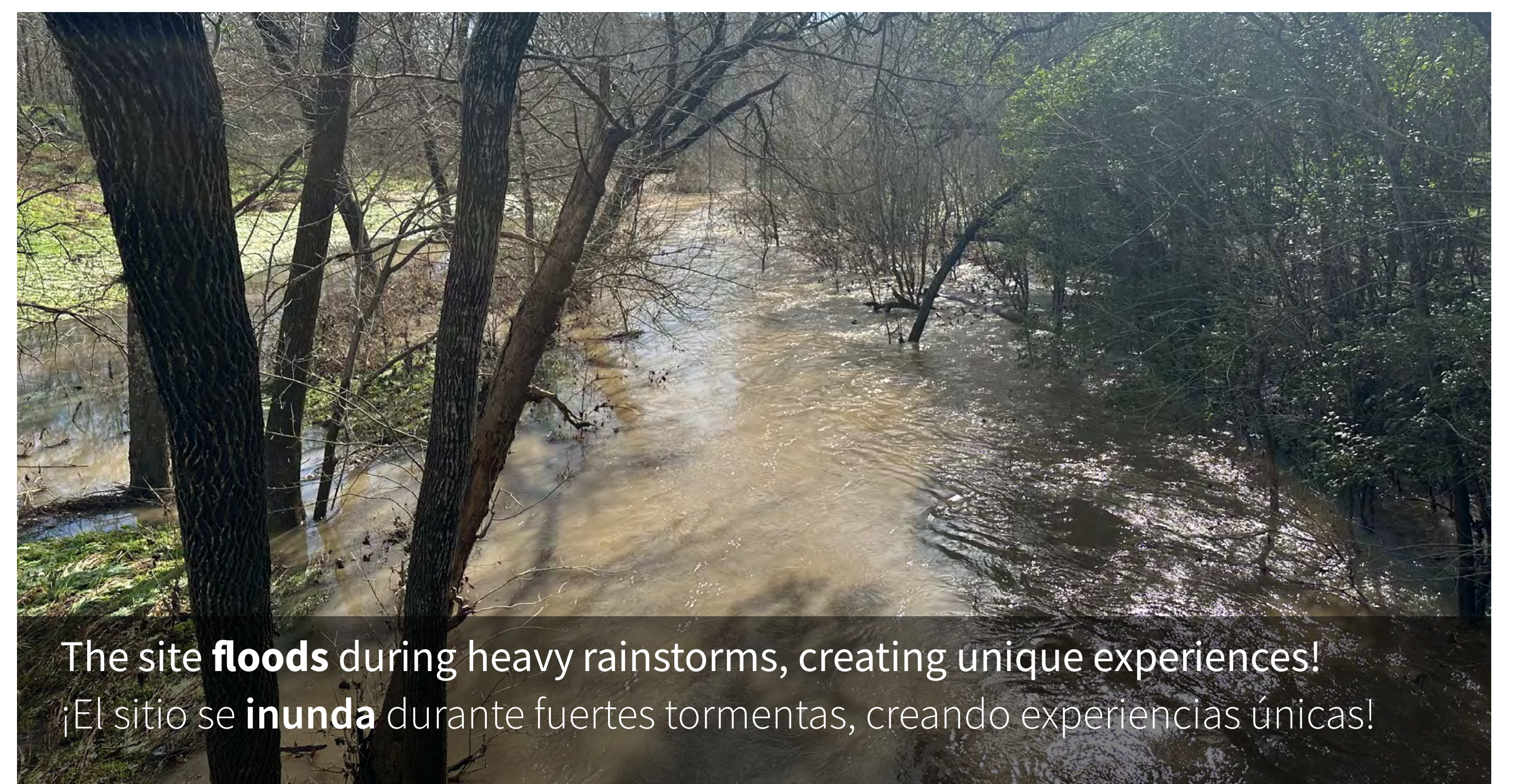
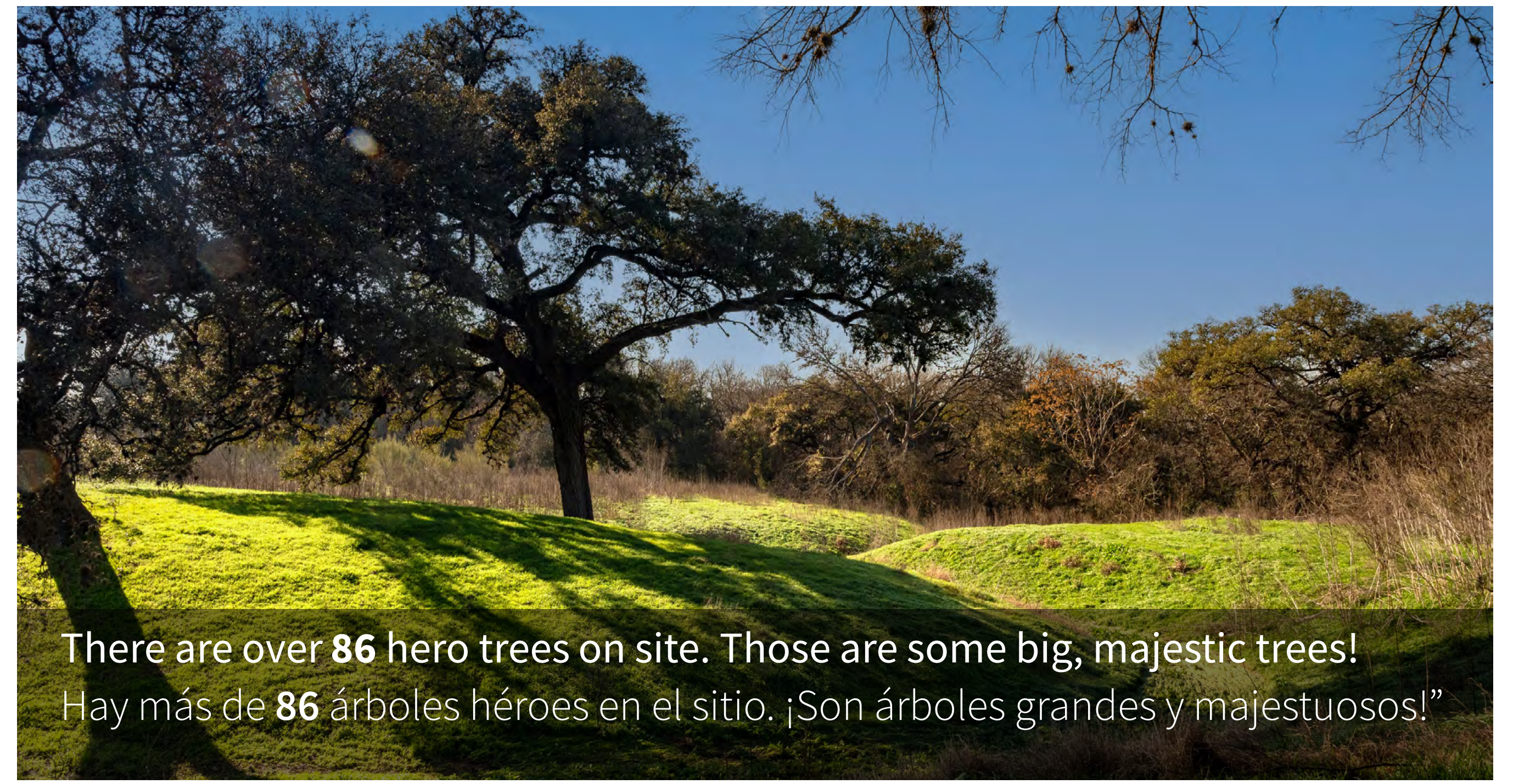
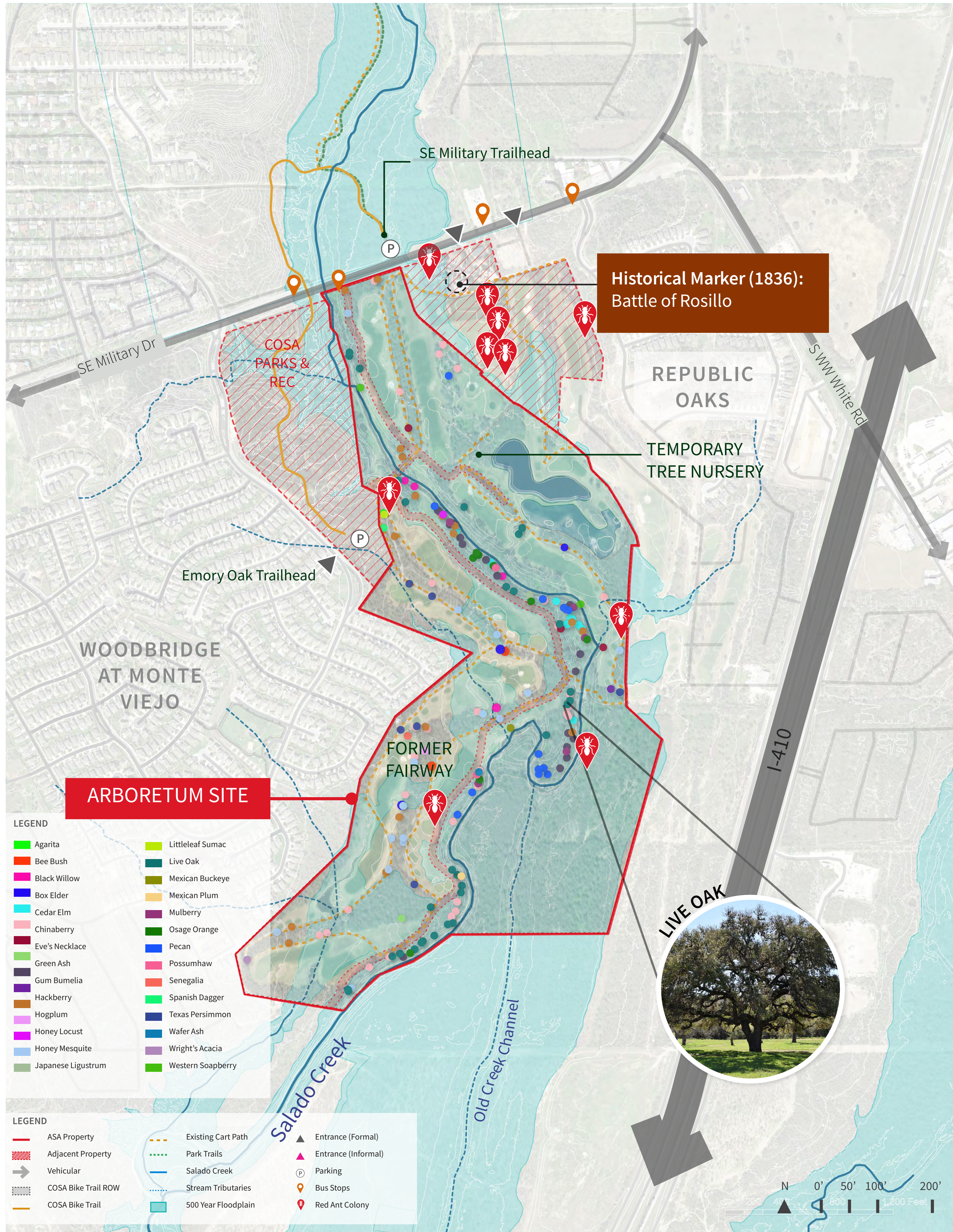


ASA Today! ¡ASA Hoy!



The Arboretum as Refuge for Biodiversity in Texas

- 1,300** Texan species are rare and/or declining
Las especies de Texas son raras y/o están en declive.
- 150** Designated Threatened Species in Texas
Especies designadas como amenazadas en Texas
- 74** Designated Endangered Species in Texas
Especies en peligro de extinción en Texas
- 13+** Species at risk in the Edward Aquifer eco-region
Especies en peligro en la ecorregión del Acuífero Edward
- 2+** Texan species have gone extinct in the past 40 years
Especies tejanas extinguidas en los últimos 40 años



What is a masterplan?

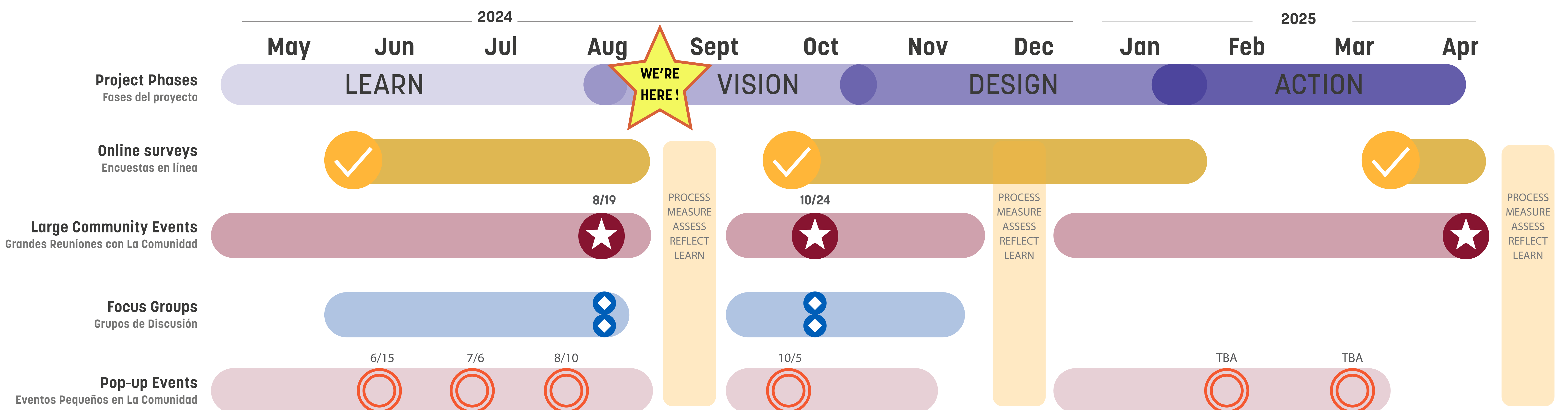
¿Qué es un Masterplan?



The Arboretum San Antonio master plan is a comprehensive strategy that outlines the long term vision and development goals of the organization. It is comprised of the Strategic Plan, The Site Plan, and the Operations and Maintenance Plans.

El plan maestro del Arboretum San Antonio es una estrategia integral que detalla la visión a largo plazo y los objetivos de desarrollo de la organización. Está compuesto por el Plan Estratégico, el Plan del Sitio y los Planes de Operaciones y Mantenimiento.

PROJECT SCHEDULE CALENDARIO DE PROYECTO



Engagement Process Proceso de participación

TOUCH POINTS SO FAR

644
Survey Responses
Respuestas de las encuestas

1
Survey
Encuesta

425+
ASA Info Cards Distributed
Distribución de tarjetas informativas ASA

3
Pop-up Events
Eventos emergentes

3 Newsletters Sent
Boletines enviados

Contributing Voices Voces contribuyentes

SURVEY 1 RESULTS
RESULTADOS ENCUESTA 1

"Please make sure that there is public transportation access."

"No destroyen a mas ecosystems naturales y reservas naturales para construir edificios."

"Me encantaría verlo terminado, conservar las áreas verdes es importante para mi."

"Please connect the Greenway. We desperately need this."

"Por qué volver a construir lo que ya existe? Este parque debería ofrecer algo diferente a todos los demás. (Y necesita un buen nombre en Espanol)"

"I'm hoping the development of this will bring new shopping and eateries in the area more growth."



A Rich and Layered History

Una Historia Rica y Compleja



Historically, Indigenous traditions sustained this region
Históricamente, las tradiciones indígenas sostuvieron esta región

Vernacular & Regional Land Management Practices



NUT GROVES

Indigenous tradition of selecting and protecting pecans and walnuts in groves near seasonal encampments.



MILPA FARMING

A succession-based agroforestry system from Mesoamerica using fire and successive planting of crops and fruit trees.



ZUNI WAFFLE GARDENS

The use of contoured earth to collect water and promote infiltration to support trees and crops.



LIVE FENCES

Indigenous and Tejano tradition of planting and or selecting key trees as living fence posts to reduce maintenance.



COPPING

Indigenous, Spanish, and Tejano use of annual cutting of willow and other species for biomass for arrows, wattle fence, and thatch.



HACKBERRY AND OAK MOTTES

Selective preservation and planting of key stands or individual trees for cattle shade in pastures.



PINE BARRENS

Indigenous use of fire in long leaf pine stands to promote pine establishment & open land for hunting grounds.



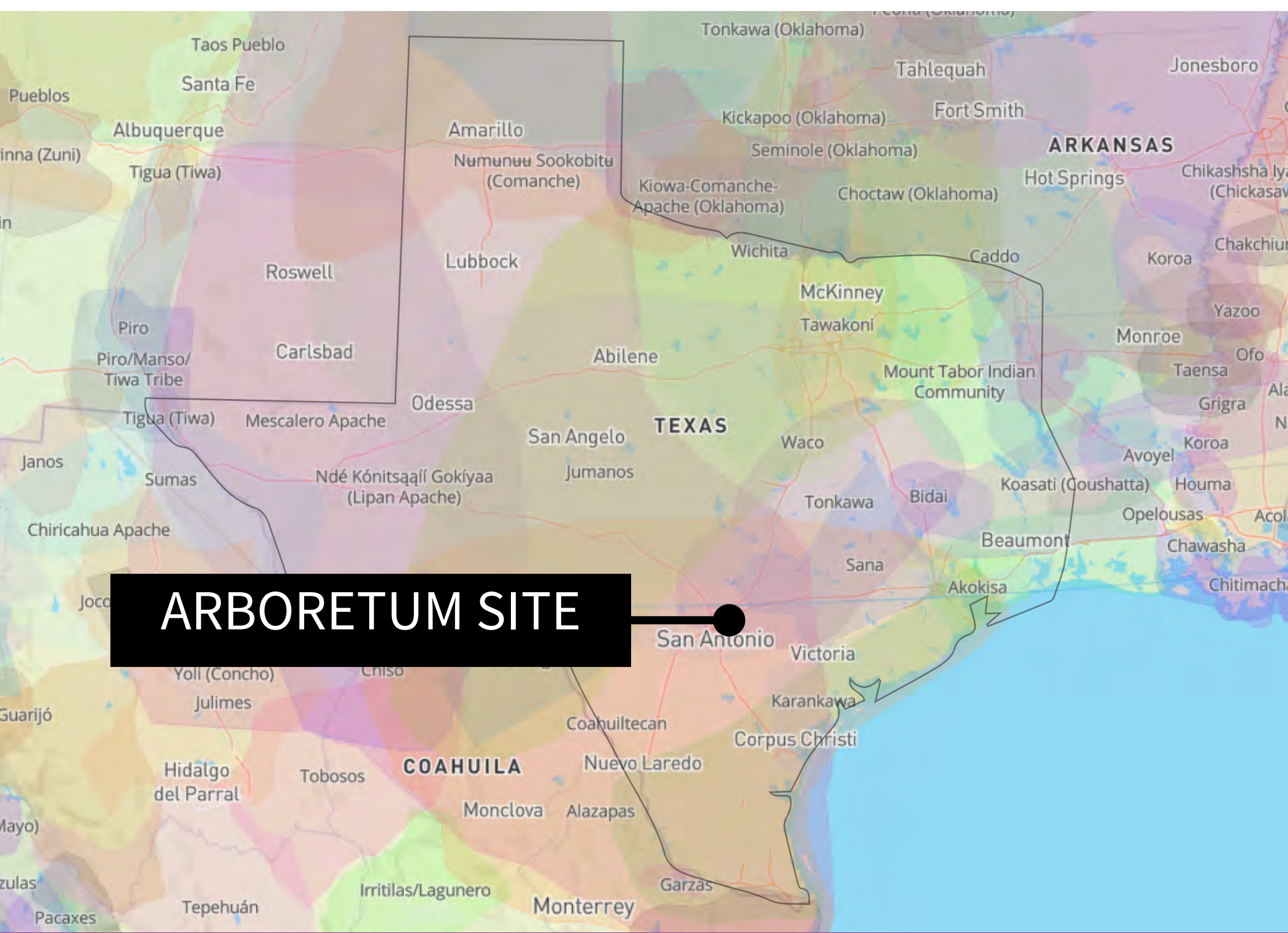
ALLEY CROPPING

Tenant and sharecropper tradition of maximizing real estate with inter-planting orchard trees with crop rows.



WINDBREAKS

Post-Dust-Bowl, windbreaks were widely promoted system of using trees and hedges to decelerate winds in large farming areas.



San Antonio, South Texas, and the wider region have a wide and varied history with trees as a fundamental part of the provision and cultivation of food. Numerous traditions & strategies, including irrigation, soil management, and plant associations, have been developed and tested over generations. Here are a few that can inspire stories and potential exhibits that could be showcased at the Arboretum San Antonio.

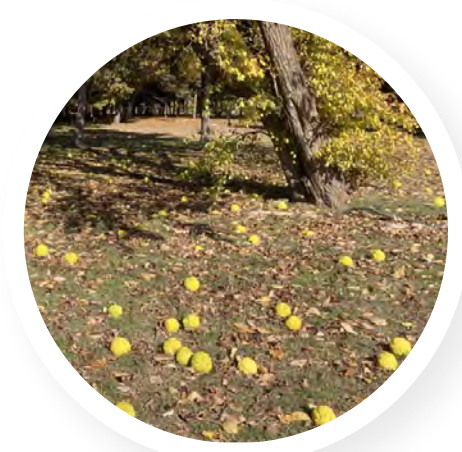
San Antonio, el sur de Texas y la región en general tienen una historia amplia y variada con los árboles como parte fundamental del suministro y cultivo de alimentos. A lo largo de generaciones se han desarrollado y probado numerosas tradiciones y estrategias, incluido el riego, el manejo del suelo y las asociaciones de plantas. Aquí hay algunos que pueden inspirar historias y posibles exhibiciones que podrían exhibirse en el Arboretum San Antonio.

Coahuiltecan Ethnobotany: Indigenous Use of Plants



Ponil
Fallugia paradoxa

- Arrow shafts



Osage Orange
Maclura pomifera

- Tools, clubs, bows
- Tannins for leather treatment
- Use fruit for dyes



Cedar Elm
Ulmus crassifolia

- Tools, bows



Anagua
Ehretia anacua

- Tools, bows
- Rough leaves used to sand wood
- Edible berries



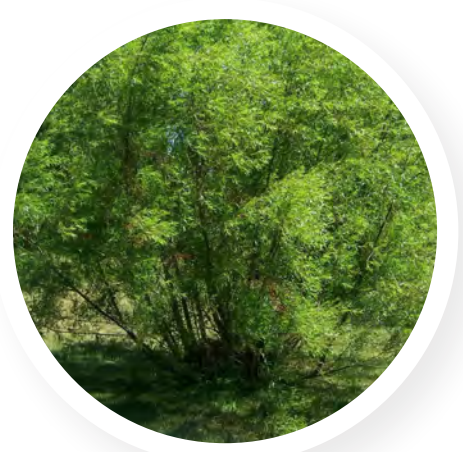
Honey Mesquite
Prosopis glandulosa

- Beans used to create a flour
- Wood for tools & bows
- Gum as adhesive



Pecan
Carya illinoensis

- Nuts are a major food source, directly & processed into flour & milk/drink



Black Willow
Salix nigra

- Construction of wickiups
- Fiber for baskets & ropes
- Medicinal tinctures

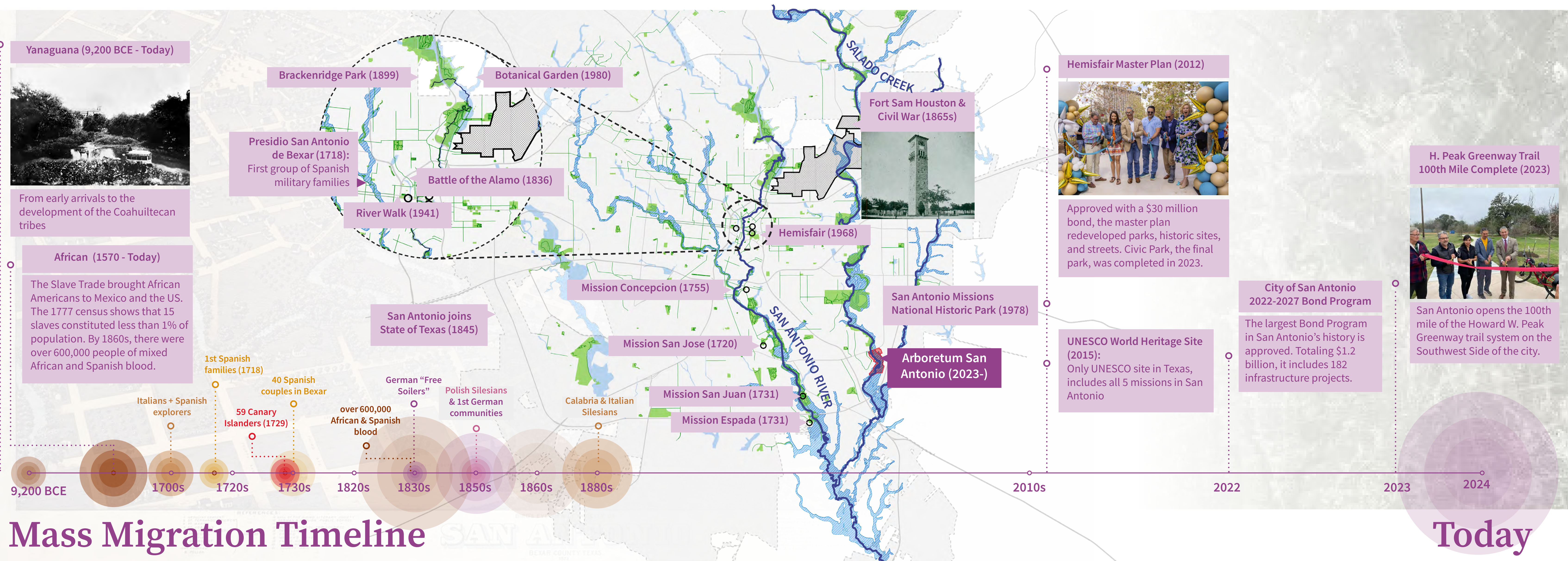


Mexican Plum
Prunus mexicana

- Edible fruit

The San Antonio Region, or Yanaguana, as referred to by Coahuiltecan speaking peoples, was defined by waterways, primarily by the River Yanaguana, not renamed San Antonio till 1691.

La Región de San Antonio, o Yanaguana, como la llaman los pueblos de coahuilteca, estaba definida por vías fluviales, principalmente por el río Yanaguana, que no fue rebautizado como San Antonio hasta 1691.



Takeaways

The Arboretum is an opportunity to celebrate the history and voice of this community and place - to take inspiration from the Indigenous traditions, artifacts, Battle of Rosillo memoria, and determine ways to coordinate with community arts groups and local and city-wide events and festivals.

Conclusiones

El Arboretum es una oportunidad para celebrar la historia y la voz de esta comunidad y lugar: inspirarse en las tradiciones y artefactos indígenas, la memoria de la Batalla de Rosillo y determinar formas de coordinar con grupos artísticos comunitarios y eventos y festivales locales y de toda la ciudad.

Extending the Greenway

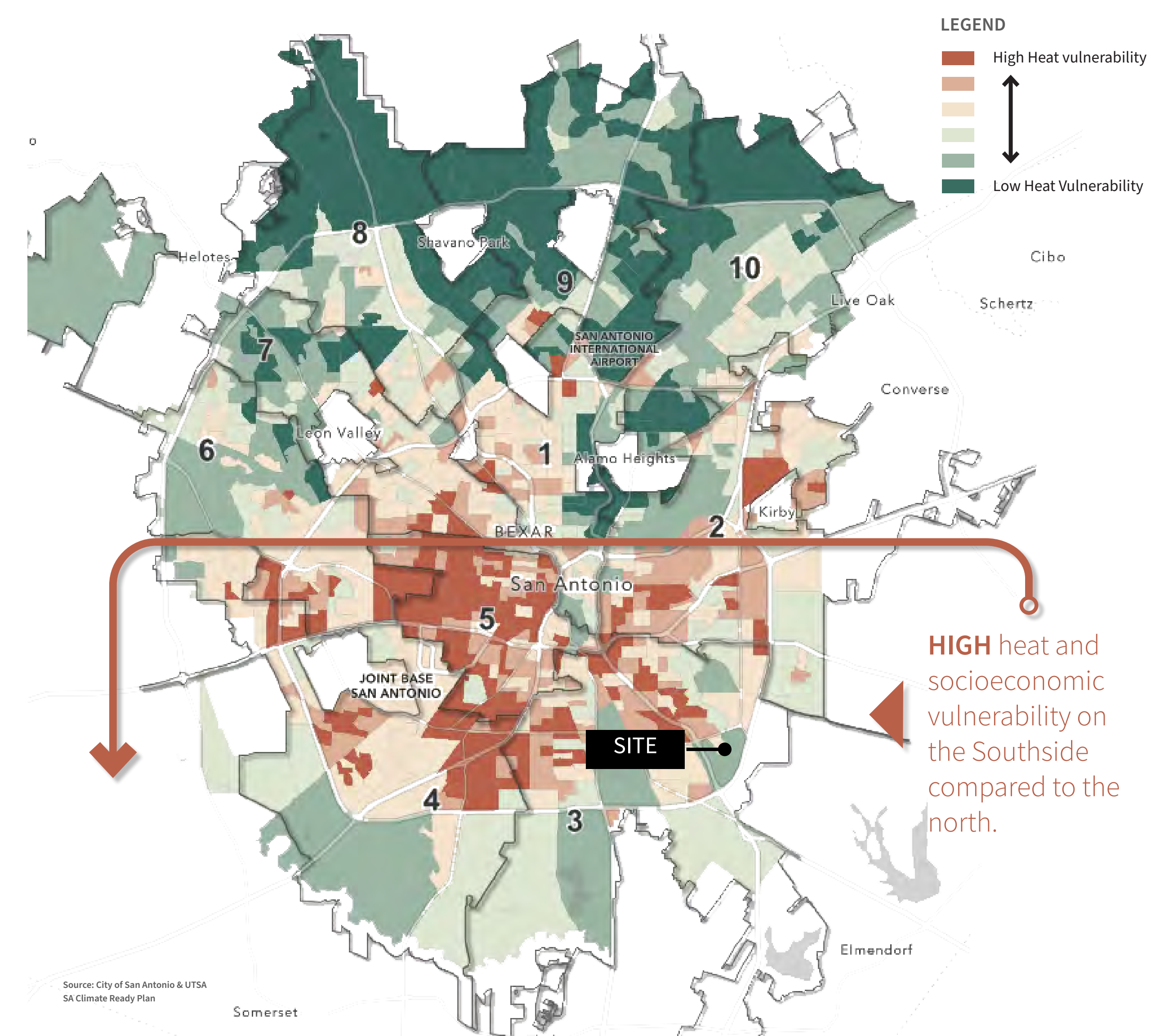
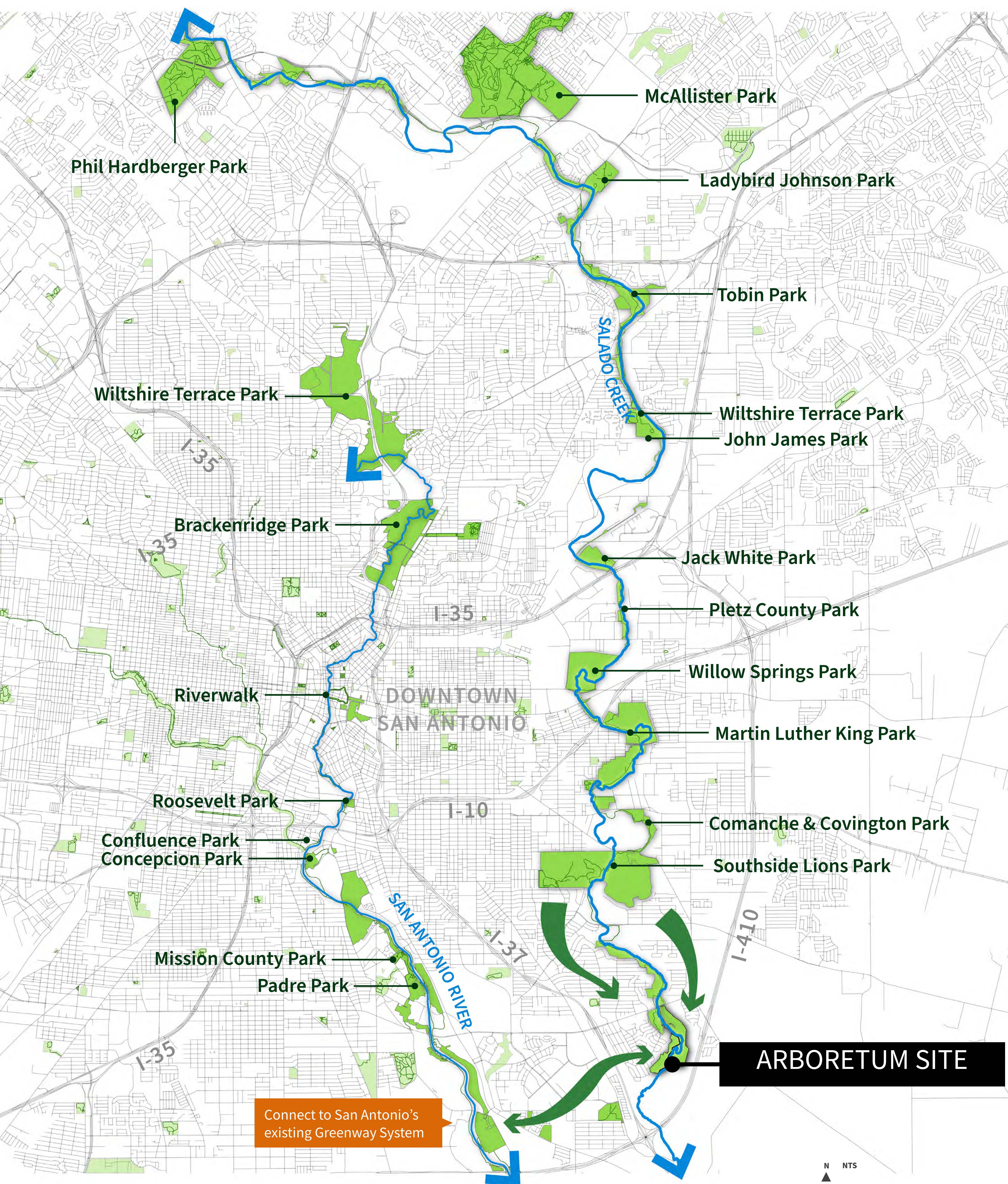
Ampliación de la Vía Verde



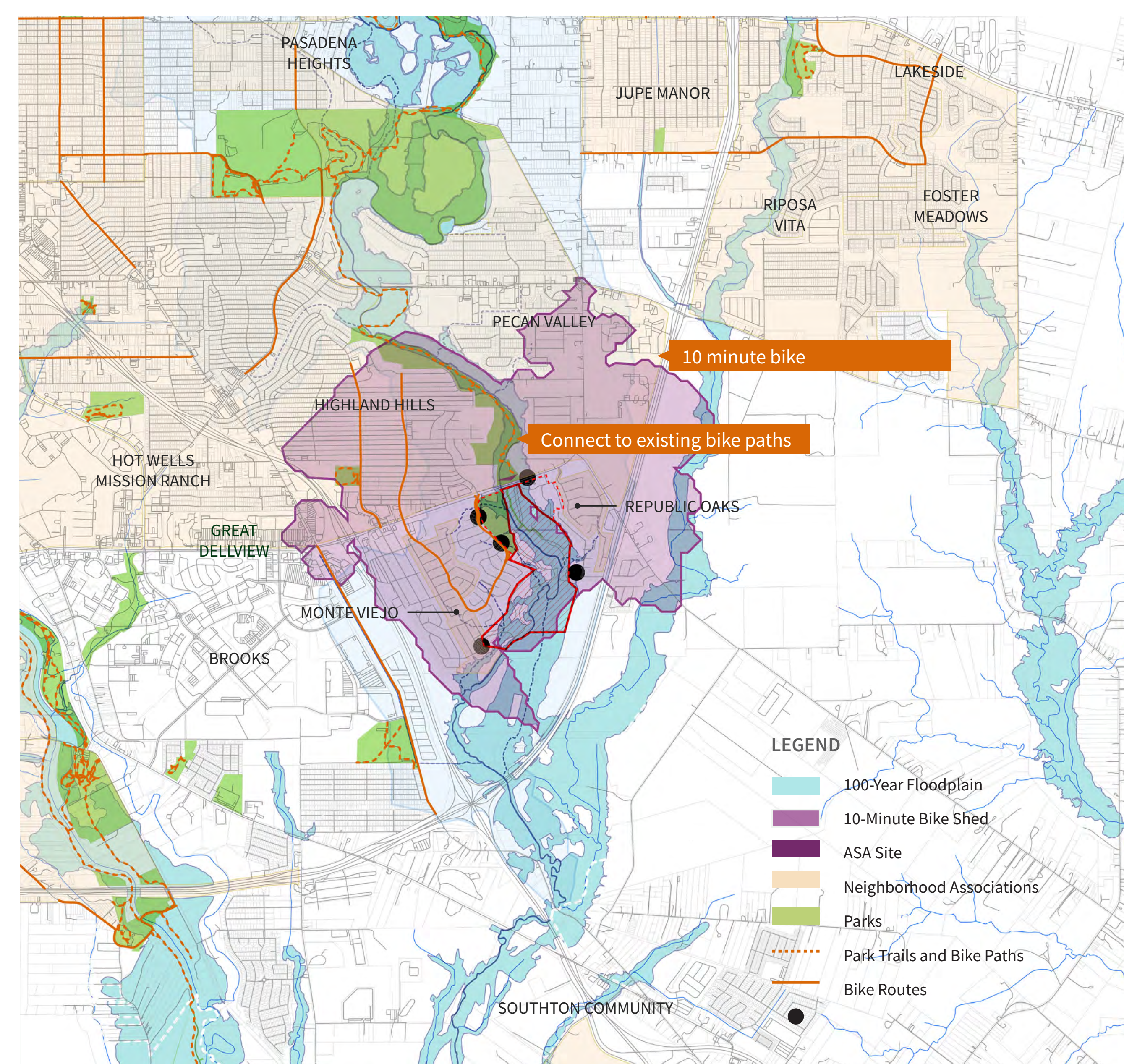
Connecting the San Antonio Parks System

Conectando el Sistema de Parques de San Antonio

The Salado Greenway **25+** Miles / Millas **10+** Connected Parks / Parques Conectados



Communities on the Southside of the city are **significantly more vulnerable to risks from heat**, and experience higher levels of air pollution in comparison with the north.



Takeaways

The Arboretum is well-positioned to service a diverse and growing population in the southeastern neighborhoods of San Antonio. These neighborhoods are underserved regarding parks and park amenities and have increased vulnerability to extreme heat.

The Arboretum will be an extension of the Salado Greenway, connecting the site to San Antonio's larger greenway system.

Conclusiones

El Arboretum está posicionado bien para prestar servicios a una población diversa y en crecimiento en los vecindarios del sureste de San Antonio. Estos vecindarios están desatendidos en cuanto a parques y servicios de parques y tienen una mayor vulnerabilidad al calor extremo.

El Arboretum será una extensión de la Vía Verde Salado, conectando el sitio con el sistema de vías verdes más grande de San Antonio.

A Regional Resource

Un Recurso Regional



An arboretum to meet future needs

Un arboreto para las necesidades futuras

Rising Temperatures

San Antonio is expected to receive more dramatic weather events by 2040, with summer temperatures increasing and the average number of days with more than 2 inches of rainfall increasing.

Se espera que San Antonio reciba eventos climáticos más dramáticos para 2040, con temperaturas de verano aumentando y el número promedio de días con más de 2 pulgadas de lluvia aumentando.

1 SAN ANTONIO'S YEARS WITH THE MOST 100-DEGREE DAYS

+3.9°F **159**

SINCE 1970, AVG. SUMMER TEMPERATURES IN SAN ANTONIO HAVE INCREASED 3.9 DEGREES F.

DAYS ABOVE 90 DEGREES F BY 2050

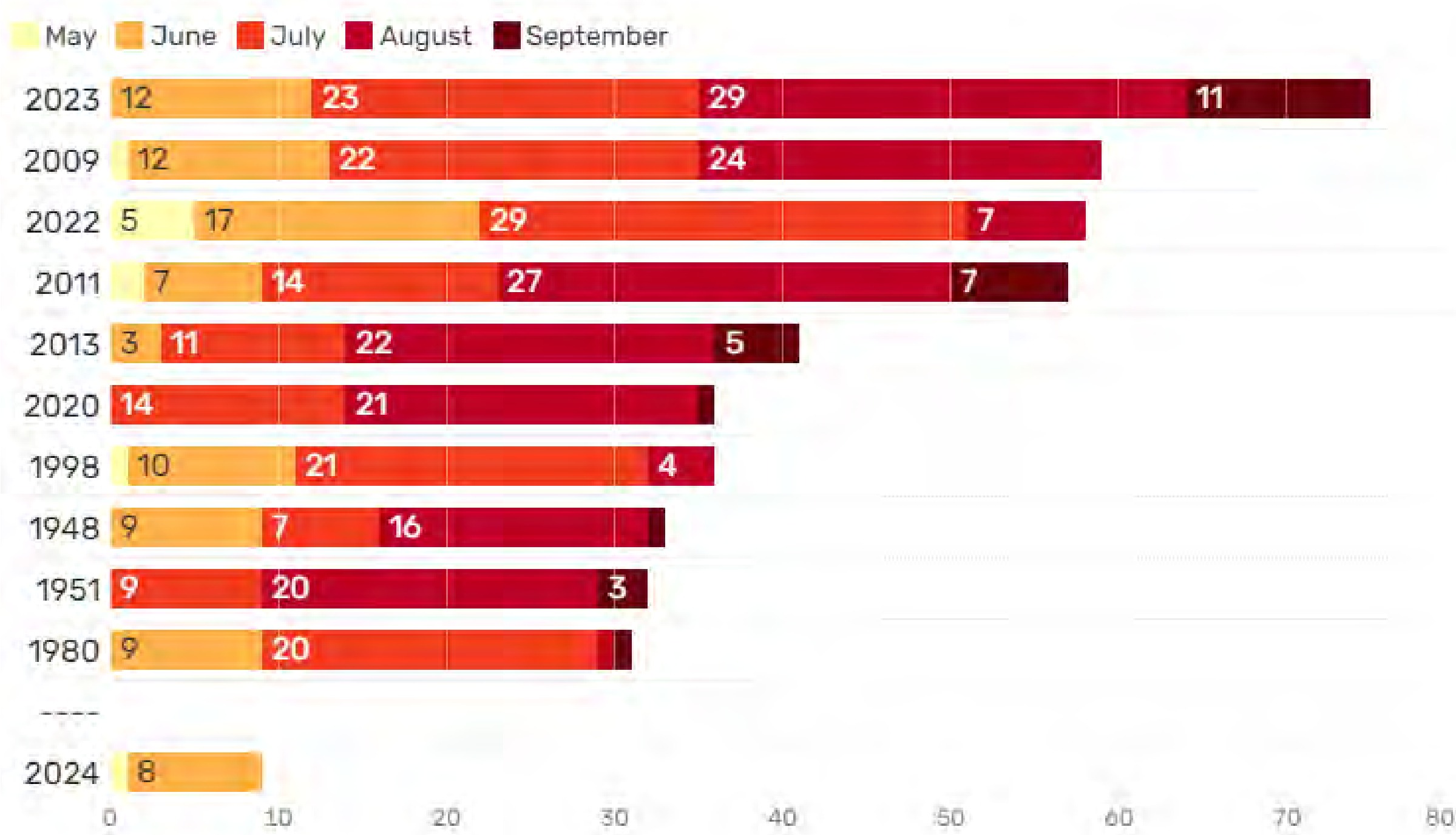
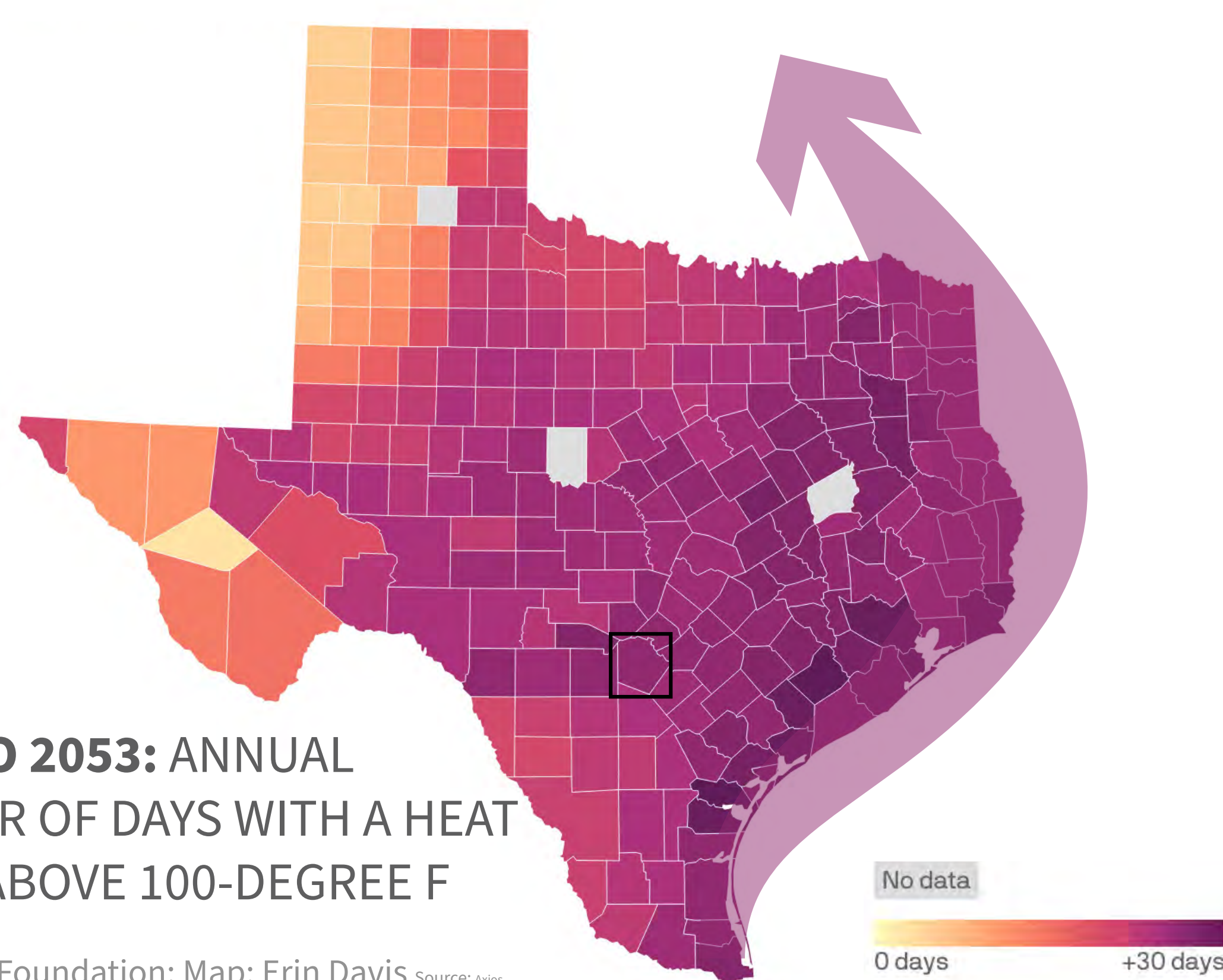
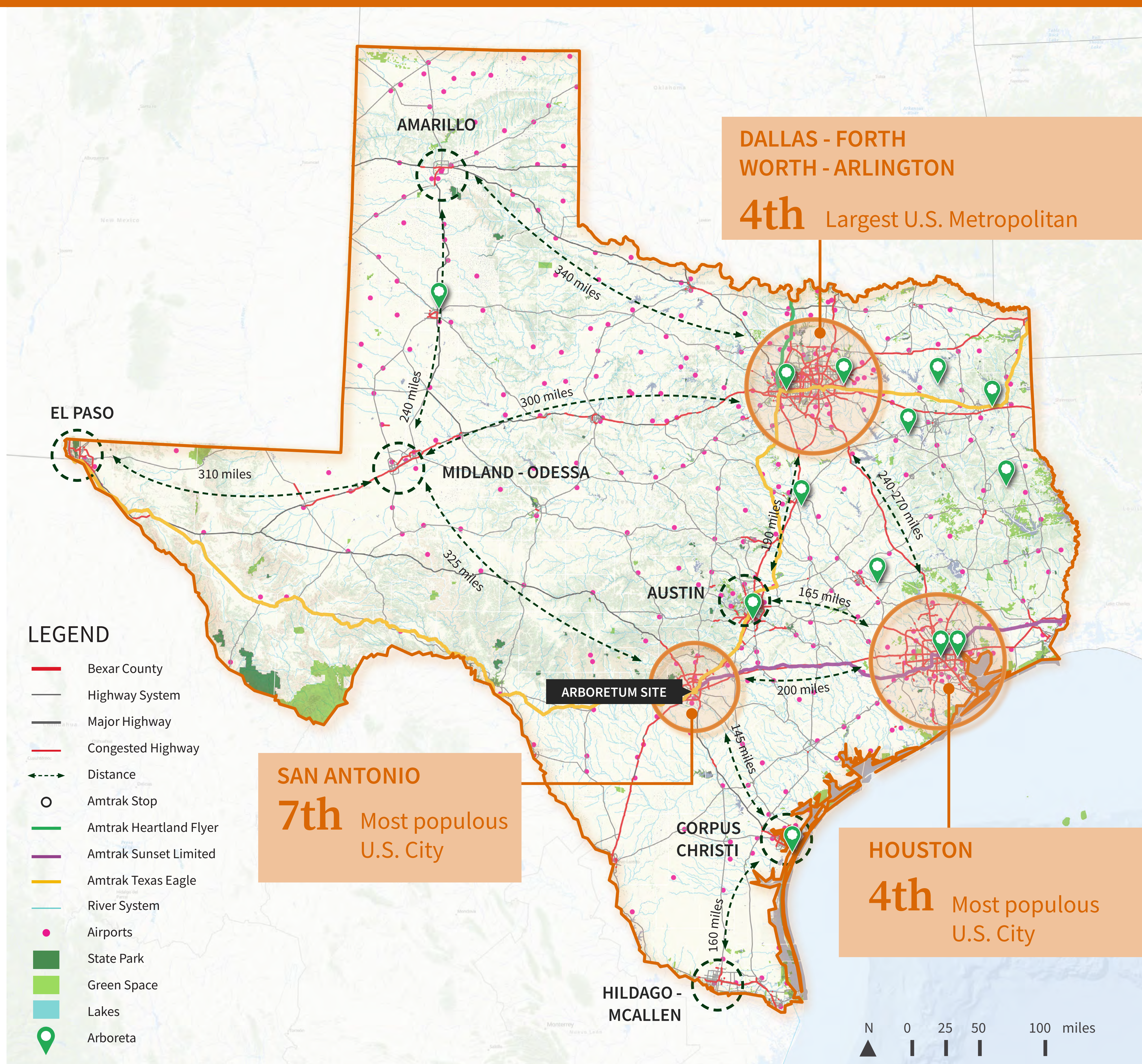


Chart: Anthony Franze and Roberto Villalpando • Source: National Weather Service

2 A FUTURE OF EXTREME HEAT

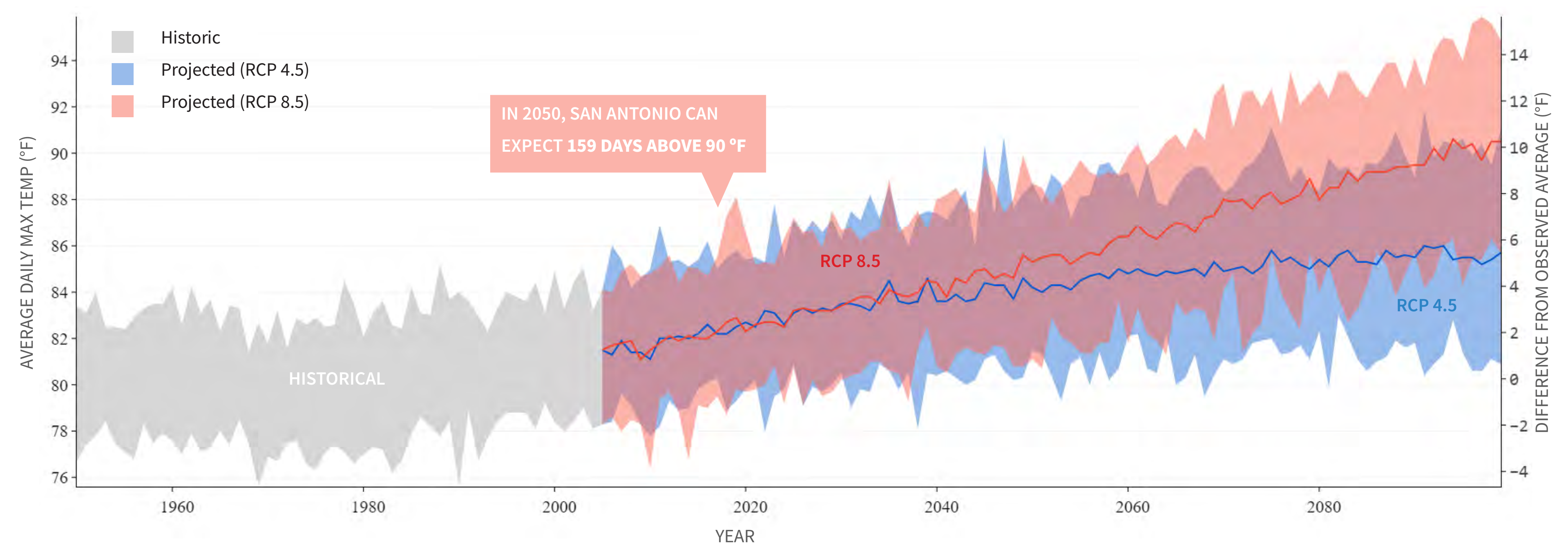


First Street Foundation; Map: Erin Davis Source: AHS



3 HISTORIC AND FUTURE PROJECTIONS

THIS INCREASE IN TEMPERATURE WILL HAVE A NEGATIVE IMPACT ON THERMAL COMFORT, AIR QUALITY, AND ECOSYSTEMS.



Takeaways

By 2050, Texas is projected to see a 60% population increase, primarily concentrated in San Antonio and Austin. Alongside rising temperatures, the Arboretum has the potential to become a cultural, ecological and social sanctuary for the community.

Conclusiones

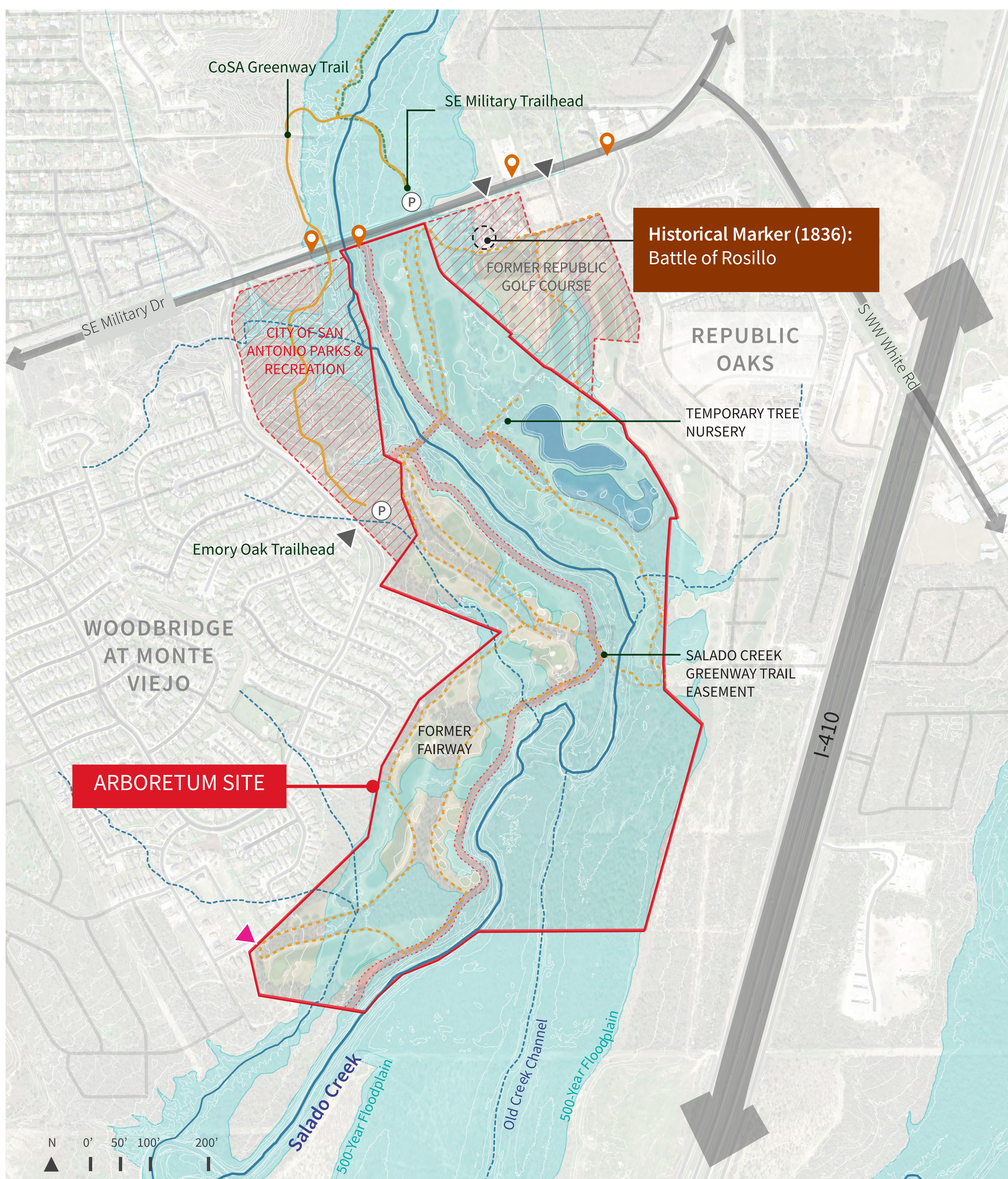
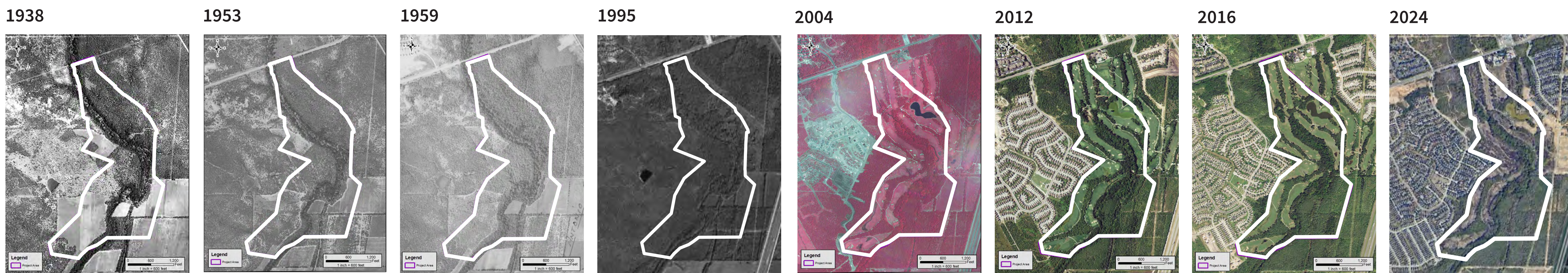
Para 2050, se proyecta que Texas verá un aumento de población del 60%, concentrado principalmente en San Antonio y Austin. Además del aumento de las temperaturas, el Arboretum tiene el potencial de convertirse en un santuario cultural, ecológico y social para la comunidad y su diversa vida silvestre.wildlife.

Understanding the Site

Comprender el Sitio



HISTORIC DEVELOPMENT OF THE SITE | DESARROLLO HISTÓRICO DEL SITIO



LEGEND					
	ASA Property		COSA Bike Trail ROW		Park Trails
	Adjacent Property		COSA Bike Trail		Salado Creek
	Vehicular		Existing Cart Path		Stream Tributaries
	500 Year Floodplain		Entrance (Formal)		Bus Stops
	Entrance (Formal)		Entrance (Informal)		

Takeaways

62% of the site is less than 5% in slope, making it easy to implement accessible trails and still offer great views! The steep slopes along Salado Creek and the high 500-year flood plain are the most significant constraints for locating programs.

Conclusiones

El 62% del sitio tiene menos del 5% de inclinación, lo que facilita la implementación de senderos accesibles y aún ofrece excelentes vistas. Las inclinaciones pronunciadas a lo largo de Salado Creek y la alta llanura aluvial de 500 años son las limitaciones más importantes para la localización de programas.

Where does Salado Flow?

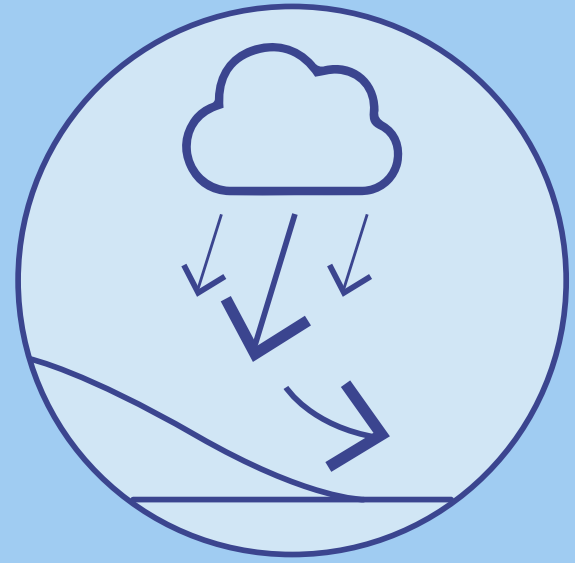
¿Dónde desemboca el Salado?



Watershed & Aquifers

Cuencas y Acuíferos

Defining Terms



Contributing Zone

Watershed where precipitation runoff flows into the recharge zone of an aquifer



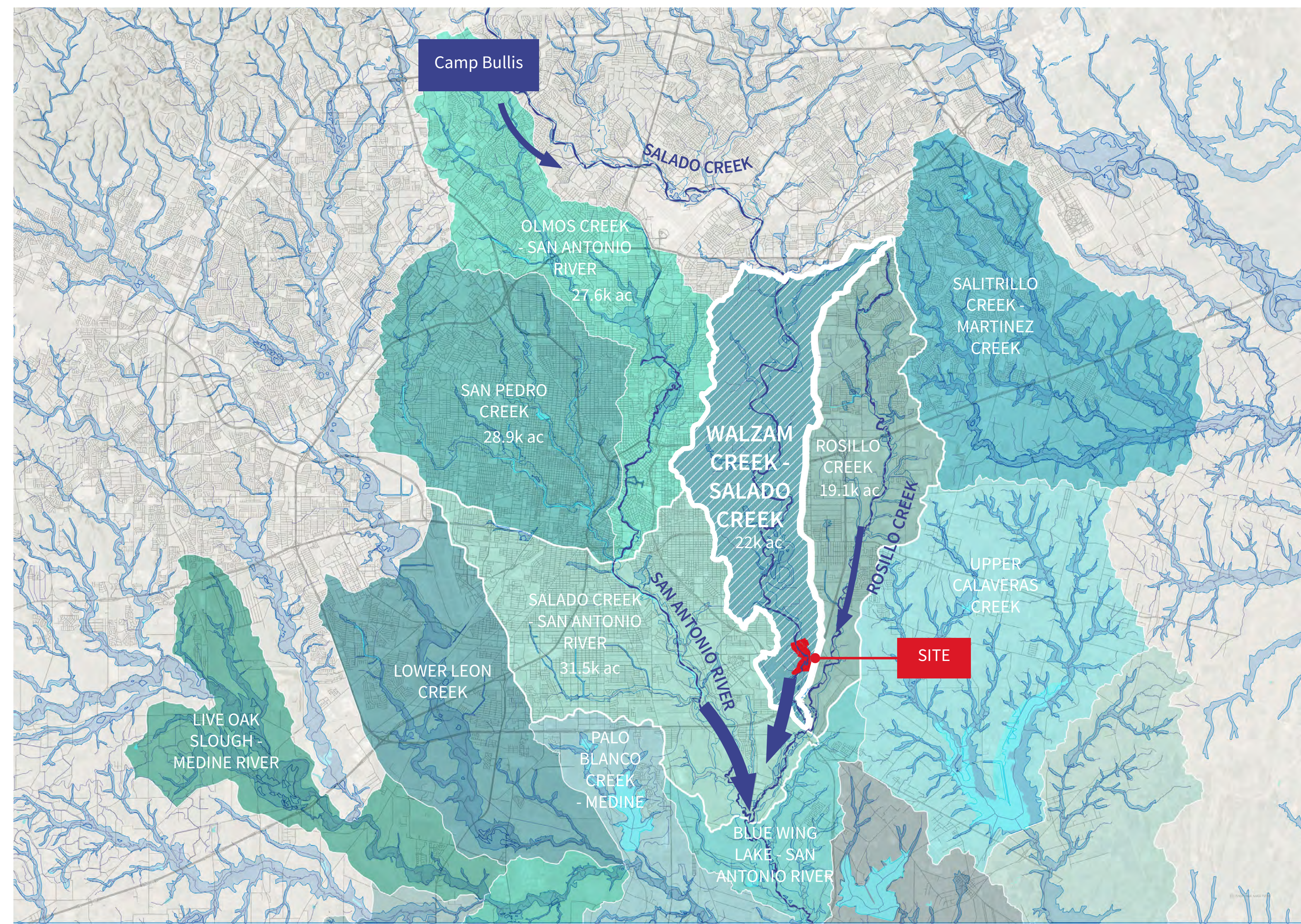
Recharge Zone

Areas where water infiltrates through the permeable rock and sediment



Discharge Zone

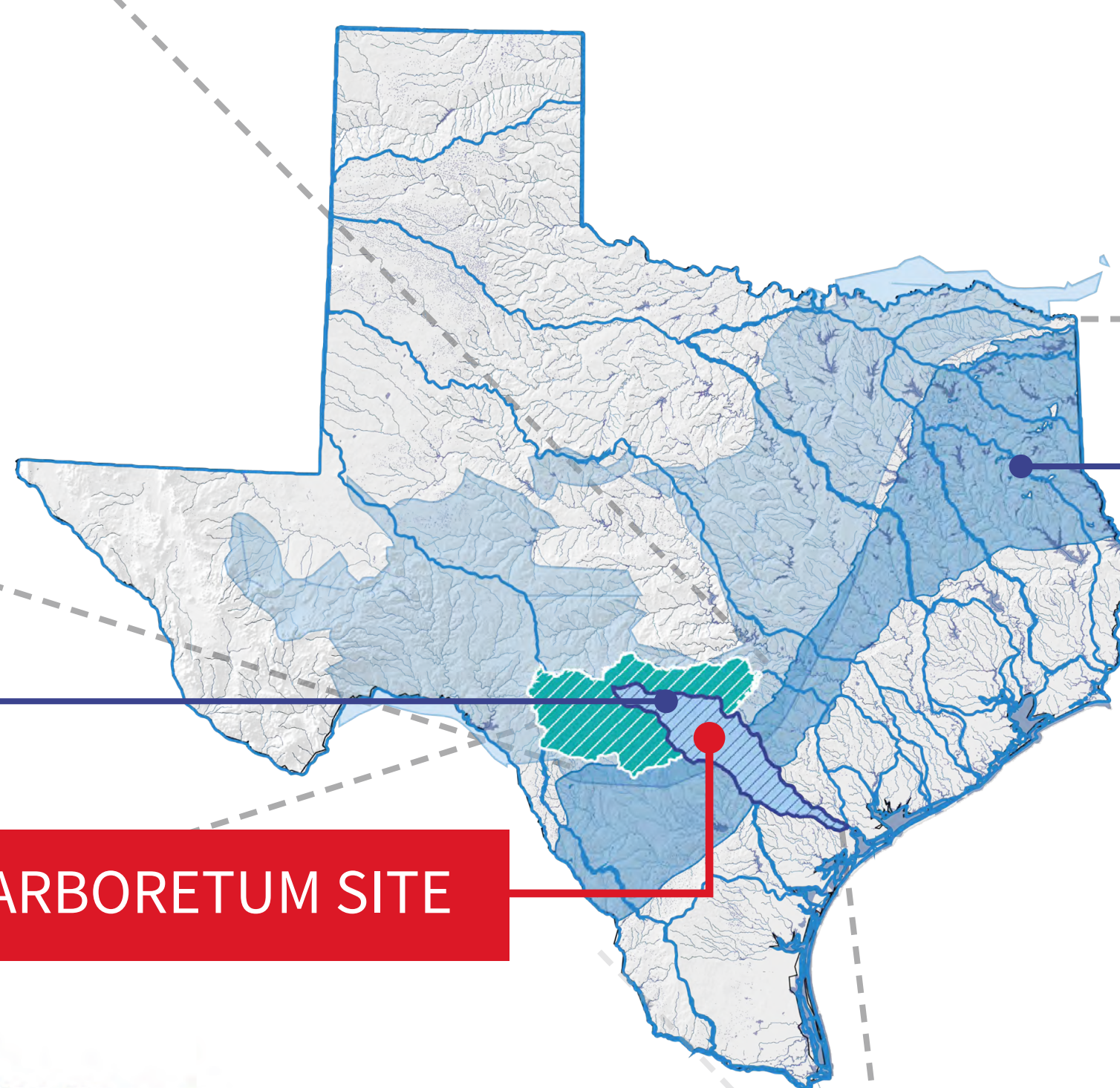
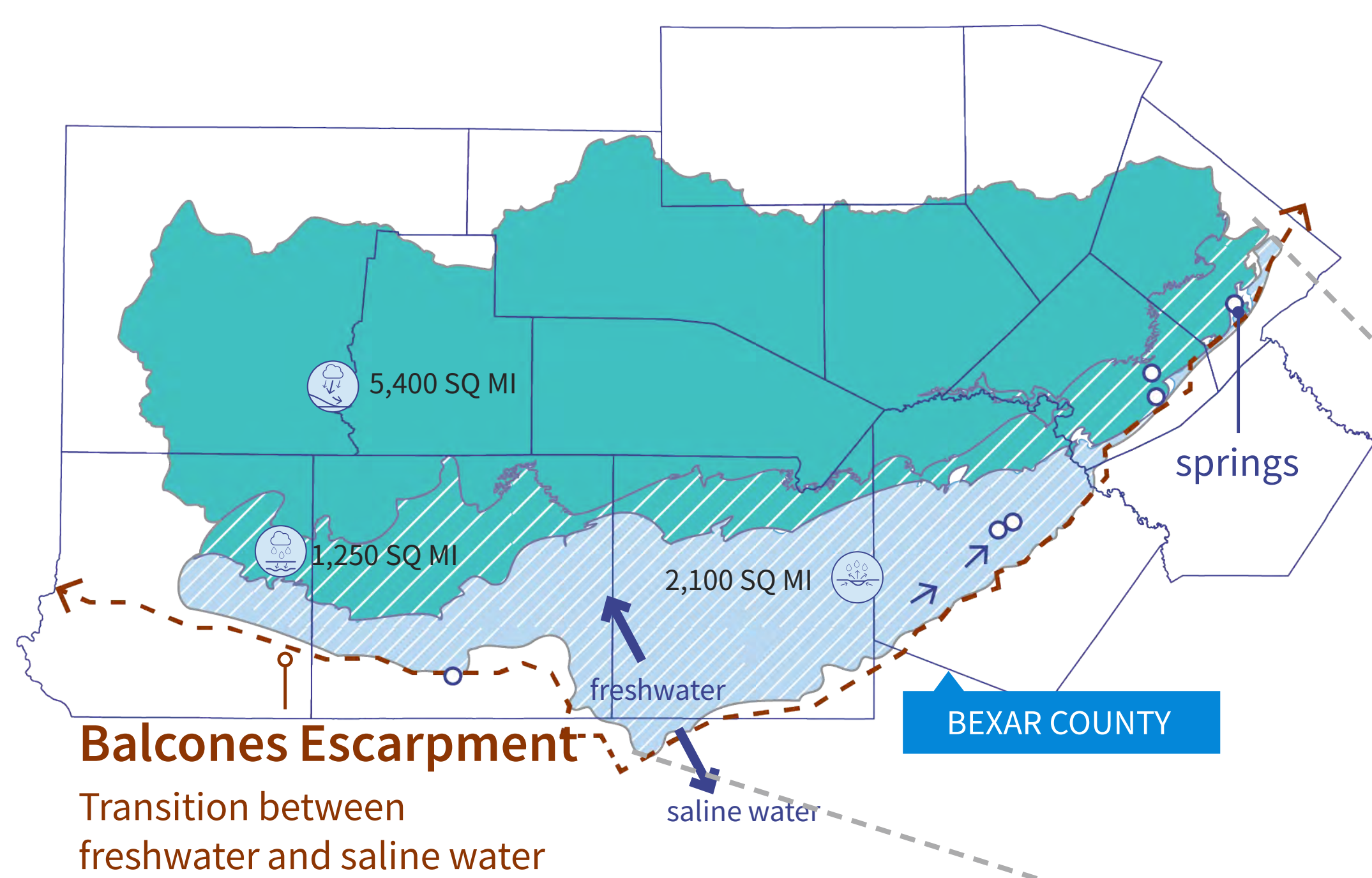
Zone where water originating from an aquifer flows to outlets, i.e. lake, wetland, ocean etc.



Edwards-Trinity Aquifer



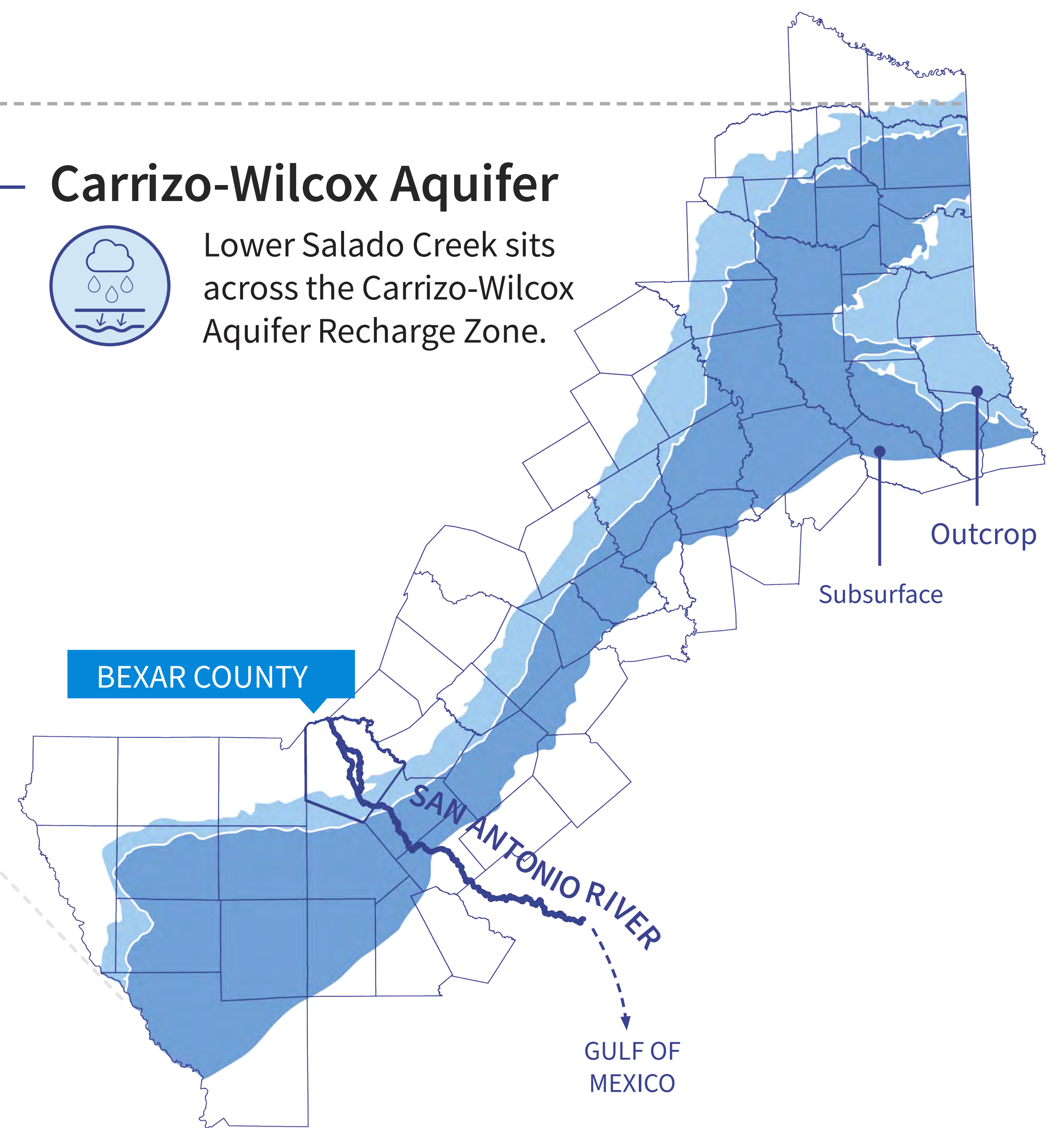
The Salado Creek headwaters receive recharged ground water and discharges it across springs, wells, and surface waters like Salado Creek. Eventually this water joins with the San Antonio River.



Carrizo-Wilcox Aquifer



Lower Salado Creek sits across the Carrizo-Wilcox Aquifer Recharge Zone.



San Antonio Watershed

218 square miles

Grade B

2022 San Antonio River Basin Report Card by SA River Authority

Salado Creek runs 35 miles NE-SE, where it converges with the Rosillo Creek and San Antonio River before flowing out to the Gulf of Mexico.

A Instream Flows

B- Biotic Integrity Index

F Public Trash

B- Habitat Quality Index

Takeaways

The Arboretum is located on the Lower Salado Creek in the San Antonio River Basin. It is well-positioned to improve water quality downstream.

Conclusiones

El Arboreto está ubicado en la parte baja de Salado Creek, en la cuenca del río San Antonio. Está bien posicionado para mejorar la calidad del agua río abajo

Salado Creek Conditions

Condiciones ribereñas de Salado Creek



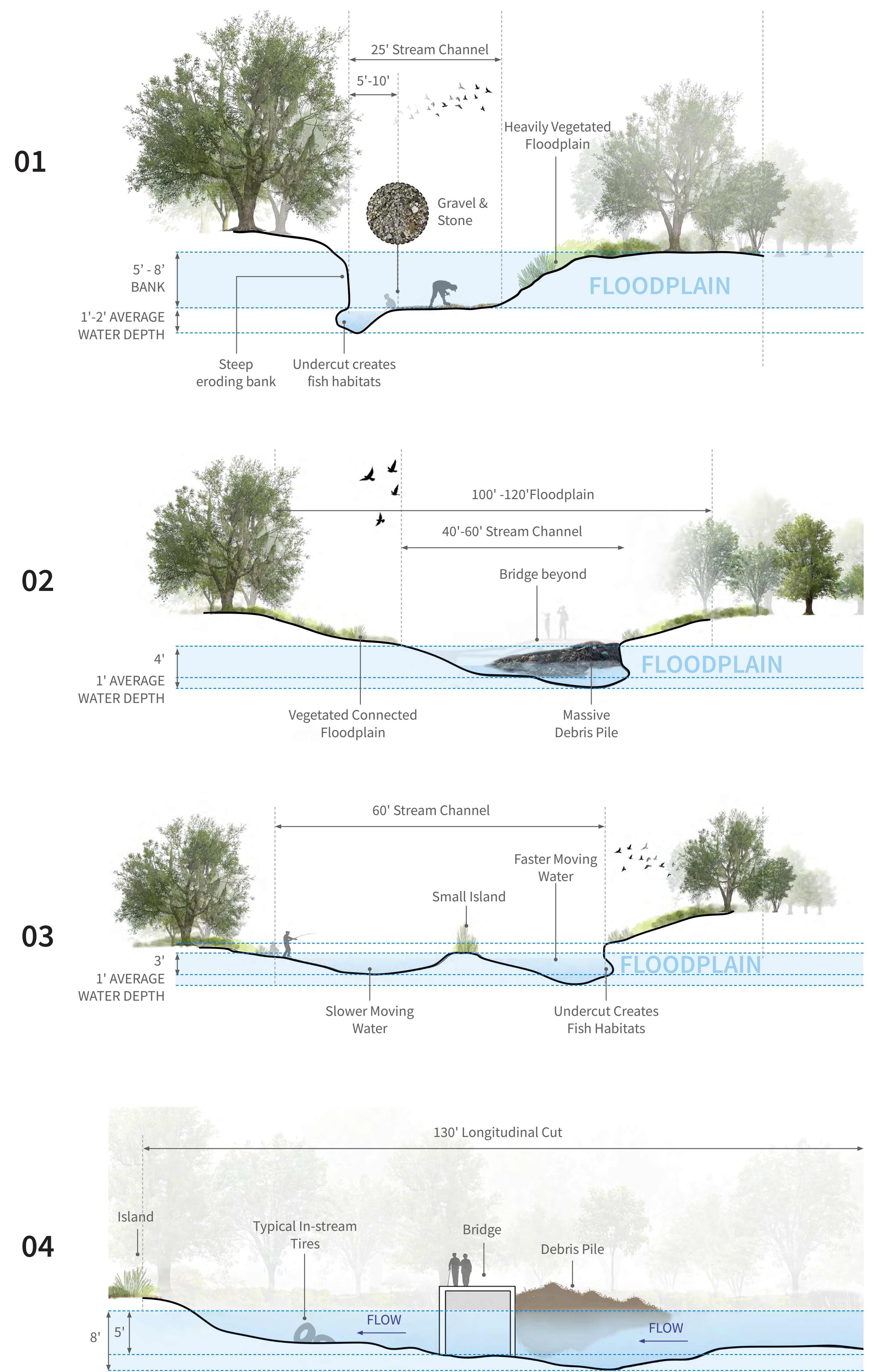
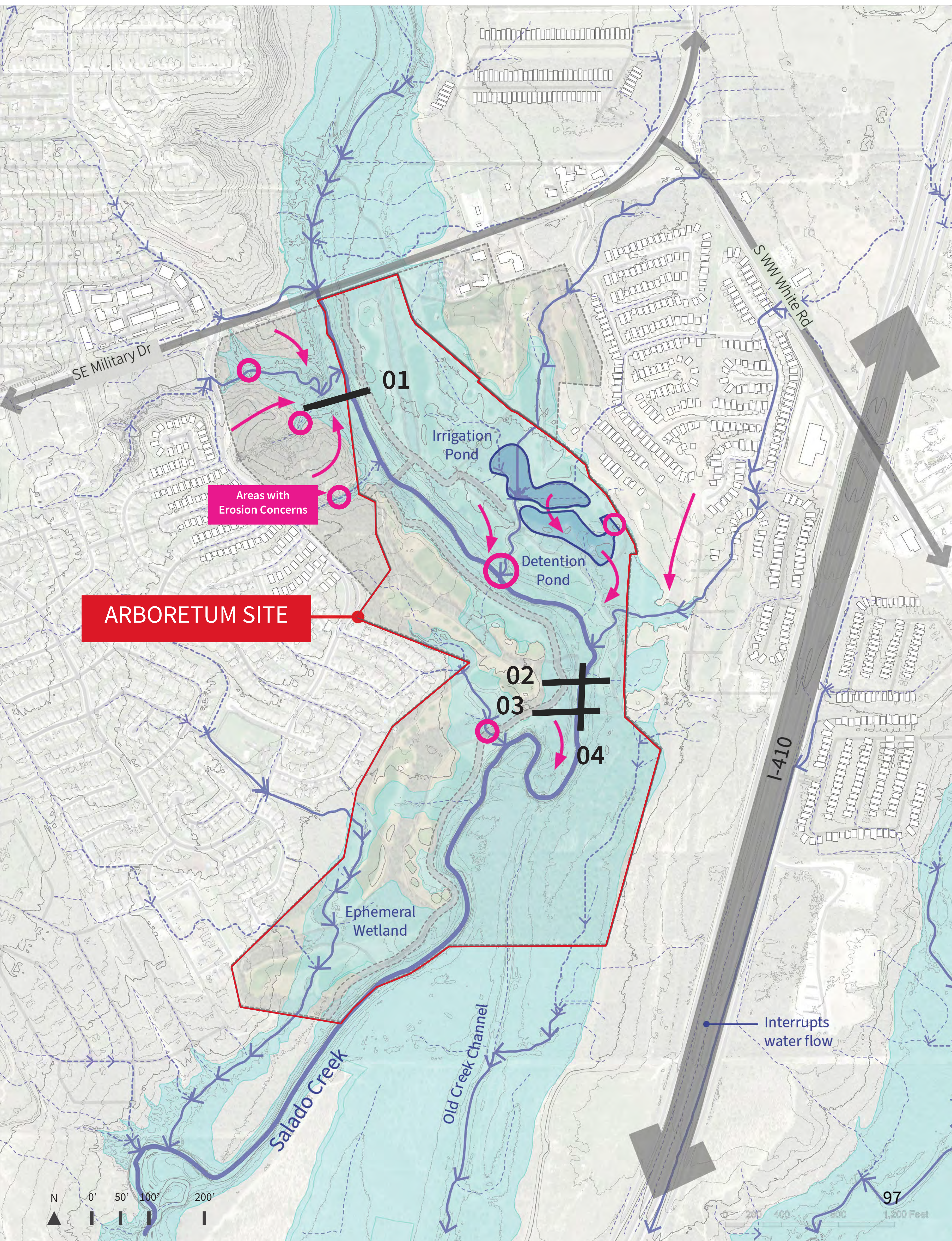
68% in 100-year floodplain
en llanura inundable de 100 años

3' average creek depth
profundidad promedio del arroyo

15' average stream channel width
Ancho promedio del canal de corriente

34' historic flood crests
Crestas de inundaciones históricas

4 commonly observed fish species
especies de peces comúnmente observadas



Takeaways

Salado Creek is the primary collector of stormwater coming from I-410, adjacent neighborhoods, and upstream flow on-site. Water quality issues related to erosion, nutrient pollution, and garbage are a concern.

Conclusiones

Salado Creek es el principal recolector de aguas pluviales provenientes de la I-410, los vecindarios adyacentes y el flujo aguas arriba en el sitio. Los problemas de calidad del agua relacionados con la erosión, la contaminación por nutrientes y la basura son motivo de preocupación.

Unique Texan Ecologies

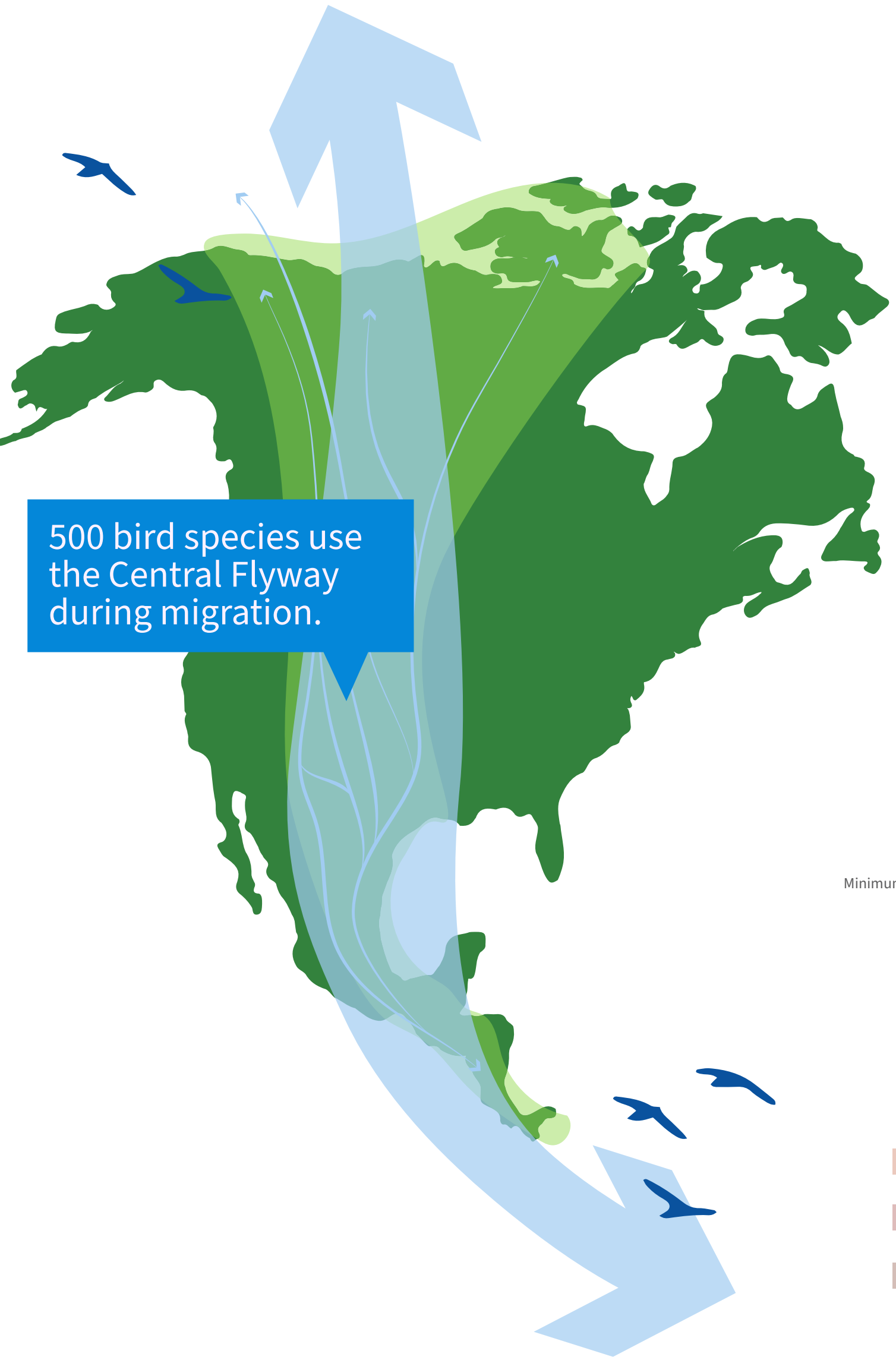
Ecologías Tejanas Únicas



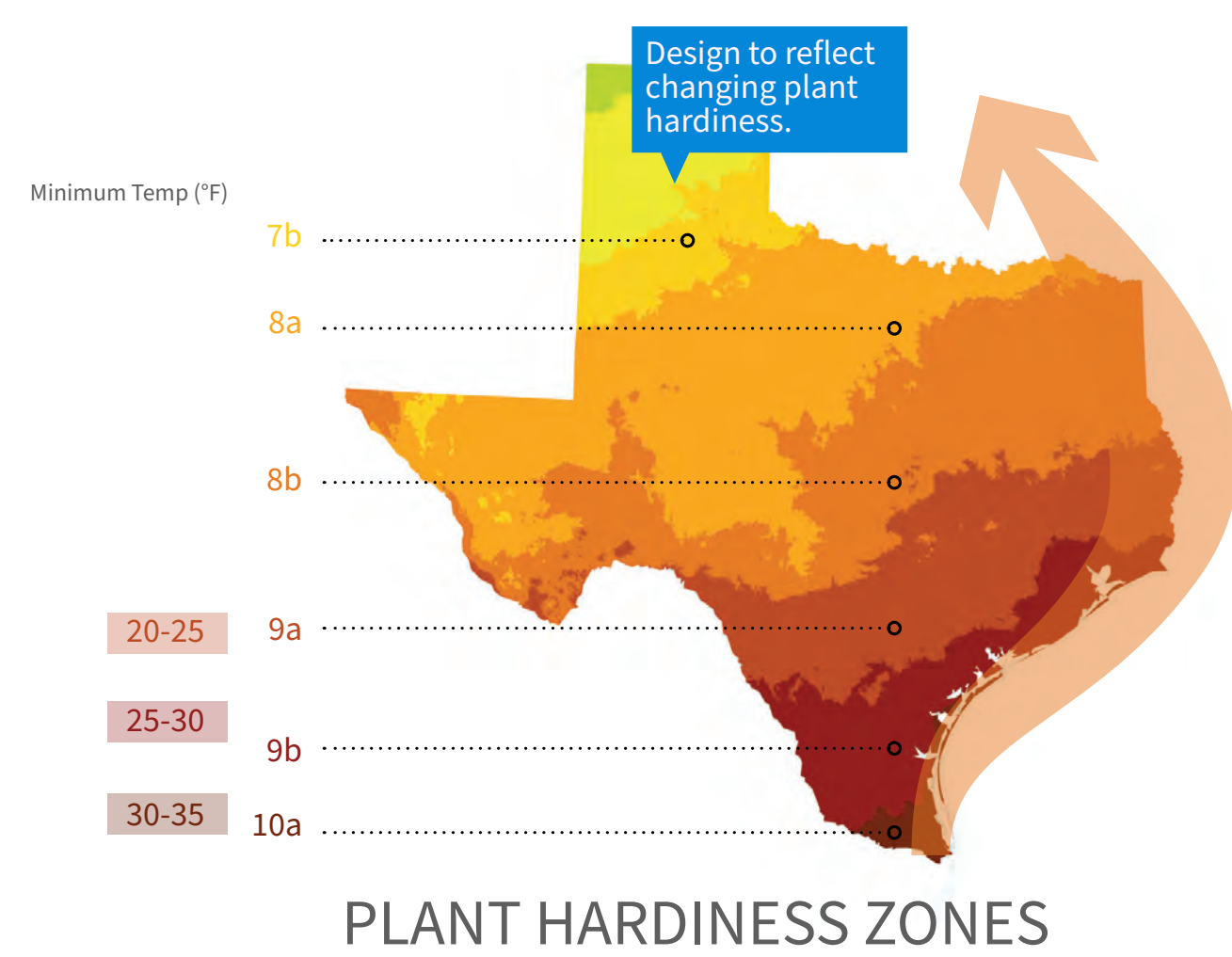
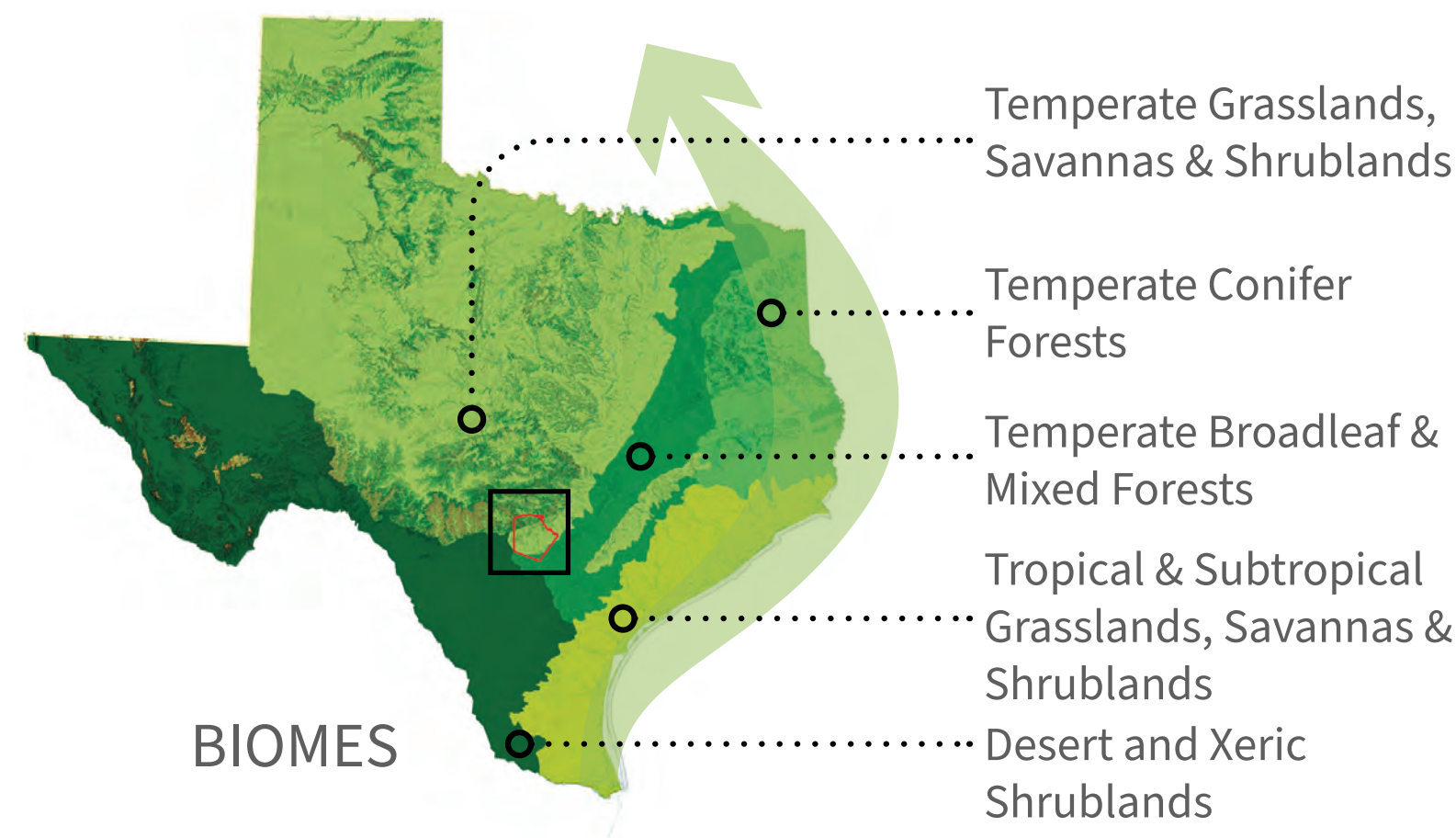
A Confluence of Four Texas Ecoregions

Una Confluencia de Cuatro Ecorregiones de Texas

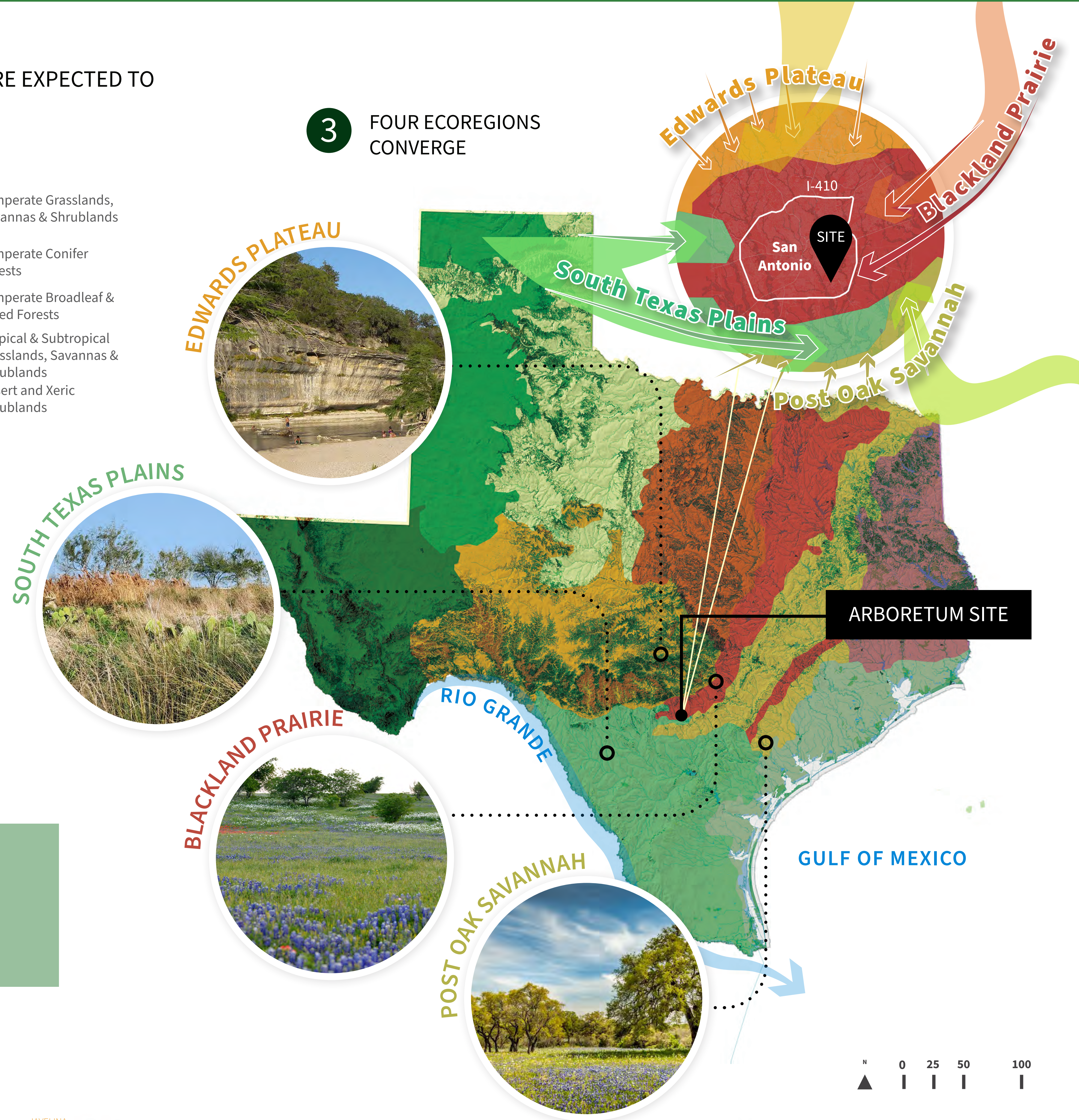
1 LOCATED ON A CONTINENTAL HABITAT CORRIDOR FOR MIGRATORY SPECIES



2 ECOSYSTEMS ARE EXPECTED TO SHIFT NORTH



3 FOUR ECOREGIONS CONVERGE



Arboretum San Antonio's geography at the convergence of four eco-regions is a unique opportunity to respond to climate change.

3 FOUR ANIMAL COMMUNITIES DISPLACED BY FERAL HOG ACTIVITY



Takeaways

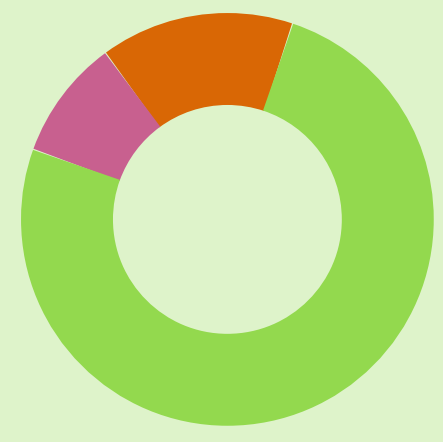
The Arboretum is well-positioned to feature plants from a variety of Texan ecoregions, provide habitat for associated animals and serve as a refuge for migratory species.

Conclusiones

El Arboretum está posicionado bien para presentar plantas de una variedad de ecorregiones de Texas y puede servir como refugio para especies migratorias.

What's on-site Today?

La colección de especies existentes



85+ species total
Total de especies

66 native species
Especies nativas

13 invasive species
Especies invasoras

6 endemic* species
Especies endémicas

*Endemic species are only found in a specific geographic region

CANOPY PABELLÓN

UNDERSTORY SOTOBOSQUE

GROUNDCOVERS COBERTORES DE SUELO

CRESTED CARACARA
Caracara

MEXICAN FREE TAILED BAT
Mexican Free-tailed Bat

RED-TAILED HAWK
Red-tailed Hawk

Species in Canopy:
 Texas Persimmon *Diospyros texana*, Cedar Elm *Ulmus crassifolia*, Bluewood *Condalia hookeri*, Chinaberry *Melia azedarach*, Privet *Ligustrum spp.*, Cedar Elm *Ulmus crassifolia*, Box Elder *Acer negundo*, Green Ash *Fraxinus pennsylvanica*, Osage orange *Maclura pomifera*, Texas Persimmon *Diospyros texana*, Bluewood *Condalia hookeri*, Honey Mesquite *Prosopis glandulosa*, Honey Mesquite *Prosopis glandulosa*, Hackberry *Celtis occidentalis*, Live Oak *Quercus virginiana*, Pecan *Carya illinoensis*, Green Ash *Fraxinus pennsylvanica*, Cedar Elm *Ulmus crassifolia*, Bluewood *Condalia hookeri*.

Species in Understory:
 Dagger Plant *Yucca aloifolia*, Agarita *Mahonia trifoliata*, Texas Prickly Pear *Opuntia linheimeri*, Buckley's Yucca *Yucca constricta*, Texas Hog Plum *Colubrina texensis*, Desert Olive *Forestiera pubescens*, Plain's Coreopsis *Coreopsis tinctoria*, Pennyroyal *Hedeoma spp.*, Texas Creeping Oxeye *Wedelia hispida*, Firewheel *Gaillardia pulchella*, Splitleaf Gilia *Giliastrum incisum*, Flase aloe *Manfreda maculata*, Green Milkweed Vine *Matulea reticulata*, Frostweed *Verbesina virginica*, Silver Dwarf Morning-glory *Evolvus sericeus*, Rescue Brome *Bromus catharticus*, Creeping Cucumber *Melothria pendula*, Johnson Grass *Sorghum halepense*, False Dayflower *Tinantia anomala*, Horseherb *Calyptocarpus vialis*, Aster *Symphotrichum spp.*, Smallflower Baby Blue Eyes *Nemophila aphylla*, Saw Greenbrier *Smilax bona-nox*, Giant Ragweed *Ambrosia trifida*, Dewberry *Rubus oklahomus*, Texas Baby Blue Eyes *Nemophila phaceloides*, Texas Nightshade *Solanum triquetrum*, Inland Sea Oats *Chasmanthium latifolium*, Giant Ragweed *Ambrosia trifida*, Goldenrods *Solidago spp.*, Hogpeanut *Amphicarpaea bracteata*, False Dayflower *Tinantia anomala*, Switchgrass *Panicum virgatum*, Plains coreopsis *Coreopsis tinctoria*, Yellow Sedge *Carex flava*, Mock Vervain *Glandularia bipinnatifida*, Clover *Trifolium spp.*, False Dayflower *Tinantia anomala*, Turnipweed *Rapistrum rugosum*, Sunflower *Helianthus spp.*, White goosefoot *Chenopodium album*, Late Goldenrod *Solidago altissima*.

In the past, there were 14 habitats that existed at the arboretum.
En el pasado, existían 14 hábitats en el arboreto.

Habitats:
 Deciduous Woodland: Upland, Blackland Prairie: Disturbed Grassland, Floodplain Live Oak Forest, Floodplain Hardwood Forest, Riparian Herbaceous, Edwards Plateau Savannah Grassland, Deciduous Woodland: Disturbed.

Animals:
 Horned Lizard, Virginia Opossum, Ringtail, White-tailed Deer, Texas Tortoise, Gold-cheeked Warbler, Indigo Snake.

Takeaways

After changing from farmland to a golf course, the unique habitats on the site have mostly turned into the same type. However, the historical habitats suggest strong potential for ecosystem restoration and naturalization.

Conclusiones

Después de cambiar de tierras de cultivo a un campo de golf, los hábitats únicos en el sitio se han convertido en su mayoría en el mismo tipo. Sin embargo, los hábitats históricos sugieren un fuerte potencial para la restauración y naturalización del ecosistema.