HEADWATERS AT THE COMAL

HEADWATERS AT THE COMAL RESEARCH PARTNERSHIP PLAN

Section 1. Introduction

The Comal River is the heart and soul of New Braunfels and for thousands of years it has been an important gathering place for people. The river and the springs that feed it are core to our identity as a community and a critical natural resource for our region. That's why New Braunfels Utilities (NBU) established Headwaters at the Comal (Headwaters) site in 2017 and in partnership with the community, began rejuvenating 16 acres at the headwaters of the Comal Springs. Shortly thereafter, a 501c3 nonprofit organization by the same name was established to advance the mission of strengthening the relationship between the community and nature by showcasing the significance of the Comal Springs. The Headwaters organization works to engage the hearts and minds of thousands of Central Texas youth, business leaders, and community members in the conservation and stewardship of our beloved springs and rivers through programs that stretch across four organizational pillars: education and demonstration, research, conservation, and community placemaking.

The Headwaters Site

In partnership with NBU and with strong support from the community, the Headwaters organization is leading a grand metamorphosis—the complete transformation of a 16-acre site from an old utility facilities property that sits at the headwaters of the Comal River into the Hill Country's premier education and nature-oriented community center. Following a community-driven master site planning process in 2012, $6 million was raised to complete initial site development work, including removal of five acres of concrete and replacement with hundreds of native trees, plants, and grasses, scenic walking trails and interpretive signage; significant riparian zone restoration on the Comal River; daylighting the headsprings of the Comal River; and remodeling an old warehouse building into a beautiful covered learning pavilion. Site build out activities resulted in a dramatic 94% reduction in localized pollution entering the Comal River system, and allowed Headwaters to begin operating educational programs and research activities.

With approximately one-third of the site fully developed, the Headwaters organization provides a unique space for the community to gather, learn and explore, while immersed in the natural environment that Headwaters works to protect and conserve. Headwaters offers engaging public programs across four "pillars": education, protection and conservation, research, and community place making. Educational programs for youth and adults teach the importance of protection and conservation of land and water resources, as well as best practices in cultural and environmental resource use and management. Conservation and restoration programs engage youth and adult volunteers in best practice land and water resource stewardship. Additionally, Headwaters conducts and facilitates internal research, and is also available for outside research projects. By engaging in facilitating research onsite, the organization aims to deepen the understanding of the impacts of human activity on our natural resources as well as

highlight the human benefits from experiences in nature to ultimately inform decision making on best practices concerning use and management of these natural resources.

Significance of the Comal Springs, Comal River, and the Edwards Aquifer

The Comal Springs ecosystem is the largest spring system in Texas as well as the southwestern United States. Its springs come from the Edwards Aquifer and are located mainly in nearby Landa Park in New Braunfels, Texas. It provides water for agriculture in the Uvalde, Hondo, and Castroville area; city water for metropolitan San Antonio; and spring flow to the Guadalupe and San Marcos Rivers. A separate segment of the aquifer provides spring flow to Barton Springs in Austin.

The Comal system is comprised of four major spring runs that feed into Landa Lake, including Spring Run Four which is accessible from Headwaters at the Comal, and a large number of smaller springs present in Landa Lake. The springs create the largest mean discharge of any spring in the southwestern United States and ultimately the headwaters of the Comal River. The system exhibits near constant temperatures of about 74º F.

Over the years, extensive development along the lake and river banks, channel modification, and the natural variability of the springs has resulted in some biological impact. However, the Edwards Aquifer Authority (EAA), the Guadalupe-Blanco River Authority (GBRA), the City of New Braunfels (CoNB) and other management entities have taken great strides to protect and preserve these important natural resources. The Edwards Aquifer Habitat Conservation Plan (EAHCP) is a cooperative effort to protect groundwater resources of the southern portion of the Edwards Aquifer both for people in the region and the endangered species that inhabit the aquifer. General information regarding the EAHCP can be found at the Edwards Aquifer Authority website.

The City of New Braunfels (CoNB), with the help of local agencies and stakeholders, has developed a Watershed Protection Plan (WPP) for the Dry Comal Creek and Comal River (DCCR) watersheds to protect and preserve the water quality in these waterbodies and leads several local projects to improve conditions. General information regarding the DCCR WPP can be found at the City of New Braunfels website.

The Comal Springs make up the shortest river in Texas, the Comal River, and provides important flow to the Guadalupe River south of Canyon Dam, and all the way to the San Antonio Bay on the Gulf of Mexico. The Comal River provides a significant portion of the baseflow to the Guadalupe River, especially during times of drought. The Comal River typically exhibits constant flow with an average discharge of approximately 300 cubic feet per second (cfs). In recorded history, the only time the Comal Springs have ever gone dry was for a period of about six months during the 1950's drought-of- record.

Historical Significance of the Headwaters Site

Early settlers of the area included Tonkawa and other Native American tribes that inhabited the area long before the settlement of the area by Europeans. Archaeological research onsite from in 2018 and 2019 provides evidence that this site has been inhabited by people for thousands of years. So far, nine radiocarbon samples have been submitted for analysis. Of these, six produced a cluster of dates ranging from the later centuries of the Middle Archaic to the early Late Archaic (generally 3000–4000 years BP). An additional carbon sample from a feature near Blieders Creek returned a date to the Late Prehistoric period, likely extending the occupation at the site at least to within the last 800 years. One radiocarbon sample collected during the vault excavations produced an Early Archaic-age date, roughly 7,900 years ago. Archaeologists have found that the Headwaters property is a largely intact, heavily utilized landform that contains numerous, mostly small, isolated thermal features (hearths) and occasional large middens, scattered all around.

These Native American tribes, as well as European settlers, were attracted to the area by the Comal Springs and the overall abundance of fresh water. Spanish explorers visited the area beginning in the 1600's and reportedly discovered large Native American tribes inhabiting the area in the vicinity of Comal Springs in 1691. French and Spanish expeditions, including those of the Marqués de Aguayo and Louis Juchereau de St. Denis, commonly passed through this area via the El Camino Real de Tejas, or Royal Road of Texas, which was a major historic route through the area and is now a National Historic Trail. In 1825, a Mexican land grant gave title of the area around the springs to Juan M. Veramendi.

During the eighteenth century, the Comal Springs and Guadalupe River (which had been called Las Fontanas [the "fountains"] and the Little Guadalupe, respectively) took the names Comal, Spanish for "the round, flat earthenware griddle used to make tortillas," and Guadalupe.

In 1836, the Republic of Texas was formed after years of battles with the Mexican government, which had laid claim to the territory. To pay off war debt and weaken political ties with Mexico, the new nation of Texas offered public land to Americans and Europeans. This offer, in conjunction with political strife in their homeland, enticed a group of German noblemen to form an immigration company named the Adelsverein. German immigrants began to arrive in Indianola, Texas in December 1844 and make their way to Central Texas.

On March 13, 1845, Prince Carl of Solms-Braunfels, Germany, entered into an agreement with Maria Antonio Garza and her husband Rafael E. Garza for 1,265 acres of the Veramendi land grant for a sum of $1,111. The German immigrants settled in the area of present-day New Braunfels. The Germans quickly built grist mills and cotton gins along the Comal River. A millrace, located parallel to present-day Landa Park Drive, was dug to divert water to power one of the mills. Joseph Landa purchased the land surrounding the upstream portions of the Comal River (i.e., Landa Lake) in 1860 and dedicated the land as a park (i.e. Landa Park) in 1898.

The Comal Settlement was one of the first settlements outside of New Braunfels and was located along the Dry Comal Creek. The Comal Settlement was founded by several German families and grew to include schools, a cotton gin, a store, church and cemetery. At that time, the Dry Comal Creek offered a source of fresh water for the Comal Settlement and for those traveling south along the Camino Real trail toward markets located near San Antonio.

Significant Research and Educational Features of the Site

The Headwaters at the Comal site holds a variety of natural and man-made features of interest to the research and education communities, including:

Comal River – Spring Run Four

The Comal Spring Run Four ecosystem, which feeds Landa Lake and is accessible from the Headwaters at the Comal site, is home to rare, endemic threatened and endangered aquatic species found nowhere else on Earth, including the Fountain Darter (*Etheostoma fonticola*), Comal Springs Dryopid Beetle (*Stygoparnus comalensis*), Comal Springs Riffle Beetle (*Heterelmis comalensis*), and Peck's Cave Amphipod (*Stygobromus pecki*). Fish species found in both the Dry Comal Creek and Comal River include largemouth bass and multiple sunfish species. Several non-native, invasive fish species, including tilapia and suckermouth catfish, are also found in the Comal River.

Site Ecology

Headwaters at the Comal is located at the edge of the Balcones Fault and falls within the artesian zone of the Edwards Aquifer. The site has characteristics of both the Edwards Plateau and the Blackland Prairie, but the site's rich alluvial soils tie it more strongly to the Blackland Prairie.

The Blackland Prairie is characterized by rich, deep, heavy clay soils, that historically supported tallgrass prairie and, to a lesser extent, savanna (scattered trees in a grassland matrix) communities. These soils are well suited for agriculture, and much of the ecoregion has been converted for that purpose, with the ecoregion's forested savanna areas typically restricted to drainages, waterways and steep slopes. Live oak (*Quercus virginiana*) was the most common woody species, though post oak (*Quercus stellata*), blackjack oak (*Quercus marilandica*), cedar elm (*Ulmus crassifolia*), sugarberry (*Celtis laevigata*) and honey mesquite (*Prosopis glandulosa*) were also present.

The Edwards Plateau has fractured limestone geology, rich in features that can hold and convey water, called karst features. This ecoregion is characterized by the Edwards Aquifer and its various spring systems, including the Comal Spring system, that exist due to the region's karst topography. The Edwards Plateau historically supported grass-dominated communities, typically juniper-oak savanna and mesquite-oak savanna. Areas with thin soils, lower nutrient levels, and reduced water availability tended to favor mixed grass and short grass assemblages, rather than the tall grass that could be supported by Blackland Prairie soils.

Low Impact Design & Sustainable Strategies

Though not fully executed, the Headwaters site design incorporates three low impact design (LID) tools: rain gardens (biofiltration/bioretention), swales (bioswales), and rainwater harvesting. Rain gardens function as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological and chemical treatment processes. Water is retained in a basin-shaped landscape area with plants and soil, allowing the water to pass through the plant roots and the soil column. Swales are vegetated channels that convey stormwater and remove pollutants by sedimentation and infiltration through soil. Unlike rain gardens which capture, retain and infiltrate stormwater, swales are primarily stormwater conveyance systems. They can provide sufficient control under light to moderate runoff conditions, but their ability to control large storms is limited. Rainwater harvesting - collecting rainwater from impervious surfaces and storing it for later use - is a common technique practiced in drought-stricken Central Texas. Collecting and harvesting rainwater on-site will reduce the facility's potable water use. It can also be used for on-site irrigation, increasing the site's water-use efficiency.

Additional sustainable design strategies currently utilized onsite include:

1. Water mitigation: Altered flow paths on the site help mitigate the water that runs to Blieders Creek, serving as an irrigation source for plants throughout the site.
2. Xeriscape: This landscape design strategy utilizes native plants, requiring less irrigation, in addition to improving soil conditions.
3. Responsible material use and re-use: Salvaging and re-using existing building materials, such as concrete for pavers, seating, plant scape boundaries, etc., means less construction waste and a reduced project cost. Pervious materials are important, particularly for parking, because they help reduce stormwater runoff. This strategy also adds to the character of the site.
4. Riparian habitat restoration: A combined strategy of invasive plant removal and the planting of a diverse range of native vegetation in the riparian corridor has helped stabilize the river banks and reduce future erosion, increased water quality by providing more filtration of stormwater, and increased the habitat value for native fauna.

Demonstration Gardens

The Headwaters site has a number of demonstration gardens that showcase the beauty and function of native and adaptive plants and gardens. Stormwater gardens show how the path of stormwater can be directed, slowed and captured in landscapes using check dams and other techniques. The diversity of plants used in these gardens include rain garden plants that are adapted to temporary water inundation.

A restored savanna- garden educates site visitors on the natural succession that occurs in the savanna landscape with different grasses and flowers first establishing themselves in disturbed areas, transitioning to other species over time. Fire management practices and other maintenance techniques associated with grasslands can also be covered in educational interpretation.

The riparian corridor around Comal Springs and Blieders Creek has undergone some restoration, though opportunities still exist to improve the corridor, including removal of invasive species and the planting and establishment of a diverse range of trees, shrubs and other plant materials that will help stabilize the banks to improve water quality and enhance wildlife habitat.

Waterworks History, Uncapping the Spring & Working Well Yard
Fritz Klingemann who inherited this property offered to sell the spring property to the City of New Braunfels in 1906 for $2,000. The City Council rejected the offer, feeling it was too high for what they deemed an "alligator swamp." Eventually, the City purchased the land for an increased price of $2,500 in 1907. Soon, new water lines and a pump were installed on the property, founding the City's new waterworks. The City of New Braunfels applied for newly available federal funding for improvements at the City waterworks in 1933. With that funding, the City set about cleaning up the property. Improvements included "walling up" (capping) the Springs to help control flow, clearing out underbrush, and constructing new buildings.

According to City Council meeting minutes from 1936, it was reported "that the State Health Department had recommended that the City encase with concrete its main spring water supply at the pumping plant in order to eliminate the possibility of contamination from surface waters seeping in the present concrete block walled spring."

By 1936, the Spring had been capped and two stone and concrete buildings were constructed to house water pressurization equipment, maintenance facilities, and a metal foundry. The rock buildings constructed at that time still remain on the property. At least two wells were in operation in 1936, with a third drilled in December 1944.

The operation of the City's waterworks was turned over to New Braunfels Utilities (NBU) in 1959 and NBU moved their operations to the Klingemann property in the 1960s. Most of the NBU operations once housed on this site moved to other locations years ago, making way for the property's environmental restoration. The pump yard and its historic structures, however, are still operational, drawing water from the Edwards Aquifer and storing it for use throughout New Braunfels.

The pump yard's large tank stores chlorinated drinking water. In the past, rare overflow events discharged water from the tank into the Springs, potentially harming the invertebrates living in this sensitive ecosystem. As part of the site's restoration, overflow sensors were added to the tank, and modifications were made to its overflow pipe to prevent chlorinated water from entering the springs in the unlikely event of a future overflow.

If an overflow does occur, the elevated pipe will divert the chlorinated water away from the Springs and into the splash basin on the nearby hilltop. This allows natural drainage and filtration to neutralize the chlorine in the water before it reaches sensitive waterways. This

operational water well, alongside the Springs, is a powerful reminder of how our water use directly impacts habitats and the environment.

A key element of the Headwaters environmental restoration effort was the removal of a portion of the 1930s- era concrete cap that covered the site's main spring, Spring Run Four. With the Spring now open, leaves and other organic matter can fall into the water, adding food and nutrients that are critical to the health of the Spring's fragile ecosystem, which is home to several rare and endangered species.

Headwaters at the Comal Maps

Image 1. Headwaters at the Comal, Comal River and Landa Park

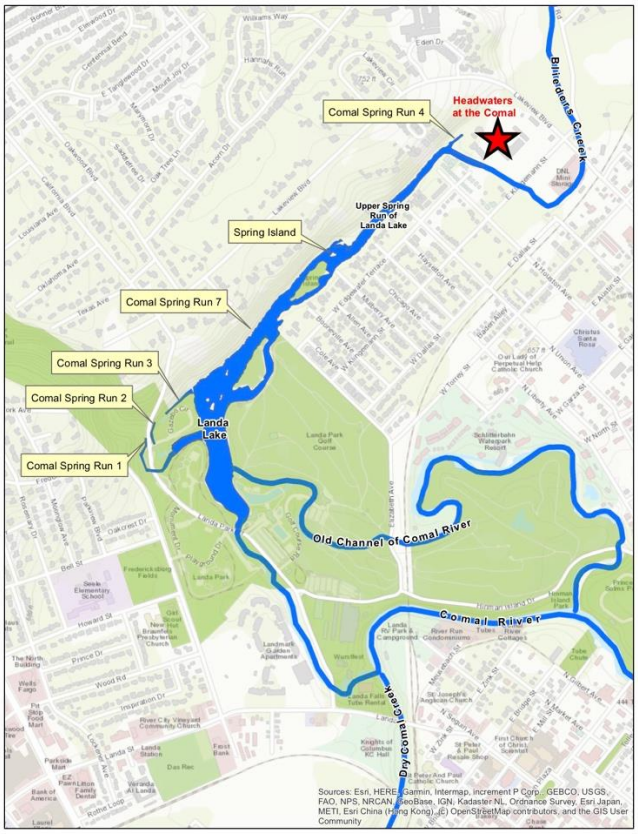
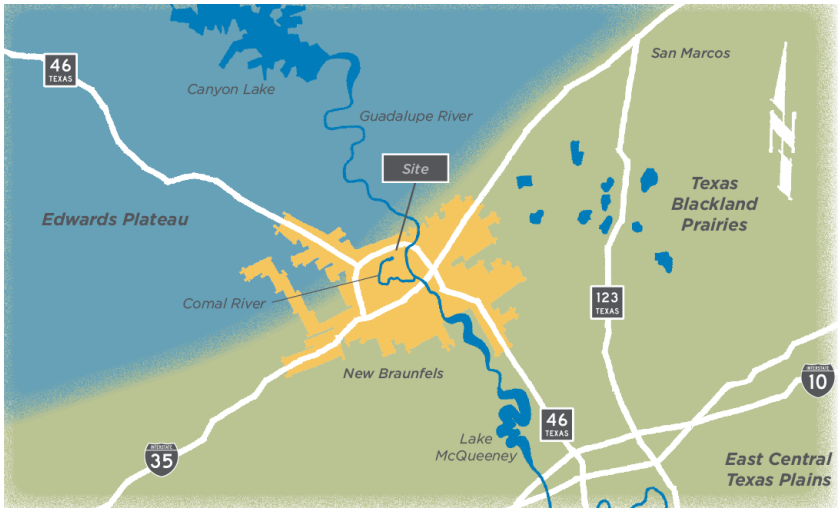


Image 2. Springs/Comal River/Guadalupe River/Edwards Aquifer



Section 2. Research Partnership Program Operations Plan

Purpose and Goals

The primary purpose of the Research Partnership Program (RPP) is to advance the Research pillar goal to facilitate and conduct research that allows for exploration and discovery of the Headwaters site; connect New Braunfels with regional science and research communities; and identify and demonstrate solutions to real world problems.

The RPP Plan formalizes the process by which decisions are made regarding access to, and use of, the Headwaters at the Comal site to ensure:

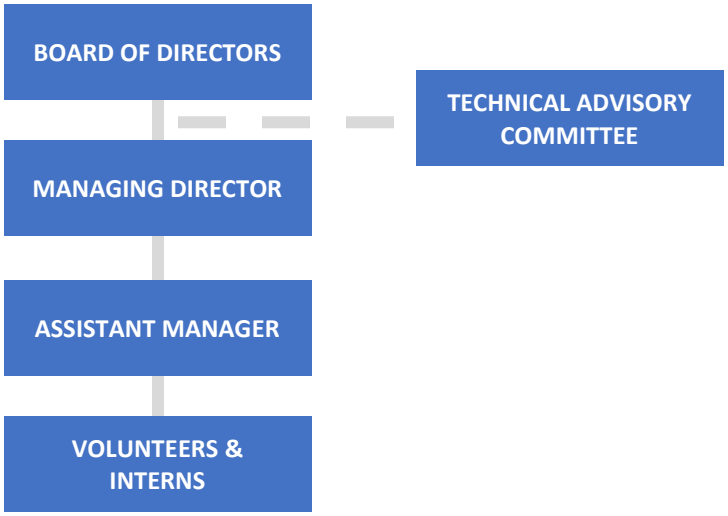
- Compliance with the Endangered Species Act and the Habitat Conservation Plan mandated by federal and state law for the springs;
- Compliance with the Army Corps of Engineers and Texas Historical Commission's archaeological requirements;
- Management of the site that supports and enhances New Braunfels Utilities' efforts to provide essential services to the community, remain a committed community partner, and good steward of the natural resources of the area;
- Emphasize the use of scientific data to support natural and cultural resource management; and
- Alignment with strategic initiatives in the strategic plan of the Headwaters at the Comal strategic plan.

Long Term Program Goals

1. Ensure that Headwaters at the Comal is utilized by a number of educational, research, and service partners to conduct timely and important research and/or studies; and
2. Ensure that any impact to the site from approved activity will not result in long-term negative impacts or degrade the overall integrity of the natural and cultural resources of the Headwaters site.

Program Management and Operations

Organizational Structure



The roles and responsibilities of the Headwaters at the Comal organization, as they relate to the Research Partnership Program are:

Managing Director

- Has direct oversight responsibility for Headwaters at the Comal and is responsible for the stewardship of Headwaters and operations of the Research Partnership Program.
- Approves any modification to the Program or specific research project activities.
- Reviews Research Partnerships requests, via recommendations from the Assistant Manager.
- Presents recommendations to Technical Advisory Committee (TAC) for review.
- Presents recommendations, including TAC feedback, to Board of Directors.

Assistant Manager

- Serves as primary Headwaters point of contact (POC) with research partners, overseeing the research project.
- Reviews initial requests for completeness and relevance.
- Conducts and/or ensures any necessary background check, training or certification for all project participants is completed and on file.
- Presents eligible requests to the Managing Director.
- Notifies request POC with final Board determination within 90 days of request submittal.
- Monitors activities and scientific studies conducted by all entities working on, in, or around Headwaters.
- Maintains program records, including log of any equipment installed in or at Headwaters site.
- Advises the Headwaters Technical Advisory Committee (TAC) and Board of Trustees of current and proposed activities at the Headwaters.

- Presents quarterly project updates to the TAC and bi-annual updates to the Board.

Headwaters Technical Advisory Committee

- Reviews Research Partnerships requests, presented by the Managing Director, on scientific relevance, objectives, potential concerns, etc. and provides feedback and recommendations.
- Participates in request presentation to Board of Directors as necessary, on case by case basis.

Headwaters at the Comal Board of Directors

- Reviews and provides final determination of Research Partnerships requests.
- Reviews bi-annual updates presented by Assistant Manager.

Outreach and Communications

Headwaters at the Comal will promote the Research Partnership Program through their existing communications channels, including the organization's website, social media accounts, and email listserv.

Partner and Project Selection

Any proposed research activity at the Headwaters of the Comal site must be submitted to the Headwaters organization for review and approval. Requests are made through the online Request for Site Access form.

Criteria for Assessing Proposed Projects

Headwaters at the Comal staff, board, and Technical Advisory Committee (TAC) each play a part in assessing whether a proposed Research Partnership Program project should be approved or denied. The team will utilize a project scoring rubric available in Section Four of this document to consider requests.

The rubric answers two primary questions:

1. Does the proposal describe a meaningful (significant) project that is built upon a good idea that could be successfully implemented (feasibility) by a trustworthy (credible), competent (capable), organization that is committed to sharing findings (commitment)?
2. Is the proposed research project manageable (feasibility) and appropriate (mission-aligned) for Headwaters at the Comal during the proposed time period (timeliness)?

Following online submittal of Request for Site Access (Request):

1. Assistant Manager will review the Request, contact the organization with any outstanding questions, and make an initial determination as to appropriateness and fit.
2. The Assistant Manager will share pre-screened Requests and initial determination to the Managing Director.
3. Managing Director will present Requests to the TAC at the next TAC meeting for additional feedback and review.

4. Managing Director will present Requests to the Headwaters at the Comal Board on a rolling basis at the next Board meeting for final determination.
5. Assistant Manager will notify the Request point of contact of final decision within 90 days of receipt of Request.
6. The Assistant Manager will provide bi-annual updates on active research projects to the Board.

Program Operations

1. Research partners should sign in and sign out each visit to Headwaters on the Research Projects Onsite Log.
2. Research partners should wear name badge while on the property for easy identification.
3. Assistant Manager should conduct weekly inspection of any research equipment and/or research project activities and report in Research Projects Onsite Log.
4. Research Equipment Log should be reviewed monthly and kept up to date.

Program Data Collection and Management

Headwaters program staff will collect, manage, and analyze program data to ensure the program's effectiveness in achieving short- and long-term program and organizational goals. Throughout the year, designated program staff will monitor activities and scientific studies conducted by all entities working on, in or around the Headwaters site and will maintain program records, including a Research Projects Log and a Research Equipment Log, which captures equipment installed in or at the Headwaters site. Additionally, the Assistant Manager will maintain a program file that includes all Research Partnership Program Requests, Progress Reports, and Project Reports.

Monitoring and Evaluation

Headwaters program staff will monitor all program-related activities to ensure guidelines are being followed. Further, designated program staff will review and analyze program data quarterly to track progress towards short- and long-term program and organizational goals. Designated program staff will provide quarterly program updates to the Headwaters Technical Advisory Committee and bi-annual program updates to the Headwaters Board of Directors, providing an opportunity to share findings and for Headwaters leadership to adjust course as needed to ensure program success.

Section 3. Guidelines, Terms and Conditions

Program Guidelines

Program guidelines intend to provide clear guidance to research partners and to the Headwaters management team.

General Guidelines – Before Project Begins

1. Any proposed research activity at Headwaters must be submitted to Headwaters at the Comal for review and approval. Requests are made through the online Request for Access form.

2. To ensure appropriate review and approval, requests must be submitted no later than three months before the proposed research project start date.

3. Research Partners must identify a primary and secondary point of contact and provide current phone numbers and email addresses for each.

4. All individuals associated with the project that will be on the premises must consent to a Criminal Background Check (CBC) performed prior to the project's start date. Background checks will be conducted by Headwaters at the Comal staff – all findings will be kept confidential. If a project participant has a current CBC affidavit already on file with their respective organization, they can submit the affidavit in lieu of a Headwaters-conducted CBC.

   NOTE: The cost of the CBC will be the sole responsibility of the project participant and/or their organization. The failure or refusal of the participant to give consent to have a CBC performed or provide the affidavit will result in the participant not be allowed on the Headwaters premises.

5. Partner organizations are responsible for securing all necessary city, state, and federal permits, certifications, and trainings, etc. for the project and should provide Headwaters staff all necessary verification and approval documentation prior to the first day of the approved project.

6. Research Partners must pay the agreed upon fee for use of the Headwaters at the Comal site. The fee amount and calculation will be discussed and agreed to before the project is approved. The fee is nominal and includes cost of administering criminal background checks and compensation for Headwaters staff/volunteer time and/or materials necessary for the Headwaters organization to participate or make the premises suitable for the proposed project.

General Guidelines – During Project Activity

7. All individuals visiting the Headwaters site for project activity must sign in and out on the "Research Projects Onsite Log" upon each site visit, and wear an identifying name badge at all times (to be provided by the Headwaters team) while on the premises.

8. Research Partner and all associated persons should follow the Headwaters Code of Conduct while on the premises at all times. See the "Code of Conduct" section below.

9. Partner points of contact should remain in open and ongoing contact with Headwaters at the Comal via the Assistant Manager for the duration of the research activities on the premises. At the onset of the project, a communication schedule will be discussed and agreed upon between partners. Any significant change in the project scope, (timeline, funding, etc.) must be communicated to the Assistant Manager as soon as possible.

10. Site access for approved projects will be limited to regular business hours (Monday through Friday, 8:00 a.m. to 5:00 p.m.) unless otherwise stated by Headwaters.

11. Headwaters at the Comal assumes no responsibility for equipment left in or at the Headwaters site; it is the sole responsibility of the project partner. All equipment to be left onsite must be noted in the Headwaters equipment log. Please ensure all equipment is labeled with contact information and follows all equipment guidelines, listed in "Additional Guidelines" section of this document.

12. For projects with Headwaters-based activities lasting longer than 120 days, research partners must submit a 90-day progress reports every 90 days until onsite project activities are complete.

General Guidelines – Following Project Completion

13. Research partners must submit a final project report within 60 days of the last day of the project

14. Research partners should formally recognize the Headwaters at the Comal organization as a project partner on all formal project documents including published reports.

15. Though not a requirement, Headwaters requests that research partners offer to present a brief post-project presentation that Headwaters can share with select audiences.

<u>Additional Guidelines</u>

Guidelines for Edwards Aquifer Habitat Conservation Plan and Dry Comal Creek and Comal River Watershed Protection Plan Compliance

The Headwaters at the Comal land and the water resources accessible at this site are environmentally sensitive and within the geographic bounds of two protection plans: the

Edwards Aquifer Habitat Conservation Plan (EAHCP), and the Dry Comal Creek and Comal River Watershed Protection Plan (DCCR WPP).

The EAHCP is a cooperative effort to protect groundwater resources of the southern portion of the Edwards Aquifer both for people in the region and the endangered species that inhabit the aquifer and its spring systems. **In support of the EAHCP, Headwaters at the Comal does not allow activities to occur that could harm endangered species or the environment they depend on. Further, collection of species of any kind is not permitted without prior approval by the Headwaters team and proper permitting by the United States Fish and Wildlife Service.** General information regarding the EAHCP can be found at the Edwards Aquifer Authority website.

The City of New Braunfels (CoNB), with the help of local agencies and stakeholders, has developed a Watershed Protection Plan (WPP) for the Dry Comal Creek and Comal River watersheds to protect and preserve the water quality in these waterbodies. The WPP includes management measures to minimize bacteria loading to the Dry Comal Creek and Comal River. These measures include discouraging the feeding of wildlife in order to minimize bacteria loading to our waterways among other reasons. One recommendation of the WPP that has been implemented by the CoNB is an ordinance prohibiting the feeding of wildlife within the city limits. **In support of the DCCR WPP, Headwaters at the Comal prohibits the feeding of wildlife found onsite.** General information regarding the DCCR WPP can be found at the City of New Braunfels website.

Guidelines for Boats, Gear and Equipment Used at the Headwaters Site

The water resources accessible onsite are delicate and pristine. In order to protect these resources from harmful invasive species, we ask that you follow the boat and gear cleaning process promoted by the Texas Parks and Wildlife Department, which can be found at https://tpwd.texas.gov/fishboat/boat/protect_water/.

All equipment placed onsite at Headwaters for any purpose must be approved by the Assistant Manager. The Assistant Manager will ensure the approved equipment will have minimal to no impact on the cultural or natural resources. Please ensure all equipment is labeled with your contact information.

Equipment must be removed by the responsible party promptly at the end of the project period. Equipment not promptly removed by the responsible party will be removed by the Assistant Manager and all associated costs billed to the responsible party. Equipment will not be returned to the responsible party until all outstanding costs have been paid.

Headwaters at the Comal Code of Conduct

All persons visiting the Headwaters at the Comal site must comply with the Headwaters Code of Conduct. Anyone who is found to be out of compliance will be asked to leave the Headwaters site immediately and will not be allowed to return.

Visitor Etiquette

Please help us protect the natural environment. Stay on paths to help preserve native plant life and animal habitats.

Always be aware of your surroundings. Watch your footing, other visitors, and native wildlife.

Do not remove, cut, or clip any of the plant life that you see. Removing or destroying plants could disturb the ecosystem.

Please confine food to designated areas. Be sure to clean up any trash or waste when you have finished.

Headwaters at the Comal is an important habitat for native wildlife. Please be respectful of their space. Do not feed any animals you may see.

No bicycles are allowed on the trails. Please leave them in the parking area.

Please park in designated areas only.

Prohibited Activities

Prohibited activities in or at the Headwaters at the Comal site include but are not limited to boating, fishing, camping, or collection of natural and historical resources unless otherwise approved by Headwaters at the Comal management.

Because of the environmental nature of the site, pets are not allowed. Service animals are welcome.

Smoking, use of e-cigarettes, alcohol, and illegal drugs are prohibited on the Headwaters at the Comal premises.

Firearms are not allowed on the Headwaters at the Comal site, unless you have a valid Concealed Handgun license.

The Headwaters at the Comal organization does not tolerate and expressly prohibits harassment of any kind on the premises. The following conduct constitutes prohibited "unwelcome harassment."

Sexual Harassment: Sexual harassment includes any unwelcome sexual advances, requests for sexual favors or other unwelcome verbal or physical conduct of a sexual nature.

Other Prohibited Harassment: Other forms of prohibited harassment include any unwelcome verbal or physical conduct that belittles, shows hostility or ridicules an individual because of race, color, gender, religion, national origin, disability, age, sexual orientation or other legally protected characteristic.

Any harassment should be reported immediately to the Headwaters staff.

Americans with Disabilities Act Compliance
The Headwaters at the Comal organization will endeavor to make a reasonable accommodation to the known physical or mental limitations of approved project participants with disabilities unless the accommodation would impose an undue hardship on the operation of our business. Please contact the Headwaters staff if any assistance and/or accommodation is required.

Section 4. Proposed Research Project Scoring Rubric

This rubric aims to assist the Headwaters at the Comal staff, board, and Technical Advisory Committee (TAC) in assessing whether a proposed Research Partnership Program project should be approved or denied.

1) Does the proposal describe a meaningful (significant) project that is built upon a good idea that could be successfully implemented (feasibility) by a trustworthy (credible), competent (capable), organization that is committed to sharing findings (commitment)?

Research Organization

- **Is the organization credible?**
  - Is there evidence that the organization is currently achieving its goals?
  - What is the reputation of the organization in the academic and education community?
- **Is the organization management team capable?**
  - Does the research team have a track record of successful projects?
  - Does the research team have adequate support from the host organization?
- **Is the organization committed to open communication with the Headwaters and to communicating project results with key audiences?**
  - Has the research team point of contact maintained adequate communication with the Headwaters thus far?
  - Does the proposal include plans to disseminate information to the general public or key stakeholder audiences?

Research Project

- **Is the proposed research project feasible?**
  - Does the timeframe seem reasonable?
  - Does the budget allocate resources required to complete the project as outlined?
- **Is the proposed research project significant?**
  - Does the project address one or more of Headwaters primary research purposes?
    - Research purposes:
      - Due diligence

- Explore, discover and better understand resources onsite
- Connect New Braunfels with regional science
- Find and demonstrate solutions to real problems

2) Is the proposed research project manageable (feasibility) and appropriate (mission-aligned) for Headwaters at the Comal during the proposed time period (timeliness)?

Headwaters at the Comal

- **Is the proposed project feasible for the Headwaters team to manage?**
  - Could the proposed research project require significant or unreasonable use of Headwaters human or financial resources?
  - Could the proposed research project negatively impact other programs or functions of Headwaters at the Comal?
    - If yes, are there adequate methods and means of mitigating these impacts?

- **Is the proposed project well-aligned with the mission, vision, goals and values of Headwaters of the Comal?**
  - Are there conflicting interests that could negatively impact the Headwaters in any way?
  - Could the proposed research project have negative impacts to the natural or cultural resources at Headwaters?
    - If yes, are there adequate methods and means of mitigating these impacts?

- **Is the proposed research project timely for Headwaters at the Comal?**
  - Could the proposed research project negatively impact programs or operations of Headwaters at the Comal during the time period proposed?
  - If yes, are there adequate methods and means of mitigating these impacts?

	CRITERIA	THOUGHTS/ASSESSMENT		
		Staff	TAC	Board
Organization	Credibility			
	Capability			
	Commitment			
Project	Feasibility			
	Significance			
Headwaters Fit	Feasibility			
	Mission alignment			
	Timeliness			
	OTHER			
	Recommendation			