HEADWATERS™
AT THE COMAL
WHERE IT BEGINS.
Comal Springs is the heart and soul of New Braunfels.

That is why we are rejuvenating 16 acres at the headwaters of the springs where people can learn, have fun, and experience history and nature.

NBU is proud to partner with the community to create this environmental showcase.
History of the site

Up to the 20th Century, New Braunfels relied on the Comal River for its water supply.

Fritz Klingemann offered to sell the property to the City in 1906.

Council purchased in 1907 and it became the site of the new waterworks.

Drilling the third well, December 1944. The water pressurization building is visible in the background.
The Existing Site
The Existing Site
The Challenges
Lake|Flato
   National leader in the master planning and design of visitor centers.

Ten Eyck Landscape Architects
   Recognized leader in the field of sustainability for site design.

Biohabitats
   National leader in water master planning, rainwater harvesting & reuse, and black water treatment.

Ecosystem Design Group of the Lady Bird Johnson Wildflower Center
   Trained in optimizing the ecological, environmental and sociological function of landscapes.

New Braunfels Area Community Foundation
   Partner in this project to provide the 501C3 resource for donors.
The Vision

Legend:
1. savanna/stormwater diversion berm
2. upper savanna bioswale
3. upper savanna nature trail
4. public sidewalk
5. primary loop path/firelane
6. monumental signage
7. prairie/overflow parking area
8. permeable parking garden
9. secondary accessible parking area
10. entry promenade
11. visitor drop-off & primary accessible parking area
12. lower woodland bioswale
13. picnic garden
14. native turf display garden
15. recycled concrete forecourt
16. rainwater cisterns
17. harvested water reflecting pool & overlook
18. terraced garden amphitheater
19. raptor perch
20. pedestrian bridge
21. low water crossing
22. savanna overlook at bioswale north
23. accessible Comal Springs loop trail
24. spring improvements
25. spring overlook
26. Comal Springs observation area
27. Comal Springs bridge
28. Bieders Creek overlook
29. terraced bank stabilization at Bieders Creek
30. water retention area & ephemeral wetland
31. wet yard
32. security fence
33. savanna overlook at bioswale south
34. inner trail
35. inner courtyard (see enlargement)
The Vision
Pre-Restoration:

Annual Volume: 26 AC-FT
Annual Total Suspended Solids (TSS): 11,850 lbs.

Post-Restoration:

Annual Volume: 5.25 AC-FT
Annual TSS: 2,100 lbs.
Annual TSS with BMPs <670 lbs.
The Vision

- Native and drought tolerant plants
- Rainwater harvesting
- Permeable walkways and parking areas
- Smart building applications
- Use of natural ambient lighting
The Vision
The Vision

Entrance from Klingemann Avenue
The Vision

Event Space
The Vision

Main Breezeway
The Vision

Breezeway to Building B
The Vision

“Living Building”
The Programming

- Property management
- Operations
- Events
- Education
- Partnerships
- Demonstration of environmental and water quality stewardship
## The Funding

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Total Estimated Cost</th>
<th>NBU Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Acquisition</td>
<td>16 acres - NBU contribution Appraised value $1.2 million</td>
<td>$0</td>
<td>FY 11</td>
</tr>
<tr>
<td>Due Diligence, Planning &amp; Design</td>
<td>Master plan development; project design; design development drawings; environmental assessments; archeological surveys; apply for USACE and USFWS permits</td>
<td>$2 million</td>
<td>FY 11-15</td>
</tr>
<tr>
<td>Phase 1</td>
<td>Spring &amp; landscape restoration; Run site utilities; Spring run observation areas; construct outdoor classroom</td>
<td>$6 million ($1.5 from other sources)</td>
<td>FY 2016 FY 2017</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Building Construction</td>
<td>$13.45 million ($8.67 from other sources)</td>
<td>FY 18-20</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Monument signage; way finding signs; additional trails, landscaping and parking</td>
<td>$1.45 million ($935,000 from other sources)</td>
<td>FY 21</td>
</tr>
</tbody>
</table>

Lifetime Project Cost: $22.9 million  
Reimbursable through grants and donations: $11.5 million
The Process
The Process
Spring Cap Removal
Spring Cap Removal
Creek Bank Improvements
The Benefits

• A Community Resource
• Ecological Restoration
• Commitment to Sustainability
• Environmental Tourism
• Storm Water Mitigation
• Water Quality Enhancement
• Protection of Comal Springs and River
In Summary

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