strategic relationship with Morgan’s Wonderland Camp adds to the EOC visitor experience by offering its menu of Ultra Accessible™ experiences and resident camp facilities.

Appendix

Access the full folder [here](#); each item below is also a live link directly to the individual file:

- [1. Project Team](#)
[2. Implementation Timeline](#)
[3. Glossary](#)
[4. Goals and Objectives Worksheets](#)
[5. Program Demographics \(2018\)](#)
[6. Feedback Survey](#)
[7. Online Engagement Event PowerPoint](#)
[8. Online Engagement Analysis Memo](#)
[9. Curriculum Resources](#)
[10. TEKS Correlations](#)
- [11. Site Visit Notes](#)
[12. Neurodiversity in Museums PowerPoint](#)
[13. EOC Boilerplate Language](#)
[14. EOC/ MW Camp Operational Integration Notes](#)
[15. Frequently Asked Questions \(Draft\)](#)
[16. Student Group Visit Outline](#)
[17. EOC Online Learning Portals – Learning Zone](#)
[18. Lotería Game Update](#)
[19. Revised 3-D Cave Script](#)
[20. 100+ Home Conservation Activities](#)





Potential Collaborators & Program Ideas

Successful partnerships require a shared set of values. Partners will understand and commit to commonly held principles:

- Recognition of the value proposition of collaboration
 - Respect for the missions of partner organizations
 - Shared responsibilities as well as shared benefits
 - Commitment to success and a willingness to share successes
 - Agreement on the scope and nature of the partnership and the roles and responsibilities of the various partners
 - Equal and fair treatment of all partners in an atmosphere of trust and mutual support
- Inclusive, transparent decision-making
- Open communication and sharing of information
 - Commitment to carrying out a common set of goals and standards
 - Accountability and reliability

The following organizations have been identified as potential EOC programmatic partners.

List on next page.

Organization/ Entity	Program Idea	Possible Contact
Bonham Academy SAISD	Possible Beta-Testing site for the Project Based Curriculum or the Learning-Zone educational pages on the website.	David Nungaray, Principal bonhamacad@saisd.net
Bibliotech	Work to create “always available” EAA-related resources to replace classroom recommended books (a former resource on the EAA website)	Carlos Saucedo Outreach Coordinator carlos.saucedo@bexar.org
Bridge Projects	Local design and documentation firm who composed the watershed wall art installation at confluence park. Through collaborating to produce art and visuals for the new EOC, this partnership will effectively communicate the importance of water in the community and the role of the EAA in promoting conservation.	Cade Bradshaw cade@art-services.info Stuart Allen stuart@stuartallen.info
City of San Antonio	Promotion through tourism department- This will help the EAA develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the EAA outreach center as a premier recreation/aquifer education destination. It will communicate the importance of water in the community and the role of the EAA in promoting conservation	Phillip A. Covington Special Projects Manager Edwards Aquifer Protection Phillip.Covington@sanantonio.gov
Compost Queens	Food Recycling program, with emphasis on how water is involved. This program will encourage local and regional participation	Kate Jaceldo info@compostqueenstx.com 201-315-4966
COSA; Solid Waste	Programs about how to take care of the trash at the EOC. This collaboration with COSA will help the EAA create programs that encourage local participation.	Zaprina Orpozo 210-207-6410
CPS	Programs to explore the nexus between regional energy and water usage and distribution. Through collaborating with SA’s municipal electric utility, the EAA will create programs that encourage interdisciplinary local and regional participation.	Steffi Ockenfels SJOckenfels@CPSEnergy.com
Dell Computers	Hardware and software for the EOC.	
Eco-central	Programs on how to be green. This local participation will communicate the importance of water in the community and the role of the EAA in promoting conservation.	Dyhanara Rios Drios87@alamo.edu Cecile Parrish
GBRA	Collaborative educational programs about regional water supplies and conservation. Create programs that encourage local and regional participation and communicate the importance of water in the community and the role of the EAA in promoting conservation.	Cinde Thomas-Jimenez cthomas-Jimenez@gbra.org

Girls, Inc.	Collaborate for virtual meetings and beta-testing.	Lauren Smith lauren@optinexperts.com Lea Rosenauer lrosenauer@girlsincsa.org
Greater Edwards Aquifer Alliance (GEAA)	Through encouraging regional and local participation, this partnership will help the EAA create innovative, accessible experiences for Edwards Aquifer programs and activities.	Annalisa Peace Executive Director Annalisa@AquiferAlliance.org 210-320-6294 (office)
Green Spaces Alliance	Collaboration on programs involving land easements and their role in water conservation. This program will emphasize local and regional participation, positioning the Edwards Aquifer Authority as the coordinating entity for water education in the region.	Zanel Pizarro zanel@greensatx.org
Hardberger Park	Possible location for pop up EAA events. This will help the EAA develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the EAA outreach Center as a premier recreation /aquifer education destination.	Teresa Shumaker tshumaker@philhardbergerpark.org
Hartman initiatives	Evening programs with MW Camp that communicate the importance of water in the community and the role of the EAA in promoting conservation	Jessicah Holloway Jholloway@morganswonderland.com Nikki Young NYoung@morganswonderland.com
Hemisfair Park	Possible location for pop up EAA events. This will help the EAA develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the EAA outreach Center as a premier recreation /aquifer education destination	Traci Lewand Traci.lewand@hemisfair.org
Henry Ford Academy: Alameda School	Engagement from local students for opportunities to show case their work will help position the Edwards Aquifer Authority as the coordinating entity for water education in the region.	Mr. J. Montez, Principal 210-226-4031 jmontez@thealamedaschool.org
Hill Country State Natural Area	Programs to demonstrate This will help the EAA create programs that encourage local and regional participation	Alice Carlos Alicecarlos09@yahoo.com
Mitchell Lake Audubon Center	Collaboration with other regional environmental entities - Create programs that encourage local and regional participation.	Shanae Dana Shanae.dana@audubon.org
MW Camp	MW Camp can provide innovative, accessible experiences for Edwards Aquifer programs and activities. Integrated wayfinding for MWC Camp and EAA Education Outreach Center. This will help the	Jessicah Holloway Jholloway@morganswonderland.com Nikki Young

	EAA create a unique identity for the Edwards Aquifer Authority and its role in regional water management.	NYoung@morganswonderland.com
National Wildlife Federation	Develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the EAA outreach Center as a premier recreation /aquifer education destination	Rebecca Quinonez Pinon QuinonezPinonR@nwf.org
Nueces River Authority	Create programs that encourage local and regional participation, and communicate the importance of water in the community and the role of the EAA in promoting conservation.	Sky Lewey slewey@nueces-ra.org Educational Director 830-232-5672
Plus One Robotics	Implement AI in museum exhibits. This will help the EAA create a unique identity for its role in water management, through interactive and engaging exhibits in the education outreach center and communication program	Info@plusonerobotics.com 210-664-3200
Rainbow Gardens	Programs to learn about water saver gardens and the value in planting native gardens/plants. This will encourage local participation and effect innovative, accessible experiences for Edwards Aquifer programs and activities.	Laura Jarvis ljarvis.rainbowgardens@yaho.com
Region 20	This education service center can serve as a place for the EAA to effect innovative, accessible experiences for Edwards Aquifer programs and activities, and to promote internship programs.	Matt Simcock Matt.Simcock@tea.texas.gov
REI	Develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the EAA outreach Center as a premier recreation /aquifer education destination	Jeanette M. Honermann Community & Government Affairs jhonerm@rei.com
San Antonio Botanical Gardens	Watersaver Gardens programming. This program will embody local and regional participation to communicate the importance of water in the community and the role of the EAA in promoting conservation.	Ask a Gardner info@bexarmg.org 210-631-0400 Gary Poole gpoole@sabot.org
San Antonio Food Bank	The San Antonio Food Bank will be operating on the Morgan's Wonderland Camp property serving meals to the campers and visitors composting, vegetable growing, etc. There is an opportunity to discuss where food comes from in the form of gardening and composting. Conservation practices may be tied in to the curriculum as well.	Eric Cooper President & CEO ecooper@safoodbank.org 210-722-7488
San Antonio Parks Foundation	This will help the EAA create programs that encourage local and regional participation. This will help the EAA develop a presence in surrounding communities and educational events by offering a pop-up experience to draw attention and pitch the	Mary Jane Verette maryjane@saparksfoundation.org

	EAA outreach Center as a premier recreation /aquifer education destination	
SARA	Collaborative educational programs about regional water supplies and conservation. Create programs that encourage local and regional participation and communicate the importance of water in the community and the role of the EAA in promoting conservation	Carrie Merson cmerson@sara-Tx.org
SAWS	Specialized tours of watersaver garden areas. Through encouraging regional and local participation, this program will help the EAA create innovative, accessible experiences for Edwards Aquifer programs and activities.	Greg Wukash - education 210-207-7447 gwukasch@saws.org
SaySi.org/	Engagement from local artists through artwork or installations to promote local community. This will help the EAA create a unique identity for itself and its role in water management.	Nicole Amri Community Outreach Director 210-212-5413
Sustainable SA	Communicate the importance of water in the community and the role of the EAA in promoting conservation.	Substainability@sanantonio.gov
TCEQ	This will help the EAA create programs on water conservation and awareness, through local and regional participation	IL'Oreal W. Stepney Deputy Director: Office of Water 512-239-6696 info@tceq.texas.gov
Texas Butterfly Ranch	Create and register Pollinator Gardens at the new EOC. This partnership will help the EAA create programs that encourage local and regional participation.	Monika Maeckle msmonikam@gmail.com https://texasbutterflyranch.com/pollinator-habitat-initiative/
Texas PTA	Keep lines of communication open and consider for future partnerships and testing. EAA EOC is repurposing portions of the Texas PTA's Kid First disability learning experience as activity 10 in the PBL unit	Carrie Mays Director of Programming cmays@txpta.org
Trinity University Department of Environmental Studies	Faculty and graduate students can assist through volunteer work or internship programs. This partnership will facilitate the recruiting and training of university students and volunteers with an interest in science, community planning, resource management, or teaching. It will also open the door for the EAA to work with universities to incorporate field experiences and programs for university students into the education outreach center offerings. Such collaboration will help position the Edwards Aquifer Authority as the coordinating entity for water education in the region	Gregory Hazelton Ghazelto@trinity.edu David Ribble dribble@trinity.edu

Trinity University Department of Geosciences	Faculty and graduate students can assist through volunteer work or internship programs. This partnership will facilitate the recruiting and training of university students and volunteers with an interest in science, community planning, resource management, or teaching. It will also open the door for the EAA to work with universities to incorporate field experiences and programs for university students into the education outreach center offerings. Such collaboration will help position the Edwards Aquifer Authority as the coordinating entity for water education in the region	Kathleen Surples 210-999-7365 ksurples@trinity.edu
Trinity University Eco Allies Club	Recruit, train and evaluate university students and volunteers with an interest in science, community planning, resource management, teaching.	EcoAllies@trinity.edu
Trinity University Urban Studies	The Urban Studies program at Trinity may also be a partner to consider – tomorrow's planners gaining appreciation for, and consideration of, the aquifer and water sources in building the communities	Christine Drennon cdrennon@trinity.edu
UIW 3D Animation and Game Design	Development of interactive software through a local university program. This will help the EAA engage with university students and volunteers with an interest in science and technology.	Kassandra Arevalo 210-805-1209
UTSA Department of Geological Sciences	Faculty and graduate students can assist through volunteer work or internship programs. This partnership will facilitate the recruiting and training of university students and volunteers with an interest in science, community planning, resource management, or teaching. It will also open the door for the EAA to work with universities to incorporate field experiences and programs for university students into the education outreach center offerings. Such collaboration will help position the Edwards Aquifer Authority as the coordinating entity for water education in the region	Carter Kearns Ph.D Senior lecturer Carter.Kearns@utsa.edu
Christus Children's Hospital	Healthy Food Choices. This program will encourage local and regional participation	Julie La Barba julie@labarbamd.com
Virtuix	Interactive motion platform for VR. This partnership will help the EAA create a unique identity for itself and its role in water management through the education outreach and communications program.	support@virtuix.com
Witte Museum	Specialized tours with scientists, self-guided experiments, and short trails with content rich labels and graphics. This will help the EAA communicate the importance of water in the community and the role of the EAA in promoting conservation.	Helen Holdsworth helenholdsworth@wittemuseum.org VP of Public Programs

		Colleen Ferguson colleenferguson@wittemuseum.org Director of Public Programs
Yes! Our Kids Can	Partner to provide EAA material in Teaching material and Offer mini experiences for students to feel like an "EAA scientist." Offering programs and activities will position the Edwards Aquifer Authority as the coordinating entity for water education in the region. This partnership would effectively communicate the importance of water in the community, and the role of the EAA in promoting conservation.	Danica Bullis 210-288-8101



EDWARDS AQUIFER AUTHORITY

900 E QUINCY, SAN ANTONIO, TX 78215

210. 222. 2204 | EDWARDSAQUIFER.ORG

